

The background of the slide features a large, light blue circular logo of the Alfred P. Sloan Foundation. The logo contains the text 'ALFRED P. SLOAN' around the top and a large 'S' in the center. A DNA double helix is superimposed over the 'S'. The slide has a black vertical bar on the left and a blue wavy bar at the bottom.

# Societal Issues in Synthetic Biology

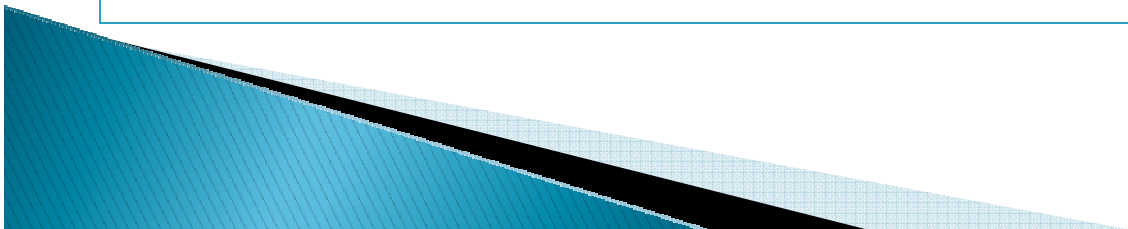
Paula J. Olsiewski, Ph.D.

July 10, 2009

Alfred P. Sloan Foundation

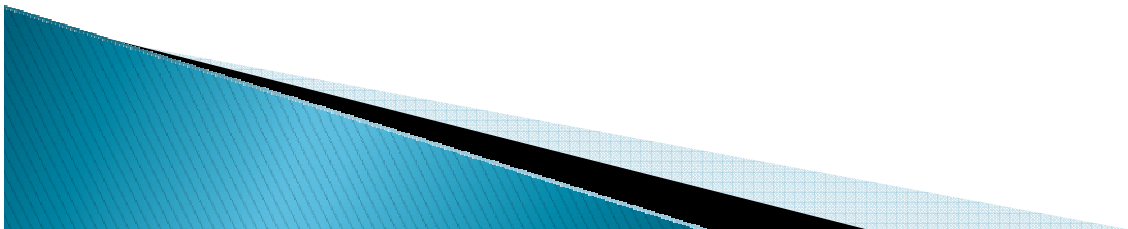
# Early Important Grants

- ▶ 2001 Grant: US National Academy of Sciences “Biotechnology Research in an Age of Terrorism” aka “The Fink Report”
- ▶ 2005 Grant: JCVI/MIT/CSIS : “Synthetic Genomics: Options for Governance”



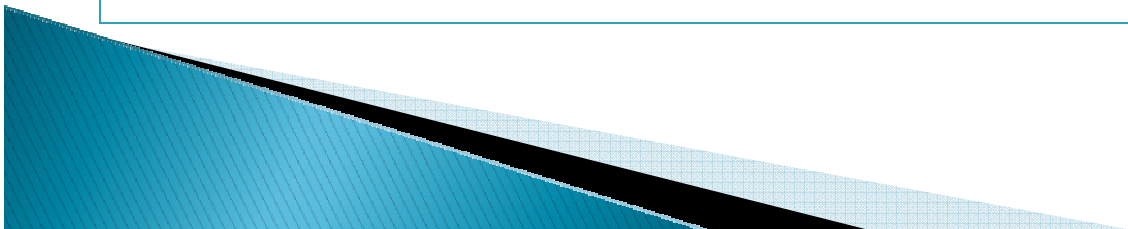
# 2008 Initiative: Desired Outcomes

- ▶ Improve understanding of ethical, social and policy issues by scientists and engineers
- ▶ Improve understanding of the science and engineering issues by policy makers, journalists, and the public
- ▶ Improve biosecurity and biosafety
- ▶ Create a cadre of young scholars working on the ethical, social and policy issues



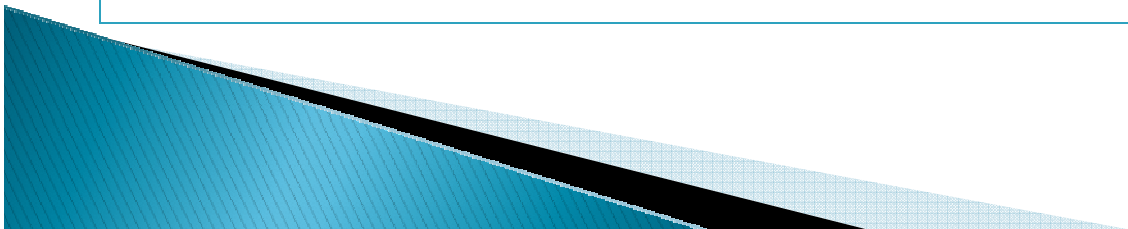
# Current Projects

- ▶ US National Academies– this meeting!
- ▶ The Hastings Center
- ▶ J. Craig Venter Institute
- ▶ Woodrow Wilson International Center for Scholars



