

American College of Rheumatology Fellowship Curriculum

Mission:

The mission of all rheumatology fellowship training programs 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.

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. 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

Specific Objectives:

- A. 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.

Methodology 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 we will be responsible for organizing the activities of this service. 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 research 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, 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.

All fellows will be required to maintain the equivalent of a full day clinic for the first 12 months and a half day clinic for the second 12 months for patients with rheumatic diseases. 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.

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. At a minimum there should be at least one clinical conference, one basic science conference, one literature review conference (journal club) and one research conference each month. It is encouraged that the content of these conferences will include members from the divisions outside of Rheumatology to include the subspecialties outlined in section C as well as include participation from members of the Departments of Pathology and Radiology who have specific interests in the field of rheumatic disease. Fellows will be required to attend a minimum of 60% of each of the conferences.

E) Research experience.

An active research component must be included within the fellowship training program. A meaningfully research experience must be provided with appropriate protected time for each fellow. Exposure to divisional research programs should 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 for

the remainder of the fellowship training program. The immediate goal of the research experience is for the fellow to learn sound methodology in designing and performing research studies and the correct interpretation and synthesis of research data. During this phase of training the fellow will work under close guidance of the 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.

The Methods of Evaluation:

In order for the training program to assess its ability to meet its goals and objectives, it is essential that the program have an evaluation process, including formative and summative evaluations of the fellows, and an evaluation process of the program and the faculty.

Formative Evaluation of the Fellows

Formal formative evaluations should 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. The evaluation form utilized is one distributed and recommended by the American Board of Internal Medicine (see attached). All faculty must 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.

During the research phase of training, an evaluation form will be completed by the fellow's research faculty mentor. These evaluations forms are completed every 4-6 months, reviewed with the fellow by the faculty research mentor, and submitted to the Program Director for placement in the fellow's permanent file.

Completed evaluation forms submitted to the Program Director are immediately reviewed upon their receipt. 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 local 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 files for future reference purposes.

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 institutional policy.

Evaluation of the Faculty and Program

Semi-annually, all fellows are required to complete and return an evaluation form (see attached) 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.

I have read and received a copy of this curriculum.

Signature

Date