Mathematical models of infectious disease transmission are heavily used to help inform policy decisions, design and evaluate interventions, and help supplement observational studies. But modeling in these circumstances has a number of important constraints – what data is available, what questions need to be asked, and how the results are presented to a wide audience potentially including decision-makers, clinicians and epidemiologists.

This talk focuses on a range of policy-driven modeling projects, from healthcare-associated infections to the West African Ebola epidemic. Primarily using stochastic simulation techniques, it explores challenges with data quality, quantifying and communicating uncertainty, and framing modeling approaches for applied research.

Refreshments served at 3:30 p.m.
Hacker Reading Lounge - Neill 216