

## presents Guest Speaker:

## **Bonnie Kirkpatrick**

Postdoctoral Researcher, University of British Columbia

Biological Models with Combinatorial Spaces

Probabilistic models are common in biology. Many of the successful models have been readily tractable, leaving calculations on models with a combinatorial-sized state space as an open problem. This talk examines two kinds of models with combinatorial state spaces: continuous-time and discrete-time Markov chains. These models are applied to two problems: RNA folding pathways and family genetics. While the applications are disparate topics in biology, they are related via their models, the statistical quantities of interest, and in some cases the computational techniques used to calculate those quantities.

Introductory speaker (10 mins):

## Gavin Ha

Shah Lab, BC Cancer Research Centre

Probabilistic approach to detect subclonal copy number and LOH from heterogeneous cell populations in whole genome sequencing of tumour biopsies

## Thursday, February 7<sup>th</sup>, 2013, 6:00 pm

Gordon and Leslie Diamond Family Theatre, BC Cancer Research Centre, 675 West 10th Avenue







