



College of
Medicine

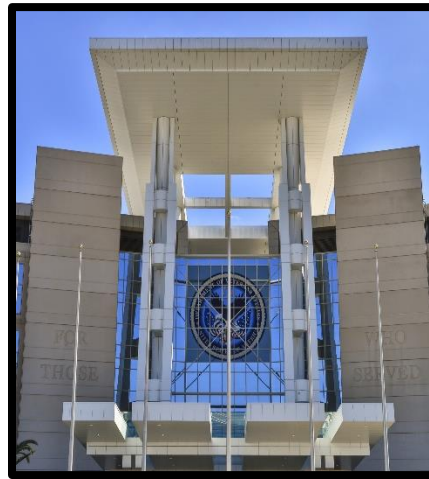
UNIVERSITY OF CENTRAL FLORIDA



Rheumatology Fellowship Program Guide

University of Central Florida/HCA GME Consortium

VA HOSPITAL



UCF HEALTH

LAKE NONA (Gateway)

EAST ORLANDO (Quadrangle)



TABLE OF CONTENTS:

OVERVIEW

Page

- Rheumatology Fellowship Goals and Objectives 3
- Goals of First and Second Year Curriculum 5
- Competency Based Goals and Objectives 6
- Methods for Teaching Rheumatology 7
- Methods for Evaluation of Fellows 8

POLICIES AND OBJECTIVES OF MAJOR TRAINING SITES

- Core Rotations General Policies 10
- VA Hospital and VA Rheumatology Clinic 12
- UCF Health Clinic at Lake Nona and East Orlando 20
- Nemours Children’s Hospital 21
- UCF College of Medicine 22

POLICIES and PROCEDURES

- Fellow Supervision 23
- Sick call/Backup Call 23
- Maternity Leave, Vacation, Leave of Absence 23
- Moonlighting 24
- Duty Hours 24
- Work Related Injuries 24
- Didactic Sessions 25

APPENDIX

- Rheumatology Clinical Assessment Tools/ Patient Questionnaires 34
- VA Hospital Map 35



OVERVIEW

Rheumatology Fellowship Goals and Objectives

Mission:

The overall mission of this program is to produce physicians that 1) are clinically competent in the field of rheumatology, 2) are capable of working in a variety of settings, and 3) possess habits of life-long learning to build upon their knowledge, skills and professionalism. 4) are capable of teaching the principles of clinical rheumatology to primary care physicians and medical house officers, and 5) have the option to acquire a clinical or basic investigative experience in preparation for a career in independent scientific research.

Specific Goals:

The specific goals of our training program are derived from the Mission Statement: 1) clinical competence, 2) capable of working in a variety of settings, and 3) a life-long learner.

The competency based goals are based on GME guidelines to achieve proficiency in:

Medical Knowledge
Patient Care
Practice-Based learning and improvement
Systems-based practice
Interpersonal and Communication skills
Professionalism

These specific goals are further amplified as follows:

1. Clinical competence is essential for all physicians and for a rheumatologist is defined as:
 - a. A basic core of knowledge of clinical manifestations, clinical presentations, pathophysiology and management of rheumatologic diseases or systemic diseases with rheumatic manifestations. This knowledge base should include an appropriate content of anatomy, genetics, biochemistry, immunology,

physiology, pharmacology, epidemiology, statistics, ethics, and human behavior relative to the practice of rheumatology.

- b. The clinical skill of data collection including history-taking, physical examination and the appropriate request of laboratory and imaging studies.
 - c. The ability to formulate appropriate differential diagnoses and therapeutic plans based on an ability to critically analyze the clinical data, and integrate this analysis with the basic fund of medical knowledge.
 - d. The ability to perform as a consultant or a health-care team leader when summoned.
 - e. The knowledge to treat the common and uncommon diseases found in the practice of rheumatology. To develop the understanding of the principles, indications, contraindications, risk, cost and expected outcome of the various treatments. To recognize the need for appropriate consultation and the reasonable expectations from a consultant.
 - f. The performance and/or interpretation of diagnostic and therapeutic procedures common in the practice of rheumatology. This skill should include the understanding of the principles, indications, contraindications, risk, cost and expected outcome of these procedures.
 - g. The further development of appropriate communication skills with patients, peer and paramedical personnel.
 - h. The further development of qualities of professionalism and humanistic skills including integrity, compassion, and respect for patients, peers and paramedical personnel.
 - i. Clinically competent rheumatologists must possess a level of skill and expertise in research. All fellows must be capable of demonstrating competence in the understanding of the design, implementation and interpretation of research studies; specifically including research methodology, critical interpretation of data, critical interpretation of published research, and the responsible use of informed consent.
2. The ability to work in a variety of settings is essential for a clinically complete rheumatologist. The fellows will be able to demonstrate clinical competence in the following settings:
- a. As the primary health care provider in the acute inpatient setting, the ambulatory clinic, the emergency department, and the intensive care setting
 - b. As the consultant to other internists or non-internists in the acute inpatient setting, the ambulatory clinic, the emergency department, and the intensive care setting

- c. As the leader of a multidisciplinary health care team, i.e. rehabilitation facilities, home health care, etc.
3. Life-long learning is an essential component for clinically competent physicians and required for the acquisition, critical analysis, synthesis and reassessment of knowledge, skills and professionalism. All fellows will be capable of demonstrating their ability to be life-long learners by their:
 - a. Independent study habits in the acquisition of clinical and research knowledge and skills
 - b. Attendance, presentation and participation in the organization of local educational conferences
 - c. Attendance and presentation at regional and national professional scientific conferences

The goals of the first year curriculum are:

- To teach how to diagnose, treat, and manage patients with rheumatic disease.
- To teach the trainee the role of the consultant and how to effectively consult.
- To teach basic immunology and concepts for understanding the pathophysiology of autoimmune diseases in general and rheumatologic diseases in particular.
- To teach basic principles for the treatment of these diseases.
- To expose the trainee to current research in autoimmunity and rheumatology through journal clubs and grand rounds.
- To learn the fundamentals of orthopedic approach to musculoskeletal disease.
- To further our trainees' education in quality assurance, cost containment and ethics.

The goals of the second year are:

- To further the education of the trainee relevant to the diagnosis of and care and treatment of patients with rheumatic diseases.
- To further expose the trainee to current research in treatment, diagnosis, and etiology of autoimmune and rheumatologic diseases. This is accomplished through the fellow's direct involvement in a research project in addition to continued involvement in selected patient care activities including rheumatology clinics.
- Fellows in the second years are encouraged to participate in laboratory or clinical research; opportunities for research are detailed in the Research section.

Specific Objectives:

At the completion of the rheumatology fellowship training, the fellow should have mastered the following specific objectives as they pertain to each of the specific goals of the curriculum:

1. Clinical competence in a variety of clinical settings:
 - a. All fellows should have mastered those specific clinical objectives for the majority of diseases seen in the practice of rheumatology, including the uncommon and complicated diseases.
 - b. Demonstrate proficiency as a consultant and/or leader of a multidisciplinary health care team.
 - c. Possess communication skills that will allow the fellow to perform as the health care team leader with peers and professionals.
 - d. The clinical proficiency of the fellow will be mastered at a level where they not only demonstrate their proficiency, but are capable of teaching these skills to trainees at junior levels.
 - e. Qualities of professionalism and humanistic skills will be demonstrated at a level which serves as a model for trainees at a junior level.
 - f. All fellows should have mastered those specific research objectives outlined for the fellowship program and have produced sufficient research work to enable them to submit their work for peer reviewed presentation, scientific meetings, manuscript submissions, or grant applications for research funding.

