



The Math/Stats Colloquium
Department of Mathematics and Statistics
San José State University



Carly Rozins

UC Berkeley

*The birds and the bees: the industrialization of
agriculture and its impact on diseases*

OCTOBER 16, 2019, MH320

Abstract: Meeting our global population's food needs has involved intensive mechanization and centralization of food production. While this industrialization has allowed farmers to provide food for a burgeoning population, it has fundamentally changed the life cycles of domesticated animals in ways that create new and unknown threats to global food security. In my research I build mathematical models aimed at answering the question: how do modern agricultural management practices impact infectious disease burden, the risk of disease outbreaks and pathogen evolution? In this talk I will focus on recent changes to the poultry and the honeybee industries.

Background: Calculus II expected.

About the speaker: Carly Rozins received her PhD from Queen's University, in Ontario Canada. She is currently a postdoctoral fellow at the University of California, Berkeley, where she uses mathematical modeling to investigate how modern agricultural practices impact the ecology and evolution of infectious diseases in livestock systems.

SNACKS IN MH331B AT 2:30 PM

TALK STARTS AT 3:00 PM

For more information, see our full schedule at:

<http://www.timhsu.net/colloq/>