Report to the National Advisory Environmental Health Sciences Council

February 18, 2010

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National Toxicology Program
Appropriations, FY2010

- October: President signed Energy and Water and Interior and Environment Appropriations, funding DOE/NIEHS Worker Training Program and NIEHS Superfund Research and Worker Training

- December: President signed an Omnibus bill that funded the rest of NIEHS (and NIH)

- NIEHS received largest increase of Inst’s and Ctr’s, 4.9% House, 3.1% Senate
President’s Request, FY2011

- President’s request submitted to Congress Feb. 1, and includes an increase to NIEHS budget of 2.6% and to Superfund 3.2%
## FY 2010 and FY 2011 Appropriations
### Dollars in Thousands

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<tr>
<th></th>
<th>FY 2009</th>
<th>Stimulus FY09-10</th>
<th>Approp. FY2010</th>
<th>%increase 10 over 09</th>
<th>Pres Req FY2011</th>
<th>%increase 11 over 10</th>
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<tr>
<td>NIEHS</td>
<td>$662,820</td>
<td>$168,057</td>
<td>$689,781</td>
<td>4.1</td>
<td>$707,339</td>
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<td>NIH</td>
<td>$30,317,024</td>
<td>$10,380,703</td>
<td>$31,008,788</td>
<td>2.3</td>
<td>$32,007,237</td>
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<td>Superfund</td>
<td>$78,074</td>
<td>$19,297</td>
<td>$79,212</td>
<td>1.5</td>
<td>$81,763</td>
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<td>NIEHS/DOE Training</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$10,000</td>
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Leadership Team – Status

• Searches underway for Scientific Director, Director DERT, Deputy Director

• SD search committee will soon interview 6 candidates to develop short list

• Search committees formed for DERT and Deputy Director
NIEHS’s New Presence in Bethesda

- Dr. John Balbus named Senior Advisor for Public Health
- Dr. Aubrey Miller, formerly FDA, named HHS liaison
- Recruitment is in progress for liaison to broader toxicology community
- These individuals will join Mary Gant, Legislative Liaison, as our Bethesda team
New Members of OD Team

• Paul Jung, M.D., named Chief of Staff

• Bruce Androphy, J.D., named to new ethics supervisory position; NIH has restored the Deputy Ethics Counselor authority to NIEHS

• Recruitment nearly completed for Education and Outreach Specialist to coordinate education and minority workforce recruitment
Recent Science Advances

• Immediate mediators of the inflammatory response are poised for gene activation through RNA polymerase II stalling

• Predicting the hepatocarcinogenic potential of alkenylbenzene flavoring agents using toxicogenomics and machine learning
  Auerbach SS, et al., Toxico Appl Pharmacol, 2009 Dec 11
Science Advances – Continued

- Inhaled carbon nanotubes reach the subpleural tissue in mice

- An optoelectronic nose for the detection of toxic gases
  Lim SH et al., Nature Chemistry, 2009, Oct

- Human DNA methylomes at base resolution show widespread epigenomic differences
  Lister R et al., Nature, 2009 Nov 19
Investigating bacterial sources of toxicity as an environmental contributor to dopaminergic neurodegeneration
Caldwell KA et al., PLoS One, 2009 Oct 6

Dietary and genetic obesity promote liver inflammation and tumorigenesis by enhancing IL-6 and TNF expression
Park EJ et al., Cell 140 (2)

Structural basis for biosynthetic programming of fungal aromatic polyketide cyclization
Crawford JM et al., Nature 2009 Oct 22
Science Advances – Continued

• A prospective study of bone lead concentration and death from all causes, cardiovascular diseases, and cancer in the Department of Veterans Affairs Normative Aging Study
  Weisskopf MG et al., Circulation, 2009 Sept 22

• Association of intrauterine and early life exposures with diagnosis of uterine leiomyomata by age 35 in the Sister Study
  D’Aloisio AA et al., Environ Health Perspect, Dec 2009
Institute Highlights

- NIEHS/NTP Director elected as a fellow of the Collegium Ramazzini, international society of environmental health sciences and toxicology
- NIEHS/NTP Director testified at two hearings related to Toxic Substances Control Act, Dec. 2 and Feb. 4
- Allen Wilcox, M.D., Ph.D., recipient of 2009 Greg Alexander Award for maternal and child health, presented at Tampa, FL, in Dec.
Institute Highlights

• Sister Study, on breast cancer, being done by Epi. Branch, reached and exceeded its recruitment goal of 50,000 sisters of women with breast cancer

• Center for Evaluation of Risks to Human Reproduction convened an independent panel to evaluate potential health effects of soy infant formula, Dec. 16-18

• Superfund Research Program is developing a Strategic Plan through a series of open meetings (see http://tools.niehs.nih.gov/srp/about/register.cfm)
Institute Highlights: Climate Change

- NIEHS hosted a press conference Oct. 27 at the National Press Club unveiling NIEHS co-funded study published in Lancet on health impacts of reducing greenhouse gas emissions

- Lancet release marked by trans-Atlantic media event in November

- NIEHS Director participated in high level White House climate change press event in November

- NIEHS’ Allen Dearry represented NIEHS at UN Climate Change Conference in Copenhagen in December
NIEHS Outreach

- The Worker Education and Training Program introduced “The NIEHS Earthquake Response Training Tool…” and made it available online in Creole in response to the Haiti earthquake.

- NIEHS held a Town Meeting in Milwaukee, Oct. 1, with NIEHS Director as keynote speaker.

- NIEHS held a Town Meeting in Sausalito, CA, Nov. 18, in conjunction with the Breast Cancer and the Environment grantees meeting.
More Institute Highlights: Meetings

• The NIEHS booth at the 137th APHA mtg. won first place for excellence

• The NIEHS Centers for Neurodegenerative Science held its first meeting Oct. 8-9

• The Third Annual Grantee’s Meeting of the Exposure Biology Program of the NIH Genes, Environment and Health Initiative, was held at NIH’s Natcher Auditorium, Jan. 26-27
Dr. Collins’ Research Agenda (Science, Jan.1)

- High-throughput technologies
- Translational Medicine
- Benefiting health care reform: comparative effectiveness research; prevention and personalized medicine; health disparities research; pharmacogenomics; health research economics
- Focus more on global health
- Reinvigorate, empower biomedical research community
NIH/Bldg. 1 Updates

- NIH human embryonic stem cell registry continues to grow
- Genotype-tissue Expression Project tests feasibility of collecting high-quality DNA and RNA multiple tissue samples from 160 donors
Thank you!