### Curriculum of the Rheumatology Fellowship

Division of Rheumatology, Allergy and Clinical Immunology
School of Medicine, UC Davis

**Table of contents**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction, goals and objectives</td>
<td>1</td>
</tr>
<tr>
<td>II. General Description of the training program</td>
<td>3</td>
</tr>
<tr>
<td>Facilities</td>
<td></td>
</tr>
<tr>
<td>Patient characteristics</td>
<td></td>
</tr>
<tr>
<td>Disease mix</td>
<td></td>
</tr>
<tr>
<td>Teaching methods</td>
<td></td>
</tr>
<tr>
<td>Procedures/synovial fluid analyses</td>
<td></td>
</tr>
<tr>
<td>Methods of evaluation</td>
<td></td>
</tr>
<tr>
<td>III. Description of the clinical rotations</td>
<td>6</td>
</tr>
<tr>
<td>Ambulatory arthritis clinics</td>
<td></td>
</tr>
<tr>
<td>Lupus clinic</td>
<td></td>
</tr>
<tr>
<td>Inpatient Consultation service</td>
<td></td>
</tr>
<tr>
<td>Conferences</td>
<td></td>
</tr>
<tr>
<td>IV. Research Experience</td>
<td>12</td>
</tr>
<tr>
<td>V. Elective rotations</td>
<td>13</td>
</tr>
<tr>
<td>VI. Appendix</td>
<td>15</td>
</tr>
<tr>
<td>A. Weekly activity schedule</td>
<td></td>
</tr>
<tr>
<td>B. Conferences</td>
<td></td>
</tr>
<tr>
<td>C. Ancillary educational activities</td>
<td></td>
</tr>
<tr>
<td>D. Procedures</td>
<td></td>
</tr>
<tr>
<td>E. Duty hour policy</td>
<td></td>
</tr>
<tr>
<td>F. Fellow evaluation forms</td>
<td></td>
</tr>
</tbody>
</table>
Curriculum of the Rheumatology Fellowship  
Division of Rheumatology, Allergy and Clinical Immunology  
School of Medicine, UC Davis  

I. Introduction, Goals and Objectives  

The UC Davis Rheumatology Fellowship is a 2-year, ACGME-accredited training program. Board eligibility in internal medicine, following successful completion of an IM residency is a prerequisite. The overall goals of the Rheumatology training program are:  

1. To provide the trainee with an appropriate background to establish a successful career in clinical rheumatology.  
2. To provide the educational opportunities and clinical experience sufficient to enable the trainee to successfully obtain board certification in the subspecialty of rheumatology.  
3. To expose the trainee to training in basic science and biomedical research, enabling him or her to understand the pathomechanisms of the autoimmune origin of the rheumatologic diseases.  

These goals are achieved by incorporating the following program objectives:  

1. Provision of a broad, comprehensive experience in ambulatory and inpatient rheumatology practice, including both consultation and continuity care;  
2. A concentrated exposure to ancillary disciplines of importance to the clinical rheumatologist, including orthopedics, rehabilitation medicine, pediatric rheumatology and geriatric medicine.  
3. Direct involvement in a mentored research experience.  
4. Participation, organization, and presentation by the fellow in a broad range of regularly scheduled didactic and clinical conferences.  

A key educational aspect throughout this training program involves fostering and promoting the fellow's ability to achieve success in six general competency areas:  

1. Patient care skills.  
2. Medical knowledge.  
3. Interpersonal and communication skills.  
4. Professionalism.  
5. Practice based learning and improvement.  

Attention to these areas is emphasized during every rotation of the training program. For example, patient care skills, communication, professionalism, and systems based practice are important aspects of exceptional ambulatory care and are encouraged and monitored during the outpatient clinics. Interpersonal and communication skills, professionalism, and systems based practice are important aspects of inpatient consultation. Medical knowledge and practice based learning are a critical component of regular didactic conferences. Professionalism and medical knowledge are necessary for a successful
research experience. The fellow's mastery of competence in each of these important areas is evaluated following each rotation of the training program, and at semi-annual intervals, as outlined in detail below.

This curriculum has been organized by the academic rheumatology faculty members, whose experience in the practice and teaching of rheumatology ranges from ten to over forty years, and each of whom has varied clinical and research interests. Ancillary teaching activities have been developed in cooperation with directors of the other relevant training programs. Each of the individual rotations (described in detail below) is discussed with the trainee prior to participation; the goals and objectives are reviewed, and expectations and the basis of evaluation are included in this discussion. The entire curriculum is reviewed and revised as necessary at semiannual meetings of the curriculum committee, which includes fellow representation. Any substantive modifications of the program are reviewed and discussed with all faculty members and reviewed in detail with all trainees.
II. General description of the training program.

Facilities.
UC Davis Medical Center (UCDMC)
VA Sacramento Medical Center (VAMC)
Kaiser Medical Center South Sacramento

Patient characteristics.

These Medical Centers serve a large urban population that is culturally, racially, ethnically, and socio-economically diverse.

