## Yale SCHOOL OF PUBLIC HEALTH Epidemiology of Microbial Diseases

## **EMD Seminar Series**

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## "Using Network Theory to Inform Infectious Disease Policy"

Network modeling tools can be used to improve our understanding of infectious disease spreading patterns, and thus minimize the risk they pose to humans. This talk will introduce various network-based methods to address important questions such as 1) what are the risk factors that contribute to the spread of an infectious disease? 2) where will an infectious disease spread to next? and 3) how do we mitigate the risk of infectious disease to humans? To answer these questions we exploit various data sets, statistical methods, simulation and optimization tools. The end goal is to improve decision support frameworks that can provide robust outbreak control policies and minimize the risk posed by an outbreak. In this talk we will explore each of these questions in the context of measles, Zika and dengue.

12:00 PM Thursday, August 29, 2019 47 College Street, Room 106B Host: N. Grubaugh

