

# INFECTIOUS DISEASES ROTATION 2008 – 2009

## Overview

Your own patient-care experiences on the wards and in the clinics is the principle venue for learning and refining your clinical skills in the evaluation and management of infectious diseases. Your educational experience on the Infectious Diseases Service has been constructed to enhance your competency in the six areas outlined by the ACGME, with specific emphasis on applying them to infectious processes. Your specific patient encounters will vary, depending on the census of the consultation service at any given time.

You will be supervised by an Infectious Diseases fellow and a faculty member. You will assist the consult team with the initial evaluation of patients with infections and will formulate a plan for their evaluation and treatment, which you will then present to the attending faculty member during rounds.

## Learning Venues/ Activities

### Clinics

- HIV Continuity Clinic – Viral Diseases Clinic, 6670 St. Vincent Avenue: Thursday 8:30 a.m. to Noon (If your continuity clinic is scheduled for Thursday mornings, you will be assigned an alternate day for the HIV Continuity Clinic.)
- Out-patient ID clinic: Monday afternoon 1:30 -3:30 PM

### Conferences

Whenever possible, residents are expected to attend the conferences of the section. These provide an environment for discussion of specific clinical questions by the faculty and Fellows. Didactic experiences embellish the clinical curriculum by either clarifying fine points about common diseases or exposing fellows and residents to infectious diseases unlikely to be encountered on the clinical service.

- *Journal Club*: First, second, and third Mondays, 12-1 p.m., Rm 5-201 or 5-301
- *Med/Peds ID Conference*: Fourth Monday, 12-1 p.m., Conference Center
- *Didactic Lecture*: First Friday, 1-2 p.m., Room 6-329
- *Case Conference*: Second Friday, 1-2 p.m., Room 6-329
- *HIV Case Conference/Fellow's Conference*: Third Friday, 1-2 p.m., Rm 6-329
- *Micro Rounds*: Fourth Friday, 1-2 p.m., Room 6-329

## Learning Resources

- Mandell, Douglas and Bennett's *Principles and Practice of Infectious Diseases*. The University maintains a license to the on-line version, accessible through MD Consult.

- Relevant sections of UpToDate
- You are expected to perform routine searches of the medical literature relevant to patient care issues. The University provides an institutional site license to a wide variety of on-line medical journals.

### **Evaluation Methods**

- Global faculty evaluation at end of rotation (*all competencies*). The evaluation will incorporate the following considerations:
  - *Patient Care*: Direct faculty observation of your patient encounters, including interactions to obtain data, perform elements of the physical exam, or explain disease processes and testing to the patient or family members.
  - *Medical Knowledge*: Direct faculty observation of your discussion of the patient's history, physical exam, problem list, differential diagnoses and treatment plan. Specific emphasis will be placed on your ability to interpret pertinent aspects of the history and exam, laboratory and radiographic data and microbiologic results with respect to potential infectious etiologies and their respective evaluations and treatments.
  - *Practice-based Learning and Improvement*: Faculty observation of your ability to evaluate your own performance, to incorporate feedback into improvement activities, and to effectively use technology to manage information for patient care and self-improvement. You are expected to self-reflect on your ability to assume responsibility for patients with complicated infectious diseases based on your experiences during the month. For example, if you evaluate and formulate a plan for a patient with *Staph aureus* bacteremia, we will pay particular attention to how well you are able to navigate through another patient with *S. aureus* bacteremia and formulate a reasonable plan.
  - *Interpersonal and Communication Skills*: Assessed through direct observation of patient-resident interactions during discussions of treatment plans. Additionally, the attending will observe specifically resident interaction with other physicians and ancillary staff members
  - *Professionalism*: Assessed by faculty reflection on your punctuality, absences, fulfillment of patient care responsibilities and observations of your interactions with patients of varying races and creeds. Additionally, faculty preceptors will actively solicit opinions from the patient and their family members and other members of the health care team regarding your ability to demonstrate compassion and to effectively teach disease processes.
  - *Systems-Based Practice*: Assessed through direct observation of your interactions with nursing staff, nutrition, wound care, case management, respiratory therapy, the clinical microbiology laboratory, and other ancillary service providers. Specific attention will be given to your ability to synthesize resource-wise, multi-disciplinary plans of diagnosis and management.

