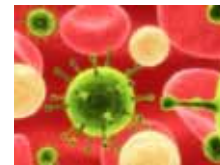




BIOSCIENCE IN THE 21ST CENTURY:

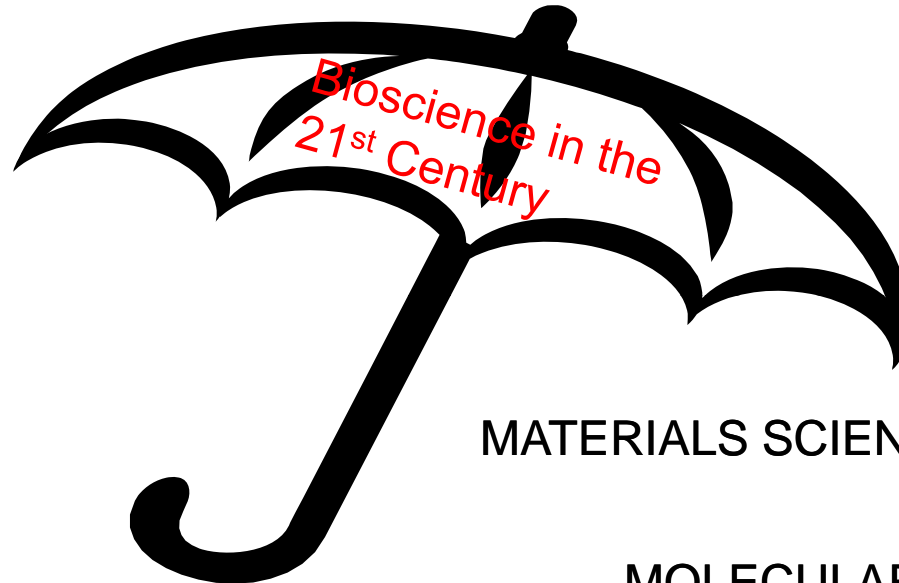
HIGHLIGHTS AND FUTURE PROSPECTS



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

BIOCHEMISTS

BIOLOGICAL ENGINEERS

CHEMISTS

CELL BIOLOGISTS

PHYSICISTS

CLINICIANS

MATERIALS SCIENCE ENGINEERS

MOLECULAR BIOLOGISTS

MICROBIOLOGISTS

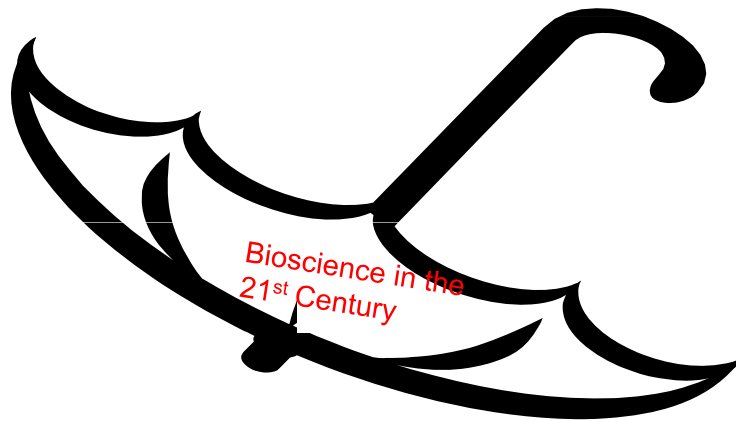
VIROLOGISTS

CHEMICAL ENGINEERS

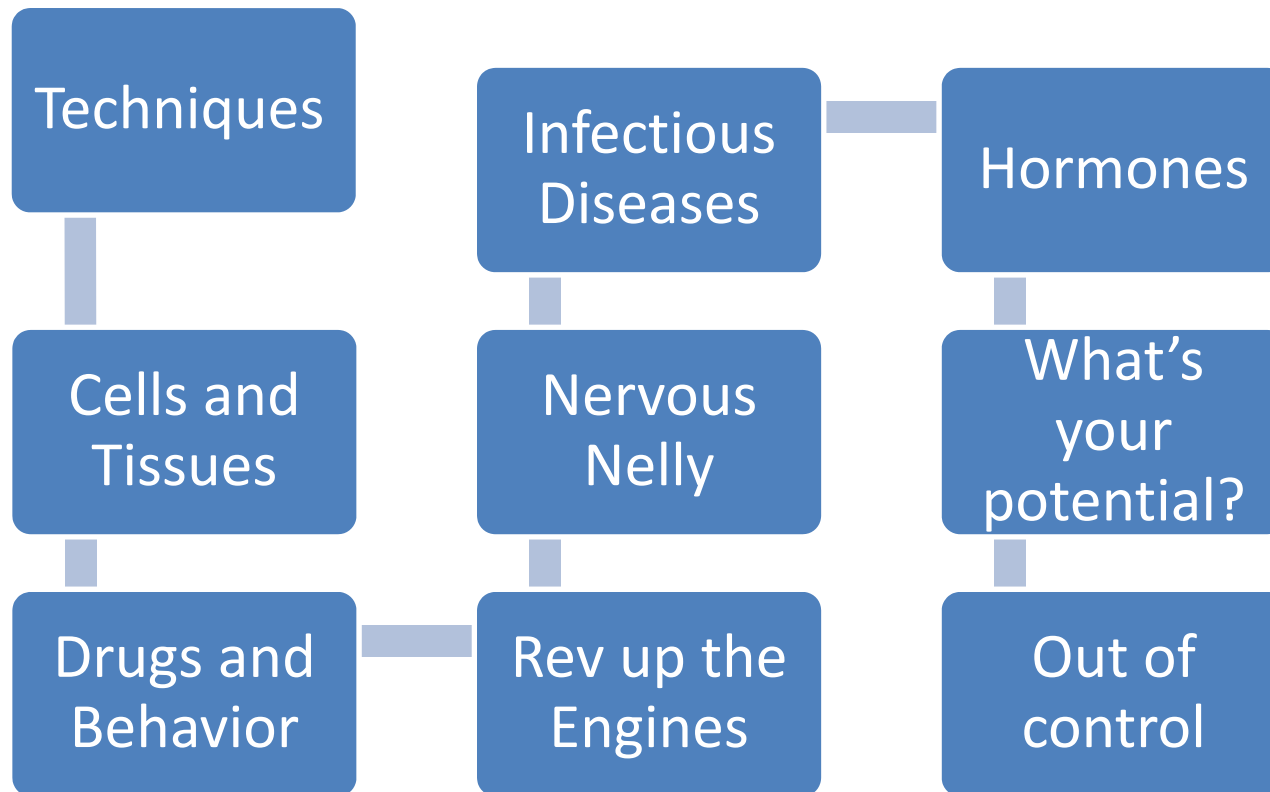
COMPUTER SCIENTISTS

SURVEY OF TOPICS IN BIOSCIENCE

- Neurophysiological processes
- Cancer and novel treatment strategies
- Genomics and bioinformatics
- Stem cell biology and disease treatment prospects
- Advances in engineered biosystems , biodevices, and bioimaging
- Ethical issues in biotechnology and medicine
- Infectious diseases
- Human physiology: cardiovascular disease, obesity, aging

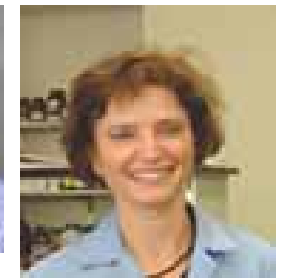
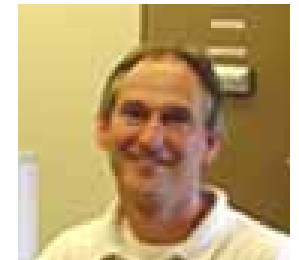
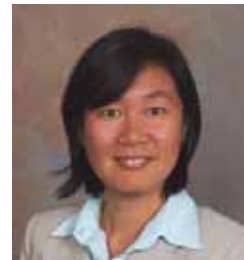


Bioscience Jeopardy



ACKNOWLEDGMENTS

Bioscience PLAYBILL: Participating Faculty and Guests



Lehigh Departments and Programs represented:

Biological Sciences, Bioengineering, Chemical Engineering, Chemistry, Computer Science & Engineering, Materials Science & Engineering, Physics

Guests: St. Thomas Aquinas College, BD Biosciences, Sanofi Pasteur, University of Medicine & Dentistry of New Jersey

Lehigh University Participants: Barry Bean, R. Michael Burger, Xuanhong Cheng, Matthias Falk, James Gilchrist, Ned Heindel, M. Kathryn Iovine, Stefan Maas, Linda Lowe-Krentz, Daniel Lopresti, Jutta Marzillier, John Nyby, Susan Perry, Colin Saldanha, Jeffrey Sands, Neal Simon, Robert Skibbens, Dimitrios Vavylonis, Vassie Ware

Guests: Ryan Wynne, St. Thomas Aquinas College

Jay Reuben, BD Biosciences

Joseph Frantz, Sanofi Pasteur

John Glod, Robert Wood Johnson Medical School, UMDNJ

American Society for Cell Biology, iBioSeminars© lectures by Brian Druker, Elaine Fuchs

Funding: Howard Hughes Medical Institute

THANK YOU!