Disease spectrum

In both the ambulatory and inpatient settings, a wide variety of rheumatologic and musculoskeletal disorders is seen, both in consultation and for continuing management. A partial list of disorders evaluated and managed by rheumatology fellows includes:
- Rheumatoid arthritis.
- Connective tissue diseases (lupus, scleroderma, polymyositis/dermatomyositis, Sjögren’s syndrome).
- Ankylosing spondylitis and related spondyloarthopathies (reactive arthritis, inflammatory bowel disease-associated arthropathy, psoriatic spondyloarthropathy).
- Psoriasis and psoriatic arthritis.
- Osteoarthritis.
- Gout and other metabolic arthropathies (hemochromatosis, ochronosis, etc.).
- Arthropathies associated with endocrine disorders.
- Hereditary musculoskeletal disorders.
- Traumatic musculoskeletal disorders.
- Soft tissue rheumatic diseases, both local and systemic.
- Vasculitis, both cutaneous and systemic.
- Metabolic bone diseases.
Teaching methods.

1. All patient encounters, in both ambulatory and inpatient settings, are directly discussed with, supervised by, and reviewed with an attending physician. All aspects of the patient encounter are included in this discussion, including the medical history, physical examination, review of laboratory and imaging studies, formulation of a differential diagnosis, approaches for further evaluation, and plans for treatment and follow up. This teaching opportunity represents a one-on-one interaction between the fellow and the attending faculty member, for every patient encounter.

2. Fellows routinely participate in didactic teaching sessions and conferences supervised by individual faculty members, including:
   - "core curriculum" lecture series
   - monthly journal clubs
   - bi-monthly musculoskeletal radiology conferences
   - weekly clinical, case-based conferences
   - basic science/research conferences
   - general medicine conferences including weekly morbidity and mortality conferences, and weekly medical grand rounds.

3. Fellows are encouraged and required to prepare and present at some of the above conferences (journal clubs, clinical case conferences). Although this teaching opportunity requires independent learning, the fellow receives suggestions, guidance, and supervision by an attending faculty member in the conduct of this activity.

4. Independent learning by the fellows is encouraged and facilitated by the availability of a rheumatology division library, multiple educational resources provided to all residents including online resources such as "M.D. Consult", "Up-to-Date", a variety of rheumatologic journals, the most recent additions of several major textbooks of rheumatology and immunology, and complimentary use of medical library resources, such as journal retrieval.

5. Each fellow is required to conduct a Morbidity & Mortality case report during the course of training. The fellow is directly supervised in this activity by the Program Director or a designated faculty member.

Procedures/synovial fluid analysis.

During the course of the ambulatory experience, the fellow will have the opportunity to carry out multiple procedures, including aspiration and injection of joints and soft tissues. Initially the fellow will observe such procedures, and subsequently will be closely supervised during independent performance of these procedures. The fellow will maintain a log of all such procedures in an electronic “Portfolio”. The information recorded will include: date of procedure; patient age, gender, and medical record identification number; site of procedure; indication; patient diagnosis; immediate outcome of procedure; complications; and name of supervising attending physician. A list of the expected type and number of procedures is included as “Appendix D” to this curriculum.
Synovial fluid analyses will also be independently conducted by the fellow, following training by a faculty physician. A dedicated microscope with polarized light microscopy capability is available for this purpose. The fellow will maintain a record of each synovial fluid analysis in his/her electronic portfolio, including the following information: patient medical record number, date, site of aspiration, volume of fluid obtained, gross description of fluid including color, clarity, and viscosity, results of light microscopic and polarized light microscopic observation, diagnosis, and results of pertinent laboratory findings, such as Gram stain, culture, white and red blood cell counts, protein, and glucose.

**Methods of evaluation.**

1. At the end of each 4-week rotation, the fellow is evaluated, specifically noting their performance in the six general competencies, using an on-line evaluation form: "Myevaluations.com". This evaluation is available to the fellow and is reviewed with the fellow directly.

2. Semiannually, the fellow receives a direct face-to-face oral and written evaluation of overall performance, including achievement of specific goals and objectives of each rotation and improvement in the 6 general competencies, by the rheumatology training Program Director. The fellow’s performance and competence in the ambulatory clinics is specifically and directly reviewed. Particular areas for further improvement are identified, future plans, goals, and objectives are reviewed, and the fellow has the opportunity to provide direct feedback concerning each of the individual rotations, and all educational aspects of the program in aggregate.

3. Each fellow is evaluated at least annually during the performance of a mini-CEX, conducted by an individual faculty member.

4. Each fellow is evaluated semi-annually in a "360°" format, involving blinded evaluations from patients, students and residents, peers, nurses and other ancillary health providers. These 360° evaluations are conducted in the ambulatory setting, and the multiple available assessments will be directly discussed with the fellow by the Program Director.

5. Each fellow is required to take an annual “In-training examination”, established and conducted by the American College of Rheumatology. The results of this examination are also directly reviewed with each fellow by the program director.

