## Undergraduate Math Club Fall 2007 2<sup>nd</sup> floor Nesbitt Common Room Monday, October 1, 4:10-5:00pm (free pizza and pop, as always)

## How simple math can sometimes make all the difference in biology and medicine

## **Professor Danny Forger**

## **Abstract**

Biological systems are often complex and defy simple intuition. Sometimes simple mathematical representations of these systems can give illuminating insights. Here I will present several examples of insightful models spanning several different disciplines including: 1) biomechanics: how the speed of a boat scales with the number of rowers, 2) biological oscillations: how to stop your biological clocks or cause a heart attack and 3) infectious disease: how AIDS develops in patients infected with HIV.