- Clinical evaluation exercises: Interviewing skills, examination skills; counseling skills; medical knowledge and diagnostic interpretation; documented through *MyEvaluations* (*medical knowledge, patient care; interpersonal and communication skills*) Specific medical knowledge, and diagnostic interpretation exercises may focus on, but are not limited to:
  - Interpretation of gram stains, KOH preparations, and acid-fast stains
  - Interpretation of culture and antibiotic susceptibility reports
  - Interpretation of serologic tests and viral load testing
  - Interpretation of cerebrospinal fluid studies

### **Educational Goals (PGY-1, 2, 3)**

*Patient Care: At the end of the rotation, residents should be able to:*

- Perform a history and physical exam on patients with fever or suspected infectious disease
- Develop an evidence-based approach to the management of:
  - Sepsis
  - Pneumonia and lung abscess
  - Infections in elderly patients
  - Newly-diagnosed human immunodeficiency virus infection
  - Infections in injection drug users
  - Staphylococcal bacteremia
  - Fever of unknown etiology
  - Fever with rash
  - Fever in neutropenic patients
  - Infections in trauma patients
  - Infections in patients with acquired immunodeficiency syndrome and other immunocompromised states
  - Nosocomial infections
  - Infections in post-transplantation patients
  - Urinary tract infections
- Demonstrate the appropriate technique for obtaining and handling clinical material from patients with suspected infectious diseases
- Use antimicrobial agents appropriately in the treatment of infectious diseases

*Medical Knowledge:*

- Understand the pathophysiology, microbiology, clinical manifestations, diagnostic evaluation, and treatment of infectious processes, including:
  - Pelvic infections
  - Human and animal bite wounds
  - Infective endocarditis
  - Osteomyelitis and spondylodiskitis
  - Necrotizing fasciitis and other SSTI
  - Myocarditis

- Meningitis, brain abscess, and encephalitis
- Central nervous system shunt infections
- Myocarditis
- Syphilis and other sexually-transmitted diseases
- Septic arthritis
- Skin and soft tissue infections
- Upper respiratory infections
- Pneumonia and lung abscess
- Toxic shock syndrome
- Peritonitis and intra-abdominal infections
- Gastroenteritis and food poisoning
- Viral hepatitis
- Understand the clinical manifestations, diagnostic evaluation, and approach to management of the following specific infections:
  - Arboviral infections
  - Histoplasmosis and cryptococcosis
  - Legionnaire's disease
  - Tuberculosis and nontuberculous mycobacteria
  - Candidiasis
  - Herpes virus infections
  - Gram negative rod infections
  - Staphylococcal infections
  - Enterococcal infections
- Learn to interpret gram stains, KOH preparations, and acid-fast stains
- Learn to interpret laboratory studies commonly used in infectious disease, including: culture and antibiotic susceptibility reports; serologic tests; cerebrospinal fluid tests, and viral load determination

#### Practice-based Learning and Improvement

- Demonstrate a pattern of applying insights gained from previous patient care experiences on the service to the management of new patients
- Demonstrate a pattern of replicating the effective clinical decision making of faculty and fellows
- Demonstrate a pattern of utilizing the medical literature effectively and in a timely fashion to research clinical questions suggested by patient care experiences on the consultation service, and of bringing the information to the other members of the team.
- Demonstrate a pattern of independent study based on patient care experiences

#### Interpersonal and Communication Skills

- Learn to use appropriate interview techniques to elicit a history from patients with infectious diseases
- Learn to explain infectious disease processes and testing to patients and family members

- Learn to communicate recommendations of the consultation service effectively to primary care physicians, verbally and in writing

### Professionalism

- Learn to maintain an effective working relationship with other members of the consultation team
- Demonstrate respect, compassion, integrity and a responsiveness to the needs of patients encountered on the consultation service
- Demonstrate a commitment to the ethical principles pertaining to confidentiality of patient information and informed consent in patients with infectious diseases
- Learn to evaluate personal attitudes and avoid judgmental behavior in patients with infectious diseases

### Systems-based Practice

- Demonstrate a comprehensive, system-based approach to the management of patients with HIV disease in the Viral Diseases Clinic
- Demonstrate compliance with hospital infection control practices