

Report to the National Advisory Environmental Health Sciences Council

19 May 2011

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Director

National Institute of Environmental Health Sciences

National Toxicology Program



Staff Updates

- Joellen Austin selected as Associate Director for Management
- Dr. J. Patrick Mastin permanent Deputy Director of Division of Extramural Research and Training (DERT).
- Dr. Claudia Thompson is permanent Chief of the Susceptibility and Population Health Branch, DERT.
- Dr. Anton Jetten is permanent Chief of the NIEHS Laboratory of Respiratory Biology.
- *Scientific Director announcement closed March 31*
- *Clinical Director announcement open until June 13*



In Memoriam



Dr. James Fouts

FY 2009 – FY 2012 Appropriations

Dollars in Thousands

| | FY 2009 | Stimulus FY09-10 | Approp. FY2010 | Full Year CR FY2011 | President's Request FY2012 |
|--------------------------------|--------------|---------------------|-------------------|---------------------------|----------------------------------|
| NIEHS | \$662,820 | \$168,057 | \$689,781 | \$683,725 | \$700,537 |
| NIH | \$30,317,024 | \$10,380,703 | \$31,008,788 | \$30,687,290 | \$31,747,915 |
| Superfund | \$78,074 | \$19,297 | \$79,212 | \$79,054 | \$81,085 |
| NIEHS/ DOE Training | \$10,000 | | \$10,000 | | |

Legislative Update

- Friends of NIEHS Congressional staff briefing
- Reauthorization of the Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR) programs
- Lung Cancer Mortality Reduction Act of 2011 (HR1394)
- Gulf Coast Health Monitoring and Research Program Act of 2011 (HR 832)
- Radiation Exposure Compensation Act
- Reinstating the Superfund Tax (HR1596)



Recent Science Advances

- Interleukin-10 in ozone-induced pulmonary inflammation
 - IL-10 protects against ozone-induced lung inflammation; IL-10 deficiency enhanced ozone-induced lung injury, Backus GS, et al. *Environ. Health Perspect.*
- Human SNPs modulate cellular stress response
 - Binding of the p53 tumor suppressor to a specific sequence of DNA, which activates transcription of the target genes, was altered by SNPs., Bandele OJ, et al. *Nucleic Acids Res.*
- Mechanism of Cell Memory of Genotoxic Insult
 - Methyltransferases mediate cell memory of a genotoxic insult., Rugo RE, et al. *Oncogene*

Recent Science Advances

- Rapid evolution in Hudson River tomcod
 - Mechanistic basis of resistance to PCBs in Atlantic tomcod from the Hudson River. Wirgin I, et al. *Science*
- Disruption of the thymus by DES, DEX, CPS, and TCDD
 - Gene expression alterations in immune system pathways in the thymus after exposure to immunosuppressive chemicals. Frawley R, et al. *Environ. Health Perspect.*
- Arsenic, stem cells, and the developmental basis of adult cancer
 - Arsenic, stem cells, and the developmental basis of adult cancer. Tokar EJ, et al. *Toxicol. Sci.*

Institute Highlights— Oil Spill Work Continues

- **GuLF** (Gulf Longitudinal Follow-up) **STUDY** currently in the field, recruiting subjects from all Gulf Coast states.
- New Orleans Community Forum, Feb 23.
- Deepwater Horizon “Lessons Learned” in Mobile, AL on June 5.

