Report to the
NTP Board of Scientific Counselors

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National Institute of Environmental Health Sciences
National Toxicology Program

NTP Board of Scientific Counselors Meeting
June 25, 2013
Implementation of Strategic Plan

• Leadership is reviewing reports of 8 cross-divisional teams:
  – Epigenetics
  – Inflammation
  – Stem Cells
  – Exposome
  – Predictive Toxicology and Disease
  – Global Environmental Health
  – Knowledge Science and Data Management
  – Website/Social Media
Special Visitors

• National Institute of Neurological Disorders and Stroke (NINDS) Director Story Landis, Ph.D.

• National Institute of Diabetes and Digestive and Kidney Diseases Director Griffin Rodgers, M.D.
Special Visitors

- Gina McCarthy, Ph.D., Assistant Administrator and Janet McCabe, Ph.D., Deputy Assistant Administrator of the Office of Air and Radiation, US EPA

- Stephen Friend, M.D., Ph.D., President, Co-Founder, and Director of Sage Bionetworks
My Air, My Health Challenge

- NIH/NIEHS, HHS Office of the National Coordinator for Health Information Technology, and EPA
- Challenge to create a personal, portable, near-real-time, location specific system
- $100K winner
- Conscious Clothing
Sage Bionetworks teamed up with DREAM and the NIEHS-NCATS-UNC toxicogenetics project to launch the crowdsourced challenge.

The NIEHS-NCATS-UNC team conducted the largest ever population-based *in vitro* cytotoxicity study:
- 1086 cell lines representing 9 distinct geographical populations
- 179 drugs and environmental chemicals

The challenge asks participants to build models based on data from the toxicogenetics project to predict:
1. the toxic response of individuals to chemicals
2. how a particular population will respond to certain types of chemicals
Data and Technology

• National Consortium for Data Science
• Metadata Access Tool for Climate and Health (MATCH)
• Big Data at NIH
• NIEHS Funding Widget

  – http://www.niehs.nih.gov/research/supported/get_widget/index.cfm
## Appropriations

<table>
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<tr>
<th></th>
<th>FY 2011 Appropriation</th>
<th>FY 2012 Appropriation</th>
<th>FY2013 Enacted Level**</th>
<th>FY 2014 President’s Request</th>
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<td>NIEHS</td>
<td>$ 683,724,312</td>
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* FY 2013 Superfund reflects Senate Subcommittee draft mark.
** Full year CR includes FY 2013 across-the-board rescission and sequestration reduction.
Legislative Items

• Hearings
  – Federal Hydraulic Fracturing Research
  – House Labor, HHS for public health and research agencies
  – Senate Labor, HHS for NIH

• Briefings
  – NIEHS Superfund Programs
  – Women’s Environmental Health
  – Breast Cancer
  – House Appropriations Ranking Member Nita Lowey (D-NY)

• Phthalate concentrations and dietary exposure from food purchased in New York state
Science Advances

DIR

- **Epigenome-wide Association Study of Breast Cancer Using Prospectively Collected Sister Study Samples**

- **Topoisomerase 1-Mediated Removal of Ribonucleotides from Nascent Leading-Strand DNA**
The broad scope of health effects from chronic arsenic exposure: Update on a worldwide public health problem

Traffic-related air pollution, particulate matter, and autism

Thank you!