2. Life-long learning:
 - a. Fellows will demonstrate proficiency at attending and participating in conferences, and coordinating conferences, conference topics, and conference schedules.
 - b. Fellows will demonstrate mastery of teaching skills in their interaction with trainees in junior levels of training. This may include supervised teaching interactions with trainees such as junior-level fellows, residents, and medical students.

Methods for Teaching Rheumatology:

In order to achieve the goals and objectives for the fellowship program the following experiences have been established for the purpose of teaching Rheumatology fellows. These include: A) the inpatient rheumatology experience, B) the ambulatory rheumatology experience, C) ambulatory rotations with other clinical subspecialties, D) didactic conferences, E) a research experience, F) continuing medical education and society participation, and G) development of teaching skills.

A) The inpatient rheumatology experience.

The fellows assigned to this rotation will be responsible for organizing the activities of this service. Inpatient rheumatology experience will be at the VA Hospital. This primarily includes the supervised evaluation of inpatient consultations and patients admitted to the rheumatology service as well as the continued follow up of these patients during their hospitalization. Essential in this role is the development and refinement of clinical evaluation skills of patients with rheumatic diseases. These skills include the development of appropriate differential diagnosis, assessing the need for hospitalization, diagnostic evaluation strategies and treatment plans. Essential in this rotation will be developing skills in providing consultation services, to include communicating with the referring physicians and ensuring support for continuing care of the patients' rheumatic condition. A fellow will be called upon to perform literature search on topics appropriate to the case at hand. They will participate actively in the teaching activities of the consultation team. Through this experience the fellow will also develop a comprehensive understanding of the indications, contraindications, techniques, and complications of arthrocentesis as well as the interpretation of results from this procedure. The fellow will also acquire the knowledge of and skill in educating patients about the procedure and in obtaining informed consent. Faculty supervision is required in developing these skills.

B) The ambulatory rheumatology experience.

This experience will continue with progressive responsibility through the fellowship and will be appropriately supervised by dedicated attending faculty members. The goal of this experience will be for the fellows to gain expertise in the outpatient evaluation and management of rheumatic problems. The experience provides an opportunity to develop an understanding for the natural history of these conditions over an extended period of time. *Ambulatory rheumatology experience will be at the VA clinic and the two locations of UCF Health clinic.*

C) Interdisciplinary interactions.

The fellow should be provided an experience with other disciplines whose expertise is required in the care of patients with rheumatic diseases. It is suggested that these disciplines include: 1) dermatology, 2) orthopedic medicine, 3) rehabilitative medicine, 4) ophthalmology, and 5) pediatric

rheumatology. The goal of these experiences is for the fellow to appreciate the approach to the specific conditions that relate to rheumatic disorders within these subspecialties. This interdisciplinary interaction can occur in the form of a clinical rotation, multidisciplinary conference, etc. Clinical experiences should be under the direction of attending physicians in the respective subspecialty who participate fully in the educational goals of the rotation.

D) Didactic conferences.

Conferences will be held on a regularly scheduled basis with attendance required of all fellows and divisional faculty. Attendance is mandatory unless excused. Conferences will include members from the divisions outside of Rheumatology to include several subspecialties including Pathology and Radiology who have specific interests in the field of rheumatic disease.

E) Research experience.

Exposure to divisional research programs will be initiated early in the fellowship to allow the fellow adequate insight into the areas of research in preparation for the ultimate selection of a faculty member to serve as a specific research mentor.

F) Continuing medical education and society memberships.

In addition to participating in the organized didactic conferences established within the fellowship program it is also strongly encouraged that all fellows become members of the American College of Rheumatology as well as any respective local society on rheumatic diseases. Participation in the continuing medical education activities of these professional organizations will help foster the standards of professionalism and augment the process of lifelong learning.

G) Experience in developing teaching skills.

The program must provide an environment for the fellow which fosters and highly regards the activities of teaching. This includes the education of not only medical students, physicians, and other allied health personnel but also the education of the patients. Development of these skills requires the fellow to receive instruction and feedback in counseling and communication techniques. This latter training must include cultural, social, behavioral and economic issues such as confidentiality of information and indications for life support systems.

Methods of Evaluation:

Formative Evaluation of the Fellows

Formal formative evaluations will occur at the completion of any substantive interaction with a specific faculty member or specific rotation. For each clinical rotation, an evaluation form will be completed by the supervising faculty member on MedHub. All faculty should complete the form prior to the completion of the rotation and review their

impressions directly with the fellow. All completed evaluation forms are returned to the Program Director for review and placed in the fellow's permanent file. Any forms that contain a rating less than satisfactory in any category will require an immediate conference between the fellow and the Program Director to identify causes for the poor performance and identify means for improving the deficiency.

All fellows will be required to keep a procedures log, identifying the procedure, date, indication, outcome, complication, and name of supervising physician. A copy of this log will be provided to the Program Director semi-annually for placement in the fellow's permanent file.

At least semi-annually, all fellows will confer individually with the Program Director to review all of their evaluations. This meeting is to provide feedback to the fellow on their performance and to identify areas for professional enhancement. A written summary of this session is placed in the fellow's permanent file.

Summative Evaluation of the Fellows

When fellows meet individually with the Program Director at least semi-annually, feedback on their performance in both a formative and summative fashion will be given. A written summary of the fellows' evaluations in the semi-annual conference is placed in the fellow's permanent file. The overall performance of each fellow is reviewed at least annually by the Clinical Evaluations Committee. This committee is asked to monitor the performance of the fellows and assess the level of competence for each fellow. The committee's assessment is written and recorded in the program. Any adverse judgments or evaluations regarding the fellow's level of performance or competence should first be directed to the Program Director. If the fellow feels that this is not to their satisfaction, then the grievance can be addressed by established University of central Florida institutional policy.

Evaluation of the Faculty and Program

Semi-annually, all fellows are required to complete and return an evaluation of the faculty and the program. Evaluations are collected in a fashion to assure the anonymity of the fellow. Fellows are encouraged to maintain a high level of communication with the Program Director and faculty. Periodically, meetings will be established for a formal conference with the fellows and Program Director. These meetings can be used to disseminate information, receive timely feedback, etc. The feedback received during informal meeting, formal meetings, and the semi-annual evaluation form will be used to make programmatic changes.

Evaluation Tools:

Faculty Performance Rating

Patient Survey

360 Evaluation

ACGME biannual milestone evaluations

CORE ROTATIONS GENERAL POLICIES:

- Each 1st year fellow will be assigned to either UCF Health or the VA for a one month rotation at a time. The fellows will alternate the rotations every other month (see tables below).
- For the 1st year: Fellow 1 will start with UCF Health rotation in July and Fellow 2 will start with VA Hospital rotation in July.
- Each fellow will have 4 half day continuity clinics divided equally between the VA and each UCF Health clinic.
- The fellow assigned to the VA rotation for the month will be responsible for seeing inpatient consults at the VA.

