**Infectious Disease Rotation Curriculum:**

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|  | **Central nervous system infection** * Microbiology of bacterial meningitis
* Diagnostic work up. When to consider CT head before LP.
* Understand how to properly interpret the CSF analysis
* What are the antibiotics used for empiric treatment of bacterial meningitis and why?
* What are the common causes of aspetic meningitis
* Definition of encephalitis, what are the common viruses, how to diagnose and treat.
* Diagnosis and treatment of focal CNS infections ( brain and spinal epidural abscess).

**Pneumonia:*** Differentiate between CAP and HCAP
* What are the common organisms causing CAP ( including atypical: Legionella and coccidioides)
* Know the diagnostic work up that should be performed for CAP, HCAP, and VAP
* Understand the choice for Antibiotic therapy for each.

**Urinary tract infections:*** Definition of uncomplicated UTI ( acute cystitis ) – everything else is complicated.
* Microbiology, diagnosis and antibiotic therapy for uncomplicated vs complicated UTIs.
* Definition and treatment options for recurrent UTIs.
* Microbiology and treatment of prostatitis.
* Indications for treating asymptomatic bacteruria.
* Diagnosis and treatment of catheter associated urinary tract infections.
* Differential diagnosis of sterile pyruia ( TB, Legionella, leptospirosis).
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|  | **Skin and soft tissue infections:*** Know the microbiology of cellulitis, including community acquired MRSA, common presentation and treatment.
* Know the microbiology, common presentation and treatment of necrotizing fasciitis.
* Know the microbiology and treatment of diabetic foot infections.
* Know the clinical presentation, diagnosis and treatment of toxic shock syndrome.

**Osteomyelitis**: * Classification and microbiology of Osteomyelitis.
* What are the diagnostic methods and treatment options for Osteomyelitis.
* Evaluation and Management of Diabetes–Associated Osteomyelitis
* Evaluation and Management of Vertebral Osteomyelitis

**Infectious arthritis:** * Know how to interpret synovial fluid analysis
* Know your different etiologies of infectious arthritis including gram positive, non gonococcal gram negative and disseminated gonococcal, lyme and viral arthritis. Understand the diagnostic and therapeutic measures.
* Diagnosis and pharmacologic and surgical management of prosthetic joint infections.

 **Infectious Diarrhea and C- diff colitis:*** What organisms causes diarrhea with and without fever
* What organisms causes pseudo appendicitis ( yersinia, Capmylobacter and RMSF).
* When should you send for stool culture and O&P.
* Recognize the clinical spectrum of C-diff and diagnosis tests
* How to treat initial, first and subsequent recurrences of C-diff infections.
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|  | **Blood stream infections:*** When must you remove central venous line in documented blood stream infections.
* What is the significance of Staph aureus isolated in blood culture.
* When to get an Echocardiogram.
* What is the significance and how to treat of Gram negative bacteremia including ESBL.
* What is the significance of candida isolated in blood stream and what are the risk factors of developing candidemia in ICU and non-ICU patients.

**Infective endocarditits:*** Know the microbiology of native and prosthetic valve endocarditis.
* How to diagnose and treat endocarditis.
* What are the HACEK organisms and how are they isolated.
* What are the indications for surgical valve replacement.
* What are the indications for prophylactic antibiotics.

**Neutropenic fever:*** What is the definition of chemotherapy induced neutropenic fever.
* Understand the gram negative bacterial translocation mechanism of acquiring the infection.
* What are your antibiotic coverage options.
* What are the indications to start Vanc.
* When to consider antifungal.

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|  | **Sexually transmitted diseases:*** What is the differential diagnosis of sexually transmitted genital ulcers?
* Recognize the different phases of syphilis, and definition of latent infection.
* How to diagnose syphilis, difference between specific and non specific antibody testing, and in which phase each are expected to be positive.
* What is the treatment of primary, secondary, latent and neurosyphilis.
* When to treat genital syphilis and when to give prophylactic therapy.
* Know the common etiology, diagnosis and treatment of urethritis, cervcitis and PID.

**HIV:*** Understand the serologic testing for HIV, and who should be screened.
* Recognize the clinical presentation and method of diagnosis for acute retroviral syndrome.
* What are the indications for initiation HAART. And what are the indications for immediate cessation of HAART.
* What are the indications for prophylaxis, what antibiotics and at what CD4 level.
* Recognize the clinical presentation, diagnostic methods and treatment for PJP, MAC, Toxoplasmosis and cryptococcal meningitis.

**Tuberculosis:*** Criteria for diagnosing latent TB in various risk groups.
* How to treat latent TB.
* Who should be placed in respiratory isolation and Criteria for diagnosis of active TB
* What is Multidrug-Resistant and Extensively Drug-Resistant Tuberculosis.

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|  | During this rotation, resident is expected to:* learn how to order, and interpret the results of immunologic, serologic and microbiologic testing including: • Serologic antigen and antibody testing • Cultures and sensitivities • Gram stains, fungal stains, acid-fast stains • Antimicrobial drug levels
* Demonstrate understanding of the major antibiotic classes, their use & common side effects.
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