Report to the NTP Board of Scientific Counselors

John R. Bucher, Ph.D., DABT
NTP Associate Director
National Institute of Environmental Health Sciences

December 7, 2017
Awards and Recognition

ACLAM
Board of Directors
Mentor of the Year Award

Angela King-Herbert, D.V.M.,
Leader of the NTP Laboratory Animal Medicine Group

Diplomate of the American Board of Toxicology

Kristan Ryan, Ph.D.
Toxicology Branch
3D HepaRG spheroid cultures (384-well)

• Report on Carcinogens:
  – Six haloacetic acids as “reasonably anticipated to be carcinogens”

• Research Reports:
  – Biological activity of Bisphenol A (BPA) structural analogues and functional alternatives
  – Absence of formaldehyde-induced neoplasia in Trp53 haploinsufficient mice exposed by inhalation

• Technical Reports:
  – 2,3-butanedione
  – p-Chloro-alpha,alpha,alpha-trifluorotoluene
  – Dietary zinc

Toxicity Report
  -TBBPA-bis(2,3-DBPE)
Assessing models of additivity and identifying interactions

- Dioxin/PCB toxic equivalence factor studies (old)
- Polycyclic Aromatic Compound Mixtures Assessment Program (PAC-MAP) https://ntp.niehs.nih.gov/results/areas/pacs/index.htm

Comparing between component-based and whole mixtures approaches

- PAC-MAP: Testing whole mixtures of cookstove emissions and Superfund mixtures

Informing decisions on which chemicals to include in a cumulative risk assessment

- Hypolipidemics and phthalates: Assessing potential additivity of chemicals that disrupt different pathways involved in testosterone production

Component-based
• Keynotes

  – Decision Contexts in a Changing Toxicology Paradigm—Gary Ginsberg, Connecticut Department of Public Health

  – Standards of Proof, Presumptions, and Defaults: Tools for Thinking About Environmental Health Protections—Carl Cranor, University of California, Riverside

  – Building and Sustaining Trust in Decision Making Processes—Branden Johnson, Decision Research
• Case Studies

- Decision Making Within Endocrine Disruptor Screening Program: A Conversation on Replacing the Uterotrophic Assay—Lynn Goldman, The George Washington University, and Stan Barone, U.S. Environmental Protection Agency

- Towards Aquatic Monitoring of Emerging Contaminants—Tara Sabo-Attwood, University of Florida

- Product Development and Market Decisions—Meredith Williams, Department of Toxic Substances Control California
Motivating Change at the Institutional Level

- Institutional Policy Changes and Growing Inequality in U.S. Health and Mortality—Mark Hayward, University of Texas, Austin

- Experiences with Paradigm Change in U.S. Government Science and Regulatory Decision—James (‘Jim’) Jones, Consumer Specialty Products Association

- Motivating Institutional Will to Change: ICCVAM Processes to Incorporate Data from Alternative Toxicity Testing Methods into Decisions About Classification, Labelling, and Risk Assessment—Anna Lowit, U.S. Environmental Protection Agency

- Experiences with Paradigm Change in European Union Science and Regulatory Decisions—Maurice Whelan, European Commission, Joint Research Centre (JRC), Ispra, Italy
Thank you

https://niehs.nih.gov