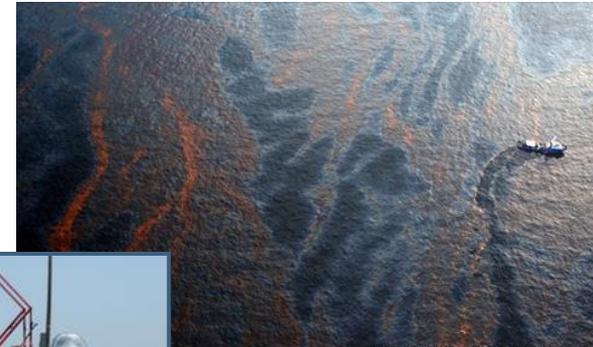


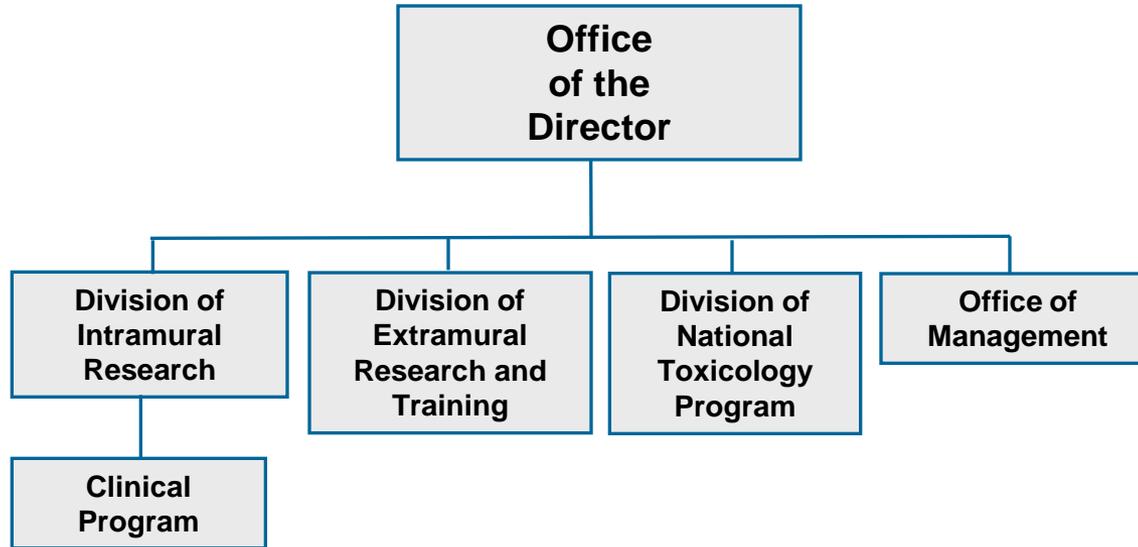
PHOTO: CHRIS GRAYTHEN/GETTY IMAGES

Institute Highlights – IC Outreach

- March 1 visit by Dr. Thomas Insel, Director of the National Institute of Mental Health
- April 11 visit by Dr. Eric Green, Director of the National Human Genome Research Institute.



NIEHS/NTP Reorganization



- Reorganization signed by Secretary Feb 22, 2011
- Federal Register notice April 28, 2011
- Reorganization within NIEHS; NTP no longer within DIR, but its own Division
- John Bucher, PhD is now Director of DNTP and Associate Director of NTP

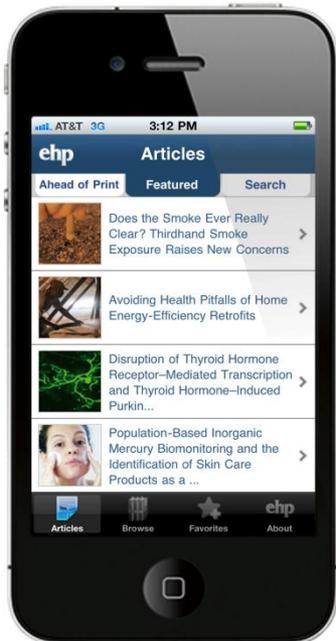
Institute Highlights – NTP News

- March 10 Tox21 high-speed robot screening system unveiled at the NIH Chemical Genomics Center
- Comparative Toxicogenomics Database (CTD) becomes part of ToxNet
- NICEATM peer review panel on endocrine-disrupting compounds (EDCs)
- International Cooperation on Alternative Test Methods agreement signed; Republic of Korea signs on
- Green Chemistry and Environmental Health Sciences



Institute Highlights – *EHP* Outreach

- *Environmental Health Perspectives* (*EHP*) is expanding the reach of its Science Education Program with the launch of a new and improved website and redesigned lessons.



- Launch of *EHP* iPhone app, which gives readers of the peer-reviewed journal access to research and news as soon as it is published online.

Institute Highlights – Meetings and Events

- March 29: Dr. Nancy Andrews, Dean of Duke University School of Medicine, delivered the Spirit Lecture “Reflections on the Glass Ceiling” in honor of National Women’s Month
- March 6–10: NIEHS and NTP marked the 50th anniversary of the Society of Toxicology with more than 75 poster presentations and 30 scientific talks at its annual meeting in Washington, DC
- April 14: NIEHS hosted the final GEI Exposure Biology Program grantee meeting
- April 27–28: The NRC Committee on Emerging Science for Environmental Health Decisions hosted "Interplay of the Microbiome, Environmental Stressors, and Human Health" to explore this new field of study

Institute Highlights – Awards and Recognition

- New AAAS Fellows:
 - James Mason, head of the Drosophila Chromosome Structure Group in the NIEHS Laboratory of Molecular Genetics. He serves on the editorial boards of the *International Journal of Biological Sciences* and *Journal of Biomedicine and Biotechnology*
 - NIEHS Grantees, neurobiologist Marie-Francoise Chesselet, MD, PhD, and exposure science expert Barbara J. Turpin, PhD
 - NIEHS Superfund Research Program Grantee Agnes Kane, MD, PhD
- Paper led by Ken Korach earned Faculty of 1000 award, meaning it is in the top 2% of published articles in biology and medicine.
- Superfund Research Program grantee and Louisiana State University chemist Barry Dellinger's paper earned Editor's Choice Award as one of ES&T's Best Papers of 2010
- 2011 Science Communication Fellows announced, half from NIEHS

Institute Highlights – Dr. Linda Birnbaum

- Pew Workshop: *Enhancing FDA's Evaluation of Science to Ensure Chemicals Added to Human Food are Safe*
- Health Affairs inaugural issue on Environmental Health



NIH Update

- New Common Funds Awards in Global Health
- Discrepancy in grant title field lengths between Grants.gov (submission of proposals) and IMPAC II (grant tracking database)
- Government Performance and Results Act (GPRA) Measure Development Working Group



NIEHS Strategic Planning - Overview

- Planning Institute direction for next 5 years
- Three phase process
- Visit our website:

<http://www.niehs.nih.gov/strategicplan>

Thank you!



NIEHS Strategic Plan Website
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