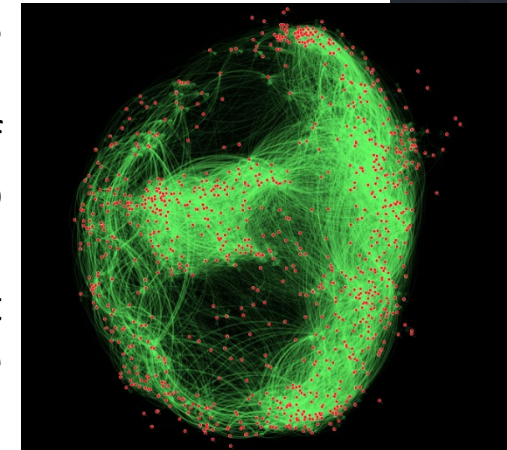


Using Human Mobility Data for Data Driven Multiplex Network Modeling in Pandemics – Insights from COVID-19

Human mobility data from mobile phone location data, Facebook, GPS vehicles are increasingly becoming available in cities. In the COVID-19 pandemic, globally, public health researchers and policy makers have used mathematical models to inform various stages of the pandemic including disease spread, response and recovery. Using data from US and Japan, this talk will focus on using mobility data to understand the spread of COVID-19, relationship between COVID-19 spread and human mobility and recovery of cities after COVID-19. I will also discuss the role of human mobility data to understand the recovery trajectories of businesses. Based on the insights, new modelling approaches will be presented that consider the contact networks, duration of the contacts and the government policies in place. The limits of these data driven models will also be discussed.



Featuring Dr. Satish V. Ukkusuri, Lyles School of Civil Engineering

Research Spotlight Series:
Wednesday 4/14 @ 10:00 am [here](#) on
Zoom



Purdue Institute of Inflammation,
Immunology and Infectious Disease