6. Participation in conferences and performance of procedures and joint fluid analyses are monitored and reviewed separately with each fellow by the Program Director on an annual basis.

7. The preparation and presentation of conferences and M&M projects are reviewed with, supervised by, and evaluated by an individual faculty member following each activity.

8. The design, progress, and achievement of a successful research activity is closely mentored by an individual faculty member, and evaluated in direct face-to-face communication.
III. Description of clinical rotations (see also Appendix A).

The goals and objectives of each individual rotation and training experience are enumerated below. These are reviewed with the fellow at the beginning of each rotation. The above 6 general competencies are important aspects of each experience, and they are each individually evaluated during and at the conclusion of each rotation.

Inpatient consultation service.

Goals:

1. To introduce the fellow to the importance of inpatient consultation as a major responsibility in rheumatologic subspecialty practice.
2. To enable the fellow to obtain skill and confidence in the musculoskeletal evaluation of hospitalized patients.
3. To promote effective communication, professionalism, and practice based learning as a critical component of the interaction between rheumatologists and other physicians.

Objectives: As a result of the inpatient consultation experience, the fellow will be able to:

1. Conduct a focused yet thorough history and physical examination on a hospitalized patient with multiple medical problems. (Patient care skills, Medical knowledge).
2. Utilize the inpatient electronic medical record and electronic radiology retrieval system to obtain appropriate data to facilitate patient evaluation. (Systems based practice, Professionalism).
3. Access appropriate evidence based medical literature relevant to differential diagnosis, evaluation, and current therapy for complex rheumatic diseases. (Practice based learning and improvement).
4. Interact successfully with physicians, residents, nurses, and other ancillary health professionals during the inpatient evaluation and management of rheumatic diseases. (Interpersonal communication, professionalism).

Description of the Inpatient Consultation Experience.

The “on-service” rheumatology fellow will have a major role in the conduct of the inpatient consultation service, including organizing the inpatient attending rounds, which are conducted daily, Monday through Friday, and on the weekends as necessary. During the initial months, the fellow will see all inpatient consultations personally, perform an initial history and physical examination, and review the pertinent laboratory results and x-rays. The fellow will then present the patient to the monthly attending rheumatologist during the daily inpatient rounds. The fellow will be responsible for preparing the initial consultation note and for following the patient during the hospitalization. With increasing experience, the rheumatology fellow may elect to assign the initial evaluation of an inpatient consultation to a rotating medical resident or medical student. In such
instances, the rheumatology fellow will nevertheless be responsible for briefly seeing the
patient prior to presentation at the formal daily inpatient rounds. To facilitate the
logistics of responding to inpatient consultations, the rheumatology fellow will carry the
rheumatology service beeper Monday through Friday and for up to two weekends of each
month. According to Department of Medicine Policy, all inpatient consultations must be
seen and evaluated within twenty-four hours, unless alternate arrangements are indicated
by the referring physician. Finally, the rheumatology fellow will have the opportunity to
follow inpatients with chronic rheumatic diseases in the ambulatory rheumatology clinic
following discharge.
In addition to inpatient consultations, the rheumatology fellow will be responsible for
carrying out urgent consultations requested from various outpatient clinics on the hospital
campus and from the Emergency Department. In these situations, he/she will discuss or
see the patient with the faculty attending and render a decision regarding immediate
evaluation, treatment and follow-up. As a result of this experience, the fellow will learn
which patients need to be seen urgently and which patients can be “triaged” for follow-up
in an arthritis clinic on a timely basis. The fellow will maintain an electronic log of all
rheumatology consultations. The following information will be recorded: date
of consultation; patient age, gender, and medical record number; hospital unit; admitting
diagnosis; consult diagnosis; plans for follow-up; attending physician; rheumatology
faculty consultant; and any special comments.

Ambulatory arthritis clinics at UCDMC and VAMC

Goals:

1. To introduce the trainee to the comprehensive evaluation and management of
ambulatory patients with a broad range of rheumatic diseases.
2. To enable the training to obtain confidence in the efficient yet thorough assessment
of patients with multiple rheumatic disease symptoms.
3. To foster the fellow’s appreciation of problem-based learning and improvement as an
important component of all ambulatory encounters.
4. To permit each fellow to establish a stable ambulatory practice of 150 to 200 patients
with multiple complex rheumatic diseases, for whom the fellow provides ongoing,
comprehensive care.