FELLOW 1 (UCF HEALTH)	Mon	Tues	Wed	Thurs	Friday
AM	GW	Quad	VA	VA	Rheumatology Board Review Didactics
Noon		VA RADIOLOGY 2 ND TUES			
PM	Faculty clinic	Faculty clinic	Faculty clinic	Faculty clinic	Didactics

FELLOW 2 (VA Hospital)	Mon	Tues	Wed	Thurs	Friday
AM	VA	VA	GW	Quad	Rheumatology Board Review Didactics
Noon		VA RADIOLOGY 2 ND TUES			
PM	VA CONSULT Faculty clinic	VA CONSULT Faculty clinic	VA CONSULT Faculty clinic	VA CONSULT Faculty clinic	Didactics VA CONSULT

- Fellows have the responsibility to make sure there is no more than 1 fellow on vacation/elective at the same time.
- Each 2nd year fellow will have (on average) 1 half-day per week protected for research. It is up to the fellow to make these arrangements with the faculty at the site they are assigned. This half day per week is averaged over the year, so some weeks (particularly at the VA) it may be a whole day.

- Fellows will be responsible for labs/medications ordered, view alerts, secure messages and phone messages for their continuity clinic patients.
- Secure messages and phone calls must be addressed within 72 hours of being assigned to the provider.
- Notes need to be completed and sent to attending for co-signature within 24 hours
- Abnormal labs should be addressed within 72 hours with notification to patient. Satisfactory labs must be notified to patient within 1 week.

Consults at VA:

Inpatient consults must be seen and the note written within 24 hours of notice request. It should be staffed by an attending within the next 24 hours. All procedures should be supervised by an attending who should be physically present.



IMPORTANT NOTES ABOUT VA HOSPITAL ROTATION:

Address for VA Hospital

Orlando Veterans Affairs Medical Center (OVAMC)
Lake Nona Campus
13800 Veterans Way
Orlando, FL 32827
Main Telephone Number 407-631-1000

Rheumatology Clinic: 1B West Valor
Mail Code: 1 B West Valor Unit
Front Desk: 407-631-1030
Nurses: 407-631-1073

Emergency Contact Phone Numbers for Lake Nona Campus

OVAMC Police Emergency Line 407-631-8276, or extension 18276, 10911

OVAMC Police Non-Emergency 407-631-5003

Dialing Lake Nona Numbers From Outside VA:

Dial 407-63 then extension starting with "1"

Telephone Access from the Lake Nona Campus To:

Lake Baldwin Campus and Metric	Dial 5 plus extension #
Lakemont and Crossroads Annex	Dial 2 plus extension #
Lake Nona DOM, CLC, and Warehouse	Dial 1 plus extension #
Daytona OPC and Orange City CBOC	Dial 3 plus extension #
Viera OPC	Dial 4 plus extension #

Parking

Employees who work in the Lake Nona Campus Clinics will park in the East Garage, building #4 (see attached maps).



Dress Requirements

Orlando VA Medical Center employees are expected to dress in a professional manner in accordance with the standards of their profession and service. This applies to all employees, volunteers, clinical trainees, work study participants, students, contracted staff and all others working at our Medical Center. Each employee's appearance contributes to the overall image of the Orlando VA Medical Center as a provider of quality health care. Please direct specific questions you may have regarding dress to the program faculty. .

Identification Badges

Identification badges are required to be worn above the waist with the picture side out and visible from the front.

Personalization of Work Spaces

There will be no personalization of workspaces or offices on the Lake Nona Campus. The only items that will be placed on the wall will be items ordered by the Interior Designer and installed by Facilities Management. You cannot tape items to the wall. This is an Orlando VAMC policy per the Director.

Cell Phone Usage

Cell phone service within the main facility is not consistent, and it also depends on your specific carrier. You can make cell phone calls if located near any of the windows, but the calls tend to drop more or not even connect the further you move away from the windows.

One recommendation is to use text messaging more than call service. Text messages usually go through more consistently than telephone calls. Be careful not to use protected patient health information in text messages.

NOTE: Please be sure you test your cell phone service where your work space is so you are aware of how it will operate when needed for urgent matters.



Dining Options

On Campus

- **Vending Machines**: are located next to male patient bathroom in the waiting area of Lake Nona Primary Care.
- **Nona Patriot Café**, located across from the lab on the first floor
 - M-F 7 a.m. – 4p.m.
- **Nona Patriot Brews**, located across from pharmacy before the ER on the first floor.
 - M-F 7 a.m.- 6 p.m.
 - Sat 7:30 a.m. - 1:30 p.m.
- **Nona Retail Store**
 - M-F 7 a.m.- 6 p.m.
 - Sat 7:30 a.m. - 1:30 p.m.

Within Medical City

- **UCF COM Café** at the UCF College of Medicine, 6850 Lake Nona Blvd. (407) 266-2233. Open Mon. - Fri., 7:00 am – 2:00 pm; meals made from scratch. ID must be presented.
- **Nemours Café** at Nemours Children's Hospital, 13535 Nemours Parkway, Orlando, FL. 32827. Café located on first floor. Open Mon. - Sun., 7:00 am - 9:30 am for breakfast and 11:00 am - 2:00 pm for lunch. ID must be presented.



VA Faculty:

Sujatha Vuyyuru, MD

Program Director
Rheumatology Section Chief
Office: 1C803
Office Phone: 407-631-1131

Ashwini Komarla, MD

Assistant Program Director, Rheumatology Fellowship
Orlando VAMC
Office: 1B914
Office Phone: 407-631-1094

Seema Frosh, MD

Site Director, Orlando VAMC
Office: 1B914
Office Phone: 407-631-1092

VA Rheumatology On Call Phone: 321-320-3722

Call Schedule Can be found on : Amion.com, Login: vaorlando

VA Clinics:

Clinic Location: Valor Clinic - 1B

Clinic Hours:

Monday-Friday
8am-4:30pm

Nurses:

Mercy Thomas, RN
Aida Acevedo, RN

Attending CPRS Clinics:

Dr. Ashwini Komarla
Dr. Seema Frosh
Dr. Sujatha Vuyyuru

ORL Rheum **P1** 1B
ORL Rheum **P2** 1B
ORL Rheum **P3** 1B



VA Rheumatology Faculty Clinic Schedule

	Mon	Tues	Wed	Thurs	Fri
AM	Komarla Frosh	Frosh Vuyyuru	Frosh Vuyyuru	Komarla Vuyyuru	Frosh
PM	Komarla Frosh (2/4/5 th wks) Vuyyuru	Komarla Frosh Vuyyuru	Komarla Frosh Vuyyuru	Komarla Frosh Vuyyuru	Didactics

Fellow Continuity Clinic:

Fellow 1 VA Clinic: Wednesday and Thursday 8am-noon

Fellow 2 VA Clinic: Monday and Tuesday 8am- noon

Work Related Injuries at VA:

During Normal Business Hours

1. Trainee notifies preceptor of work-related injury
2. Trainee goes to Occupational Health
 - ❖ Preceptor will also call Occupational Health to notify that they are on the way
3. Occupational Health checks to see if trainee is in CPRS
4. If trainee is not in CPRS, Occupational Health immediately notifies Human Resources by the VHAORLWOC@VA.GOV email group to enter the trainee into CPRS
 - ❖ Occupational Health will send email with “High Importance” with subject line TRAINEE WORK RELATED INJURY
5. HR submits the trainee into CPRS and responds back to Occupational Health as “completed”



6. Occupational Health will then proceed with the standard work-related injury process

After Normal Business Hours

Urgent Care/Emergency Services will provide Occupational Health services after normal business hours. Trainees at Community Based Outpatient Clinics or other off-site facilities of Corporate Orlando will be directed to Urgent Care Clinics in their vicinity or Emergency Room of local hospitals for emergency care otherwise they will be directed to travel to Orlando for non-emergent conditions.

