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

Bioscience in the 21st Century

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 and behavioral science
• Cancer and novel treatment strategies
• Genomics and bioinformatics
• Stem cell biology and disease treatment prospects
• Advances in engineered biosystems and biodevices
• Environmental biotechnology
• Infectious diseases
• Human physiology: cardiovascular disease, reproductive technologies, stress-related diseases
Bioscience Jeopardy

- Techniques
- Infectious Diseases
- All about “Gene”
- Cells and Tissues
- Nervous Nelly
- What’s your potential?
- Drugs and Behavior
- Rev up the Engines
- Out of control
ACKNOWLEDGMENTS
Bioscience PLAYBILL: Participating Faculty and Guests

Departments and Programs represented:
Biological Sciences, Bioengineering, Chemical Engineering, Civil & Environmental Engineering, Chemistry, Computer Science & Engineering, Materials Science & Engineering

Guests: Ryan Wynne, St. Thomas Aquinas College
John Glod, Robert Wood Johnson Medical School, UMDNJ

American Society for Cell Biology, iBioSeminars© lectures by Graham Hatfull, John McKinney

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THANK YOU!