Objectives: As a result of this experience, the rheumatology fellow will be able to:

1. Gain experience in the efficient and cost-effective evaluation of ambulatory
patients who present for initial evaluation. (Medical knowledge, Practice based
learning and improvement)
2. Exercise diligence and compassion in the ongoing management of outpatients
with chronic rheumatic diseases. (Patient care skills, Interpersonal and
communication skills, Professionalism)
3. Demonstrate skill in the performance of a rheumatologic history and examination
on inpatients referred for consultation. (Patient care skills, Medical knowledge,
Professionalism)
4. Develop an appropriate plan for diagnostic testing and treatment of both inpatients seen in consultation and outpatients followed in the continuity clinics. (Practice based learning and improvement, Systems based practice)

5. Become competent in the performance of multiple musculoskeletal procedures including aspiration and injection of diarthrodial joints and soft tissues. (Patient care skills, Professionalism)

Description of the ambulatory clinic experience- "continuity" clinic
Each fellow participates in 3-4 general Arthritis Clinics each week. Each clinic session is 3 - 4 hours in length and is supervised by one or two rheumatology faculty members. Initially the fellow will see three to four patients at each session. With additional experience, the fellow will continue to see two new patients at each session, along with follow-up patients. The fact that the rheumatology fellow sees both new and follow-up patients at each session reflects the real world experience of rheumatologists in practice, who typically see a mix of new and follow-up patients on a daily basis. For each patient encounter, the fellow will carry out an appropriate history and examination and then present the patient to a faculty attending. At this time laboratory results, x-rays and other diagnostic studies are reviewed. The fellow will be encouraged to formulate a plan for further evaluation and treatment, and this is discussed with the faculty attending physician. The fellow will have autonomy in scheduling the patient for follow-up. The fellow will be responsible for follow-up of laboratory and x-ray findings. The details of all ambulatory encounters, including follow-up phone calls and/or correspondence, will be recorded in the electronic medical record. When a patient returns for follow-up, the fellow will be encouraged to review and discuss the patient with the attending physician who is already familiar with the patient from previous visits, to facilitate continuity of care.

At his/her discretion, the fellow may opt to provide not only rheumatologic care but total management for patients seen in the arthritis clinics. This will be most appropriate for patients who do not already have a primary care physician. In addition to rheumatologic and continuity care, the fellow will gain experience in several specific areas during this ambulatory experience, including when to refer patients for ancillary services such as physical therapy, orthopedic consultation, etc.; when to initiate complex therapy such as immunosuppressive or biologic agents; the relative cost of various available therapies; and social issues that impact patients with chronic diseases.

The fellow’s performance in the ambulatory clinics is evaluated in three ways:
1. A mini-CEX is conducted at least annually during a new patient encounter, with direct observation by an individual faculty member.
2. 360° evaluations are collected from patients, students, peers, nurses, and other ancillary personnel on a semiannual basis.
3. The fellow receives direct, face-to-face and written feedback concerning their performance in the ambulatory clinic at a semi-annual meeting with the Program Director.
The VAMC Rheum-Derm Clinic.

Goals:

1. To introduce the fellows to the complexity of rheumatologic patients with skin as an additional target organ with focus on the following disease- psoriatic arthritis, SLE, scleroderma and PM\DM.
2. To enable the fellow to conduct a complete, comprehensive and thorough history and physical examination of patients with multiple symptoms and multisystem pathology of the above mentioned diseases.
3. To illustrate the importance of patient communication and close regular follow up in the successful management of - psoriatic arthritis, SLE, scleroderma and PM\DM.

Objectives: As a result of this ambulatory experience, the rheumatology fellow will be able to:

1. Rapidly, yet carefully evaluate complex patients with psoriatic arthritis, SLE, scleroderma and PM\DM. (Patient care skills, Medical knowledge).
2. Use appropriate, medical resources in an efficient manner to achieve successful patient diagnostic evaluation and long-term management. (Medical knowledge, Practice based learning and improvement, Patient care skills).
3. Establish effective patient communication that leads to productive long-term follow-up and successful outcomes. (Interpersonal communication, Professionalism).
4. Appreciate the importance of multidisciplinary care, involving other health professionals such as nephrologists and dermatologists, in the long-term evaluation and management of these patients. (Systems based practice, professionalism).

Description of the VAMC Rheum-Derm Clinic.

The VAMC Rheum-Derm Clinic is a bi-weekly clinic supervised by Rheumatologist and if required the patients are jointly seen along with a dermatologist. Each fellow participate in the VAMC Rheum-Derm Clinic in every other month, throughout their two years of training. The dermatology residents and the Rheumatology fellows work together in this clinic. The fellows are required to see new patients on referral, scheduled follow-up patients, and urgent patients as necessary. Fellows receive evaluation for this clinic experience in a manner identical to that noted above for the general arthritis clinics.
Conferences (see also Appendix A & B).

As indicated above, a large number of conferences are conducted on a regular basis. Attendance at these conferences is required by the division faculties and rheumatology fellows. Regular conferences include:

1. Weekly Thursday noon case conference with residents, fellows and faculties- Each fellow presents one case and management of each case is discussed over 20 minutes.
2. Musculoskeletal radiology conference (bi-weekly). This conference will review 5 interesting cases and will be conducted in collaboration with the musculoskeletal radiology section of the Department of Radiology.
3. Basic science/research conference (Friday noon conference). This session is devoted to presentation of current research or basic science review by visiting professors, faculty members, or invited speakers from related disciplines in the broad areas of musculoskeletal medicine, inflammation, pathology, or immunology.
4. Journal club. The rheumatology fellows will present recent rheumatologic articles of exceptional current interest for group discussion
5. Medical resident/student presentation. Each rotating resident and student on the rheumatology service is obliged to prepare a 20-30 minute presentation focusing on a rheumatologic topic of their own interest. A brief outline with references is supplied to all attendees. These informal conferences provide an opportunity for fellows, trainees and faculty to engage in discussion regarding contemporary rheumatologic issues of importance.

