

Guidance for elective rotations in Rheumatology for medical students and residents

1. Introduction

Rheumatology is one of the least representative subspecialties in Internal Medicine (1–3). Students and Residents from academic historically Black colleges and universities (HBCUs) and community hospitals often lack exposure to major academic Rheumatology centers (4) and experts, potentially limiting their appreciation of the breadth of opportunities and pathways to this subspecialty. This lack of training opportunities may discourage students and residents from under-resourced backgrounds with a strong interest in adult and pediatric Rheumatology from pursuing further training.

Offering an invaluable rotation opportunity would allow them to connect with an experienced rheumatologist, who will serve as a mentor and an advisor to navigate the pathway to application to adult or pediatric rheumatology.

With this effort, we expect to recruit future rheumatologists who are equipped to meet the evolving healthcare needs of underrepresented communities.

2. Aspects of the elective rotation

2.1 Overview

- We encourage students/residents from the second and third year who intend to pursue an adult or pediatric rheumatology fellowship to apply early for this opportunity.
- Rotations are best advised in-house, but if not available, sites for elective rotations that remain in-state or are close to the student/resident institution are preferred.
- A rotation can be arranged if the student medical school or Resident training program allows for off-site rotations in close proximity, during an elective period. This allows the student or the resident to balance their time between their duties at their institution and the expected goals for the offered rheumatology rotation. [eg: continue some outpatient clinics at training site]
- Rotation should be arranged with enough lead time to allow all administrative tasks to be completed"

If demand is high, a brief interview process by the host institution or practice may be needed. **2.2 Required Paperwork**

- 1. Letter from candidate expressing interest and motivation.
- 2. Curriculum Vitae from candidate
- 3. Request for Approval of Out of program rotation (including within state off-site Rotation) signed by Dean or Program Director.
- 4. Medical school/Program Director statement or advise letter. Only residents in good standing in the programs should be considered for an out rotation.
- 5. Letter from the off-site supervising faculty/institution supporting (Program Letter of agreement) and verifying the rotation. Signed by resident and Program Director, mentioning goals and objectives for the rotation.
- 6. Copy of malpractice insurance coverage and any licensure, permit or registration.

2.3 List of available external rotating rheumatology

2.3.1 Resident Physicians

- **Cleveland Clinic**: https://my.clevelandclinic.org/departments/orthopaedics-rheumatology/medical-professionals/rheumatology-fellowships
- **Duke University**: https://medicine.duke.edu/education-and-training/fellowship-programs/rheumatology-fellowship
- **Johns Hopkins University**: https://www.hopkinsrheumatology.org/postdoctoral-fellowships/
- **Mayo Clinic**: https://college.mayo.edu/academics/residencies-and-fellowships/rheumatology-fellowship-minnesota/
- University of California, Los Angeles (UCLA):
 https://www.uclahealth.org/departments/medicine/rheumatology/fellowship
- University of California, San Francisco (UCSF): https://rheumatology.ucsf.edu/education/fellowship-program
- **University of Michigan**: https://medschool.umich.edu/departments/internal-medicine/divisions/rheumatology/education/fellowship-training-programs/rheumatology-fellowship

- University of Pennsylvania: https://www.pennmedicine.org/departments-and-centers/department-of-medicine/divisions/rheumatology/education-and-training/fellowship-programs
- University of Washington: https://rheumatology.uw.edu/fellowship
- Washington University in St. Louis: https://rheumatology.wustl.edu/fellowship-program/

2.3.2 Occupational Therapy

- **Columbia University**: https://www.vagelos.columbia.edu/education/academic-programs/programs-occupational-therapy
- George Washington University: https://occupationaltherapy.smhs.gwu.edu/
- New York University (NYU):
 https://steinhardt.nyu.edu/departments/occupational-therapy
- University of Illinois at Chicago: https://ahs.uic.edu/occupational-therapy
- University of Southern California (USC): https://chan.usc.edu/education

2.3.3 Physical Therapy

- Mayo Clinic: https://college.mayo.edu/academics/explore-health-care-careers/careers-a-z/physical-therapist/
 - DPT Program: https://college.mayo.edu/academics/health-sciences-education/physical-therapy-doctoral-program-minnesota/
- **University of Michigan**: https://www.medicine.umich.edu/dept/pmr/education-training/therapy-education
 - DPT Program: https://www.umflint.edu/graduateprograms/physical-therapy-entry-level-dpt/
- University of North Carolina at Chapel Hill:

https://www.uncmedicalcenter.org/uncmc/professional-education-andservices/rehabilitation-clinical-education/physical-therapy-programs/

- DPT Program:
 https://www.med.unc.edu/healthsciences/physical/academic-programs/doctor-of-physical-therapy/dpt-admissions/
- University of Southern California (USC): https://pt.usc.edu/

- Washington University in St. Louis: https://pt.wustl.edu/education/

2.4 Candidate profile

- ✓ Genuine Interest in Rheumatology: Demonstrates excitement and interest in rheumatology cases or experiences.
- ✓ Previous Background: Had previous experience during medical training or current exposure that aligns with the field of rheumatology.
- ✓ Expressed Interest: Clearly expresses interest in elective rotation and willingness to learn and follow administrative requirements for approval.
- ✓ Scholarly Activity: Shows willingness to engage in scholarly activities or research related to rheumatology.
- ✓ Mentor Compatibility: Demonstrates the ability to work well with a mentor and receptive and responsive to constructive criticism.
- ✓ Collegiality: Exhibits a collaborative and respectful attitude towards colleagues and patients.
- ✓ Curiosity: Tries to learn more about the rheumatology field.