VA Electives Available:

(Contact Site Director)

Orthopedics

Podiatry

Physical Medicine and Rehabilitation

Prosthetics

Anesthesia/Pain Medicine

Physical Therapy

Ophthalmology/Retina

Dermatology

Possible: Pulmonary, Allergy



IMPORTANT NOTES ABOUT THE UCF HEALTH CLINIC ROTATION



GATEWAY CLINIC (Lake Nona)

9975 Tavistock Lakes Blvd.
Orlando, 32827 FL

Phone: 407-266-3627

Fax: 407-266-4911

Hours:

Monday - Friday: 8 a.m. – 5 p.m

QUADRANGLE CLINIC (East Orlando)

3400 Quadrangle Blvd.
Orlando, 32817 FL

Phone: 407-266-3627 (DOCS)

Fax: 407-882-4799

Hours:

Monday - Thursday: 8 a.m. - 5 p.m.

Friday: 8 a.m. – 1 p.m.

UCF Health Contact Information

Shazia Bég MD

Assistant Program Director, Rheumatology Fellowship
Rheumatology Fellowship Site Director for UCF Health
Assistant Professor of Rheumatology
Shazia.beg@ucf.edu

Neha Bhanusali MD

Core Rheumatology Faculty
Assistant Professor of Rheumatology
Neha.Bhanusali@ucf.edu

Lance Feller MD

Core Rheumatology Faculty
Assistant Professor of Rheumatology

Mary Toth MD

Division Chief of Rheumatology
Nemours Children's Hospital



UCF Health Medical Director:

Maria Cannarozzi MD
Maria.Cannarozzi@ucf.edu

UCF Health Operations Director (interim):

Adam Novak
Adam.novak@ucf.edu
407-266-1208

IT Contact

Richard Truehl
Richard.Truehl@ucf.edu
407-882-4809

Raymond Eccleston
Raymond.Eccleston@ucf.edu
407-266-4859

Nurse Manager:

Anthony Dearman
Anthony.dearman@ucf.edu

Patient Services Manager:

Traci Briggs
Traci.briggs@ucf.edu



UCF Health Rheumatology Faculty Clinic Schedule

	Mon	Tues	Wed	Thurs	Fri
AM	Bég (GW)	Bhanusali (Quad)	Bég (GW)	Bég (GW) Bhanusali (Quad)	Bég (GW)
PM	Bég (GW)	Bhanusali (Quad)	Bég (GW)	Bhanusali (Quad)	

Fellow Continuity Clinic:

Fellow 1 UCF Health Clinic: Monday (GW) and Tuesday (Quad) 8am-noon

Fellow 2 VA Clinic: Wednesday (GW) and Thursday (Quad) 8am- noon

- Fellows are responsible for calling their own patients with results and documenting it in the chart. If patient cannot be reached or more action needs to be taken, then the “Clinical Pool” or the Rheumatology Nurses should be included on the message.
- Rheumatology-Dermatology combined clinic will be offered on some Thursday mornings at Gateway with Dr. Naveed Sami.
- MSK Ultrasound clinic with Dr. Mike Seifert may be scheduled for one afternoon a month (either Wednesday at GW or Tuesday at Quadrangle) after October 2018. Permission for this should be first obtained from the supervising rheumatology attending you are working with that day.

UCF Health Electives Available:
(Contact Site Director)

Allergy/Immunology
Sports Medicine
Dermatology
Behavior Health for Chronic Pain management

NEMOURS CHILDREN'S HOSPITAL



- Address: 13535 Nemours Pkwy, Orlando, FL 32827
- Important Contacts:
 - Mary Toth MD, Division Chief of Pediatric Rheumatology, Core Faculty

UCF COLLEGE OF MEDICINE



- Address: 6850 Lake Nona Blvd, Orlando FL 32827
- Important Contacts:
 - Deborah German MD, Dean and Vice President for Medical Affairs
 - Ed Ross MD, Chair, Department of Internal Medicine
 - Marcia Katz MD, Associate Dean for Clinical Affairs/Chief Medical Officer
 - Abdo Asmar MD, Vice Chair of GME, Program Director of Internal Medicine Residency Program
- All UCF fellows can get access to UCF COM Library which is a great resource for journals, rheumatology textbooks, online databases – many of which can be accessed remotely.
- Fellows will get opportunities to teach UCF medical students, interns and internal medicine residents.
- Fellows can participate in inter-professional educational activities (IPE) hosted at UCF COM if on a non-clinical day and approved by attending.
- UCF GME Consortium policies are listed under this website. Please refer to this for further information:
<https://med.ucf.edu/academics/graduate-medical-program/gme-policies-2/>

POLICIES and PROCEDURES

<https://med.ucf.edu/academics/graduate-medical-program/gme-policies-2/>

The policies and procedures are outlined in detail on the UCF website listed above. Some important ones are mentioned here.

Fellow Supervision

All residents are supervised by attending staff in the in-patient and out-patient settings. In the inpatient setting fellows are supervised by an attending on service that makes bedside rounds with the fellow at least three times per week and who is available by phone at all times. Attending staff will come in to the hospital to assist the fellow as needed. Fellows are expected to call the attending as needed for follow-up patients and for any new consults as they are seen. Joint aspirations are initially supervised by the attending until an appropriate level of skill is reached. Fellows are to keep a list of all procedures performed. Instruction on joint examination and injection techniques are given throughout the year. In the outpatient setting all fellows present all new and follow-up cases to the attendings in clinic. The attendings review charts of patients seen by fellows.

Sick call/Backup Call

In the event that a fellow is absent on a short term basis (less than two weeks) because of illness or for personal matters, another fellow in that PGY year will assume the appropriate responsibilities and commitments which would have been normally assumed by the absent fellow. If a fellow in that PGY year is unable to totally assume the allotted responsibilities, then an appropriate fellow from the other PGY year will assume responsibility.

Maternity Leave, Vacation, Leave of Absence

Fellows are allowed 4 weeks of paid vacation per year. Only one first year fellow may take vacation at one time, and vacation time must not be taken during inpatient consult month at the VA. Vacation requests must be submitted at least 8 weeks in advance and approved by the Program Director. Travel/vacation plans should not be made before vacation requests have been approved. Appropriate outpatient clinics must be cancelled accordingly.

The program allows maternity leave as mandated by University and ACGME policy (6 weeks maternity, including sick leave and 4 weeks vacation). If additional time is required this will be taken as unpaid family leave and made up at the completion of the fellowship.

Family leave may be taken in accordance with University policy. The American Board of Internal Medicine stipulates that leave for any reason, including Maternity leave, must be made up at the end of the fellowship. If vacation time and leave of absence total more than 12 weeks over two years, time will need to be made up at the end of the fellowship. Any leave of absence must be arranged with the Program Director.

Moonlighting

Moonlighting activities need to be approved by the Program Director and will be approved only if the resident or fellow is in good academic standing. Moonlighting activities must leave the fellows in compliance with duty hour policies.

