## Graduate Seminar

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Thursday, November 28, 2013 1:00 p.m., HH-3017

An introduction to mathematical biology

## **Abstract:**

The first part of my talk will be an introduction to mathematical biology. I will discuss the importance of both the derivation and the analysis of mathematical models. I will provide an overview of the training of prominent theoretical biologists and highlight areas of mathematical biology that are currently seeing rapid growth. In the second part of my talk, I will develop the theory for identifying an evolutionarily stable strategy (ESS). I will discuss why the ESS is a useful concept in evolutionary ecology and I will use the ESS to predict the evolution of parasite populations.