Brigham and Women's Hospital

Antimicrobial Stewardship & Infection Control Fellowship Track

Overview

The Brigham and Women's Hospital Antimicrobial Stewardship and Infection Control teams are proud to offer mentored, hands-on training for senior infectious disease fellows interested in pursuing careers in antimicrobial stewardship and / or infection control and healthcare epidemiology. Our faculty members include internationally recognized leaders in both fields and have published widely on outbreak detection and containment, strategies to prevent and treat healthcare-associated infections, antibiotic timing and selection for sepsis, antimicrobial stewardship, and pathogen transmission dynamics. We are also home to a CDC Prevention Epicenter, one of 11 U.S. academic medical centers funded by CDC to conduct research on preventing healthcare-associated infections and improving antibiotic utilization. Trainees that join this track will be integrated into the routine operations of both the antimicrobial stewardship and infection control teams and will be tasked with combating an active cluster of healthcare-associated infections or designing and implementing a quality improvement initiative to advance the quality and safety mission of the hospital.

Specific components of the program include:

- Attendance at weekly infection control staff meetings
- Attendance at monthly (Mass General Brigham) and bimonthly (BWH) antimicrobial stewardship meetings
- Integration into hospital cluster responses including data monitoring, root cause analyses, case-control studies, site inspections, discussions with frontline staff, strategizing responses, implementation, and monitoring impact.
- Development of at least one mentored project in cluster response, infection prevention, or antimicrobial stewardship. This will ideally lead to a presentation at a professional society meeting and manuscript for publication.
- Coverage of the antimicrobial approval pager (minimum 2 weeks, more if desired)
- Shadowing of infection preventionists and antimicrobial stewardship pharmacists
- Leading journal club sessions for infection preventionists, antimicrobial stewardship staff, or both.
- Attendance at the <u>Annual Fellows Course in Infection Prevention and Antimicrobial Stewardship</u>

Faculty include:

Meghan Baker MD, ScD Associate Hospital Epidemiologist Hospital Epidemiologist at Dana-Farber Cancer Institute



Dr. Baker's interests focus on healthcare epidemiology and infection control with a focus on cluster prevention, detection and response. Her work focuses on the use of electronic health records and other routinely collected electronic health data to improve patient safety and includes both local and national data. She is also currently leading a multisite cluster randomized trial to assess a statistically-based automated method to improve cluster detection in hospitals. Her work and publications inform her work in infection prevention and control as well as broader quality improvement initiatives and healthcare epidemiology.

Michael Klompas MD, MPH

Hospital Epidemiologist



Dr. Klompas has <u>published widely</u> on the development of novel surveillance metrics for healthcare associated infections, prevention and management of hospital-acquired pneumonia, benefits and risks associated with sepsis care mandates, defining the optimal balance between timely and effective treatment for pneumonia and sepsis while limiting overtreatment, respiratory virus transmission dynamics and infection control policies to prevent the spread of respiratory viruses in healthcare, and the management and control of hospital-based infectious clusters.

David Kubiak, PharmD Infectious Diseases Clinical Pharmacist



Dr. Kubiak has <u>published</u> on antimicrobial stewardship and antimicrobial pharmacology, dosing antimicrobials in patients with obesity, adverse effects associated with new and novel antimicrobial agents, management of central line associated bloodstream infections, and clinical diagnostics for infectious diseases. He is a co-director of the antimicrobial stewardship program and also provides clinical support to the Division of Infectious Diseases and Department of Pharmacy Services.

Jeffrey Pearson, PharmD Infectious Diseases Clinical Pharmacist



Dr. Pearson is the Program Director for the Infectious Diseases Pharmacy Residency at Brigham and Women's Hospital and codirector of the antimicrobial stewardship program. His areas of interest include antimicrobial stewardship, antimicrobial pharmacokinetics and pharmacodynamics, COVID-19, and nontuberculous mycobacterial infections, and he has <u>published</u> on a variety of infectious diseases-related topics.

Chanu Rhee MD, MPH Associate Hospital Epidemiologist



Dr. Rhee's clinical and research interests include sepsis, infection control and healthcare epidemiology, and infections in critically ill and immunocompromised patients, with a particular focus on using electronic health record data to improve disease surveillance, diagnosis, prevention, treatment, and quality of care. He has <u>published</u> numerous studies that have leveraged local and national datasets to inform clinical care, research, quality improvement, and healthcare policy.