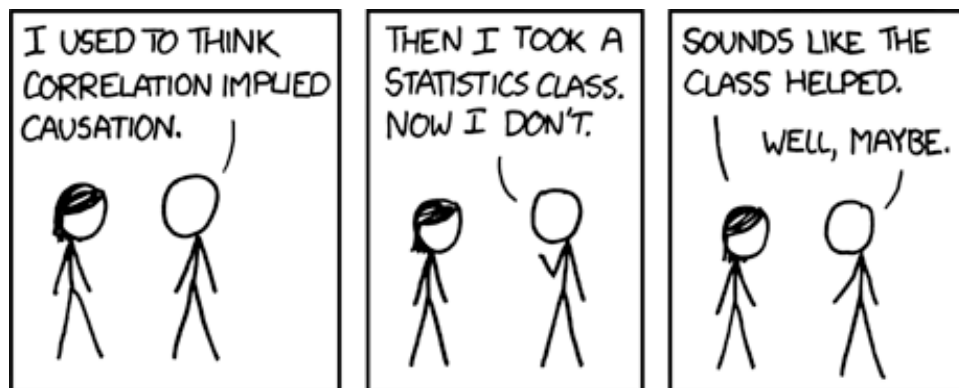


# When Correlation Implies Causation: How to Remove Selection Bias in Observational Research



**FEBRUARY 17, 1:00 - 3:00 PM**  
423 Tobin Hall, UMass Amherst  
**Instructor:** Nathan C. Carnes

We conduct observational research because random assignment to treatment condition is sometimes impractical, unethical, or even undesirable. However, observational studies are especially susceptible to threats to internal validity, and selection bias is among the most problematic of these threats.

In this seminar, you will learn the basics of propensity score analysis. This approach has several goals, among them removing selection bias through matching techniques to help researchers infer causation and aiding researchers in controlling for large numbers of confounding variables.

Our examples will focus on intervention research, but these techniques extend to nearly any kind of non-experimental design. The seminar will use Stata and SPSS in an applied demonstration of how to conduct a propensity score analysis. Attendees are encouraged to bring laptops in order to participate in a hands-on experience.

**This workshop is free, but we ask that you please  
register by clicking [HERE](#).**

[www.umass.edu/family/methodology](http://www.umass.edu/family/methodology)

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