## Navigating the functional relationship between people and places in contextual effects: uncertainty in boundaries, scale, time, and mechanism.

'Place matters' is a fundamental tenet of geographic thought but generalizing the mechanisms through which the characteristics of a location shape outcomes for an individual is incredibly challenging. In this talk I examine several facets of uncertainty that condition this relationship including how we define and locate boundaries, what scales we assume matter, how we manage changing characteristics over time, and what we assume about the mechanism that produces an outcome for a specific individual. My focus will be primarily on small scale geographies both administrative (e.g. census tracts) and conceptual (e.g. neighborhoods) with applications to segregation, equitable access to education, political redistricting, and health outcomes.