



National Institute of Environmental Health Sciences
Your Environment. Your Health.

Report to the National Advisory Environmental Health Sciences Council

June 2-3, 2015

**Linda Birnbaum, Ph.D., D.A.B.T., A.T.S.
Director**

National Institute of Environmental Health Sciences
National Toxicology Program

Overview

- Legislative Report
- Science Advances
- News and Highlights
- Meetings, Events, and Updates
- Awards and Recognition



Legislative Report

Appropriations

- House Labor, HHS, ED & Related hearing on NIH funding
- Senate Labor, HHS Appropriations Subcommittee hearing on NIH funding
- The House and Senate have passed a budget resolution for FY 2016



Legislative Report

Briefings

- Senate Appropriations staff, Laura Friedel, Majority Clerk, and Alex Keenan, Minority Clerk.
- Senate Interior, Environment Appropriations staff Melissa Zimmerman (Minority) and Chris Tomassi (Majority)

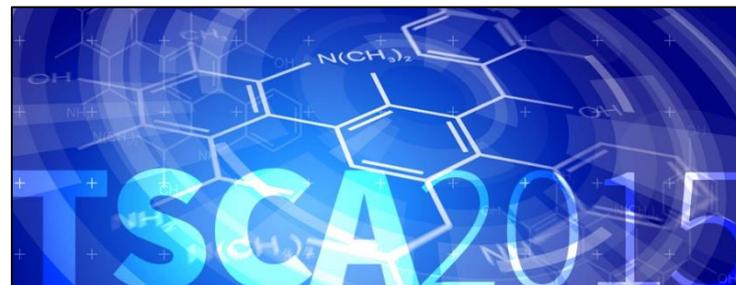


James Inhofe (R-OK)

Legislative Report

TSCA Reform

- Frank R Lautenberg Chemical Safety for the 21st Century Act FOIA Improvement Act
 - Senate Environment & Public Works Committee hearing on the Lautenberg Chemical Safety for the 21st Century Act
- TSCA Modernization Act of 2015
 - House Energy and Commerce Subcommittee on Environment and the Economy hearing on a draft bill to amend TSCA



Legislative Report

Other Relevant Legislation

- 21st Century Cures Act
 - Approved by House Energy and Commerce Subcommittee on Health
- Secret Science Reform Act of 2014
 - Passed by the House in March 2015





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Thank you Mary Gant for 27 years of service!

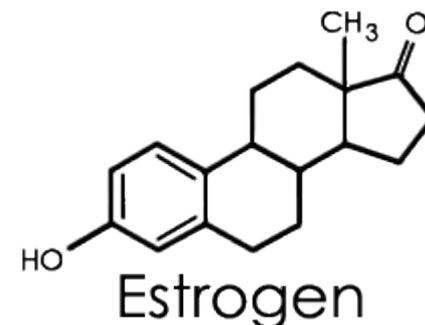


Science Advances

One NIEHS

Development of phenotypic and transcriptional biomarkers to evaluate relative activity of potentially estrogenic chemicals in

ovariectomized mice. *Hewitt SC (DIR), W Winuthayanon (DIR), B Pockette (DIR), RT Kerns (DIR), JF Foley (NTP), N Flagler (NTP), E Ney (NTP), A Suksamrarn, P Piyachaturawat, PR Bushel (DIR) and KS Korach(DIR). Environ. Health Perspect. (2015) (SP Goal 1, 3)*



Essential role of Orai1 store-operated calcium channels in lactation. *Davis FM (DIR), A Janoshazi (DIR), KS Janardhan, N Steinckwich (DIR), DM D'Agostin (DIR), JG Petranka (DIR), PN Desai (DIR), SJ Roberts-Thomson, GS Bird (DIR), DK Tucker (NTP), SE Fenton (NTP), S Feske, GR Monteith and JW Putney, Jr. (DIR). Proc. Natl. Acad. Sci. U. S. A. (2015) [ePub] (SP Goal 1)*



Science Advances

DIR

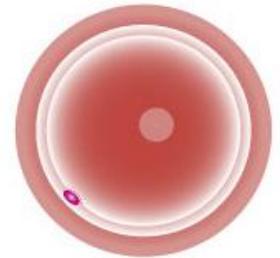
Mental health service use by cleanup workers in the aftermath of the Deepwater Horizon oil spill.