Duty Hours

The scheduled work week will not exceed 80 hours per week. On-call is taken 1 week at a time by beeper from outside the hospital. For our program this does not result in an excess of hours over the mandated 80 hours per week.

Work hours are monitored electronically by utilization of MedHub. Duty hours must be entered on a weekly basis in MedHub. The program can be fined if Duty Hours and Duty Hours Surveys are not completed by the required deadlines.

Work Related Injuries:

1. Trainees exposed to either infectious or environmental hazards, including needle sticks during work, require immediate assessment and should report to the hospital occupational or employee health office unless otherwise directed. Standard hospital protocols, including reporting of incident should be followed. HIV prophylaxis may need to be considered depending on the circumstances of exposure. After hours, the trainee should report to Urgent Care or the Emergency Department for treatment. For other types of injury occurring at work, the trainee should seek medical attention appropriate to the level of injury.
2. Clinical site should verify that appropriate test order set has been submitted for the source patient (for blood and bodily fluid exposures from patient).
3. **All injuries and exposures should be reported to Amerisys as soon as possible or within 24 hours at 800-455-2079.** Amerisys is the UCF Workers Compensation carrier and is responsible for claims for injuries; the trainee should not supply personal health insurance information for work related injuries.
4. The hospital GME office, the DIO office and the program director and coordinator should be notified within 24 hours if there is consideration of worker's compensation claim. The program coordinator will work with the trainee to complete necessary paperwork and reporting to Amerisys; additionally, the GME office at each hospital will have a listing of local clinics for any follow-up care. The report of injury for compensation can be found at http://hr.ucf.edu/files/New_First_Report_Of_Injury_Form.pdf
5. The trainee should follow-up appropriate for any work-related injury or exposures and will be granted leave from clinical duties for this purpose.

Additional information on how to handle needle sticks and exposure to blood borne pathogens can be found at <https://www.cdc.gov/niosh/topics/bbp/emergnedl.html>.

Didactic Sessions

Expectations: Fellows are expected to attend all didactic sessions and to arrive on time. Fellows may have their beepers turned on. Cell phones need to be turned off. Fellows are expected to participate actively in these sessions, to ask questions, and to participate in discussions. Fellows presenting at these sessions are expected to prepare a PowerPoint presentation and be familiar with the contents of referenced papers.

Supervision: Fellows are encouraged to seek help from attendings when preparing their conferences. Multiple attendings participate at these conferences and provide immediate written and/or oral feedback. Case reports are supervised by an attending; usually this is the attending that has seen the case with the fellow.

Rheumatology Fellowship Curriculum Goals

Curriculum Topics:

BASIC SCIENCES

A. Anatomy and biology of musculoskeletal tissues: for each tissue, distinguish the embryology, development, biochemistry and metabolism, structure, function, and classification

1. Connective tissue cells and components: fibroblasts, collagens, proteoglycans, elastin, matrix glycoproteins
2. Joints and ligaments: diarthrodial joints, intervertebral discs, synovium, cartilage
3. Bone: development, structure, turnover and remodeling (including the role of osteoclasts, osteoblasts, osteocytes, as well as hormonal and cytokine regulation)
4. Muscle and tendons
5. Vasculature and endothelium
6. Skin

B. Immunology

1. Anatomy and cellular elements of the immune system

- a. Lymphoid organs: gross and microscopic anatomy, structure and function
- b. Organization of the immune system: innate and adaptive immune systems
- c. Specific cells: for each cell type, the ontogeny, structure, phenotype, function, and major activation markers/receptors
 - i. Lymphocytes: T cells and B cells (naive, memory, activated, regulatory, innate lymphoid cells)
 - ii. Antigen presenting cells: dendritic cells, monocytes and macrophages
 - iii. Natural killer cells
 - iv. Neutrophils and eosinophils
 - v. Other cells: NKT cells, mast cells, endothelial cells, platelets, fibroblasts

2. Immune and inflammatory mechanisms

- a. Antibody structure and genetic basis of antibody diversity
- b. Receptor/ligand interactions: activating and inhibiting receptors, complement receptors, Fc receptors, adhesion molecules
- c. Toll-like (TLR) and other pattern recognition receptors (PRR)
- d. Molecular basis of T cell antigen recognition and activation
- e. B cell receptors: structure, function, antigen binding, effector functions
- f. Antigens: types, structure, processing, presentation, and elimination
- g. Major histocompatibility complex: structure, function, nomenclature, and immunogenetics
- h. Major immune cell signaling pathways
- i. Complement/Kinin systems: structure, function, and regulation
- j. Acute phase reactants and enzymatic defenses
- k. Intracellular signal transduction
- l. Inflammasome, neutrophil extracellular traps

3. Cellular interactions and immunomodulation
 - a. Cellular activation and regulation: mechanisms of activation and suppression of function (e.g. T cell and B cell interactions via CD28:CD80/86)
 - b. Cytokines: origin, structure, effect, site of action, metabolism, regulation, and gene activation
 - c. Immune cell trafficking; adhesion molecules, chemokines
 - d. Inflammatory mediators: origin, structure, effect, site of action, metabolism, and regulation

4. Immune responses
 - a. Antibody-mediated: opsonization, complement fixation, and antibody dependent cellular cytotoxicity
 - b. Cell-mediated: cells and effector mechanisms in cellular cytotoxicity, granuloma formation, and delayed type hypersensitivity
 - c. IgE-mediated: acute and late-phase reactions
 - d. Mucosal immunity and the microbiome
 - e. Innate immune responses: natural killer cells, pattern recognition, interaction with adaptive responses
 - f. Pathologic immune responses: immune complex-mediated (physicochemical properties and clearance of immune complexes), graft versus host response, abnormal apoptosis

5. Immunoregulation
 - a. Tolerance: mechanisms of central and peripheral tolerance, including clonal selection, deletion, and anergy
 - b. Cell-cell interactions: help and suppression; collaboration among cells for control of the immune response
 - c. Autoimmunity: pathogenesis of systemic and organ specific autoimmunity
 - d. Idiotype networks: inhibition and stimulation

- C. Crystalline disease metabolism
 1. Purine and uric acid metabolism
 - a. Purine: biochemistry, synthesis, and regulation
 - b. Uric acid: origin, elimination, and physicochemical properties
 - c. Purine pathway enzyme deficiencies and immunodeficiency: ADA, PNP

 2. Calcium-based crystal metabolism
 - a. Crystals: factors affecting formation, induction of inflammation
 - b. Genetic abnormalities contributing to crystal formation

- D. Genetics and epigenetics

- E. Biomechanics of bones, joints, and muscles: principles of kinesiology of peripheral/axial joints and gait and how alterations in biomechanics contribute to musculoskeletal disorders

- F. Neurobiology of Pain
 1. Peripheral afferent nociceptive pathways
 2. Central processing of nociceptive information
 3. Biopsychosocial model of pain

