James C Scott* (jcscott@colby.edu), Neha Shah, Travis Porco and Jennifer Flood. What happens if we run out of drugs?: Estimating the causal effects of a tuberculosis drug shortage.

When is it OK to claim that one thing causes another? How does one go about trying to determine causality? Is it ever appropriate to claim causality without conducting a rigorous experiment? Can Big Data help answer the question of causality? In this talk, I’ll describe what epidemiologists and statisticians mean by causality and I’ll demonstrate different methods that can be used to quantify the effect a specific cause has. I’ll highlight some recent research that uses causal inference and a stochastic model to answer public health questions related to mycobacterium tuberculosis. (Received July 05, 2016)