

## Incorporating GIS methodology into the hospital setting to address healthcare associated infections



**Abstract:** In this talk Dr. Hebert will discuss an ongoing project in which a transdisciplinary group of collaborators at OSU is applying tools and methods from the field of Geography and implementation science to the investigation of hospital onset infections, specifically *Clostridioides difficile*. The team combines room data with patient data to identify areas of the hospital at increased risk of transmission using GIS methodology. The ultimate goal is to create an interactive application for infection preventionists to use during outbreak investigation.

**About the Speaker:** Dr. Courtney Hebert is an Assistant Professor in the Department of Biomedical Informatics and a Physician in the Division of Infectious Diseases at the Ohio State University. She completed her Internal Medicine residency and Infectious Diseases Fellowship at the University of Chicago in 2011. She came to The Ohio State University in 2011 as a post-doctoral researcher in the Department of Biomedical Informatics, and received her Master's in Public Health with a specialization in Biomedical Informatics in 2013. Her research focuses on the secondary use of electronic record data in research and quality improvement efforts. She is the PI of an R01 focused on developing methodology to leverage clinical microbiology data to drive clinical decision support for antimicrobial prescribing. Predictive models created with these data can be used to help providers choose the best antibiotic for a patient before culture results are available. She is also a project lead on a P30 grant from AHRQ focused on using electronic health record data to better track and prevent hospital acquired infections within institutions. She was recently awarded an R01 from AHRQ to further this work by developing a fully functioning hospital GIS for infection prevention in collaboration with her Co-PI from the Department of Geography at OSU.

**Courtney Hebert, PhD**  
**Friday, September 11<sup>th</sup>, 11:00am-12:00pm**  
**Carmen Zoom**