Other regular conferences include:

7. Rheumatology division meeting (monthly). All faculty and the rheumatology fellows attend this meeting to discuss a variety of topics, including future educational activities, logistic issues affecting the division such as vacation schedules, equipment needs etc., interesting patients, and evaluations of rotating residents and students. At one meeting semiannually the rheumatology fellows will be excused so that the division faculty can discuss their evaluation, including progress in achieving important goals of each rotation and performance in the six general competencies. The Rheumatology Program Director will review these evaluations with each rheumatology fellow and solicit feedback.

8. Immunology lecture series (monthly). Review of a particular aspect of basic or clinical immunology will be conducted by an attending faculty member on a monthly basis.
9. Pathology conference. With one of our pathologists specialty (e.g. a dermatopathologist, nephropathologist, neuropathologist, etc.), we will review histologic material from recent cases seen on the inpatient services. This session will take place in
the Pathology Department, where a multi-head microscope is available for teaching purposes.

"Appendix A" includes a table illustrating the weekly activity schedule of the arthritis clinics, inpatient consultation rounds and regularly scheduled conferences.

IV. Research Experience.

Goals:

1. To provide "protected time," technical support, and mentoring sufficient to enable the fellow to conduct and complete a research project.
2. To assist the fellow in preparation of an abstract for presentation or a manuscript for publication.

Objectives:

1. Appreciate important characteristics of a rigorous clinical investigation, such as valid study design; value of randomization, blinding, and use of control populations; application of appropriate statistical measures; and potential sources of bias. (Medical knowledge, Professionalism)
2. Understand the theoretical background, technical aspects, and appropriate use of several important clinical and laboratory procedures, such as electrophoresis, immunodiffusion, direct and indirect immunofluorescence, ELISA, immunoprecipitation, polymerase chain reaction, immunoblotting, FACS analysis, cell culture and the basics of safe laboratory practices. (Medical knowledge)
3. To understand and participate in the process of presentation and publication of a research project, including compellation and organization of data, statistical analysis, review of pertinent literature and preparation of a final abstract and/or manuscript for submission. (Medical knowledge, Professionalism, Systems based practice)

All efforts will be made to ensure that the fellow’s choice of research project(s) will lead to the acquisition of data that can be presented at a scientific meeting or prepared as a manuscript for publication. The fellow’s mentor will supervise the tempo of the research with these objectives in mind. The completion of a project and preparation of a relevant abstract or manuscript is considered an important and vital aspect of this research process. It is assumed that the fellow will be the first author on any abstract or publication and will have primary responsibility for preparation of slides, figures, graphs, posters and all portions of a manuscript.
V. Elective rotations.

The goals of these Elective rotations are:

1. To refine the fellow’s clinical and/or research skills.
2. To provide additional opportunities to extend the rheumatology fellow’s range of knowledge and experience.
3. To expose the rheumatology fellow to a more in depth experience in various ancillary musculoskeletal disorders.

**Community Rheumatology Clinic at Kaiser Permanente South Sacramento**

**Goals:** The goals of the community rheumatology experience are:

1. To expose the rheumatology fellow to a unique and complementary outpatient experience, reflecting “real world” outpatient rheumatologic care.
2. To enable the fellow to gain experience in a community-based, consultative ambulatory rheumatology practice.

**Objectives:** As a result of this experience, the rheumatology fellow will be able to:

1. Understand the pace, logistics and nuances of a community rheumatology practice.  
   *(Practice based learning and improvement, Systems based practice)*

2. Appreciate the importance of focused evaluation and timely communication for outpatient referrals in a community practice setting.  
   *(Interpersonal and communication skills, Professionalism)*

**Description of the community rheumatology experience.**

The fellows attend one Rheumatology clinic bi-weekly at **Kaiser Permanente South Sacramento**. The fellows will see follow-up patients and new patients under the direct supervision of the rheumatologist, with whom he/she will review the history and physical findings and discuss approaches for evaluation and treatment. Procedures may be carried out at the discretion and under the guidance of the rheumatologist.

**Pediatric Rheumatology.**

**Goals:** The goals of the pediatric rheumatology experience are:

1. To provide the rheumatology fellow within opportunity to conduct an appropriate diagnostic evaluation in children with rheumatic disease symptoms.
2. To enable the rheumatology fellow to become comfortable with diagnosis, treatment, and follow up of children with rheumatic diseases.

**Objectives:** At the end of this experience, the rheumatology fellow will be able to:
1. Conduct an appropriate history, examination and evaluation of the pediatric patient with a rheumatologic illness. (Interpersonal and communication skills, Patient care skills)
2. Review important aspects of rheumatologic treatment, specifically related to the pediatric patient. (Medical knowledge, Practice based learning and improvement)

Description of the pediatric rheumatology rotation. Fellows interested to do this elective are sent to Stanford University Pediatric Rheumatology Fellowship program for one month rotation.

