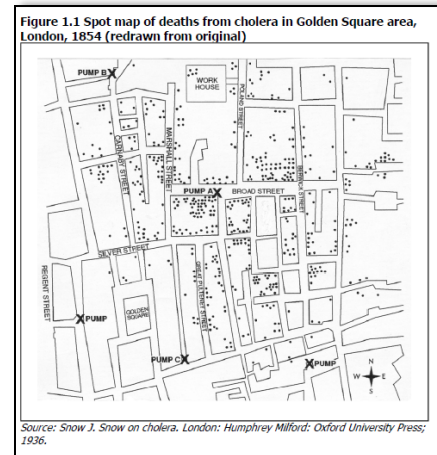


# Infection Prevention, Healthcare Epidemiology, and Antimicrobial Stewardship Fellowship Track

Infection prevention, healthcare epidemiology, and antimicrobial stewardship are critical to the safe and effective delivery of patient care. The primary purpose of this fellowship track is to train fellows for a career in Infection Control/Healthcare Epidemiology and Antimicrobial Stewardship. An emphasis is placed on mastering the core competencies needed to assume leadership roles in these vital areas as well as designing and conducting investigations to advance our understanding of effective approaches. Physicians with clinical and research interests in these areas are ideal candidates. This one-year fellowship track takes place after the first ID Fellowship Clinical year. There is one fellow per year in this track at MGH.



## Fellowship Components

The fellowship program has several components which are tailored to the individual fellow's clinical and professional development.

### Didactics

The didactic component includes both formal coursework and participation in hospital-based conferences. Fellows will complete specific on-line courses offered in Infection Control and Antimicrobial Stewardship. Additionally, as part of mentored research, coursework may be undertaken through a customized curriculum developed through the MGH Clinical Research Program and the Harvard Catalyst. The goal of the coursework is to build or supplement the fellow's skills directly related to the fellowship.

### Core Competency Development

Core competencies in Infection Prevention, Healthcare Epidemiology, and Antimicrobial Stewardship will be developed through a series of rotations in the Infection Control (IC) Unit and the Antimicrobial Stewardship Program (ASP). Fellows are paired with staff in each group during the academic year. The Core Competency component is based on the following white papers:

- [Kaye KS, Anderson DJ, Cook E, Huang SS, Siegel JD, Zuckerman JM, Talbot TR. Guidance for infection prevention and healthcare epidemiology programs: healthcare epidemiologist skills and competencies. Infect Control Hosp Epidemiol. 2015 Apr;36\(4\):369-80. doi: 10.1017/ice.2014.79. PMID: 25998192.](#)
- [Cosgrove SE, Hermsen ED, Rybak MJ, File TM Jr, Parker SK, Barlam TF; Society for Healthcare Epidemiology of America; Infectious Diseases Society of America; Making-A-Difference in Infectious Diseases; National Foundation of Infectious Diseases; Pediatric Infectious Diseases Society; Society of Infectious Disease Pharmacists. Guidance for the knowledge and skills required for antimicrobial](#)

[stewardship leaders. Infect Control Hosp Epidemiol. 2014 Dec;35\(12\):1444-51. doi: 10.1086/678592. PMID: 25419765.](#)

## Project

Fellows will work with their mentor and the IC Unit or ASP during their clinical year to develop a project for implementation during their fellowship year that will lead to a conference abstract, a review paper, or a book chapter. Examples of projects include: a formal outbreak investigation or implementation and evaluation of a quality improvement intervention.

## Dissemination/Education

Fellows are responsible for educating other fellows and residents and will present at least once in the Harvard-wide Infectious Diseases Conference and other venues as appropriate.

Fellows will also lead a “Lunch and Learn” series for the MGH Infection Control Unit.

## Administration

Fellows are required to attend weekly IC Unit staff meetings, the monthly hospital-wide Infection Control Committee meeting, and the monthly Antibiotic Stewardship Leadership Meetings, as well as the bi-annual ASP Meeting.

## Mentorship

Fellows will be paired with faculty member with whom they will meet regularly during the fellowship to ensure progress towards fellowship goals.

## Current Fellow

### Akanksha Arya, MD, MBA



Dr. Arya completed her BA at Rutgers University in Cell Biology & Neuroscience, with a Certificate in Women’s Leadership. She completed her MD at Rutgers-Robert Wood Johnson Medical School and her Internal Medicine Residency at Sidney Kimmel Medical College-Thomas Jefferson University Hospital. She has also completed an MBA at Northwestern University-Kellogg School of Management. She is currently completing an Infectious Diseases Fellowship at Massachusetts General and Brigham Hospitals, with a focus on Infection Prevention, Healthcare Epidemiology, and Antimicrobial

Stewardship. Dr. Arya’s work experiences include working as a Public Health Associate from 2013-2015 at the Centers for Disease Control and Prevention, with placement through this program at the New York State Department of Health-Western Regional Office. At the NYSDOH, she conducted hundreds of environmental inspections as a junior sanitarian at the Geneva District Environmental Office. She also worked with implementing federally funded maternal-child nutrition programs, including WIC and CACFP, at the Rochester Regional Office. While at the CDC, she also deployed as junior field epidemiologist to the CDC Ebola Response in Sierra Leone. In Sierra Leone, she conducted contact tracing of Ebola contacts and worked with the community to improve disease surveillance. Prior to ID fellowship, she had also worked from 2022-2023 as a hospitalist at the Hospital of the University of Pennsylvania.



