Nina H Fefferman*, 447 Hesler Biology Building, Knoxville, TN 37996. How Mass Incarceration Affects Outbreaks of Infectious Disease.

Certain activities and populations lead to increased challenge in combating outbreaks of infectious disease. For influenza, has focused on young children in schools. For COVID-19, attention to nursing homes and large gatherings ranging from religious services to sporting events has been shown to be critical. There is also a less widely discussed but equally potentially challenging population: those incarcerated in jails and prisons. Medical research has clearly demonstrated the variety of ways that incarceration compromises health, leaving populations both more susceptible to transmission of infection and also more likely to suffer severe outcomes from infection. Not only is this of concern for managing the health of incarcerated populations, but just as with nursing homes, schools, churches, concerts, and sporting events, these facilities do not operate separately from the rest of society. In the United States, approximately 2.2 million (%0.7) of the entire population is incarcerated in 2020 and the institutions surrounding their management and care involve millions more. In this talk, we will explore a model of the impact of jailed populations on community management of COVID-19 and discuss the general implications for management of all infectious diseases. (Received September 07, 2020)