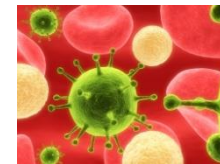




BIOSCIENCE IN THE 21ST CENTURY:

COURSE HIGHLIGHTS AND PROSPECTS



COURSE GOALS AND EXPECTATIONS

Welcome and Introductions

What is this course about?

Course highlights and requirements

Course website: www.lehigh.edu/~inbios21
(for lecture videos, syllabus, schedule)

Coursesite: <http://coursesite.lehigh.edu/>
(for course assignments, study guides, resources)

Bioscience PLAYBILL: BioS 10 and BioS 90 Instructors



Ware



Lang



Kuchka



Chen



Lowe-Krentz



Sands

Departments and Programs represented:

Biological Sciences, Bioengineering, Chemical Engineering, Civil & Environmental Engineering, Chemistry, Computer Science & Engineering, Materials Science & Engineering, Electrical Engineering

Upcoming Faculty Guests:



Davis



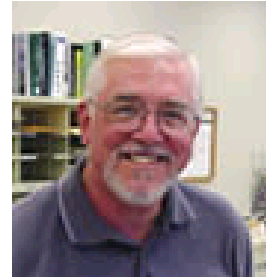
Simon



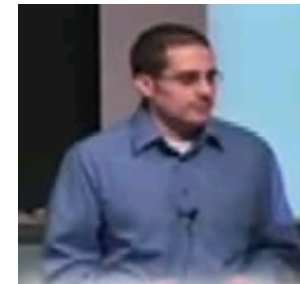
Rice



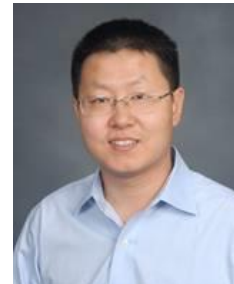
Haas



Nyby



Wynne

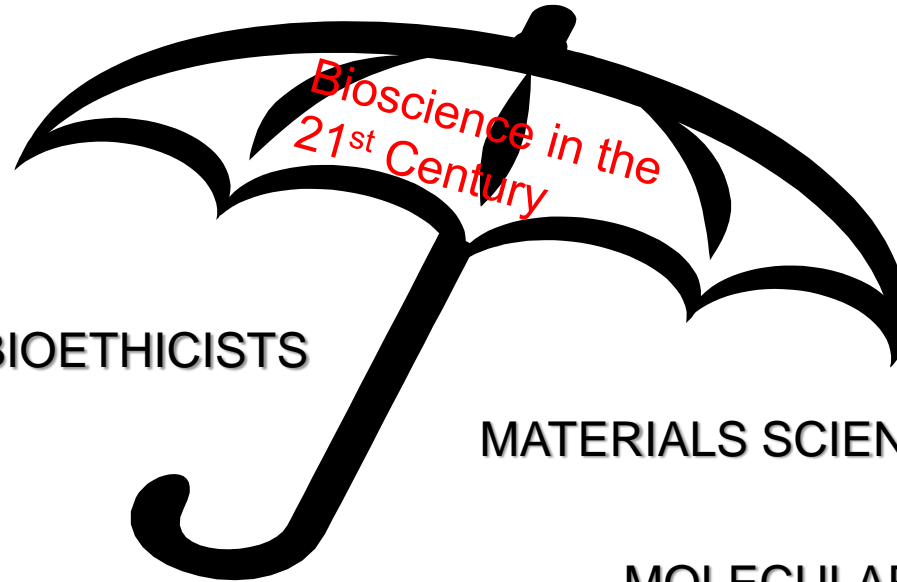


Zhou

BIOSCIENCE IN THE 21ST CENTURY

- What biologically-relevant problems confront society?
- What are the strategies for studying these problems?
- What are the prospects for solutions to these problems?

MULTIDISCIPLINARY APPROACHES



NEUROBIOLOGISTS

BIOETHICISTS

BIOCHEMISTS

MATERIALS SCIENCE ENGINEERS

BIOLOGICAL ENGINEERS

MOLECULAR BIOLOGISTS

CHEMISTS

CLINICIANS

MICROBIOLOGISTS

CELL BIOLOGISTS

VIROLOGISTS

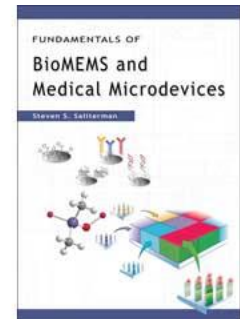
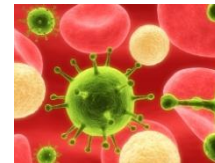
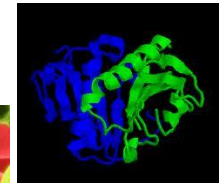
PHYSICISTS

CHEMICAL ENGINEERS

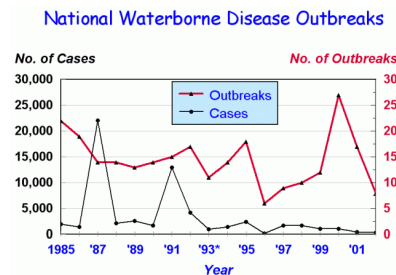
COMPUTER SCIENTISTS

Topics for consideration:

- Neurophysiological processes
- Cancer and novel treatment strategies
- Genomics, Proteomics and bioinformatics
- Stem cell biology and disease treatment prospects
- Advances in engineered biosystems , biodevices, and bioimaging
- **Social/Ethical issues in bioscience**
- Microbiology & Infectious diseases
- Human physiology
- Environmental health



<http://www.dep.state.pa.us>



spie.org

Bioscience in the 21st Century

www.lehigh.edu/~inbios21