Lowe SR, Kwok RK (DIR), Payne J, Engel LS (DIR), Galea S, Sandler DP (DIR). Soc Sci Med. 2015 Apr;130:125-34. (SP Goal 5)



Lineage specification of ovarian theca cells requires multicellular interactions via oocyte and granulosa cells.

Liu C, Peng J, Matzuk MM, Yao HH (DIR). Nat Commun. 2015 Apr 28;6:6934. (SP Goal 1)



Anti-müllerian hormone and lifestyle, reproductive, and environmental factors among women in rural South Africa.

Whitworth KW, Baird DD (DIR), Steiner AZ, Bornman RM, Travlos GS (DIR), Wilson RE (DIR), Longnecker MP (DIR). Epidemiology. 2015 May;26(3):429-35. (SP Goal 4)

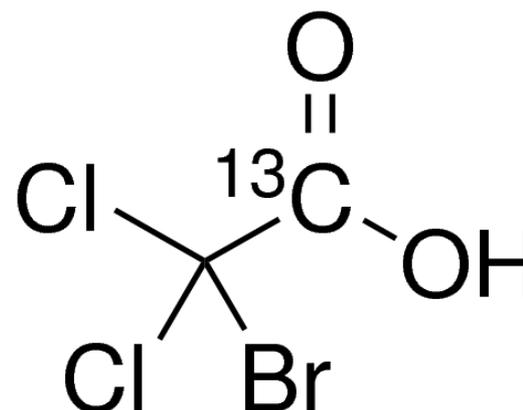


Science Advances

DNTP

F344/Ntac rats chronically exposed to bromodichloroacetic acid develop mammary adenocarcinomas with mixed luminal/basal phenotype and Tgf β dysregulation.

*Harvey JB (DNTP), Hong HH (DNTP), Bhusari S, Ton TV (DNTP), Wang Y (DNTP), Foley JF (DNTP), Peddada SD (DIR), Hooth M (DNTP), DeVito M (DNTP), Nyska A, Pandiri AR (DNTP), Hoenerhoff MJ (DNTP).
Veterinary pathology. 2015. (SP Goal 1)*



Science Advances

DETR

Impact of natural gas extraction on PAH levels in ambient air. Paulik LB, Donald CE, Smith BW, Tidwell LG, Hobbie KA, Kincl L, Haynes EN, Anderson KA. *Environ Sci Technol.* 2015 Apr 21;49(8):5203-10. (SP Goal 5)



Early-life lead exposure recapitulates the selective loss of parvalbumin-positive GABAergic interneurons and subcortical dopamine system hyperactivity present in schizophrenia.

Stansfield KH, Ruby KN, Soares BD, McGlothan JL, Liu X, Guilarte TR. *Transl Psychiatry.* 2015 Mar 10;5:e522. (SP Goal 2)



Early introduction and cumulative consumption of sugar-sweetened beverages during the pre-school period and risk of obesity at 8-14 years of age.

Cantoral A, Téllez-Rojo MM, Ettinger AS, Hu H, Hernández-Ávila M, Peterson K. *Pediatr Obes.* 2015 Apr 17. (SP Goal 2)



Science Advances

DETR

Estimated exposure to arsenic in breastfed and formula-fed infants in a United States cohort.

Carignan CC, Cottingham KL, Jackson BP, Farzan SF, Gandolfi AJ, Punshon T, Folt CL, Karagas MR. Environ Health Perspect. 2015 May;123(5):500-6. (SP Goal 5)



Quantitative assessment of inhalation exposure and deposited dose of aerosol from nanotechnology-based consumer sprays.

Nazarenko Y, Lioy PJ, Mainelis G. Environ Sci Nano. 2014 Apr;1(2):161-171. (SP Goal 5)



Increasing sample size in prospective birth cohorts: back-extrapolating prenatal levels of persistent organic pollutants in newly enrolled children.

