Drugs, Sex, Rock'n-Roll and a Rational Basis for Hope: What's Math Got to Do With It?

Mathematics underlies much of everyday experience, even if most people don't realize it. I'll discuss the process of mathematical modeling and point out how each of us use models regularly. Modeling approaches will be described for some biological examples that illustrate the utility of taking a quantitative perspective in the evolution of sex, gender inequity (including at UTK), drug dosing, and concert sound engineering. Finally, I will summarize recent work to link models of human behavior and global climate that provide some basis for hope regarding projected increases in global temperature.