CLINICAL SCIENCES

A. Rheumatic Diseases

- B. For each disease, acquire knowledge of the epidemiology, genetics, disease pathogenesis, natural history, clinical expression (including clinical subtypes), pathology.
1. Rheumatoid Arthritis.
 2. Seronegative spondyloarthritides: ankylosing spondylitis, reactive spondyloarthritis/arthritis, psoriatic arthritis, inflammatory bowel disease-associated arthritis, arthritis associated with acne and other skin diseases, synovitis, acne, pustulosis, hyperostosis, and osteitis (SAPHO) syndrome, and undifferentiated spondyloarthritis.
 3. Lupus erythematosus: systemic, discoid, and drug-related; anti-phospholipid antibody syndrome
 4. Primary anti-phospholipid syndrome
 5. Scleroderma: diffuse and limited cutaneous systemic sclerosis, localized scleroderma, chemical/drug-related, other fibrosing skin disorders (eosinophilic fasciitis, eosinophilia-myalgia syndrome, nephrogenic systemic fibrosis, scleromyxedema, scleredema of Buschke)
 6. Other systemic autoimmune diseases: Sjögren syndrome, mixed connective tissue disease, undifferentiated connective tissue disease, and overlap syndromes
 7. Other inflammatory diseases: relapsing polychondritis, panniculitis (lobular or septal (erythema nodosum)), adult-onset Still's disease
 8. Vasculitides: giant cell arteritis/polymyalgia rheumatica, Takayasu's arteritis, polyarteritis nodosa, ANCA-associated vasculitis such as granulomatosis with polyangiitis (GPA, formerly Wegener's granulomatosis), eosinophilic granulomatosis with polyangiitis (EGPA, formerly Churg-Strauss syndrome) and microscopic polyangiitis, anti-glomerular basement membrane disease, cryoglobulinemia, Immunoglobulin A vasculitis (formerly Henoch-Schönlein purpura), hypocomplementemic urticarial vasculitis, Behçet's disease, Cogan's syndrome, cutaneous leukocytoclastic angiitis, primary central nervous system vasculitis, isolated aortitis, vasculitis from systemic disorders, infections, drugs, malignancies, and overlap necrotizing vasculitis.
 9. Infectious a. Infectious arthritides: bacterial (non-gonococcal and gonococcal), mycobacterial, spirochetal (syphilis, Lyme), viral (HIV, hepatitis B, hepatitis C, parvovirus, chikungunya, dengue), fungal, parasitic b. Whipple's disease
 10. Reactive arthritides: acute rheumatic fever, arthritis associated with subacute bacterial endocarditis, intestinal bypass arthritis, post-dysenteric arthritides, post-immunization arthritis, other colitis-associated arthropathies,
 11. Metabolic, endocrine, and hematologic disease associated rheumatic disorders
 - a. Crystal-associated diseases: monosodium urate monohydrate (gout), calcium pyrophosphate dihydrate deposition disease, basic calcium phosphate (hydroxyapatite), calcium oxalate
 - b. Endocrine-associated diseases: rheumatic syndromes associated with diabetes mellitus, acromegaly, parathyroid disease, thyroid disease, Cushing disease
 - c. Hematologic-associated diseases: rheumatic syndromes associated with hemophilia, hemoglobinopathies, angioimmunoblastic lymphadenopathy or lymphoma,

multiple myeloma, hemophagocytic lymphohistiocytosis/macrophage activation syndrome

12. Bone and cartilage disorders

a. Osteoarthritis - primary and secondary osteoarthritis

b. Metabolic bone disease: low bone mass, osteoporosis, osteomalacia, bone disease related to renal disease

c. Paget's disease of bone

d. Avascular necrosis of bone: idiopathic, secondary causes, osteochondritis dissecans

e. Others: transient osteoporosis, hypertrophic osteoarthropathy, diffuse idiopathic skeletal hyperostosis

13. Hereditary, congenital, and inborn errors of metabolism associated with rheumatic syndromes

a. Disorders of connective tissue: Marfan syndrome, osteogenesis imperfecta, Ehlers-Danlos syndrome, pseudoxanthoma elasticum, hypermobility syndrome

b. Mucopolysaccharidoses

c. Osteochondrodysplasias: multiple epiphyseal dysplasia, spondyloepiphyseal dysplasia

d. Inborn errors of metabolism affecting connective tissue: homocystinuria, ochronosis

e. Storage disorders: Gaucher's disease, Fabry's disease

f. Immunodeficiency: IgA deficiency, complement component deficiency, SCID and ADA deficiency, PNP deficiency, others

g. Autoinflammatory syndromes: familial Mediterranean fever, hyperimmunoglobulinemia D syndrome, tumor necrosis factor receptor-associated periodic syndromes (TRAPS), periodic fever, aphthous stomatitis, pharyngitis, adenitis syndrome (PFAPA), Blau syndrome, Behçet's syndrome, Schnitzler syndrome, systemic juvenile idiopathic arthritis (SJIA), and cryopyrin associated periodic syndrome (CAPS) including Muckle-Wells syndrome, and familial cold autoinflammatory syndrome

h. Others: hemochromatosis, hyperlipidemic arthropathy, myositis ossificans progressiva, Wilson's disease, others

14. Non-articular and regional musculoskeletal disorders

a. Fibromyalgia

b. Myofascial pain syndromes

c. Axial syndromes: low back pain, spinal stenosis, intervertebral disc disease and radiculopathies, cervical pain syndromes, coccydynia, osteitis condensans ilii, osteitis pubis, spondylolisthesis/ spondylolysis, discitis

d. Regional musculoskeletal disorders: in addition to bursitis, tendinitis, or enthesitis occurring around each joint, other characteristic disorders occurring at each specific joint site (e.g., shoulder-rotator cuff tear, subacromial bursitis, adhesive capsulitis, impingement syndrome; wrist-ganglions, De Quervain's tenosynovitis; trigger fingers/stenosing tenosynovitis, Dupuytren's contractures; knee-synovial plica syndrome, internal derangements, popliteal cyst; foot/ankle-plantar fasciitis, Achilles tendinitis, Morton's neuroma; other-temporomandibular joint syndromes; costochondritis)

e. Biomechanical/anatomic abnormalities associated with regional pain syndromes: scoliosis and kyphosis, genu valgum, genu varum, leg length discrepancy, foot deformities

- f. Overuse rheumatic syndromes: occupational, sports, recreational, performing artists
- g. Sports medicine: injuries, strains, sprains, nutrition, medication issues
- h. Entrapment neuropathies: thoracic outlet syndrome, upper extremity entrapments, lower extremity entrapments
- i. Other: peripheral neuropathies (polyneuropathy, small fiber neuropathy), mononeuritis multiplex, complex regional pain syndrome (formerly reflex sympathetic dystrophy), erythromelalgia
- 15. Neoplasms and tumor-like lesions
 - a. Benign
 - i. Joints: loose bodies, fatty and vascular lesions, synovial osteochondromatosis, pigmented villonodular synovitis, ganglions
 - ii. Tendon sheaths: fibroma, giant cell tumor, nodular tenosynovitis
 - iii. Bone: osteoid osteoma
 - b. Malignant
 - i. Primary: synovial sarcoma, osteoid sarcoma, chondrosarcoma
 - ii. Secondary: leukemia, myeloma, metastatic malignant tumors
 - iii. Malignancy-associated rheumatic syndromes: carcinomatous polyarthritis, palmoplantar fasciitis, Sweet's syndrome, paraneoplastic presentations of rheumatic diseases
- 16. Muscle diseases
 - a. Acquired muscle diseases
 - i. Autoimmune
 - (1) Polymyositis
 - (2) Dermatomyositis
 - (3) Myositis with other connective tissue diseases
 - (4) Immune-mediated necrotizing myositis
 - (5) Others (ocular/orbital myositis, focal/nodular myositis, eosinophilic myositis, granulomatous myositis)
 - (6) Inclusion body myositis
 - ii. Endocrine disorders
 - iii. Drugs/Toxins
 - iv. Others (critical illness myopathy, infections, amyloid, paraneoplastic)
 - b. Inherited muscle diseases
 - i. Metabolic myopathies
 - (1) Glycogen storage diseases
 - (2) Lipid metabolism disorders
 - (3) Mitochondrial myopathies
 - ii. Muscular dystrophies
 - iii. Muscle channelopathies
 - c. Myasthenia gravis
- 17. Rheumatic diseases in special populations
 - a. Geriatric population
 - b. Pregnant women
 - c. Dialysis patients
 - d. Transplant patients
- 18. Miscellaneous rheumatic disorders
 - a. Amyloidosis: primary, secondary, hereditary
 - b. Primary Raynaud phenomenon