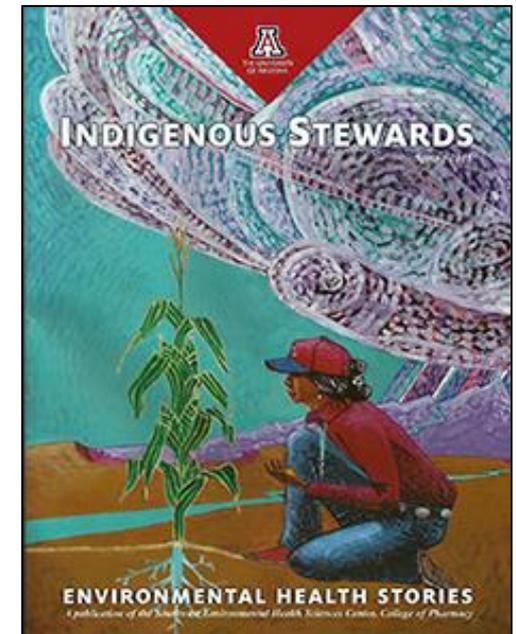
Verner MA, Gaspar FW, Chevrier J, Gunier RB, Sjödin A, Bradman A, Eskenazi B. Environ Sci Technol. 2015 Mar 17;49(6):3940-8. (SP Goal 3)



NIEHS News and Highlights

Translation & Outreach

- Deepwater Horizon Efforts Continue 5 Years Out
 - GuLF Study
 - Research Partnerships
 - Disaster Research Response
- SRP Vapor Intrusion Community Education Event
- Tribal Stories of Health and the Environment Community Forum

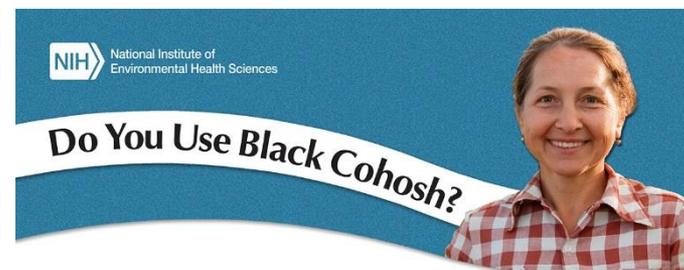
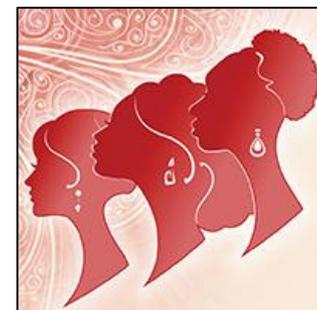


NIEHS News and Highlights

Translation & Outreach

- A Community Conversation on Toxics, Climate Change & Health in Brooklyn, NY
- NYT Retro Report video on flame retardants
- Women's Health Awareness Day
- NIEHS Scholars Connect Symposium
- Clinical studies recruitment:
 - Black cohosh
 - Asthma and microbiome

RETROREPORT



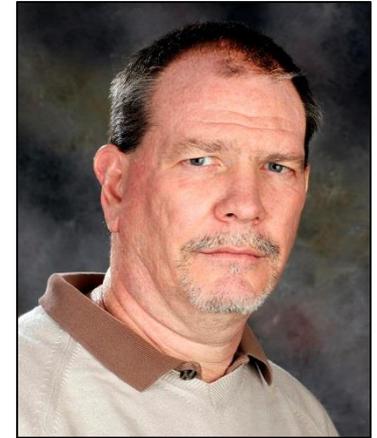
Data and Technology

- White House Climate and Health Data Nexus
- Climate Change and Human Health Innovation Challenge Series and NIH briefing
- Climate Change and Children's Health Policy Roundup
- NIH Roadmap Epigenomics Program
- Entrepreneurship Academy