Sports Medicine Clinic at UCDMC.

Goals: The goals of this rotation will be:

1. To expose the rheumatology fellows to various musculoskeletal problems associated with sports injuries.
2. To enable the fellow to understand the value of a multidisciplinary approach involving the orthopedic surgeons and rehabilitation facility for patients with musculoskeletal disorders of sports injuries.
3. To illustrate the important role played by ancillary health professionals, such as physical and occupational therapists in successful long-term rehabilitation.

Objectives: As a result of this rotation the rheumatology fellow will be able to:

1. Understand the goals, therapeutic modalities and anticipated outcomes of to various musculoskeletal problems associated with sports injuries. (Medical knowledge, Practice based learning and improvement)
2. Observe the responses to therapy and progress of various musculoskeletal problems associated with sports injuries. (Patient care skills, Practice based learning and improvement)
3. Develop an awareness of the importance of multiple healthcare providers and other resources in an overall plan for management of musculoskeletal problems associated with sports injuries. (Systems based practice, Professionalism)
4. Select and counsel patients who are most appropriate for surgical and rehabilitation therapy. (Practice based learning and improvement, Interpersonal and communication skills)

Description of the rehabilitation medicine rotation.

This rotation will be a weekly clinic for 2 months at the UCDMC Sports clinic. The fellow will be responsible initial evaluation, and subsequent management of these patients under the supervision of a faculty in the Sports Medicine Clinic at UC Davis. At the end of this rotation the fellow will be evaluated by the supervising faculty of the Sports Medicine Clinic and the fellow will meet with the Rheumatology Program Director to provide feedback about the learning experience of this clinic.
Appendix A: Schedule

Schedule of weekly activities:

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td></td>
<td>Radiology</td>
<td>Arthritis</td>
<td>Arthritis clinic</td>
</tr>
<tr>
<td></td>
<td>Research and</td>
<td>conference</td>
<td>clinic</td>
<td>clinic</td>
</tr>
<tr>
<td></td>
<td>personal studies</td>
<td></td>
<td></td>
<td>Clinical Immunology Clinic</td>
</tr>
<tr>
<td>9:00</td>
<td>UCDMC Clinic</td>
<td>Kaiser Clinic</td>
<td>VAMC Clinic</td>
<td>UCDMC Clinic</td>
</tr>
<tr>
<td>10:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td></td>
<td></td>
<td>Noon</td>
<td>Didactics Grand Round</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:00</td>
<td>VAMC Clinic</td>
<td>Research and</td>
<td>Research and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personal</td>
<td>Personal</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>studies</td>
<td>studies</td>
<td></td>
</tr>
<tr>
<td>2:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes regarding schedule:

1. Fellow responsibilities: Inpt. Rounds- The fellow on call

2. Attending rounds: Ordinarily to begin at 9:00 - 9:30 on Monday through Friday, off service fellow encouraged to participate if possible.
Appendix B: Conferences

1. All fellows attend core lecture

2. A weekly teaching activity will be organized and presented by the faculty attending (or designee), at a time agreed on by faculty and fellows. This activity may include lectures and/or demonstrations relative to the following topics:
   - regional MS plain-film imaging (eg, hand, shoulder, etc)
   - disease activity measures (in RA, OA, SLE, Spondyloarthropathies)
   - bone/cartilage biology
   - rheumatic medication MOAs
   - basic laboratory/immunology techniques (ELISA/PCR/FACS/ISH)
   - acute phase response
   - genetics: genome, transcriptome, epigenome
   - physical therapy
   - occupational therapy
   - introduction to MS US
   - MS techniques: DEXA, capillaroscopy, polarizing light microscopy
   - basics in immunology (innate/acquired, cellular & humoral elements)
   - clinical trial design
   - basic statistics

Other specific topics may be requested by the fellows.
Appendix C: Ancillary educational activities

During the course of the 2 years of this fellowship training program, each fellow will have the opportunity to participate in several additional activities, relevant to the practice of clinical rheumatology. These include:

1. Fellows will have the opportunity to attend a training course relative to the use of musculoskeletal ultrasound, and will be supervised in the use of this technique in the ambulatory clinic by trained rheumatology faculty.

2. Fellows will be apprised of, and encouraged to attend, several regional and national rheumatology conferences each year during the course of their training program.

3. In-Service Exam
   The ACR in Service Exam takes place in March of each year. Fellows are required to take the annual in service exam.
Appendix D: Procedures

Procedures Expected

Joint aspiration and/or injection.

PIP/MCP.
Wrist.
Elbow.
Glenohumeral.
Knee
Ankle

Bursa injections.

Subdeltoid/subacromial.
Olecranon.
Trochanteric
Prepatellar
Anserine

Tendon injections.

Trigger finger.
Dequervains.
Medial/lateral epicondylitis.
Bicipital.
Posterior tibial.

