

# **Socio-Demographic Approaches to Modeling Health Over Time**

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## **Abstract**

This talk will present sociological and demographic approaches to the study of health over time for two different problems. The first application is the evolution of HIV/AIDS epidemics, with a particular focus on countries in sub-Saharan Africa. While data on HIV prevalence is readily available in many settings, the primary metric of interest is HIV incidence. We will examine a demographic model (for population projection) that utilizes HIV prevalence data to estimate age-specific patterns of HIV incidence.

In the second application, we will consider a socio-demographic approach to analyzing the relationship between health trajectories and pollution exposure over time. Specifically, a structural equation framework is proposed to measure the association between these two trajectories using data from the Health and Retirement Survey.