- c. IgG4-related disease
- d. Retroperitoneal fibrosis
- e. Charcot joint
- f. Remitting seronegative symmetrical synovitis with pitting edema (RS3PE)
- g. Multicentric reticulohistiocytosis
- h. Sarcoidosis
- i. Intermittent arthritides: palindromic rheumatism, intermittent hydrarthrosis
- j. Arthritic and rheumatic syndromes associated with: plant thorn synovitis, scurvy, pancreatic disease, primary biliary cirrhosis, drugs, and environmental agents

B. Therapeutic modalities and strategies

1. Pharmacology: for each medication, the dosing, pharmacokinetics, metabolism, mechanisms of action, side effects, drug interactions, compliance issues, costs, and use in specific patient populations, such as chronic kidney disease and including fertile, lactating, and pregnant women and fertile men as well as across the age spectrum
 - a. Nonsteroidal anti-inflammatory drugs
 - b. Glucocorticoids: topical, intra-articular, systemic
 - c. Systemic anti-rheumatic drugs
 - i. DMARDs, small molecules: anti-malarials, sulfasalazine, methotrexate, leflunomide, azathioprine, cyclophosphamide, mycophenolate, calcineurin inhibitors, JAK kinase inhibitors, phosphodiesterase inhibitors
 - ii. Biologic agents: interleukin inhibitors (1, 6, 12, 17, 23), tumor necrosis factor inhibitors, T cell co-stimulatory inhibitors, anti-B cell therapy
 - iii. Historical agents such as gold compounds
 - d. Urate lowering therapy:
 - i. Xanthine oxidase inhibitors: allopurinol, febuxostat
 - ii. Uricosuric: probenecid
 - iii. Uricase agents: pegylated uricase, rasburicase
 - e. Bone disorder medications
 - i. Bisphosphonates: alendronate, risedronate, ibandronate, zoledronic acid
 - ii. Anabolic agents: teriparatide
 - iii. RANKL inhibition: denosumab
 - iv. Hormonal therapy: estrogen, selective estrogen receptor modulators, calcitonin
 - v. Calcium and Vitamin D
 - f. Vasodilators
 - i. Calcium channel blockers
 - ii. Topical nitrates
 - iii. Prostacyclin analogs
 - iv. Endothelin receptor antagonists
 - v. Phosphodiesterase inhibitors
 - vi. Guanylate cyclase agonist
 - g. Antibiotic therapy for septic joints
 - h. Opioid and non-opioid analgesics
 - i. Colchicine
 - j. Agents used for pain modulation: anti-depressants, anti-convulsants, pregabalin, muscle relaxants
 - k. Anti-cholinergics and non-pharmacologic agents used for the treatment of sicca symptoms
 - l. Vaccines

- m. Intravenous immunoglobulin (IVIG)
- n. Plasma exchange
- o. Rehabilitation and disability Multidisciplinary approaches to rehabilitation and pain control: appropriate use of and referral/prescription to rehabilitation specialists and pain clinics
- p. Methods of rehabilitation: for each method, principles, mechanism of action, indications, precautions and contraindications, potential side effects, and costs
 - i. Exercise
 - ii. Rest and splinting
 - iii. Thermal Modalities
 - (1) Ultrasound (2) Phoresis (3) Spa therapy (4) Icing
- q. Adaptive equipment and assistive devices
- r. Footwear and orthotics

2. Surgical and perioperative management

a. For each procedure, the fellow should demonstrate a working knowledge of indications, pre-operative evaluation and medication adjustments, contraindications, complications, postoperative management, and expected outcome.

- i. Bone biopsy
- ii. Arthroscopy
- iii. Synovectomy of tendons and joints
- iv. Entrapment neuropathy release
- v. Osteotomies: hip, knee
- vi. Arthrodesis
- vii. Spine surgery: radiculopathy, stenosis, and instability
- viii. Reconstructive surgery of hand and foot
- ix. Total joint replacement
- x. Specific surgical management problems:
 - (1) Patient with rheumatoid arthritis
 - (2) Infected joint: arthroscopy vs. arthrotomy
 - (3) Infected prosthetic joint
 - (4) Patient with ankylosing spondylitis
 - (5) Pediatric patient with rheumatic disease
 - (6) Prevention and treatment of deep venous thrombosis
 - (7) Peri-operative anti-rheumatic medication management

2. Complementary and alternative medical practices, including but not limited to: diet, nutritional supplements, acupuncture, chiropractic

DIAGNOSTIC TESTING

A. Laboratory tests: rationale, methods for performing, and utility/limitations of specific laboratory tests including but limited to:

1. Erythrocyte sedimentation rate, C-reactive protein, and other acute phase reactants
2. Rheumatoid factors, cryoglobulins, and circulating immune complexes
3. Anti-cyclic citrullinated peptide antibodies

4. Antibodies against nuclear antigens: ANA, anti-dsDNA, anti-Smith, anti-SSA, anti-SSB, anti-U1 RNP, anti-centromere, anti-histone, anti-ribosomal P, anti-topoisomerase 1, anti-RNA Polymerase III and LE cell preparation
5. Myositis-specific (anti-Jo-1 and other anti-synthetases, anti-Mi-2, anti-SRP, anti-HMGCR [200/100], anti-TIF1-gamma [p155/140], anti-MJ [NXP-2], anti-CADM-140 [MDA-5], anti-SAE) and myositis-associated (anti-U1RNP, anti-Ku, anti-PM-Scl) antibodies
6. Other disease-associated auto-antibodies; anti-mitochondrial, anti-smooth muscle, anti-neuronal
7. Anti-neutrophil cytoplasmic antibodies (anti-proteinase 3, anti-myeloperoxidase)
8. Anti-phospholipid antibodies including RPR, lupus anticoagulant, anti-cardiolipin and beta-2- glycoprotein I
9. Antibodies to formed blood elements including direct and indirect Coombs testing, anti-platelet antibodies, anti-granulocyte antibodies
10. Assays for complement activity (CH50) and components of the complement cascade
11. Serum immunoglobulin levels, serum protein electrophoresis and immunofixation electrophoresis
12. HLA typing
13. ASO and other streptococcal antibody tests
14. Serologic and PCR tests for Lyme disease, HIV, Hepatitis B, Hepatitis C, parvovirus, chikungunya and other infectious agents
15. Serum and urine measurements for uric acid
16. Iron studies including ferritin
17. Flow cytometry studies for analysis of lymphocyte subsets and function
18. Specific genetic testing

B. Diagnostic imaging techniques: basic underlying principles and technical considerations in the use of plain radiographs, computed tomography, magnetic resonance imaging, ultrasonography and radionuclide scanning of bones, joints, periarticular and vascular structures.

