

MTCS COLLOQUIUM

Phil Ryan

will present

The Lungs: Gas Exchange and Dynamical Disease

4:30 pm

Tuesday, October 12th

Violette Hall 1236

This talk arose from designing modules for the introduction to mathematical biology course that is currently being developed and which will be offered for the first time this Spring. The idea is to model the lungs in order to understand how that system works. We will first discuss the laws that govern the transport of gases in the lung and consider the conditions that lead to optimal transport of gases. Then we will look at disorders in the system which arise when a generally adequate control system becomes unstable (this is an example of a *dynamical disease*), for example, Cheyne-Stokes breathing or infant apnea.

Note the unusual time.

Cookies and Refreshments!!!