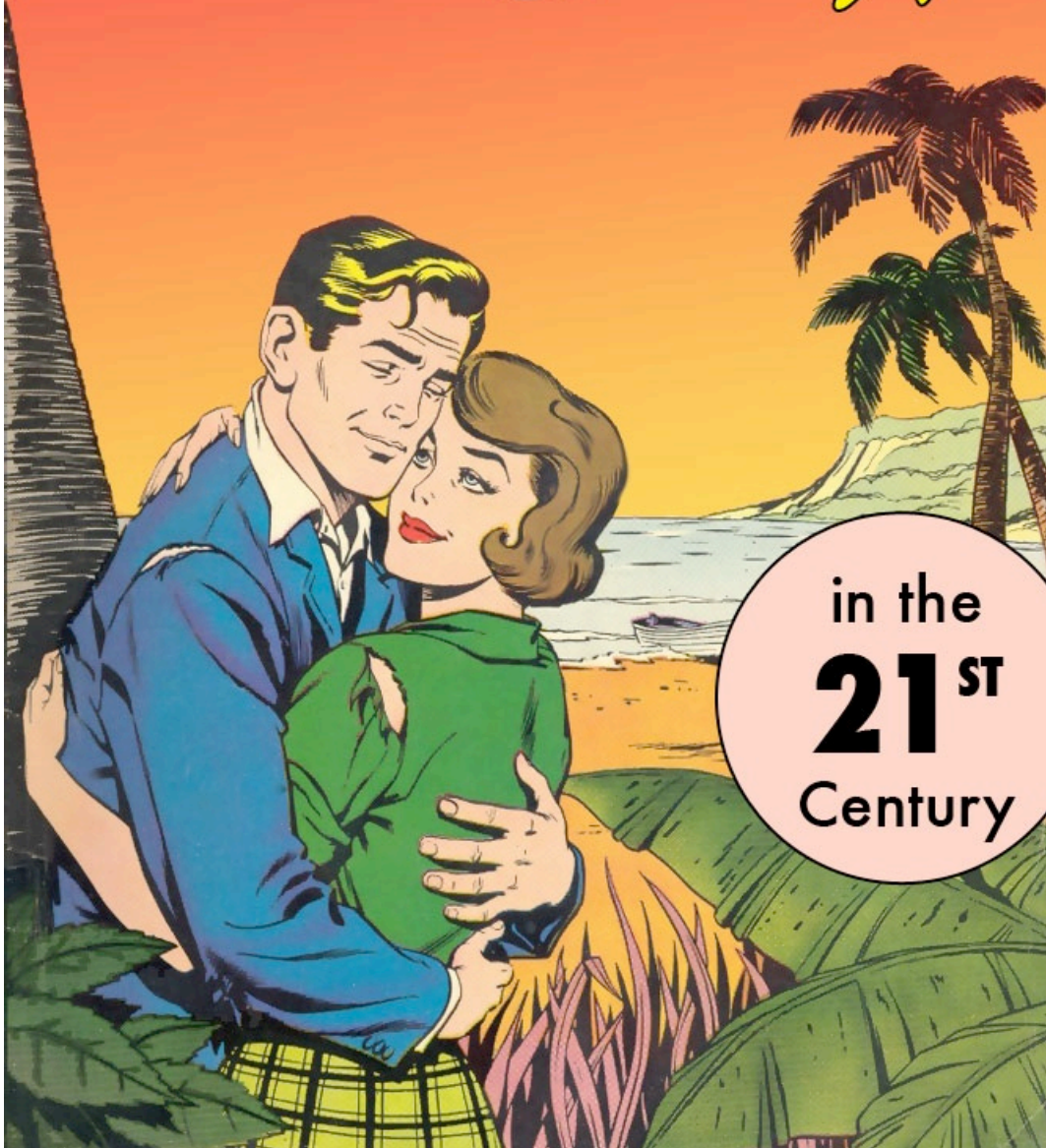


Mathematics

AND

Biology



in the
21ST
Century

Joint Math & Biology Colloquium

Thursday, November 20th, 2008

12:30-1:30 pm

UCCS University Theater, UC 302

Dr. David Bortz

Applied Math Department

University of Colorado at Boulder

Mathematics and Biology in the 21st Century

It is a common refrain to hear how the 21st century will be "The Century of Biology." But, what does that mean for mathematicians who want to work on real biological problems and biologists who want to employ sophisticated mathematical tools to help understand a particular phenomena? And, perhaps more importantly, what does that mean for students who aspire to bridge the gap?

In this talk, I will provide some answers to these questions using the story of how mathematics completely revolutionized the treatment of HIV/AIDS worldwide in the late 90's as well as discuss some of my own research into the mathematics of bacterial communities. In particular, I will focus on the disconnect between mathematical and biological strategies of investigation as illustrated in my collaboration with an emergency room physician. I will also discuss some open mathematical questions in these areas as well as the research opportunities for undergraduate and graduate students.

Light refreshments at 12:15 pm.
Students are encouraged to participate.