C. Synovial fluid analysis: cell count and differential, crystal identification, viscosity, and other special stains/analyses

D. Laboratory test-performance characteristics: principles of sensitivity, specificity, predictive value, and likelihood ratio

Rheumatology Clinical Assessment Tools/ Patient Questionnaires:

Rapid 3/MDHAQ

Useful for all Rheumatology patients

Standardized, objective evaluation tool for assessing functional capacity

Clinically significant change: ± 0.3

How it is calculated?

RAPID 3 (0-30) = Function Score (0-10) + Pain Score (0-10) + Patient Global (0-10)

Disease Activity Score 28 (DAS28)

Standardized assessment tool for monitoring disease activity in *Rheumatoid Arthritis*

Components:

28 Tender Joint Count

28 Swollen Joint Count

ESR

28 Joints: 10 MCP's + 10 PIP's + 2 wrists + 2 elbows + 2 shoulders + 2 knees

How is it calculated?

DAS28 online calculator (using a formula)- see uptodate calculators

How is it scored?

DAS < 2.6 Disease Remission

DAS 2.6 - 3.1 Low Disease Activity

DAS 3.2-5.1 Moderate Disease Activity

DAS > 5.1 High Disease Activity

Clinical Disease Activity Index (CDAI)

Quick and useful clinical composite score for *Rheumatoid Arthritis*

How is it calculated?

CDAI = Tender Joint Count + Swollen Joint Count + Patient Global + Physician Global
(0-28) (0-28) (0-10) (0-10)

How is it scored?

CDAI <2.9 Remission

CDAI 2.8-10 Low Disease Activity
CDAI 11-22 Moderate Disease Activity
CDAI >22 High Disease Activity

A reduction of 6.5 represents moderate improvement

** does not include ankles or feet, does not include inflammatory markers

Bath Ankylosing Spondylitis Disease Activity Index (BASDAI)

Used for patients with *Seronegative Spondyloarthritis*

How is it calculated?

BASDAI = Average of questions 1-10

Bath Ankylosing Spondylitis Function Index (BASFI)

Used for patients with *Seronegative Spondyloarthritis*

How is it calculated?

BASFI = $\frac{\text{Question 13} + 14 + 15 + 16 + [(17+18) \div 2]}{5}$

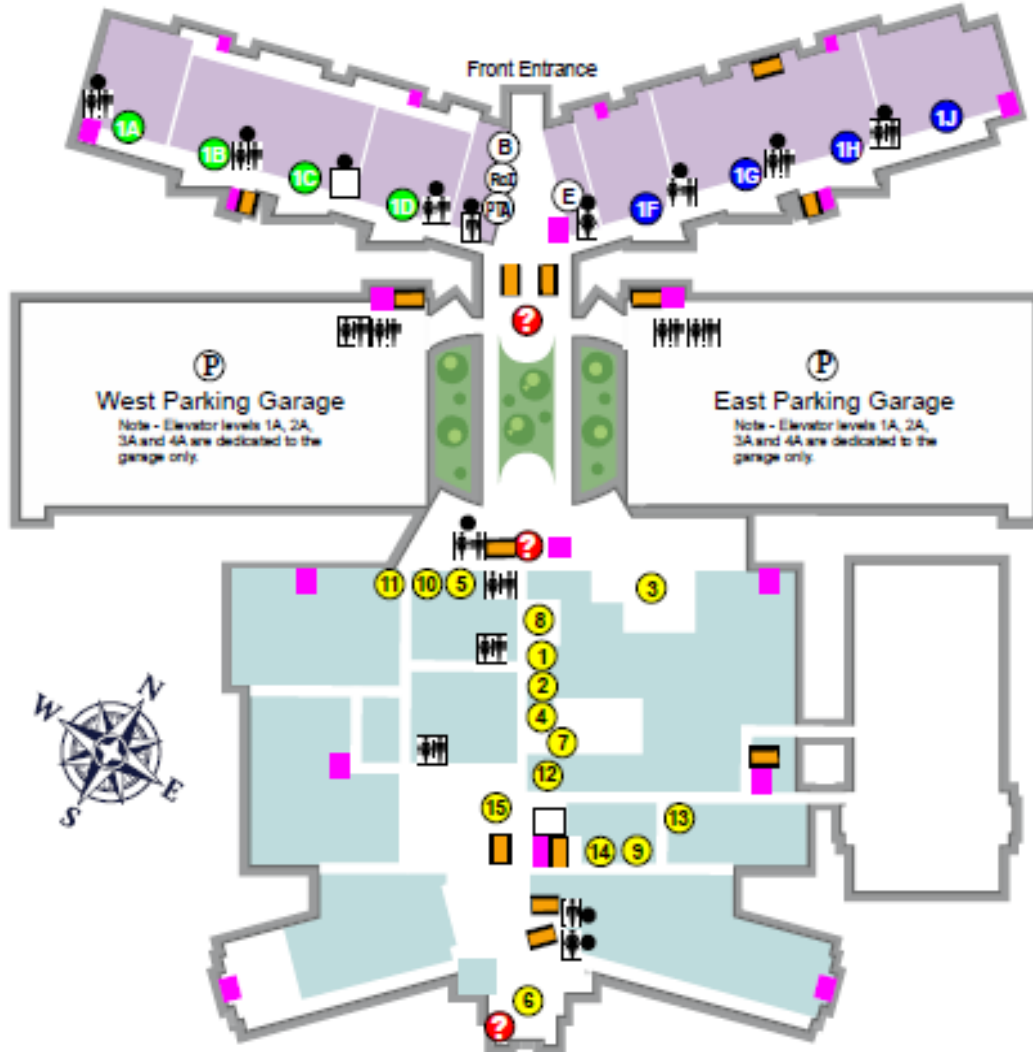
Orlando VA Medical Center - Lake Nona

Veterans and Visitors

1st Floor

CLINIC RECEPTION AREAS

- | | | | |
|--|--|-----------------------------------|--|
| 1A Dialysis Clinic | 1D Freedom Clinic
Endocrinology
Neurology | Rel Release of Information | 1F Hero Clinic
Post Deployment
Spinal Cord Injury |
| 1B Valor Clinic
Nephrology
Rheumatology
Transplant | PA Patient Advocate | B Billing | 1G Patriot Clinic |
| 1C Honor Clinic
Cardiology | E Eligibility and Enrollment | 1H Victory Clinic | 1J Audiology & Speech Clinic |



HOSPITAL AREAS

- | | | |
|--|---|---------------------------------------|
| 1 Agent Cashier | 7 Patriot Store | 13 Viewing Room |
| 2 Beneficiary Travel | 8 Pharmacy | 14 Voluntary Services |
| 3 Patriot Canteen (Dining Area) | 9 Police | 15 Patriot Brews (Coffee Shop) |
| 4 Credit Union | 10 Imaging/Radiology | |
| 5 Laboratory | 11 Radiation Therapy/Oncology/Cardiology | |
| 6 Lobby | 12 Veterans Service Offices | |

- | | | | | |
|----------------------|-------------------|-------------------|--|--|
| P Parking | W Women | M Men | R Restroom | ● Baby Changing Table (Available in Restroom) |
| ? Information | E Elevator | S Stairway | G Healing Garden (Sitting Area) | |

Lake Nona Campus