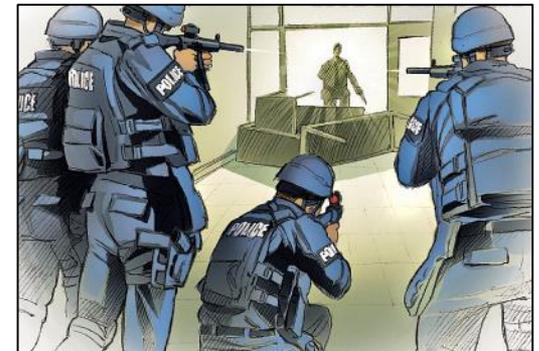


Preparing for Emergencies at NIEHS

- Emergency drill for all NIEHS staff on June 17, 2015, 9:30-10:30 am
- Allows employees to practice evacuations and shelter-in-place
- Day-long emergency exercise with local law enforcement agencies and EPA
- Emergency scenario – active shooter on campus



Mitch Williams, NIEHS
Chief of Operations and
Security Branch



Meetings and Events

- IOM Roundtable: The Interplay Between Environmental Exposures and Obesity (Mar 2-3)
SP Goals 1, 2, 3, 4, 5, 6, 10, 11
- International Symposium on Alternatives Assessment (Mar 5-6) **SP Goals 1, 7**
- Population-Based Rodent Resources for Environmental Health Sciences (Mar 18-19)
SP Goals 1, 3

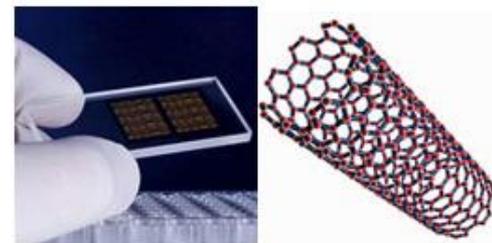


International
Symposium on
**Alternatives
Assessment**



Meetings and Events

- Society of Toxicology (Mar 22-26)
SP Goals 1, 3, 8, 11
- NIEHS Centers for Nanotechnology Health Implications Research Consortium (May 6-7) SP Goals 1, 3
- Undergraduate Research Conference at Georgetown University





Upcoming Meetings

- Climate Justice meeting, NIEHS, June 8-9
- Workshop on new approaches for detecting environmentally-induced DNA damage and mutation, NIEHS, June 11-12
- Elucidating Gene-Environment Interactions in Neurological Disorders and Disease, UC-Davis, CA, June 17-19
- Targeting Environmental and Neurodevelopmental Risks (TENDR) Workshop, DC, June 23-24
- Virtual Forum on Near-Roadway Pollution & Health, online, July 10
- Epidemiological Analysis of Exposure to Chemical Mixtures Workshop, NIEHS, July 13-14
- Safer Chemicals through Better Data, EPA in RTP, July 15-16



Staff Updates



Jennifer Martinez, Ph.D.

Head, Inflammation and
Autoimmunity Group



Shaun Halloran

Operations Manager
for EHP

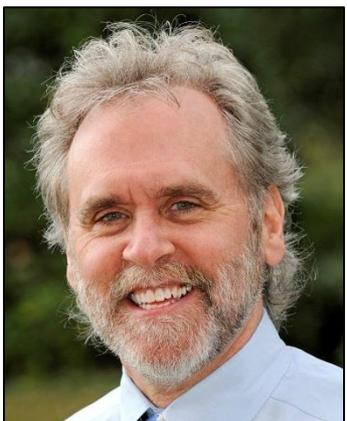


Awards and Recognition – NIH Director’s Awards

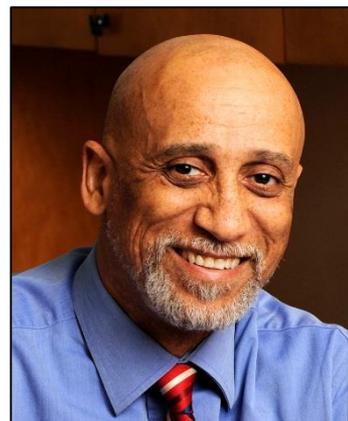
NIH Epigenomics Roadmap Program



Lisa Chadwick, Ph.D.



