

# Curriculum on Solid Organ Transplantation

## Educational Purpose and Goals

Infectious Diseases physicians are often called on to serve as consultants to patients with solid organ transplantation problems. The purpose of this rotation is to allow the fellow to develop an in depth understanding of the basic and clinical science aspects of solid organ transplants, understand appropriate treatment and prevention of disease, understand criteria for patients that need to be referred to a tertiary center and those that can be personally managed, the epidemiology, humanistic, moral and ethical aspects of these diseases. Fellows will gain knowledge regarding the diagnostic difficulties when working with solid organ transplant patients with infection and appropriate utilization of prophylaxis.

## Principal Teaching Methods

This rotation will occur at Henry Ford Hospital under the direction of Dr. Brara. Dr. Brara is the ID residency program director and supervises ID fellows from the Wayne State University program who rotate at Henry Ford for their solid organ transplant experience. Faculty are members of the Henry Ford Hospital Infectious Diseases Division.

Reading lists and important articles beyond the base text will be provided through the coordinator of the rotation.

## Educational Content

Mix of diseases: Fellows are exposed to a wide variety of infectious diseases problems on the solid organ transplant rotation. These include, but are not limited to, the febrile patient, upper respiratory, pleuropulmonary, and bronchial infections, urinary tract infections, peritonitis and other intra abdominal infections, cardiovascular infections, central nervous system infections, skin and soft tissue infections, prosthetic device infections, infections related to trauma, gastrointestinal infections, bone and joint infections, infections of the reproductive organs, viral hepatitis, sepsis syndromes, nosocomial infections, infections in immunocompromised or neutropenic patients, infections in patients with leukemia or lymphoma, infections in geriatric patients, and infections in parenteral drug abusers. A diverse patient population is served at Henry Ford Hospital.

Patient characteristics: Patients are ethnically, and socioeconomically diverse. Patients are referred to the Henry Ford Hospital solid organ transplant program from throughout the mid-west.

Learning venues: All inpatient activity will take place at the Henry Ford Hospital. Inpatients will be evaluated with direct attending supervision and fellow will be expected to follow assigned patients as appropriate.

Structure of rotation: Inpatients will be evaluated with direct attending supervision. Fellows will be responsible for consultations on the solid organ transplant rotation. This includes a complete work-up with a history and physical examination, be responsible for daily patient follow-up including appropriate medical record documentation, be prepared to discuss all aspects of a patients' illness as it relates to progress and treatment plans, attend inpatient rounds with the attending physician on weekdays and assigned weekends, present significant patient related events that occur during nighttime hours to ensure information transfer and continuity of care, prepare case presentations for infectious disease solid organ transplant conferences, as appropriate, learn by assisting and performing (with supervision) infectious diseases-related procedures, read and be prepared to discuss key literature, attend all required educational conferences offered by the hosting institution. Direct teaching will be a blending of teaching and management rounds and will occur at least 4 ½ hours per week. This is a one month rotation. When on this rotation, fellows will attend only the host institutions conferences and will not have outpatient clinics.

### **Principal Ancillary Educational Materials**

The principle text of the rotation is Mandell's Principles and Practice of Infectious Diseases. Fellows have access to web based resources and other texts and videos through the hospital libraries. The rotation director will provide other resources as appropriate.

### **Methods of Evaluation**

Fellow Performance: At the conclusion of the rotation, faculty members will summarize and accurately describe the fellow's performance on the provided form, discuss this evaluation with the fellow and return the form to the residency director. The evaluation is competency-based, fully assessing core competency performance. The evaluation will be part of the fellow file and will be incorporated into the semiannual performance review for directed fellow feedback.

Semiannually the fellow will be evaluated by the program director in a formal, written evaluation session. This evaluation will be transcribed and signed by both the residency program director and the fellow.

Program and Faculty Performance The fellow will summarize and accurately describe faculty performance, facilities, and experience and return it to the program office for inclusion in a computer-generated report

to insure fellow anonymity. The Fellowship Training and Evaluation Committee will review results annually.

### **Institutional Resources: Strengths and Limitations**

**Strengths:** A commitment to high quality patient care and education. MSU has a national reputation in the field of solid organ transplantation.

**Limitations:** Distance. Loss of clinic continuity

### **Rotation Specific Competency Objectives**

#### ***Patient Care***

Fellows are expected to precisely and logically obtain patient histories, efficiently perform accurate physical exams approaching the level of a sub-specialist, demonstrate sound clinical reasoning in ambiguous situations, possess knowledge of common solid organ transplant syndromes/diseases sufficient to establish a differential diagnosis, establish patient monitoring procedures to determine need for changes in therapeutic programs, observe patients for adverse side effects, and apply public health policies to patient care.

Fellows will be responsible for medical record documentation, as appropriate, under the supervision of the medical attending.

#### ***Medical Knowledge***

Fellows will possess knowledge of and demonstrate growing understanding of basic and clinical sciences regarding solid organ transplantation, knowledge of urgent and non-urgent solid organ transplant conditions, lead teaching of residents and students. Fellows will display self-initiative to stay current with new medical literature, and demonstrate knowledge on the impact of study design on validity or applicability to practice. Fellows will read appropriate texts and articles and be prepared to discuss key literature. Fellows will attend all conferences at the hosting institution relevant to their solid organ transplantation experience.

#### ***Interpersonal and Communication Skills***

Fellows will engage in shared decision making, conduct family meetings, as appropriate, successfully negotiate nearly all difficult patient encounters unaided, function as a team leader with minimal reliance upon attending physicians, thoroughly educate patients and their families using education as a form of intervention and partnering, effectively communicate with referring physicians. Fellows will be able to demonstrate appropriate

consultative principles of communication with other physicians and responsiveness to professional consultative requests.

### ***Professionalism***

Fellows are expected to exhibit honesty and trustworthiness, reliability in their clinical duties, as well as demonstrate integrity, compassion, and respect in their interactions with patients and colleagues from the same or different cultures/ages/sexes. Fellows will be responsible for prompt completion of medical records and proper documentation in the medical record.

### ***Practice Based Learning and Improvement***

Fellows will use consulting services to improve patient care and self knowledge, appraise and assimilate scientific literature, integrate evidence based medicine, expert opinion and professional judgment, suggest and utilize data driven protocols, respond to the questions of the consulting physician, demonstrate self-initiative in the use of information technology available via the hospital library, the MSU electronic library, or the internet to access and retrieve materials for performance improvement. Fellows are expected to show progressive self-learning throughout the rotation, with emphasis on learning from any cognitive or procedural errors.

### ***Systems Based Practice***

Fellows will demonstrate leadership in management of complex patients, as appropriate, partner with case managers and other health providers to identify and act on improvement opportunities in the health care system, practice within external regulations and expectations, contain cost and conserve resources while preserving high quality care, ensure effective communication between providers.