UCLA-OLIVE VIEW INTERNAL MEDICINE RESIDENCY INFECTIOUS DISEASE CURRICULUM

Target: PGY 1-3 Updated September 2018

A. EDUCATIONAL OVERVIEW

The purpose of this rotation is to train residents to competently care for hospitalized and clinic patients with a broad range of infectious diseases (ID), and know when and how to appropriately consult or refer to subspecialty care.

B. ROTATION DESCRIPTION AND STRUCTURE

Training takes place at the Olive View-UCLA Medical Center, and spans the three years of training. It is composed of clinical experiences on the inpatient consult service and outpatient clinic. Rotations on the inpatient consult service will be two weeks in length. Outpatient ID/HIV clinic is assigned during Ambulatory Medicine week and during the inpatient consult rotation. Trainees will provide care for patients with infectious diseases requiring subspecialty consultation. During the inpatient consult rotation, resident will also be expected to attend the weekly UCLA Affiliated Infectious Disease case conference (Tuesdays) and the weekly OVMC intramural case conference (Fridays). Supervision will be provided by the ID faculty, assisted by the ID fellow(s), and the attendings in the specialty clinics.

Monday	Tuesday	Wednesday	Thursday	Friday
12:00 pm Noon Conference	8:00 am UCLA-Affiliated ID Case Conference OV, VA West LA or CS 12:00 pm Noon Conference	12:00 pm Noon Conference	8:00 am ID/HIV Clinic Clinic C 12:00 pm Noon Conference 1:00 pm ID/HIV Clinic Clinic C	8:00 am Olive View Intramural Case Conference OV 12:00 pm Noon Conference

C. GOALS & OBJECTIVES

Residents are expected to achieve the common goals and objectives of clinical care (see separate document) in addition to the following objectives by the completion of training (PGY 3).

- 1. Goal: Provide the initial evaluation and diagnosis of common adult infections (*e.g.* head/neck, soft tissue, CNS, urinary tract, intra-abdominal, pulmonary, blood stream infections) and fever.
 - Perform a detailed history of the infectious symptoms, time course, and relevant epidemiological data and exposures. (PC1)
 - Perform a detailed physical exam with focus on the areas of infectious concern. (PC1)
 - Differentiate between infectious from non-infectious findings. (PC1)
 - Synthesize the patient's findings into an infectious disease differential diagnosis. (PC1)

- Identify the top microbiologic causes of the common adult infections. (MK1)
- Recommend laboratory and/or radiographic testing for initial and/or further work-up. (PC1)
- Recommend initial therapy directed at the likely pathogens in common adult infections. (PC2)

2. Goal: Understand the principles, need for, and implementation of Antimicrobial Stewardship.

- Describe the mechanisms and risk factors for bacterial resistance. (MK1)
- Identify which antibiotics have anti-Pseudomonal and anti-MRSA properties and when they are needed and when they are not. (MK1, PC2)
- Describe the basic spectrum of activity of commonly used antibiotics. (MK1)
- Synthesize the data from an antibiogram and use it to select the most optimal antibiotic for the patient. (PC2/3, SBP3)
- Recommend interventions in antimicrobial stewardship (e.g. de-escalation) to help decrease collateral damage and bacterial resistance. (PC2/3/5, SBP3)

3. Goal: Understand and practice the principles of Infection Control.

- Identify the causes and risk factors for hospital acquired infections (e.g. catheter associated blood stream infections, catheter associated UTIs, hospital acquired pneumonia, *C. difficile* colitis). (PC1, MK1)
- Identify the infections with high risk of transmission (e.g. TB, influenza, *C. difficile*). (PC1, MK1)
- Recommend and practice interventions to prevent transmission of infections within the hospital (e.g. barrier precautions, patient droplet/airborne isolation). (PC3, SBP1/3)

4. Goal: Provide the initial evaluation and management of HIV.

- Perform a detailed history of the risk factors for HIV. (PC1, MK1)
- Perform a detailed physical exam for findings related to HIV and HIV complications (*e.g.* signs of fungal infection/thrush, adenopathy, Kaposi's sarcoma, weight loss). (PC1)
- Identify opportunistic infection(s) that may be present in a patient with HIV. (PC1, MK1)
- Recommend and interpret laboratory testing to diagnose HIV (e.g. HIV test, HIV viral load) and immunity (e.g. T-cell subsets/CD4). (PC1)
- Recommend additional work-up (laboratory, radiographic) for patients with HIV and/or opportunistic infections. (PC1/2)
- Utilize a multidisciplinary approach to provide medical and supportive care to patients with HIV, including pharmacy, social work, nutrition, and subspecialty consultation. (PC2/3, SBP3, ICS2)

