Infectious Disease

*International Medicine Migrating Your Way*

*Faculty: Regan Marsh, MD*

Climate change & global warming is bringing tropical diseases to the US — no longer just through returning travelers, but now with epidemiological spread of disease outside the conventional “tropics.” Emergency physicians must be prepared to diagnose & manage these neglected tropical diseases, which are increasingly presenting to our EDs. The speaker will offer training on conditions like Ebola, Zika, Chikungunya, Dengue & Chagas so that you can be prepared.

- Discuss the shifting epidemiology of key vector-borne, neglected tropical diseases likely to be seen in the US.
- Identify fundamentals of recognition & treatment of Ebola, Zika, Chikungunya, dengue, & Chagas, which have seen domestic transmission within the US.
- Explain testing & reporting requirements, as part of required public health surveillance within the ED.
- Identify vector-borne, Zika, Chikungunya, dengue, and Chagas, and public health.

*New Sepsis Guidelines: Latest But Not Greatest*

*Faculty: John C. Perkins, Jr., MD, FACEP*

How often do you hear about documenting your sepsis bundle & making sure all the correct 'boxes are checked'? The newest set of sepsis guidelines might have been well intentioned, but are fraught with practical difficulties & pitfalls. Come learn how to ensure you are really doing the best for your patient & still keeping the coders & administration happy.

- Illustrate the main components of the new sepsis bundle.
- Review various scores & modalities to determine which patients are septic & might benefit from the guidelines interventions.
- Discuss the pitfalls of the new sepsis bundle & who is at risk of being harmed rather than helped by the new guidelines.
- Review sepsis, protocols, and sepsis guidelines.

*Infectious Disease Game Show*

*Faculty: Catherine A. Marco, MD, FACEP*

Bring your smart phone and compete with your colleagues in this fun, interactive trivia game! The game focuses on important clinical facts about Infectious Diseases in the ED.

- Identify clinical presentations of common infectious diseases.
- Describe clinical management of common infectious diseases.
- Describe the indications for consultation and admission for patients with common infectious diseases.
Cruising the Infectious Disease Literature
Faculty: John C. Perkins, Jr., MD, FACEP
So many journals, so little time. Let an expert in the field help you stay updated on the latest in the infectious disease realm. The speaker will review recent literature on infectious diseases, old diseases with new treatments, & new diseases with old treatments. Make sure you have the information to use the right drugs for the bad bugs!

- Review the latest literature in infectious disease.
- Illustrate how this information might affect emergency medicine practice.
- Identify new strategies for managing this infectious illness in the ED.

Forgotten Infections in IV Drug Users
Faculty: Danielle T. Miller, MD
The intravenous drug use population is at risk for uncommon infections that we need to be routinely vigilant about. Come listen to a discussion of high-risk injection drug habits including the use of non-sterile & fruit juice diluents, needle-licking practices, & tents & bolts of injection drug use that put this population at high-risk of forgotten infections.

- Describe the use of fruit juice diluents & the risks of fungal endophthalmitis.
- Explain needle licking & its association with HACEK organisms & endocarditis.
- Discuss fastidious gram negative organisms borne from non-sterile water injection.
- Discuss IV drug abuse, endocarditis, spinal epidural abscess, and fungemia.

High-Yield Infectious Disease: FAST FACTS
Faculty: Fredrick M Abrahamian, DO, FACEP, FIDSA; Regan Marsh, MD; John C. Perkins, Jr., MD, FACEP
Infectious diseases concerns are prevalent in the ED. From the relatively common to the rare & from the seemingly simple to the extremely complex, appropriate management of diverse infectious diseases requires a broad understanding about them. Join this panel of experts in a FAST FACTS, high yield, tour through the world of infectious disease.

