OPTI-West San Antonio Regional Hospital Internal Medicine Residency Program

Rheumatology Rotation Curriculum with Goals & Objectives

SARH and Clinics — Inpatient and Outpatient Rheumatology — Internal Medicine Residency

Goals & Objectives Stratified by Level of Training (PGY-1 / PGY-2 / PGY-3)

Effective: [Date] | PEC Approval: Pending

Overview and Organization

Organization / Site: SARH and Clinics (inpatient consultation and outpatient rheumatology).

Faculty: [To be determined by the program].

The Internal Medicine resident functions as a key member of the medical team whose primary objective is to provide compassionate, evidence-based care. The team comprises an attending rheumatologist, medical residents, and medical students, and is led by the attending, who bears final responsibility for patient management. The resident works closely with the attending and gradually assumes more autonomous decision-making responsibility in a graded fashion, and is expected to teach junior residents and medical students and collaborate with other specialty providers in a multidisciplinary environment.

Rheumatologic and autoimmune diseases commonly affect both outpatients and hospitalized patients. The Rheumatology rotation provides the resident an opportunity to evaluate and manage patients across a spectrum of musculoskeletal and systemic autoimmune disorders, largely in the outpatient and inpatient-consult settings. The goal is to familiarize residents with the musculoskeletal history and joint examination, basic mechanisms of disease, interpretation of autoimmune serologies and imaging, evidence-based management of common rheumatic disease including immunosuppressive therapy, indications for procedures, and appropriate indications for referral.

General Educational Goals

Across the rotation and progressively across all three years, residents will:

- Practice evidence-based medicine and apply current ACR/EULAR guidelines to patient care.
- Develop proficiency in the musculoskeletal history and a systematic joint examination.
- Interpret autoimmune serologies, synovial fluid analysis, and musculoskeletal imaging.
- Manage common rheumatic disease, including the safe use and monitoring of immunosuppressive and biologic therapy, and recognize appropriate indications for referral.
- Coordinate multidisciplinary care and communicate effectively with patients, families, and the team.
- Assume responsibility in a graded fashion, progressing toward independent practice by the end of three years of training.

Levels of Supervision

Residents are supervised by an attending rheumatologist for all patients. Levels of supervision include:

- Direct Supervision — the supervising physician is physically present with the resident and patient; residents are initially directly observed to build history-taking and examination skills.
- Indirect Supervision, with direct supervision immediately available — the supervising physician is within the site and immediately available.
- Indirect Supervision, with direct supervision available — the supervising physician is immediately available by phone or electronic means.

Direct attending supervision is required for all procedures (e.g., arthrocentesis and joint injection) performed by PGY-1 residents. Once approved by the program, PGY-2 and PGY-3 residents may perform procedures with indirect or direct supervision at the attending's discretion.

Assessment Scale — Entrustment

The basic evaluation unit is entrustment. Attendings determine the level at which they trust the resident to perform each skill:

- 1 — Cannot perform the skill even with assistance (critical deficiency).
- 2 — Can perform the skill under proactive, full supervision.
- 3 — Can perform the skill with reactive supervision (readily available upon request).
- 4 — Can perform the skill independently.
- 5 — Can act as a supervisor and instructor for the skill.

The Six ACGME Core Competencies — Objectives by Level of Training

Objectives are stratified for PGY-1, PGY-2, and PGY-3 residents, reflecting increasing entrustment. Senior objectives are cumulative — PGY-2 residents also meet PGY-1 objectives, and PGY-3 residents meet all prior objectives.

1. Patient Care and Procedural Skills

All residents must provide compassionate, culturally sensitive, and appropriate care to prevent and treat rheumatologic disease, take a pertinent musculoskeletal history, and perform a systematic joint examination.