Other soft tissue procedures.

Carpal tunnel.
Plantar fasciitis.
Trigger point
Appendix E

1. DUTY HOURS POLICY:

   A. Definitions
   Duty hours are defined as all clinical and academic activities related to the fellowship program. This includes inpatient and outpatient clinical care, in-house call, short call, night float and day float, transfer of patient care, and administrative activities related to patient care such as completing medical records, ordering and reviewing lab tests, and signing verbal orders.

   Hours spent on activities that are required by the accreditation standards, such as membership on a hospital committee, or that are accepted practice in fellowship programs, such as fellows’ participation in interviewing fellow candidates, must be included in the count of duty hours. It is not acceptable to expect fellows to participate in these activities on their own hours; nor should fellows be prohibited from taking part in them.

   Duty hours do not include reading, studying, and academic preparation time, such as time spent away from the patient care unit preparing for presentations or journal club. **Duty Hours are to be recorded in MedHub each week by the Fellow.**

   B. General Requirements
   The Rheumatology Fellowship Program strictly adheres to all Stanford Hospital & Clinics House Staff Policies and Procedures, ACGME common program requirements, and RRC requirements concerning duty hours.

   Institutional policies and procedures are provided to fellows with their contract and are available on the GME website: [http://med.stanford.edu/gme/policy/](http://med.stanford.edu/gme/policy/)

   The ACGME common program requirements can be found on the following website: [http://www.acgme.org/acWebsite/dutyHours/dh_dutyhoursCommonPR07012007.pdf](http://www.acgme.org/acWebsite/dutyHours/dh_dutyhoursCommonPR07012007.pdf)

   The RRC requirements can be found on the following website: [http://www.acgme.org/acWebsite/dutyHours/Specialty-specific_DH_Definitions.pdf](http://www.acgme.org/acWebsite/dutyHours/Specialty-specific_DH_Definitions.pdf)

   C. Specific Duty Hour Limitations

   **Duty Hours, further definitions**

   a. Duty hours are defined as all clinical and academic activities related to the fellowship program, i.e., patient care (both inpatient and outpatient), administrative duties related to patient care, the provision for transfer of patient care, time spent in-house during call activities, at-home time involved directly in patient care while on call, and scheduled academic activities such as conferences. Duty hours do not
include reading and preparation time spent away from the duty site. These standards apply to all UCDMC training sites: VAMC Sacramento, Kaiser Permanente South Sacramento.

b. Duty hours will be limited to 80 hours per week, averaged over a four-week period, inclusive of all activities.

c. Fellows will be provided with 1 day in 7 free from all educational and clinical responsibilities, averaged over a four week period, inclusive of call. One day is defined as one continuous 24-hour period free from all clinical, educational, and administrative activities.

A minimum of 10 hour time period for rest and personal activities will be provided between all daily duty periods.
Appendix F

Fellow’s Semi-Annual Evaluation Form

E*Value:

Patient Care
Medical Knowledge
Systems-Based Practice
Practice Based Learning
Professionalism
Interpersonal and Communication Skills
Overall Competence

ave.__________
ave.__________
ave.__________
ave.__________
ave.__________
ave.__________

Strengths:

Areas for Improvement:

General Comments:

________________________________________ Date:__________________________
Program Director
Nursing Semi-Annual Assessment of Fellow Performance

Fellow: _______________________________________________________
Evaluator: _______________________________________________________
Date: _________________________

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree Somewhat</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carries out responsibilities in a professional manner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is professional in his/her communications with nursing staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicates effectively with patients and families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides appropriate leadership of the healthcare team</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates a commitment to providing quality healthcare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectively utilizes resources in providing patient care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PATIENT /PARENT SATISFACTION RATING FORM

Please answer these questions so that we may help the doctor in training who took care of you (or your family member) know how she/he did in giving care. Your thoughts will help our doctors learn to give the best care to patients and families.

Please do not put your name on this form, only the name of the doctor you are evaluating.

<table>
<thead>
<tr>
<th>Your Doctor's Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Doctor:</th>
<th>Can't tell</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduced him/herself to me</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduced other members of the health care team to me if they were in the room with us</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respected my privacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spoke to me and/or other members of my family so we could understand what was going on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asked questions in a way that let me tell my concerns and feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt like the doctor listened to me</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt like the doctor took enough time with me</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt like the doctor was interested in my problems and concerns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>He/she gave me instructions on how to treat my problem by either telling me or giving me something in writing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments: Please tell us why you answered “no” to any of the questions

Thank you for completing this form. Please drop this in the container that is marked “Patient Surveys.” Anyone on our team will be happy to show you where this container is located.
ACGME Milestone Evaluations
ACGME Milestone Evaluations - Internal Medicine Subspecialties

Select the level corresponding to the resident's knowledge, skills, attitudes, and other attributes in each area below. Your selections should take into account the resident's demonstration of milestones throughout the program with updates to reflect recent progress. Evaluations must be based on evidence with an emphasis on that obtained by direct observation.

