Welcome and Introductions
What is this course about?
Course highlights and requirements
Course website: www.lehigh.edu/~inbios21
Blackboard site: www.bb.lehigh.edu
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?
Bioscience PLAYBILL: Participating Lehigh Faculty
Topics for consideration:

- 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 biomedicine
- Infectious diseases
- Reproductive biology and contraceptive technologies
- Human physiology
First part of course will deal with neuroscience topics:

For “Brain as a Company “diagram from Vancouver Coastal Health website

www.vch.ca/abi/brain_understand.htm
Infectious Diseases

HIV

Avian Flu

Methicillin-resistant *Staphylococcus aureus* (MRSA)
Genomics

Genome-based medicine: Using genomics to improve human health and fight disease