2.5 Mentor profile

The mentor/advisor for the rheumatology rotation should be an active rheumatologist engaged in clinical practice, research, education, or academics. Motivated to work and inspire potential future trainees.

A suitable mentor should be of good standing and follow current clinical practice guidelines. The mentor can be someone in an independent setting or group practice near the resident's program, ideally within a one-hour commute, yet connected to an academic center or hospital. In that way, the rotation could be done during an elective rotation of the resident where they could meet the expected goals of their program while also participating in this unique experience.

Mentor/Mentee compatibility may be guided by the CATCH program (5) . [https://www.jbcwebportal.org/catch-program/] .

- 3. Recommended Topics for learning during rotation
- 3.1 Recommended educational topics to be reviewed with mentor and mentee during the rotation.

All topics are outlined in the American Board of Pediatrics and the American Board of Internal Medicine.

Pediatrics https://www.abp.org/sites/public/files/pdf/content-outline-general-pediatrics-2024.pdf

- A. Postinfectious/reactive arthritis
- B. Juvenile idiopathic arthritis (JIA)
- C. Psoriatic arthritis, sarcoidosis, fibromyalgia, ankylosing spondylitis
- D. Connective tissue diseases
- E. Systemic lupus erythematosus (SLE)
- F. Dermatomyositis
- G. Rheumatic fever, cyclic fever, and periodic fever syndrome

Internal Medicine https://www.abim.org/Media/h5whkrfe/internal-medicine.pdf

- A. Dermatomyositis and polymyositis
- B. Relapsing polychondritis
- C. Behçet disease
- D. Rheumatic fever
- E. Sjögren syndrome
- F. Fibromyalgia
- G. Juvenile Idiopathic arthritis
- H. Adult Still disease
- I. Marfan and Ehlers-Danlos syndromes
- J. Scoliosis Arthropathy of hemochromatosis
- K. Vasculitis:

Polyarteritis nodosa

Eosinophilic granulomatosis with polyangiitis

Leukocytoclastic vasculitis

Large-vessel vasculitis ANCA-associated vasculitis

L. Scleroderma

generalized CREST syndrome

Scleroderma and interstitial lung disease

- M. Raynaud phenomenon
- N. Systemic lupus erythematosus (SLE)
- O. Rheumatoid arthritis
- P. Spondyloarthropathies
- Q. Regional musculoskeletal syndromes
- R. Crystal-induced arthropathy

3.2 Evaluation of specific competencies

 Every rotating student/resident will have a weekly mentor meeting of 15–30 minute to discuss with mentor about experiences and learnings during the week as well as any other relevant topic desired by mentee.

- Students/Residents will present cases they encounter during the rotation, discussing their assessment, differential diagnosis, and management plan. This allows for evaluation of clinical reasoning and decision-making skills.
- To interpret bloodwork and next steps in care in the clinical context of a patient.

The Mentor Rheumatologist participating in this experience will be recognized in a Photograph with short biography along with their mentee and the accomplishments of the rotation. This will be displayed both on the AWARD website and during the American College of Rheumatology (ACR) Convergence.

On the AWARD project website, we will feature a link at the end of the year highlighting all the mentor rheumatologists and mentees who participated in this experience, along with a list of rheumatologists who have volunteered to serve as mentors for the future.

4. References

- Strait A, Graf J, Margaretten M, Yazdany J, Goglin S. Race, Ethnicity, and Disparities in Rheumatology Educational Materials. Arthritis Care Res (Hoboken). 2022 Sep;74(9):1416–20.
- 2. Miloslavsky EM, Bolster MB. Addressing the rheumatology workforce shortage: A multifaceted approach. Semin Arthritis Rheum. 2020 Aug;50(4):791–6.
- 3. Santhosh L, Babik JM. Trends in Racial and Ethnic Diversity in Internal Medicine Subspecialty Fellowships From 2006 to 2018. JAMA Network Open. 2020 Feb 7;3(2):e1920482.
- 4. Weiss J, Holaday L, Keene D, Akingbesote ND, Balasuriya L, Sharifi M, et al. Perspectives of Historically Black College and University Advisors to Premedical Students During the COVID-19 Pandemic: A Qualitative Study. JAMA Network Open. 2022 Oct 21;5(10):e2238563.
- 5. CATCH Program Joint Biology Consortium [Internet]. [cited 2024 Apr 9]. Available from: https://www.jbcwebportal.org/catch-program/