

# Quantitative Health Sciences



## Quantitative Methods Core Methods Seminars

**Tuesday, February 20<sup>th</sup>, 2018**

**12:00-1:00pm**

**Albert Sherman Center, AS9.2072**

**Targeting Learning to evaluate the effects of community-based interventions: the SEARCH trial & HIV prevention in East Africa**

**Presented by:**



**Dr. Laura Balzer, PhD**

**Assistant Professor of Biostatistics**

**University of Massachusetts Amherst**

Evaluation of cluster-based interventions presents significant methodological challenges. In this talk, we describe the design and analysis of the SEARCH trial, an ongoing community randomized trial to evaluate the impact of early HIV diagnosis and immediate treatment with streamlined care in rural Uganda and Kenya. We focus on 3 choices to optimize the design and analysis: causal parameter, pair-matching, and data-adaptive estimation. These choices are compared theoretically and with finite sample simulations. We demonstrate how each choice improves upon standard practice. We conclude with practical implications and some ongoing challenges.

Lunch will be provided, please RSVP to Tammy Falla at ([tammy.falla@umassmed.edu](mailto:tammy.falla@umassmed.edu))