

Immunology Fellowship Guidelines

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The MERSI Immunology Fellowship Guidelines presented here is a summarized version. Should you wish to have a full copy of the guidelines, kindly request a copy using the Feedback Link below.

I. EDUCATIONAL GOALS

The primary goals of the MERSI Ocular Immunology Fellowship are to develop diagnostic skills and therapeutic skills in caring for patients with destructive ocular diseases mediated by abnormal immunoregulatory processes, and to develop an information base in basic ocular immunology, with associated research skills, to facilitate appropriate total care of patients with destructive ocular inflammation.

Such diseases include progressive cicatricial pemphigoid, progressive Mooren's ulcer, peripheral ulcerative keratitis secondary to collagen vascular disease, retinal vasculitis, necrotizing retinitis, and chronic, steroid resistant uveitis. The specific goals and objectives enumerated below should serve as a starting framework:

Basic Objectives

1. Diagnosis and management of cicatricial pemphigoid
2. Differential diagnosis and evaluation of patients with peripheral ulcerative keratitis
3. Management of peripheral ulcerative keratitis
4. Differential diagnosis and evaluation of patients with scleritis
5. Management of scleritis
6. Evaluation and categorization of uveitis
7. Differential diagnosis and formulation of diagnostic strategy for patients with uveitis
8. Management of uveitis
9. Differential diagnosis and evaluation of patients with vasculitis and/or retinitis
10. Management of vasculitis and retinitis

The Fellow should reasonably be expected to have mastered these objectives within six months of his/her experience in the MERSI Ocular Immunology Fellowship; he/she should then develop further skills with some of the more difficult and subtle forms of immunologically mediated destructive ocular disease, and obtain experience in the indications for use of immunosuppressive agents. It is to be emphasized that the proper, safe use of cytotoxic drugs requires significant medical training and experience, and significant, frequent, longitudinal experience in the use of cytotoxic agents, recognition of complications induced by these agents, and management of such complications.

Our teaching approach emphasizes the case method, and each patient is to be examined initially by the Fellow and then formally presented to the attending staff member for discussion of diagnosis and treatment. Additional readings and pertinent references will often be suggested to supplement the attached basic list of reference material. The clinical experience forms the essential core for the learning experience.

Used properly, this experience will provide the opportunity for recognition and diagnosis of disease and will be the stimulus for in depth reading about each disease entity. Additional complements to the educational program in the MERSI Ocular Immunology Fellowship include Immunology Conference (Wednesdays), Fluorescein Conference, Research Conference (Wednesdays), Clinical Case Conference (one Friday a month) and Immunology Journal Club (once a month). Several basic science and clinical examinations will be administered throughout the year, and a "thesis" or several manuscripts for publication is (are) required for satisfactory completion of the Fellowship.

Additional educational obligations include participation in conferences and courses offered to ophthalmologists and to optometrists at MERSI.

II. ORGANIZATION

Dr. C. Stephen Foster is the President and Founder of MERSI and of the Immunology and Uveitis Foundation.

III. CLINICAL ACTIVITIES

A. OUTPATIENT RESPONSIBILITY

MERSI is in operation Monday through Friday, 8:30 AM until 5:00PM, and often on Saturday from 9:00AM until noon.

The Fellow should attempt to make a diagnosis or at least place the case into as carefully-described a category as possible. Each new patient should be administered the Uveitis questionnaire, and a small general battery of laboratory tests should be ordered: CBC with differential and sedimentation rate, urinalysis, chest X-ray, and FTA-ABS would be the usual minimum. Further studies are based on the results of the history and physical examination and on discoveries from the Review of Systems questionnaire.

B. SURGICAL AND INPATIENT RESPONSIBILITIES

Emergency or scheduled admissions for medical workup, for medical therapy, for diagnostic vitrectomy, or for emergency corneal, scleral or conjunctival surgery will be the responsibility of the Fellow on call. He/she is responsible for the admitting note, orders, daily rounds, assembling laboratory data, arranging post-discharge care details and completing the medical record. The assistant is responsible for completing the pathology form and dictating the operative note immediately after assisting in surgery.

C. OTHER CLINICAL RESPONSIBILITIES

The on-call Fellow is responsible for all emergency consults. These may be cases urgently referred from abroad, or from local practitioners, or they may be requests for consultation on inpatients at the Massachusetts General Hospital. Such consultations are to be presented immediately to Dr. Foster.

IV. CONFERENCES

Conference Schedule:

Monday evening, once a month - Journal Club

Tuesday, 5:30-6:30 p.m. - Lab Meeting

Wednesday, 5:30 - 7:30pm - Immunology Seminar or Fluorescein Conference

Friday, 7:30-8:30 a.m. Case Discussions

Journal Club meets once a month, on a Monday evening. Basic immunology and clinical immunology and ophthalmology articles are discussed, with rotating assignments for the Fellows responsible for each article.