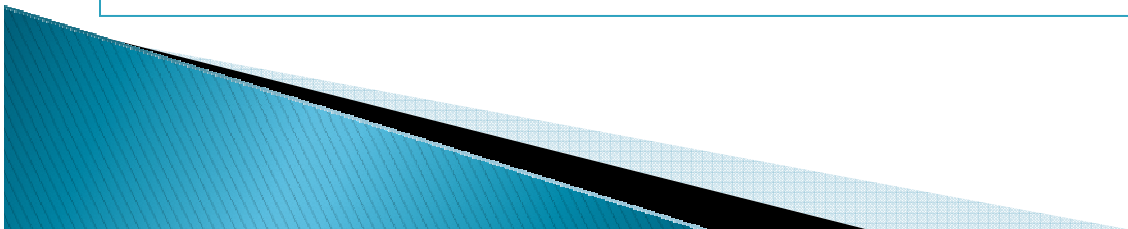
# The Hastings Center

- ▶ Investigate ethical issues; Serious scholarly research to inform policy discussions
- ▶ Roger Brent, President and Research Director, The Molecular Sciences Institute, Science Advisor
- ▶ The Nonphysical Moral Concerns Raised by Synthetic Biology
- ▶ Nonphysical Moral Concerns, Political Discourse, and Public Policy
- ▶ The Risks and Hopes for Synthetic Biology



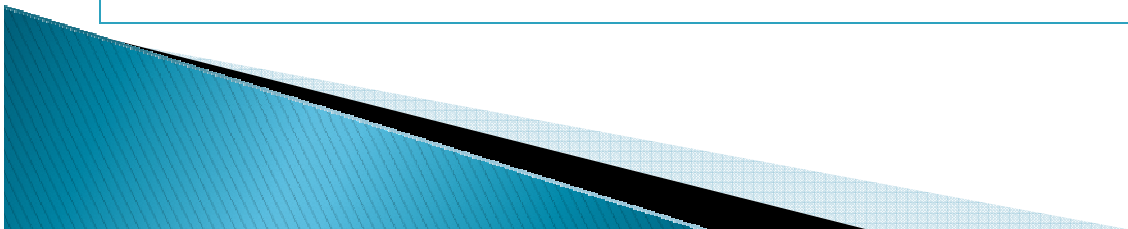
# J. Craig Venter Institute

- ▶ Synthetic Genomics: Scientists' Understanding of Society's Concerns; Society's Understanding of the Science and Scientists
- ▶ Help scientists and bio-engineers understand how society views their work
- ▶ Educate journalists, so that they can better inform the public about the technology
- ▶ Inform policymakers to help them structure better rules, laws, guidance, and oversight



# JCVI: Methodology

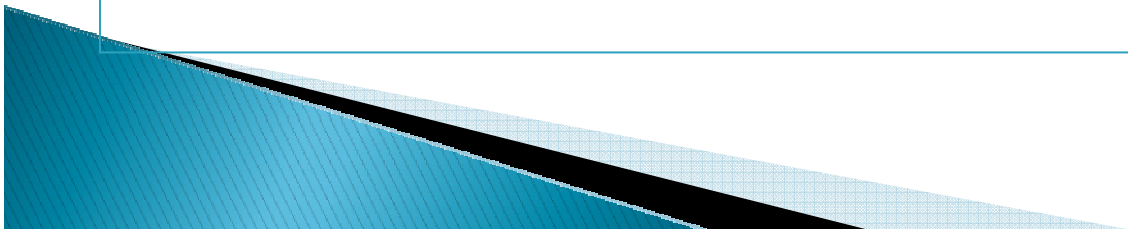
- ▶ Series of multi-day workshops
- ▶ Issues of Concern
  - Environmental/ecological
  - Philosophical/ethical/theological
  - Intellectual property/distribution
- ▶ Series of scenario-based analyses to better understand nature of concerns, e.g.:
  - Constructing organelles
  - Constructing microorganisms
  - Constructing eukaryotes



# Woodrow Wilson International Center for Scholars

- ▶ Goal: Identify and start to address risks
  - Understand public perception
  - Evaluate adequacy of current regulatory framework
  - Educate policy makers

[www.synbioproject.org/](http://www.synbioproject.org/)





Questions?

[Olsiewski@sloan.org](mailto:Olsiewski@sloan.org)

