Undergraduate Math Club
Fall 2005
2nd floor Nesbitt Common Room
Nov. 17, 4:10-5:00pm
(free pizza and pop, as always)

Can Mathematics Cure AIDS?

Prof. Patrick Nelson

Mathematical modeling has become an integral part of the science of understanding AIDS. It can provide information to experimentalists that can save them hundreds of hours of lab work and lead to novel experiments. Modeling also allows us to simulate situations that would be impossible under controlled experiments. However, one needs to be careful with the ``model'' being used. Each model has its own implicit dynamics and it is up to us, the mathematicians, to determine which model is correct.

I will discuss some successes we have had and the difficulties that lie ahead for students wanting to work in this field. I will end on some notes about ``why is mathematical biology so hard?''