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**Student Performance in Curricula Centered On Simulation-Based Inference**

Monday, October 12, 2015  
11:00 am – 12:00 pm  
GMCS 405 (on campus)

**Abstract:** In teaching introductory statistics at the high school and undergraduate level, the content and pedagogy of “Simulation-based inference” (e.g., bootstrapping and randomization tests) have been advocated (e.g., Cobb, 2007) with the goal of improving student understanding of statistical inference, as well as the statistical investigative process as a whole. Preliminary assessment data has been largely positive (e.g., Tintle et al., 2011; Tintle et al., 2012). This talk describes the analysis of the first year of data from a multi-institution assessment effort by instructors using such an approach, some for the first time. We examine pre/post measures of conceptual understanding in the introductory course. We highlight some patterns in the data, focusing on student level and instructor level variables, but also look to how the data collection and analysis can be improved for future years.