PGY-1 — Build foundational skills under supervision

- Differentiate stable from unstable patients (e.g., recognize the acutely inflamed or septic joint) and elicit key historical details:
  - Pattern and distribution of joint involvement (monoarticular versus polyarticular, symmetric versus asymmetric, axial versus peripheral)
  - Inflammatory versus mechanical features (morning stiffness, night pain, gel phenomenon)
  - Systemic and extra-articular features (rash, fever, weight loss, sicca symptoms, Raynaud's phenomenon)
  - Family history of autoimmune disease, and medication and functional history
- Perform a systematic joint examination, including inspection, palpation for synovitis and effusion, and range of motion.
- Understand the indications, contraindications, complications, limitations, and interpretation of arthrocentesis, and interpret synovial fluid analysis.

PGY-2 — Manage complexity and perform procedures (in addition to PGY-1)

- Recognize the contribution of comorbidities, psychosocial factors, and medication effects to the clinical picture.
- Recognize the extra-articular manifestations (skin, eye, lung, renal, and neurologic) of systemic rheumatic disease.
- Seek appropriate subspecialty consultation when necessary to further patient care.
- Perform arthrocentesis and joint or soft-tissue injection with supervision, optimizing patient safety and comfort.

PGY-3 — Lead, supervise, and manage transitions (in addition to PGY-1 and PGY-2)

- Independently obtain the history and examination for patients with complex multisystem autoimmune disease and multiple comorbid conditions.
- Supervise and ensure seamless transitions of care between primary and consulting teams and between inpatient and outpatient care.
- Perform and model arthrocentesis and joint injection with indirect supervision as approved by the program.

Instructional / Training Methods: *Supervised patient care in inpatient-consult and outpatient settings, direct observation, joint-injection and musculoskeletal-ultrasound supervision, case-based learning.*

Evaluation Methods: *Bedside Mini-CEX, direct observation and feedback, procedure logs, faculty entrustment ratings.*

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2. Medical Knowledge

Residents will demonstrate knowledge of the pathophysiology, evaluation, and evidence-based management of rheumatic and autoimmune disease and apply it to patient care.

PGY-1 — Develop foundational knowledge under supervision

- Understand the basic pathophysiology and approach to the following presenting conditions:
  - Monoarticular and polyarticular arthritis
  - Arthralgia and joint swelling
  - Low back pain and axial pain
  - Myalgia and muscle weakness
  - Raynaud's phenomenon
  - Positive ANA or elevated inflammatory markers
  - Acute gout or pseudogout flare
  - Regional and soft-tissue pain (bursitis, tendinitis, enthesitis)
- Understand the pathophysiology, clinical presentation, and initial therapy for the following common rheumatic diseases:
  - Rheumatoid arthritis
  - Osteoarthritis
  - Gout and calcium pyrophosphate deposition disease (pseudogout)
  - Septic arthritis
  - Systemic lupus erythematosus (fundamentals)
  - Polymyalgia rheumatica and giant cell arteritis
  - Fibromyalgia
  - Mechanical low back pain and common soft-tissue syndromes
- Understand the indications for ordering and the interpretation of the following laboratory values and procedures:
  - ANA, rheumatoid factor, and anti-CCP antibodies

    - ESR and CRP
    - Serum uric acid
    - Complement (C3, C4) and anti-dsDNA
    - HLA-B27
    - Synovial fluid analysis (cell count, crystals, Gram stain, culture)
    - Creatine kinase
    - Plain radiographs of affected joints

PGY-2 — Understand targeted therapy and advanced diagnostics (in addition to PGY-1)

- Understand the pathophysiology, clinical presentation, targeted therapy, and duration of therapy for the following diseases:
    - Seronegative spondyloarthropathies (ankylosing spondylitis, psoriatic, reactive, and IBD-associated arthritis)
    - Systemic sclerosis
    - Sjögren's disease
    - Inflammatory myopathies (polymyositis and dermatomyositis)
    - Systemic vasculitides (large-, medium-, and small-vessel, including ANCA-associated)
    - Antiphospholipid syndrome
    - Adult-onset Still's disease
    - Sarcoid and other systemic-disease-associated arthropathy
    - Disease-modifying antirheumatic drugs (DMARDs) and biologic agents
- Demonstrate knowledge of the indications for ordering and interpretation of: the extractable nuclear antigen (ENA) panel (anti-Ro/La, Sm, RNP, Scl-70, Jo-1), ANCA (MPO/PR3), antiphospholipid antibodies, cryoglobulins, musculoskeletal ultrasound, MRI of joints and spine, DEXA, nailfold capillaroscopy, and biopsy (temporal artery, salivary gland, renal, skin).