- Describe the most up to date management of sexuality transmitted infection.
- Discuss the critical update on food-borne illness outbreaks, including the common causative organisms & their therapies.
- Discuss the most common sources of sepsis while highlighting the less common sources that carry significant morbidity & mortality when missed.
- Appreciate significance of sepsis source identification in impacting patient mortality.
Hot and Heavy: Non-Infectious Causes of Fevers
Faculty: Alisa V. Wray, MD, FACEP

Fever is a common presenting complaint to the emergency department, however not all fevers are infectious. It is important for emergency physician to be aware of the vast differential of a febrile patient, the non-infectious causes of fever and the management and treatment of these causes. The presenter will review the physiology of hyperpyrexia, 5 non-infectious cases of fever and discuss their diagnosis and management.

- Review the underlying pathophysiology of fevers.
- List 5 non-infectious causes of fever.
- Discuss the management of these 5 non-infectious causes of fever.

Infections With Deadly Consequences
Faculty: Annahieta Kalantari, DO, FACEP

Deadly & rapidly progressive infections that are fatal, though uncommon, are always remembered. What infections can do this in the normal host - meningococcemia, necrotizing fasciitis, ascending cholangitis? Are there any characteristics that can help identify these infections early & what therapies must be instituted in a timely fashion to affect survival? Using a case-based approach, the speaker will work through some “deadly cases.”

- Describe a select number of rapidly progressive infections.
- Illustrate how various infections are underestimated.
- Describe some pearls & pitfalls in the treatment of these infections.
- Describe meningococcemia, necrotizing fasciitis, ascending cholangitis, and rapidly progressive infections.

Other People’s Parts: Transplant Troubles
Faculty: Annahieta Kalantari, DO, FACEP

Increasingly, organ transplant recipients are presenting to the emergency department. The nature of their underlying disease & complex medication regimen make them very challenging to manage. The presenter will discuss the disease processes associated with transplantation & the post-transplant therapies. Special infectious disease problems & their treatment options also will be discussed.

- Discuss the immunology & therapies that can increase risk for infection after transplantation.
- Discuss the disease processes associated with transplantation.
- Recognize the special infectious disease problems faced by these patients.
**Staying Cool With Pediatric Fever**  
*Faculty: Alfred D. Sacchetti, MD, FACEP*  
What’s the latest treatment for a child with fever? Do I need to obtain a complete blood count? How about a blood culture? Who absolutely needs a spinal tap? What to do in the second month of life. What is the current risk of significant bacterial infection & how do I ensure one is not missed? How do I alter my approach if there is a delay or no vaccinations? The speaker will review the latest literature on the evaluation of the febrile child & the best evidence available to help you care for them without breaking a sweat.

- Review the latest literature on the current risk of serious bacterial infection in children.
- Identify the latest literature on the evaluation of the febrile child & infant in the ED and the work up in the second month of life.
- Discuss how vaccination status plays a role in the work up of the febrile child.

**Top 10 Antibiotic Mistakes in the ED**  
*Faculty: Bryan D. Hayes, PharmD, DABAT, FAACT, FASHP*  
On a daily basis we prescribe a multitude of medications with various mechanisms of action to treat a broad range of disease, but are we doing our patient’s a disservice? Who better than an ED pharmacist to help us recognize potential pitfalls when prescribing antibiotics? Come learn how we can be sure we are effectively & safely treating our patients conditions.

- Review interactions between common daily medications & antibiotics in an effort to decrease dangerous side effects.
- Identify pitfalls in treating infections in special patient populations.
- Highlight deleterious side affects of medications that might be hurting your patient more than helping.
- Discuss antibiotic stewardship strategies in the ED.

**Vanc & Zosyn Is Not The Answer to Everything**  
*Faculty: Bryan D. Hayes, PharmD, DABAT, FAACT, FASHP*  
It’s almost reflexive to start vancomycin + piperacillin/tazobactam in many ED patients. But, do all of these patients really need the broad spectrum gram-positive, gram-negative, & anaerobic coverage this antibiotic combination provides? Learn how to better select antibiotics for your patients.

- Design an appropriate antimicrobial regimen that includes atypical coverage for your patient with healthcare-associated pneumonia.
- Define which patients with diabetic foot infections need broad antimicrobial coverage.
- Interpret the data linking piperacillin/tazobactam with increased risk of acute kidney injury when prescribed with vancomycin.
- Discuss pneumonia, diabetic foot infection, and antibiotic stewardship.