Milestone levels do not correspond to the resident's year in your program. Selecting a level implies that milestones in that level and in lower levels have been substantially demonstrated. Selecting a radio button between levels indicates that milestones in lower levels have been substantially demonstrated as well as some milestones in the higher level(s). Mouse over the radio buttons to read the milestones for each level. After completing the evaluation, click the "Submit" button to finalize it. Alternatively, click the "Save Progress" button to save your current changes and complete the form later. You MUST use the "Submit" button to finalize the form before the deadline for this evaluation period. Incomplete evaluations will NOT be accepted.

There may be cases in which a resident had no experiences within a subcompetency area during the previous six months. In this case, the reported milestone level should remain the same as the one reported during the previous evaluation. Do not increase (or decrease) the milestone level simply because time has passed; an evaluation of each subcompetency area must occur every six months. To review previously completed milestone evaluations, go to the 'Reports' tab in ADS and select "Milestone Evaluations".

### Patient Care

<table>
<thead>
<tr>
<th>ACGME Milestone</th>
<th>Not Yet Assessable</th>
<th>Critical Deficiencies</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Ready for Unsupervised Practice</th>
<th>Aspirational</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Gathers and synthesizes essential and accurate information to define each patient's clinical problem(s). (PC1)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>b. Develops and achieves comprehensive management plan for each patient. (PC2)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>c. Manages patients with progressive responsibility and independence. (PC3)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>d. Demonstrates skill in performing and interpreting invasive procedures. (PC4a)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>e. Demonstrates skill in performing and interpreting non-invasive procedures and/or testing. (PC4b)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>f. Requests and provides consultative care. (PC5)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

- Yes
- No
- Conditional on Improvement

### Medical Knowledge

<table>
<thead>
<tr>
<th></th>
<th>Not Yet Assessable</th>
<th>Critical Deficiencies</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Ready for Unsupervised Practice</th>
<th>Aspirational</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Possesses Clinical knowledge (MK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Knowledge of diagnostic testing and procedures. (MK2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Scholarship. (MK3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Systems-Based Practice

<table>
<thead>
<tr>
<th></th>
<th>Not Yet Assessable</th>
<th>Critical Deficiencies</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Ready for Unsupervised Practice</th>
<th>Aspirational</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Works effectively within an interprofessional team (e.g., with peers, consultants, nursing, ancillary professionals, and other support personnel). (SBP1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Recognizes system error and advocates for system improvement. (SBP2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Identifies forces that impact the cost of health care, and advocates for and practices cost-effective care. (SBP3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Transitions patients effectively within and across health delivery systems. (SBP4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

- Yes
- No
- Conditional on Improvement

### Practice-Based Learning and Improvement

<table>
<thead>
<tr>
<th>Not Yet Assessable</th>
<th>Critical Deficiencies</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Ready for Unsupervised Practice</th>
<th>Aspirational</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Monitors practice with a goal for improvement. (PBLI1)</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>b. Learns and improves via performance audit. (PBLI2)</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>c. Learns and improves via feedback. (PBLI3)</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>d. Learns and improves at the point of care. (PBLI4)</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

- Yes
- No
- Conditional on Improvement

### Professionalism

<table>
<thead>
<tr>
<th>Not Yet Assessable</th>
<th>Critical Deficiencies</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Ready for Unsupervised Practice</th>
<th>Aspirational</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Has professional and respectful interactions with patients, caregivers, and members of the interprofessional team (e.g., peers, consultants, nursing, ancillary professionals, and support personnel). (PROF1)</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>b. Accepts responsibility and follows through on tasks. (PROF2)</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>c. Responds to each patient’s unique characteristics and needs. (PROF3)</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>d. Exhibits integrity and ethical behavior in professional conduct. (PROF4)</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>
The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

- Yes
- No
- Conditional on Improvement

**Interpersonal and Communication Skills**

<table>
<thead>
<tr>
<th></th>
<th>Not Yet Assessable</th>
<th>Critical Deficiencies</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Ready for Unsupervised Practice</th>
<th>Aspirational</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Communicates effectively with patients and caregivers. (ICS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Communicates effectively in interprofessional teams (e.g., with peers, consultants, nursing, ancillary professionals, and other support personnel). (ICS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Appropriate utilization and completion of health records. (ICS3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

- Yes
- No
- Conditional on Improvement

**Overall Clinical Competence**

This rating represents the assessment of the resident's development of overall clinical competence during this year of training:

- Superior
- Satisfactory
- Conditional on Improvement
- Unsatisfactory

For questions or further assistance with ACGME competency evaluations, contact us (mailto:WebAIDS@acgme.org). Further information on the use of our data can be found within the ACGME Terms of Use (http://www.acgme.org/acgmeweb/tabid/300/Legal/TermsOfUse.aspx) and Privacy Policy (http://www.acgme.org/acgmeweb/tabid/468/Legal/PrivacyPolicy.aspx).

© 2015 Accreditation Council for Graduate Medical Education (ACGME)