

TEMPLE UNIVERSITY
Department of Mathematics

Applied Mathematics and Scientific Computing Seminar

Wednesday, 5 September 2018, 4:00 p.m.
Room 617 Wachman Hall

(refreshments and social at 3:45 p.m)

Using mathematical and statistical modeling to understand behavior change in problem drinkers

by Rebecca Everett
Haverford College

Abstract. Psychologists are interested in developing new and accessible techniques to treat problem drinkers, individuals with mild to moderate severity of alcohol use disorder. Understanding the mechanisms of behavior change for drinking reduction can help healthcare providers implement more effective interventions. Thus it is important to understand the crucial factors that initiate and maintain this change process. We use mathematical and statistical modeling with clinical data to investigate factors that can influence a patients success in reducing their alcohol consumption and to identify cohorts of patients with similar underlying mechanisms of behavior change.