5. Goal: Provide the initial evaluation and diagnosis of Tuberculosis (TB).

- Perform a detailed history of the risk factors for TB. (PC1, MK1)
- Perform a detailed physical exam for findings related to TB (e.g. weight loss, adenopathy, pulmonary findings). (PC1)

- Recommend appropriate isolation (e.g. airborne) in patients with suspicion of TB. (PC2/3, SBP3)
- Recommend laboratory and/or radiographic testing to diagnose TB (e.g. sputa AFB smears/culture, sputa TB PCR). (PC2)
- Recommend initial treatment and monitoring of treatment for patients with TB. (PC2/3)

6. Core Topics in Infectious Disease

- Sepsis syndrome
- Skin/Soft tissue infections
 - o Cellulitis
 - o Impetigo
 - Necrotizing fasciitis
- Bone and joint infections
 - Septic arthritis
 - o Osteomyelitis
 - Diabetic foot infections
 - Vertebral osteomyelitis
 - Tuberculous spondylitis (Pott's disease)
- Pneumonia
 - Community-acquired pneumonia (CAP)
 - o Atypical pneumonia
 - Lung abscess/aspiration pneumonia
 - Pulmonary tuberculosis (TB)
- Cardiovascular infections
 - o Infective endocarditis
 - o Myocarditis/pericarditis
- Intra-abdominal infections
- Genitourinary tract infections
- Sexually transmitted infections (STI)
- Central nervous system infections
 - o Meningitis
 - Encephalitis
 - Brain abscess
 - Epidural abscess
- Fever of Unknown Origin (FUO)
- Zoonoses

- Animal bite infections
- Brucellosis
- Q fever
- o Psittacosis
- o Tick-borne diseases
 - Rocky Mountain Spotted Fever
 - Lyme Disease
 - Ehrlichiosis
- Fungal infections
 - o Candidiasis
 - o Aspergillosis
 - Coccidioidomycosis
 - o Histoplasmosis
 - o Blastomycosis
- Viral infections
 - o Influenza
 - Herpes simplex
 - o Varicella-zoster
 - Infectious mononucleosis (EBV)
 - Viral hepatitis
 - o HIV
- Infectious in special populations or environments
 - o Infections in immunocompromised host
 - Infections in diabetics
 - o Nosocomial infections
 - o Travel/tropical infections: malaria, dengue, chikungunya
 - Biologic weapons: anthrax, smallpox, plague

D. TEACHING METHODS

Clinical education is provided through direct patient care and attending rounds with the supervising attending and fellow physician. Attending rounds will also include bedside teaching and didactic teaching. Consultative care is provided to hospitalized patients and patients seen in clinic.

Additional clinical education is provided at the Tuesday and Friday case conferences. Housestaff are expected to attend inpatient Morning Report and Noon Conference as permitted by patient care responsibilities and ID-specific conferences.

E. SUPERVISION AND EVALUATION

All housestaff and patient care will be supervised by the attending physician.

Residents will be evaluated by the supervising attending. Direct verbal feedback may be provided throughout the rotation, and written evaluation will be submitted electronically in MedHub at the end of the rotation. These can be reviewed by the resident at any time and will be reviewed with the housestaff during the Clinical Competency Committee meeting.

Direct observation and feedback of interviewing, examination, and/or counseling skills may be documented with the Mini-CEX.

F. EDUCATIONAL RESOURCES

Electronic resources are also available through the internet at Olive View-UCLA Medical Center and through UCLA, including the following:

- UpToDate
- Dynamed (coming)
- Harrison's Principles of Internal Medicine
- Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases (available via www.mdconsult.com on OVMC computers)
- Current Diagnosis & Treatment in Infectious Diseases. Editors Walter R. Wilson, Merle A. Sande (more cursory overview on ID topics)
- PubMed
- Visual Diagnosis (VisualDx)