PGY-3 — Independent management and interpretation (in addition to PGY-1 and PGY-2)

- Understand the epidemiology of the above conditions.
- Understand statistical concepts such as pretest probability and number needed to treat, and their effect on diagnostic workup and treatment.
- For the most part, independently manage patients with evidence-based immunosuppressive and biologic therapy, including appropriate monitoring and infection prophylaxis.
- Recognize a lack of response to therapy, identify possible causes, and formulate an alternate treatment plan.
- Independently and appropriately order studies and interpret results within the context of patient comorbidities, pretest probability of disease, and patient values.

Instructional / Training Methods: *Case-based learning, specialty didactics, journal club, journal and textbook reading (Primer on the Rheumatic Diseases; Kelley's Textbook of Rheumatology), guideline review (ACR/EULAR).*

Evaluation Methods: *Case-based questioning, chart review, faculty written evaluation.*

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3. Practice-Based Learning and Improvement

Residents will investigate and evaluate their patient-care practices, appraise and assimilate scientific evidence, and improve their practices.

PGY-1 — Build foundational skills under supervision

- Access current national guidelines (e.g., ACR/EULAR) to apply evidence-based strategies to patient care.

- Identify knowledge gaps through patient encounters, seek evidence-based resources, and respond to feedback with positive change.
- Participate in case-based therapeutic decision-making as part of the team.

PGY-2 — Manage independently (in addition to PGY-1)

- Develop skills in evaluating new studies in the published literature through journal club and independent study.
- Review and apply relevant guidelines and literature to improve patient care.

PGY-3 — Lead, supervise, and teach (in addition to PGY-1 and PGY-2)

- Deliver a short teaching presentation on a rheumatology topic (recent paper, guideline update, or case).
- Take a leadership role in coordinating multidisciplinary care and facilitate the learning of junior residents and students.

Instructional / Training Methods: *Journal club, guideline review, case-based decision-making, topic presentations.*

Evaluation Methods: *Self-assessment and reflection, teaching-presentation and journal-club evaluation, Mini-CEX.*

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4. Interpersonal and Communication Skills

Residents will demonstrate communication skills that result in effective information exchange with patients, families, and professional associates.

PGY-1 — Build foundational skills under supervision

- Demonstrate organized, articulate electronic and verbal communication that builds rapport with patients and families.
- Convey information to other healthcare professionals and provide timely, accurate documentation.

PGY-2 — Manage independently (in addition to PGY-1)

- Educate patients on chronic rheumatic disease, management plans, and the risks and benefits of immunosuppressive therapy.
- Provide concise, focused answers when performing consults.

PGY-3 — Lead, supervise, and teach (in addition to PGY-1 and PGY-2)

- Lead difficult conversations (e.g., chronic disease trajectory, immunosuppression risk, goals of care).
- Demonstrate leadership to build consensus and coordinate a multidisciplinary approach to care.

Instructional / Training Methods: *Direct observation, supervised patient encounters, case presentations, family discussions.*

Evaluation Methods: *Direct observation, Mini-CEX, faculty and multisource feedback.*

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5. Professionalism

Residents will demonstrate a commitment to professional responsibilities, ethical principles, and sensitivity to a diverse patient population.

PGY-1 — Build foundational skills under supervision

- Demonstrate a strong commitment to professional responsibilities through conduct, ethical behavior, professional attire, collegial interactions, and devotion to patient care.
- Educate patients and families in a manner respectful of gender, age, culture, race, religion, disability, national origin, socioeconomic status, and sexual orientation regarding choices about their care.

