



HUMBOLDT STATE UNIVERSITY

DEPARTMENT OF MATHEMATICS

Spring 2019 Colloquium Series

A Comparison of Statistical Models with Longitudinal Data: An Application to Outpatient Clinical Treatment for Problem Drinkers

Dr. Judith E. Canner



A challenge for any researcher is knowing when a statistical model is wrong, but useful, and knowing when the model is simply wrong. We will explore how different models affect the discovery of information in a case study observing the longitudinal behavior for problem drinkers. We will explore several models (Generalized Estimating Equations, Generalized Linear Mixed Models, Markov Models, and Generalized Linear Mixed-Effects Markov Models) commonly used to evaluate such data. We will see how model choice can impact how we quantify the effectiveness of different interventions for problem drinkers. Our goal is provide social science researchers a starting point to explore what types of information can be obtained through different statistical models.

Dr. Judith E. Canner received her B.S. in Mathematics from Shippensburg University, PA, and her Ph.D. in Biomathematics and Zoology from North Carolina State University, Raleigh, NC studying The Population Ecology of Ant-dispersed Plants in Space and Time. She coordinates Statistics programs and is Principal Investigator on the NIH funded Big Data to Knowledge (BD2K) Program at CSUMB. Her current research focuses on statistical error models for systems with differential equations and applications of Markov and Hidden Markov models to identify addiction behaviors.

Thursday, February 14, 2019

BSS Room 166, 4:00 PM

To view this poster online, go to <http://www.humboldt.edu/math/news-and-events/math-colloquium>

We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS building at 3:30 pm on Thursday.