

**Instructor:** Robert Apel, Rutgers University–Newark, robert.apel@rutgers.edu

**Title:** So You Want to Do an Evaluation: Quantitative Tools for Program Evaluation

**Description:** This workshop is designed to provide quantitative researchers with a number of tools that come in handy for program or policy evaluation. Topics will span estimation and inference in the analysis of experimental as well as non-experimental data. The experimental applications will address some of the following questions: How do I estimate the intention-to-treat, and is that different from treatment-on-the-treated? How do I obtain an effect size? What can I do with pretest variables? What is this I hear about randomization inference? The non-experimental portion of the workshop will focus on settings with longitudinal data in which some units get exposed to an intervention or policy change and others don't. The applications will involve estimation of the difference-in-differences, and will cover current best practices and sensitivity analyses. Some pertinent questions to be addressed include the following: How do I test for parallel pretest trends? What if my intervention is staggered over time? Is it true I shouldn't control for post-intervention variables in the model? I should bootstrap what? Time permitting, a special case of this scenario will also be considered, in which only a single unit gets exposed to an intervention and the remaining units don't, giving rise to the synthetic control design.

The workshop will be taught using R and RStudio, although references to Stata will be made throughout. The slide deck, datasets, and program files (for both R and Stata) will be made available to participants in advance.