## Recent Fellows

### **Marisa Winkler, MD, PhD (2021-2022)**



*Current Role: Associate Director for Clinical Trials & CLIA Laboratory Director at JMI Laboratories*

Dr. Winkler received her MD and PhD degrees from Case Western Reserve University in 2017 and 2015, respectively. She completed her Internal Medicine residency at Brigham and Women's Hospital in 2020 and joined the combined MGH/BWH Infectious Disease Fellowship. Her areas of interest include diagnostic and therapeutic stewardship, multidrug-resistant infections, and outbreak investigation and management. During 2022-2023, Dr. Winkler was the Clinical Microbiology Fellow at Brigham and Women's Hospital. Most recently, she was an Assistant Professor at

Emory University School of Medicine and the Director of Antibiotic Stewardship, Emory University Hospital Midtown.

### **Sarimer Sánchez, MD, MPH (2019-2020)**



*Current Role: Assistant Dean for Admission in the School of Medicine at Ponce Health Sciences University*

Dr. Sánchez received her medical degree from the University of Puerto Rico School of Medicine in 2015 and completed an Internal Medicine residency at University of Pennsylvania in 2018. She entered the combined MGH/BWH Infectious Diseases Fellowship in 2018. After her clinical training, Dr. Sánchez enrolled in the Commonwealth Fund Fellowship in Minority Health Policy at Harvard Medical School and obtained her MPH degree from the Harvard T.H. Chan School of Public Health in May 2021. Her areas of interest include applied epidemiology, outbreak preparedness,

and public health, with a focus on enhancing equitable delivery of communicable disease education and services to vulnerable populations. Most recently, Dr. Sánchez was Director of the Infectious Diseases Bureau at the Boston Public Health Commission.

### **Joshua Stripling, MD, DTMH (2017-2018)**



*Current Role: Assistant Professor, Division of Infectious Diseases, University of Alabama; Director of Stewardship, University of Alabama; Director of Infection Control, Birmingham Alabama VA Health Care System*

Dr. Stripling received his MD degree from Mercer University in 2012. From there he completed his residency at the University of Alabama at Birmingham in 2015, staying for an additional year as Chief Medical Resident. He entered the combined BWH/MGH Infectious Diseases Fellowship Program in 2016. His areas of interest are

antimicrobial stewardship and its impact on hospital associated infections such as *Clostridioides difficile*, FMT for treatment of recurrent CDI, and clinical education.



**Karen Coffey, MD, MPH, FASCP (2016–2017)**



*Current Role: Assistant Professor, University of Maryland School of Medicine; Associate Hospital Epidemiologist VA Maryland Healthcare System*

Dr. Coffey received her MD and her MPH from Tulane University School of Medicine and School of Public Health and Tropical Medicine, respectively. She completed Internal Medicine residency at University of Virginia Health System in 2015 and the same year joined the MGH-BWH Infectious Disease (ID) Fellowship Program. She went on to complete a third fellowship year in the Pathology Department, obtaining board certification in Medical Microbiology. Her areas of interest include

antimicrobial stewardship, hospital epidemiology, and clinical microbiology.



**Molly Paras, MD, FIDSA (2015–2016)**

*Current Role: Program Director, Mass General Brigham Infectious Diseases Fellowship*

Dr. Paras received her MD from the Mayo Clinic College of Medicine in 2010, completed internal medicine residency at the Massachusetts General Hospital in 2013, and the same year joined the MGH-BWH Infectious Disease (ID) Fellowship Program. Her areas of interest include medical education and antimicrobial stewardship.

**Faculty**

Faculty are drawn from the Infectious Diseases Division, Infection Control Unit, and Pharmacy Departments, with collaboration from other departments as appropriate given each fellow’s individualized program plan.



**Alyssa R. Letourneau, MD, MPH**

*Program Director*

Dr. Letourneau is the Medical Director of the MGH Antimicrobial Stewardship program and the Co-Chair of the Mass General Brigham Antimicrobial and Infectious Diseases Quality Collaborative. Her clinical interests include immunocompromised patients, antimicrobial prophylaxis, treatment of multidrug resistant organisms, and how antimicrobial stewardship intersects across these disciplines. The Antimicrobial Stewardship Program develops antimicrobial use policies that are implemented both at the MGH and Mass General Brigham.

**Kimberly G. Blumenthal, MD, MSc**



Dr. Blumenthal is a clinical allergist whose focus is on drug hypersensitivity. Her research interests include using clinical epidemiology and simulation-based methods to study antibiotic allergies and their impact on clinical outcomes and cost. In her role as the Quality and Safety Officer for Allergy within the Edward P. Lawrence Center for Quality and Safety, she coordinates policies on allergy entry in the electronic health record and medication dispensing for patients with prior recorded allergies.



