



PIMS Mathematical Biology Seminar



**Monday, March 31, 2008
3 pm - 657 CAB**

Troy Day
Queens University

The Evolutionary Biology of Autoimmune Disease

Autoimmune diseases arise when an individual's adaptive immune response incorrectly targets self-tissue, resulting in a variety of pathologies. One theory for the occurrence of autoimmune disease posits that pathogens who mimic host peptides elicit autoimmune responses when they cause infections.

I will present some simple mathematical models for the coevolution of such molecular mimicry and the vertebrate immune system, to better understand the plausibility of this hypothesis.

Join us for refreshments in CAB 549 immediately following the seminar

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