Pat Mastin, Ph.D.



Fred Tyson, Ph.D.



Astrid Haugen, Ph.D.



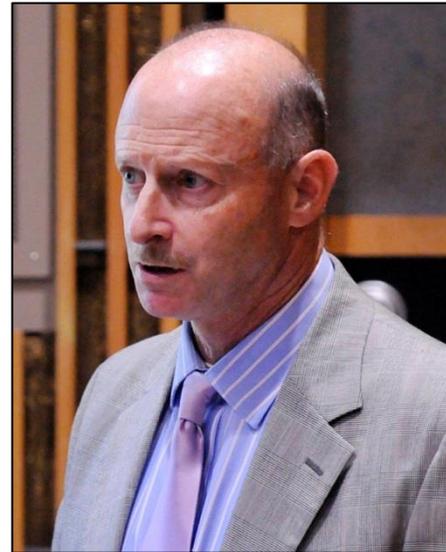
Kimberly McAllister, Ph.D.

Awards and Recognition – NIH Director’s Awards

NIH Microphysiological Systems (Tissue Chip) Program Team



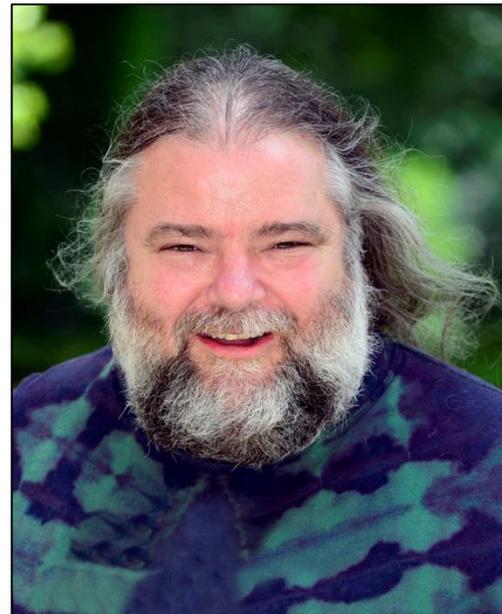
David Balshaw, Ph.D.



Les Reinlib, Ph.D.



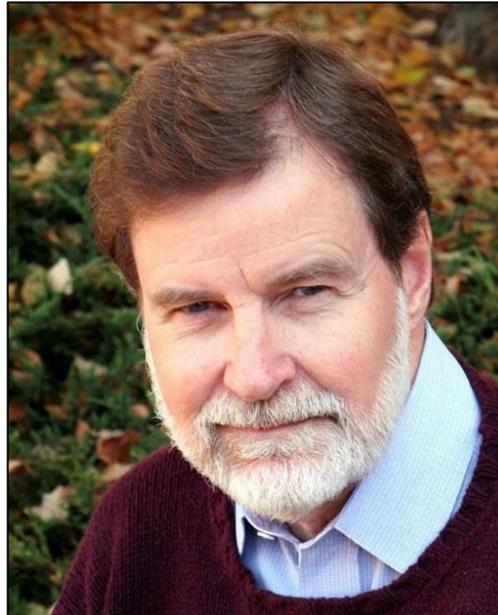
Awards and Recognition – NIH Director’s Awards Sexual and Gender Minority (SGM) Research Coordinating Committee



William (QB) Quattlebaum

Awards and Recognition – NIH Director's Awards

Ruth L. Kirschstein Mentoring Award



Samuel Wilson, M.D.

Awards and Recognition – NIEHS



Dale Sandler, Ph.D.

Dr. Nathan Davis Award
for Outstanding
Government Service

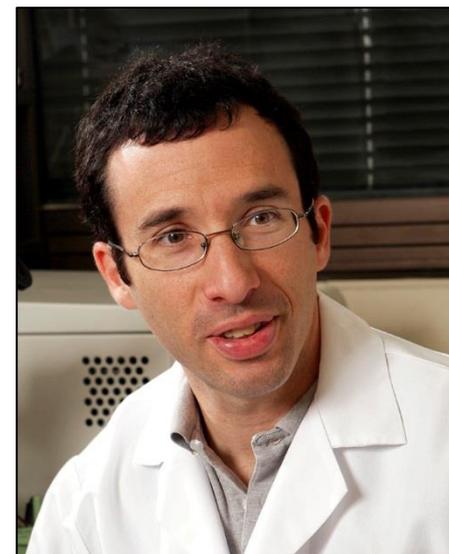
American Medical
Association



Darryl Zeldin, M.D.

