





### **FACULTY**

### TAHSEEN J. SIDDIQUI, MD

Board Certifications: Internal Medicine & Infectious Diseases



- Infectious Disease Consultant Chair, Infection Control & Vice Chair Department of Medicine - Clinical & Teaching Faculty, Family Medicine & Podiatry Residency Programs - Humboldt Park Health/ Norwegian American Hospital, Chicago
- Infectious Disease Consultant & Chair, Infection Control - Holy Cross Hospital/Mt. Sinai Health System, Chicago
- Infectious Disease Consultant & Chair, Infection Control - Saint Bernard Hospital, Chicago
- Infectious Disease Consultant & Chair, Infection Control - Roseland Community Hospital, Chicago
- Infectious Disease Consultant Advocate Aurora Health System, Chicago
- Asst. Professor of Medicine & Clinical Faculty - St. George University Medical School

Dr. Siddiqui is an American board-certified Internist and Infectious Disease specialist, practicing in Chicago.

He is currently a practicing Infectious Disease specialist in the U.S in both the clinical as well as academic settings at multiple hospitals and holds various leadership positions including Chair, Infection Prevention & Vice Chair Department of Medicine, Clinical & Teaching Faculty of Family Medicine & Podiatry Residency Programs at Norwegian American Hospital, Chicago, IL; Chair, Infection Control at Holy Cross Hospital, St. Bernard Hospital and Roseland Hospital, Chicago, IL, Asst. Professor of Medicine at St. George University Medical School, and President of Chicago Infectious Disease Physicians Group.

Dr. Siddiqui has written several research articles, presented papers/posters at various scientific seminars and has delivered numerous CME lectures on a variety of topics pertinent to the local as well as global infectious diseases and HIV medicine

In recognition of his professional achievements, dedication and continuous work, related to public health, medical education, scientific research, quality improvement, and patient care, he received many awards from the national and international organizations, including The Marquis Who's Who' Publication Board (Sixty Seventh Edition), Patient Reviews Top Doctor Certified, Consumers Research Council of America, Peer Reviewed professional, Philippine Medical Association in Chicago (PMAC), and Pakistan Physicians Society in America.

# Virtual Rotation: Infectious Disease

### **OVERVIEW**

Infectious Diseases remain a major cause of morbidity and mortality. In addition, new organisms have been emerging (SARS, MERS, COVID 19), older pathogens have been reemerging and the spectre of bioterrorism requires a broad range of knowledge for physicians practicing clinical infectious diseases. The purpose of this is to broadly train our students to treat and manage patients with infectious diseases in a changing world. The students serve as a team member in the hospital and/or in the outpatient setting. Students observe, assist or perform a spectrum of clinical activities such as taking patient history, performing physical examinations and/or different procedures, writing patients notes, performing patient education, participating in the management team and forming the patient plan in regards with necessary blood tests, imaging, diet, activities, therapy and education.

### COURSE OBJECTIVES

- a. Learn to do a directed history and physical examination
- b. Learn to collect relevant laboratory data
- c. Evaluate results of blood and imaging tests.
- d. Assess the risks and benefits of relevant diagnostic procedures
- e. Understand the rationale for selection and use of treatment modules
- f. Select appropriate medications and usual dosing regimens from the hospital formulary
- g. Learn how to interpret the results of blood/imaging studies.
- h. Master the physical diagnostic skills necessary to be an effective physician.
- j. The student should be able to evaluate a patient with infectious disease and propose the diagnosis and a plan for management.
- k. The student should be able to effectively use the biopsy tests, other pathology laboratories and radiology and understand the results provided.
- I. The student should be able to critically interpret the medical literature and research data.



# Virtual Rotation: Family Medicine

# **HOW IT WORKS**





COURSE LENGTH 4 WEEKS



**DURATION** 20 HOURS PER WEEK



CLASS SIZE
UNLIMITED



**EFFORT** 5 HOURS PER DAY



**FORMAT** 100% ONLINE



**MODEL** FACULTY-LED



# Virtual Rotation: Infectious Disease

# WHAT YOU WILL EARN



- √ Letter of Recommendation provided by Faculty
- √ Certificate of Completion provided by Telehealth Institute

# AGENDA

- Lectures Series (2-3 hours weekly)
- Telemedicine (2-3 hours daily)
- Student Presentations (weekly)
- Individual Case Studies

### **System Requirements**

Please ensure that the computer you plan to use meets the following requirements:

- Operating System: Microsoft Windows, Apple Mac OS X, Apple iOS (iPad)
- Supported Browsers: Google Chrome Mozilla Firefox and Apple Safari
- Internet Connection:
   Broadband recommended





## **COMMON CONDITIONS**

Student should see at least one of the following major clinical syndromes/disease/conditions:

### Meningitis

- Recognize clinical presentation of acute meningitis. Understand causative agents, diagnostic tools available and treatment.
- Recognize the differences in etiology and presentation in immunocompromised hosts.

