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## **Modeling and Simulation of Epidemics**

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### **ABSTRACT**

Infectious disease epidemics are dynamic processes that can be treated as decomposable systems which are driven by multiple forcing processes. In this presentation I will discuss my experience as a public health researcher working with collaborators from the physical sciences. I will discuss how computational methodologies from oceanography, plasma physics, and statistical physics can be productively applied to analysis and simulation of infectious disease epidemics. I will especially discuss computational modeling and simulation of H1N1 swine influenza.