Spatial-Temporal Analysis for Population Health Data

This course is designed for students who wish to analyze spatial-temporal data for population health. Topics include research ethics, study design, databases for spatial-temporal population health data, data retrieving and processing, geocoding using google map API and census geocoder API with R programming environment, exploratory data analysis and data visualization for spatial-temporal data. The course will also introduce a variety of statistical modeling methods for point-level and area-level population data, and focus on their application and interpretation.