PGY-2 — Manage independently (in addition to PGY-1)

- Address ethical issues and manage difficult conversations professionally.
- Model professional behavior for students and interns and use clinic time efficiently.

PGY-3 — Lead, supervise, and teach (in addition to PGY-1 and PGY-2)

- Provide constructive feedback to more junior members of the team and serve as a professional role model.
- Lead ethically complex discussions and advocate for patients.

Instructional / Training Methods: *Role modeling by attendings, direct patient care, patient and family encounters.*

Evaluation Methods: *Faculty ratings, multisource feedback, self-reflection.*

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6. Systems-Based Practice

Residents will demonstrate awareness of the larger health-care system and provide care of optimal value.

PGY-1 — Build foundational skills under supervision

- Understand that diagnostic and treatment decisions involve cost and risk and affect quality of care.

PGY-2 — Manage independently (in addition to PGY-1)

- Identify current quality issues in rheumatology, such as medication access, monitoring, and prior authorization for biologic and DMARD therapy.
- Coordinate appropriate referrals and safe transitions between inpatient and outpatient care.

PGY-3 — Lead, supervise, and teach (in addition to PGY-1 and PGY-2)

- Demonstrate awareness of alternative therapies and their costs, risks, and benefits, and of how insurance coverage affects treatment adherence.
- Lead care coordination across settings and champion high-value, guideline-concordant care.

Instructional / Training Methods: *Supervised care across settings, cost-and-value case discussion, multidisciplinary collaboration.*

Evaluation Methods: *Direct observation, chart review, faculty ratings.*

Health Maintenance and Counseling

Across all levels, residents should counsel patients and manage the health-maintenance issues pertinent to rheumatic disease and immunosuppression:

- Vaccination in immunosuppressed patients (including timing of live vaccines relative to therapy)
- Tuberculosis and hepatitis B/C screening prior to biologic therapy
- Osteoporosis screening and glucocorticoid-induced bone-loss prophylaxis
- Cardiovascular risk assessment in chronic inflammatory disease
- Contraception and pregnancy planning with DMARD and biologic therapy
- Age-appropriate cancer screening in patients on immunosuppression

Teaching Methods

Supervised Patient Care

- Residents are initially directly observed with patients to facilitate the acquisition of excellent history-taking and joint-examination skills.

- As residents become more proficient, they interact independently with patients and present cases to faculty.
- Initial emphasis is on diagnosis and basic management; once mastered, focus shifts to medical decision-making and finalizing the care plan with supervising physicians.

Conferences and Independent Study

- Specialty-specific didactics.
- Journal and textbook reading as assigned by the rheumatology attending.
- Case-based learning with patient-based questions and short topic presentations to the group.

Guidelines and Online Resources

- American College of Rheumatology (ACR) and EULAR clinical guidelines.
- Primer on the Rheumatic Diseases (Arthritis Foundation) and Kelley's Textbook of Rheumatology.
- ACR guidelines for the management of rheumatoid arthritis, gout, lupus nephritis, and vasculitis.
- CDC and ACR recommendations on vaccination in immunocompromised adults.
- UpToDate and ClinicalKey.

Evaluation

- Mini-CEX bedside evaluation tool.
- Verbal mid-rotation individual feedback.
- Attending written evaluation of the resident at the end of the month, based on rotation observations and chart review.

Rotation Structure

- Residents should contact the rheumatology attending three days prior to the rotation to determine start time and location.
- Residents divide their time between the inpatient consult service and the rheumatology clinic as appropriate to achieve the educational goals.
- Rotations are a hands-on learning experience; residents are sent in to see patients, including follow-up visits when patients return during the rotation.
- Case-based learning is emphasized, with patient-based questions to research and short topic presentations to the group.
- When performing consults, residents should understand the question asked and provide a concise answer.
- Call and weekend responsibilities are determined by the attending. Hours must comply with ACGME requirements and are subject to approval by the Program Director.
- Residents have noon conferences and should be excused in a timely fashion to attend.