Inductee

Association of
American Physicians



Michael Fessler, M.D.

Inductee

American Society for
Clinical Investigation



Awards and Recognition – NIEHS



Joyce Goldstein, Ph.D.

NIH Scientist Emeritus



Pierre Bushel, Ph.D.

Distinguished
Alumni Award

University of Massachusetts at
Amherst



Awards and Recognition – NIEHS



Xiaoling Li, Ph.D.

NIH Tenure



Erin Quist, D.V.M.

Roger O. McClellan
Student Award



Shannon Farris, Ph.D.

2014 Society for
Neuroscience Early
Career Policy Fellow



Awards and Recognition – New ONES Awardees



Neel Aluru, Ph.D.

Woods Hole Oceanographic
Institution



Kara Bernstein, Ph.D.

University of Pittsburgh

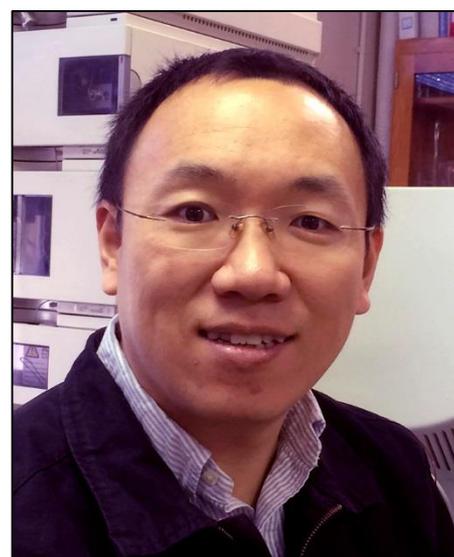


Awards and Recognition – New ONES Awardees



Samir Kelada, Ph.D.,

University of North Carolina
at Chapel Hill

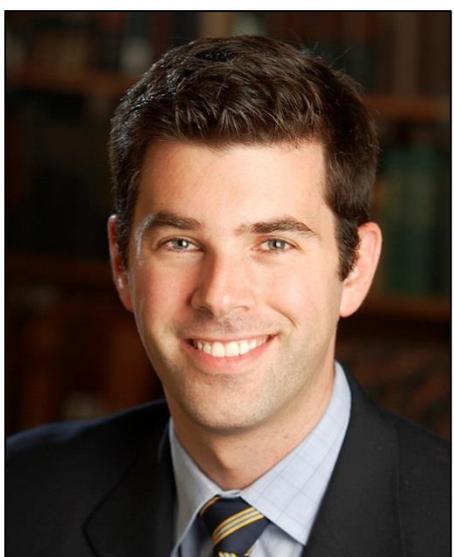


Kun Lu, Ph.D.,

University of Georgia



Awards and Recognition – New ONES Awardees



William Mack, M.D.,
University of
Southern California



Dana Miller, Ph.D.,
University of Washington

Awards and Recognition



NIH 2015 Ethics Program Innovation Award
in Recognition of Innovative Ethics Education and Communication Practices



Awards and Recognition – NIEHS Grantees



Corin Hammond, Ph.D.

2015 Karen Wetterhahn
Memorial Award



Frederica Perera, Ph.D.

2015 Heinz Environment
Award



Phil Brown, Ph.D.

2015 American Sociological
Association
Practice and Outreach Award



Awards and Recognition – NIEHS Grantees



Julian Schroeder, Ph.D.
Elected to National
Academy of Sciences



**Environmental Resource
Program at UNC**
2015 UNC Office of the
Provost Engaged
Scholarship Award



National Institute of Environmental Health Sciences
Your Environment. Your Health.

Thank You!