Immunology Seminar responsibilities are shared between Fellows, Faculty, and Visiting Professors. Fellows will, for their Seminar presentations, discuss with Dr. Foster appropriate topics to formally prepare.

V. RESEARCH AND LABORATORY ACTIVITIES

A. THE OCULAR IMMUNOLOGY AND UVEITIS FOUNDATION LABORATORY

Our major goal is to provide a resource for individuals who are determined to become the best that they're capable of becoming: from a personal, character point of view, as well as from a physician/clinician/caretaker point of view and from a restless, question-asking, scientist point of view.

This Program is not about excellent ocular immunology, or excellent ophthalmology; it isn't even about excellent medicine. This program is about personal excellence. Excellence in attitude, behavior, relationships. Our job is to create the environment and resources to create the possibility and stimulation for each Fellow to grow to his or her maximum.

The resource that we have attempted and continue to attempt to provide for such individuals is comprised of an

atmosphere that encourages generosity, thoughtfulness, kindness, consideration, respect; one that encourages independence, courage, with appropriate limits and circumspection, appropriate introspection and recognition of one's knowledge and skills, and the feeling of complete comfort in recognizing and admitting to others what one does not know, asking for help, and graciously accepting help. We have tried to construct an environment that is rich in clinical material, so that physicians can appreciate the relevant human circumstances and ocular inflammatory diseases which need our attention, and can imagine possible ways for learning more about those important problems, and can develop exceptional expertise at recognizing (diagnosing) and treating those problems. The environment that we have attempted to create is one that includes a laboratory resource which is rich in opportunity and is stimulating from both a scientific and social perspective. The environment also includes teachers, "professors," whose primary function is to stimulate, guide, critique and evaluate.

We hope that each Fellow will learn to identify a problem appropriate for study, map a strategy for solving that problem, and identify the resources necessary to pursue that strategy—whether the necessary resources are within or outside the OIUF Laboratory. Once the time has "apparently" arrived to begin an experiment, careful re-evaluation may disclose that, in fact, it is not time to begin. Planning, details, checking, rechecking, and then checking once again can save thousands of dollars and hundreds of wasted hours. Avoid the temptation to rush. Avoid the temptation to attempt to do too much in one experiment. Avoid the temptation to take short cuts. Even such seemingly safe expedients as using solutions or buffers that a colleague has been using have destroyed months of effort by some Fellows.

The level to which we succeed in our goal is mirrored by the behaviors of the individuals completing the Fellowship training program: behaviors both from a character/social perspective and from a clinician/scientist perspective. We have reason, so far, to believe that the program accomplishes its goal. Some Fellows take more with them from this environment than do others. All, however, have selflessly recognized the quid pro quo for the benefits they derive from the program: 100% dedicated effort to the Fellowship training program while in it, total commitment to the patients for whom they are responsible, and absolute honesty and scientific integrity.

B. LABORATORY RESEARCH

Each Fellow is expected to work on a research project. There are few general services. Techniques such as tissue culture, histopathology, immunofluorescence and biochemical analyses will be taught to you, but, thereafter, you should do the work independently.

We perform our own histopathology on plastic embedded tissue. There are many projects involving light microscopy. So, to make it possible to process the tissue in the shortest time, please select from your experiment tissues which are representative of your study. For example, if 10 eyes receive the same treatment for the same period of time, sectioning and observation of a few should give the structural information.

Finally, each Fellow is expected, with the help of the preceptor, to apply for research funds, separate from salary support, to help defray the cost of materials, supplies and animals. We will take responsibility for all research costs, however (typically \$20,000 - \$30,000 per Fellow), even if the Fellow is unsuccessful in obtaining research funds.

C. CLINICAL RESEARCH

Research, presentation, and/or publication of interesting cases or series by fellows is encouraged. We believe that a doctor is a better physician as a result of carefully analyzing a case, reviewing the literature, and reporting the case, than by not doing so.

MERSI records, kept in the electronic medical record files, may be reviewed upon approval of the project and upon obtaining IRB approval from the New England IRB. Most of you will be required to review patient charts for your clinical projects. There is a computerized electronic medical record system which prints out the names of all MERSI patients according to specific ICD-9 diagnosis codes. If, for example, you would like to review all charts for patients with keratoconjunctivitis, you should contact the MERSI Practice Administrator with your request for a printout of a specific diagnosis. The report will be produced and the print-out of patients will be left in the Fellows' In-Box for you to pick up. Reports are not printed out immediately upon your request, so give us the time to fill your needs.

VI. MISCELLANEOUS INFORMATION

1. Spare Time

There is no such thing. Remember that. Think about that. Your time here is brief; don't waste it. There will be many opportunities to waste it, many opportunities to be seduced by Boston, New England, etc. The array of saboteurs is endless. Read regularly. One hour a night, every night, without fail. Be systematic and you will consume an enormous amount of material in a year.

2. Visa Processing - All observers of foreign nationality obtain their visitor visas through the usual channels. It is the fellow's responsibility to pay these charges.