#### Sepsis

- Recognize clinical and physiologic manifestations of sepsis.
- Learn a thoughtful approach to discovering cause of syndrome.
- Understand the appropriate use of antimicrobials in sepsis syndrome.
- Learn the use of adjunctive therapies in the patient with sepsis.

#### **Urinary Tract Infections**

- Understand spectrum of illness: Pyelonephritis, cystitis, prostatitis, abscess
- Know appropriate management issues in relation to the treatment and prevention of UTIs.

#### Skin and Soft Tissue Infections

- Understand spectrum of illness including cellulitis, erysipelas, fasciitis, furunculosis, folliculitis and impetigo. Define the likely pathogen for each of these syndromes.
- Know clinical manifestations, predisposing host factors, classic exposures, and appropriate treatment. In particular, understand the management of infections with Methicillin-Resistant Staphylococcus aureus (MRSA) differentiating hospital and community-associated strains.





## COMMON CONDITIONS cont.

#### Pneumonia

- Learn to perform a physical exam to diagnose this infection
- Develop knowledge of different bacterial, viral, fungal causes of pneumonia
- Understand the treatment of pneumonia.

#### COVID -19

- Learn the structure of the virus
- Learn the incubation period and mode of transmission. Type of isolations.
- Understand the epidemiology in relation to the etiological agent and risk factors.
- Look the clinical manifestation of the infection and its complications
- Learn diagnostic and confirmatory tests for mild and severe disease, possible treatment options, prevention if any now, social distancing, vaccines.

#### Websites:

https://www.chicagohan.org/covid-19

https://www.chicagohan.org/documents/14171/239678/20200311\_IDPH\_SARS-CoV-2\_Interim\_Gu.pdf/7b932f99-07ff-db64-d638-27a5fdf7f4e3?t=1583983509770

https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html?CDC\_AA\_refVal=https%3A %2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fguidance-hcp.htmlStudent should see at least one of the following major clinical syndromes/disease/conditions:





## COMMON CONDITIONS cont.

#### Coccidioidomycosis (cocci)

- Understand the epidemiology of cocci, clinical presentation, diagnosis and therapeutic management of localized and disseminated cocci.
- Understand the clinical presentation of localized and disseminated cocci
- Understand the diagnostic approach to the patient with suspected or proven disseminated cocci
- Understand the principles of antifungal therapy for localized and disseminated cocci, with an emphasis on the role of triazole agents

#### **Tuberculosis**

- o Understand the epidemiology of tuberculosis
- o Understand the pathogenesis, clinical stages (latent versus active disease) and clinical manifestations of tuberculosis
- o Understand the role of tuberculin skin testing in the diagnosis of tuberculosis, including interpretation of PPD skin test
- o Become familiar with the use of antimicrobial therapy in the management of latent and active tuberculosis
- o First line vs. second/third line agents
- o Common side effects of ant tuberculous agents
- o Periodic laboratory tests and clinical exams used to monitor for toxicity of antituberculous therapy





## COMMON CONDITIONS cont.

#### Endocarditis and intravascular infections

- Understand the epidemiology in relation to etiologic agents and risk factors
- Learn to perform a physical exam to look for the clinical manifestations of disease
- Learn the utility and limitations of various diagnostic tests including echocardiogram.
- Apply the modified Duke Criteria to help in determining the diagnosis
- Learn treatment strategies for the management of endocarditis.

#### Osteomyelitis and Prosthetic Joint Infections

- Recognize the common bacterial pathogens associated with osteomyelitis
- Understand the utility and pitfalls of the various clinical, laboratory and imaging modalities used to diagnose and monitor disease
- Develop knowledge concerning duration of therapy for osteomyelitis, based on pathogen, duration of illness and presence or absence of orthopedic devices

#### HIV infection

- Understand serology to establish the diagnosis of HIV infection
- Develop knowledge about antiretroviral agents indications, drug interactions, common side effects, development of resistance
- Develop knowledge about role of resistance testing, interpretation of genotypic and phenotypic resistance tests
- Develop knowledge about the clinical presentation, diagnosis and treatment of opportunistic infections

References Guidelines for treatment of HIV and opportunistic infections: http://aidsinfo.nih.gov





# COMMON CONDITIONS cont.

#### Candida species

- Understand microbiology, pathogenesis, and pathologic findings.
- Learn spectrum of clinical manifestations.
- Thrush, esophagitis, cutaneous syndromes, fungemia and deep organ manifestations.
- Know appropriate management of infections with Candida sp. As determined by cultures of blood or sterile body fluids; Endocarditis, line infections and peritonitis
- Understand relationship between different species particularly the non-albicans candida and antifungal agents. Endocarditis and intravascular infections