**Latoya P. Brewster, MBA, CMIP**



Mrs. Brewster is the Director of Environmental Services (EVS) at Massachusetts General Hospital. In this role, Latoya leads a 900+ team that is responsible for maintaining a clean and sanitized environment throughout the Mass General community. She also manages the organization’s waste plant, vendor contracts and conference room booking system. She has over 20 years of operations experience leading teams in large complex facilities. She is passionate about helping people, enjoys problem solving and works to create processes that improve efficiency. She is an active member of the Association of MGH Multicultural Professionals (AMMP) and the Association for the Health Care Environment (AHE).

**Rebecca Craig, MPH, RN, CIC**



Ms. Craig is the Senior Manager of Infection Control for MGH and MEEI. In this role, she has staffing and operational management responsibility for the Infection Control Unit and is responsible for the Infection Control Program across MGH and MEEI, including all inpatient and outpatient settings. She collaborates with leaders to ensure compliance with regulatory requirements and accreditation standards for infection control across both institutions. She is responsible for the oversight of infection control education in the organizations and encourages opportunities for Infection Control Unit staff to participate in professional development programs. Ms. Craig serves as an infection control resource to hospital departments, including but not limited to Risk Management, Quality and Safety, Environmental Health and Safety, Occupational Health, and Patient Care Services.

**Ramy Elshaboury, PharmD, BCPS AQ-ID**



Dr. Elshaboury is currently the Director of Clinical Pharmacy Services and Program Director for the Infectious Diseases Pharmacy Residency at Massachusetts General Hospital. His areas of interest include pharmacy administration, antimicrobial stewardship and metrics, pharmacokinetics/ pharmacodynamics in special populations, and clinical research.



**Andy Gottlieb, MSN, MPH, FNP-BC**



Mr. Gottlieb is the Executive Director of Occupational Health Services for Mass General Brigham. He oversees the day-to-day operations of multiple OHS clinics including MGH and BWH. As a member of the MGB OHS leadership team, he assists with identifying and managing enterprise wide OHS objectives. He provides consultation to HR, affiliate leadership, and managers across the network on occupational health matters including the interpretation of regulations and standards, potential organizational exposure and liability, surveillance requirements, fitness for duty cases, job accommodations, and injury and exposure prevention. In addition, he develops relationships with HR, clinical, and business leaders to better understand their needs, address issues, and act as a change agent. He currently serves on the following committees: MGH Safety Committee, MGB Institutional Biosafety Committee, Emergency Preparedness Committee, the Boston Biosafety Committee, and is a member of the MGH Biothreats team.

**Eileen F. Searle, PhD, RN, CCRN**



Dr. Searle is the Director of Funded Projects within the Center for Disaster. In this role she serves as the Biothreats Program Director, overseeing development and implementation of MGH’s hospital-wide special pathogens program and status as the Region 1 Emerging Special Pathogens Treatment Center (RESPTC), and as the Executive Director of the Region 1- Regional Disaster Health Response System. During the COVID response, Dr. Searle led the Mass General Brigham system-wide PPE Taskforce. She is a registered nurse with extensive experience caring for critically ill adult patients in acute care and community settings.

**Erica S. Shenoy, MD, PhD**



Dr. Shenoy is Chief of Infection Control at Mass General Brigham. She is an Associate Professor of Medicine at Harvard Medical School. Dr. Shenoy’s research has evaluated the clinical, operational, and economic impact of infection control strategies for multi-drug resistant pathogens and prevention of healthcare-associated infections through clinical studies and mathematical modeling, use of electronic health records for surveillance, and applied machine-learning techniques to create risk prediction models for infectious diseases. She is the Principal Investigator on a CDC-funded National Infection Prevention Strengthening grant focused on HCP and patient safety and is the Medical Director of the Regional Emerging Special Pathogens Treatment Center at MGH, one of thirteen federally funded centers with expertise in preparedness and response for emerging pathogens. In this role, she has responsibility for development and implementation of a comprehensive infection prevention program for the MGH Biocontainment Unit and Special Pathogens Program. Dr. Shenoy is a fellow of the Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America (SHEA). She is currently a voting member of the Healthcare Infection Control Practices Advisory Committee (HICPAC) to the Centers for Disease Control and Prevention. She is Chair of SHEA’s Public Policy and Government Affairs Committee and co-chair of the Sterilization and High-Level Disinfection guidelines committee.



**Kimon D. Zachary, MD**



Dr. Zachary is Director of Quality and Safety for the Division of Infectious Diseases and Assistant Chief of the Infection Control Unit at Massachusetts General Hospital and an Assistant Professor of Medicine, Harvard Medical School. He has been a full-time attending physician in the Division of Infectious Diseases, and Assistant Chief of Infection Control, at MGH since 2000. He treats a broad array of infectious diseases in the outpatient and inpatient settings and has helped train and mentor numerous fellows. He chairs the MGH Tuberculosis Control Task Force and directs the hospital's HIV post-exposure prophylaxis program.

**For more information,** contact Jennifer Startek, Director of Education, MGH Division of Infectious Diseases, at [jstartek@mgh.harvard.edu](mailto:jstartek@mgh.harvard.edu)

