SOT 57th Annual Meeting and ToxExpo
March 11-14, 2018
NIEHS and NTP Activities

NIEHS, NTP, and EHP Exhibit
Booth 1451/1453/1550/1552
CC Exhibit Hall

ToxExpo Hours:

- Monday, March 13: 9:15 AM – 4:30 PM
- Tuesday, March 14: 9:15 AM – 4:30 PM
- Wednesday, March 15: 9:15 AM – 4:30 PM

Research Funding Information Room — Room 221B

- Monday, March 12: 9:30 AM – 11:30 AM, 12:30 PM – 3:00 PM
- Tuesday, March 13: 9:30 AM – 11:00 AM, 12:30 PM – 4:30 PM
- Wednesday, March 14: 9:30 AM – 11:30 AM, 12:30 PM – 4:30 PM

Sunday, March 11, 5:15 PM to 6:30 PM, CC Stars at Night Ballroom B1

Awards Ceremony
Arnold J. Lehman Award
Linda Birnbaum, Ph.D., NIEHS and NTP Director

Sunday, March 11, 8:15 AM to Noon, CC 300 Level

Continuing Education Course: In Vitro Testing: Tales from the Real World
Chairperson(s): Kelly Coleman, Medtronic PRL, Minneapolis, MN; and Amy Clippinger, PETA International Science Consortium Ltd., Norfolk, VA.

Includes:
Developing, Testing, and Implementing Novel Testing Strategies for Skin Sensitization.
Nicole Kleinstreuer, NTP NICEATM, Research Triangle Park, NC.
Saturday, March 11, 8:15 AM to Noon, CC 300 Level

**Continuing Education Course: Developmental Neurotoxicity Testing: Current Practices and Latest Advancements**
Chairperson(s): Kristen Ryan, NIEHS, Research Triangle Park, NC; and Susan Makris, US EPA, Washington, DC.

**Includes:**
**Introduction and Course Goals.**
Kristen Ryan, NIEHS, Research Triangle Park, NC.

**Alternate Approaches to Advancing Developmental Neurotoxicity Testing in the 21st Century.**
Mamta Behl, NIEHS, Research Triangle Park, NC.

Sunday, March 11, 1:15 PM to 5:00 PM, CC 300 Level

**Continuing Education Course: NGS-Based Technologies Enable Biomarker Development and Discovery in Toxicology**
Chairperson(s): B. Alex Merrick, NIEHS, Research Triangle Park, NC; and Andrew B. Nixon, Duke University Medical Center, Durham, NC.

**Includes:**
**Next-Generation Sequencing Platforms in Toxicology.**
B. Alex Merrick, NIEHS, Research Triangle Park, NC.

**Whole Exome Sequencing in Toxicology.**
Julie F. Foley, NIEHS, Research Triangle Park, NC.

Sunday, March 11, 7:30 PM to 9:30 PM, CC Hemisfair Ballroom C1

**Student/Postdoctoral Scholar Mixer**

Monday, March 12, 6:15 AM to 7:45 AM, CC Room 220

**SOT Mentoring Breakfast (Registration Required)**

Monday, March 12, 9:00 AM to 10:00 AM, CC Room 217C

**Exhibitor-Hosted Session: Implementing New Approaches to Evaluate the Safety of Chemicals and Medical Products in the United States**
Presented by NIEHS and NTP

Monday, March 12, 9:15 AM to Noon, CC Hemisfair Ballroom C2

**Symposium Session: Cancer Risk Assessment of PAH Mixtures: Current and Future Directions**
Chairperson(s): M. Margaret Pratt, US EPA, Washington, DC; and Cynthia Rider, National Toxicology Program/NIEHS, Research Triangle Park, NC.
Abstract 1022
9:45 AM  In Vitro Screening to In Vivo Testing of Polycyclic Aromatic Hydrocarbons at the National Toxicology Program. C. Rider, National Toxicology Program/NIEHS, Research Triangle Park, NC.

Monday, March 12, 9:15 AM to Noon, CC Room 304

Platform Session: Investigating Mode-of-Action in Chemical Carcinogenesis
Chairperson(s): B. Bhaskar Gollapudi, Exponent, Inc., Alexandria, VA; and Matthew LeBaron, The Dow Chemical Company, Midland, MI.

Abstract 1064
9:35 AM  The SIX1 Oncoprotein Mediates Aberrant Uterine Basal Cell Development Following Neonatal Exposure to Diethylstilbestrol.
A.A. Suen1, W.N. Jefferson2, C.J. Williams2, and C.E. Wood1. 1US EPA, Research Triangle Park, NC; and 2NIEHS, Research Triangle Park, NC.

Monday, March 12, 9:15 AM to 4:30 PM, CC Exhibit Hall

Poster Session: Immunotoxicity
Chairperson(s): Emanuela Corsini, Università degli Studi di Milano, Milan, Italy; Peter W. Dornbos, Michigan State University, East Lansing, MI; Victor J. Johnson, Burleson Research Technologies, Morrisville, NC; and Colleen McLoughlin, Scivera LLC, Morgantown, WV.

Abstract 1109, Poster Board P139
Immunotoxicity Evaluation of Sulfolane following Developmental Exposure in Rats and Adult Exposure in Mice. V.J. Johnson1, M.I. Luster1, G.R. Burleson1, F.G. Burleson1, C. Blystone2, V.G. Robinson2, and D.R. Germolec2. 1Burleson Research Technologies, Morrisville, NC; and 2NIEHS, Research Triangle Park, NC.

Poster Session: Cardiovascular Toxicology: In Vivo Systems
Chairperson(s): Marjan Boerma, University of Arkansas for Medical Sciences, Little Rock, AR; and Lorraine Chalifour, McGill University, Montreal, QC, Canada.

Abstract 1161, Poster Board P203
Engineered Nanomaterial Exposure: Effects on Epigenetic and MiRNA Regulation of Cardiac Mitochondria. Q.A. Hathaway1, C.E. Nichols2, D.L. Shepherd1, A.J. Durr1, P.A. Stapleton3, A.B. Abukabda1, T.R. Nurkiewicz1, and J.M. Hollander1. 1West Virginia University, Morgantown, WV; 2NIEHS, Research Triangle Park, NC; and 3Rutgers, The State University of New Jersey, Piscataway, NJ.

Poster Session: Air Pollution: Ozone
Chairperson(s): Mehdi Hazari, US EPA, Research Triangle Park, NC; and Robert M. Tighe, Duke University, Durham, NC.

Abstract 1238, Poster Board P329
Scavenger Receptor B-I Mitigates Ozone-Induced Pulmonary Inflammation through Efferocytosis.
M.X. Hodge1, S. Reece1, B. Kilburg-Basnyat1, B. Luo1, J. Madenspacher1, and K. Gowdy1. 1East Carolina University, Greenville, NC; and 2NIEHS, Research Triangle Park, NC.
Poster Session: Biotransformation and Metabolism
Chairperson(s): Danica DeGroot, US EPA, Research Triangle Park, NC; Gabriel A. Knudsen, NCI, Research Triangle Park, NC; and Bhagavatula Moorthy, Baylor College of Medicine, Houston, TX.

Abstract 1302, Poster Board P400
Evaluation of BPAF and BPS Metabolism in Primary Human Hepatocytes (PHHs) and Tox21 Cell Lines. W. Qu, D.M. Crizer, S. Ferguson, and M. DeVito. NIEHS, Research Triangle Park, NC.

Poster Session: Mechanistic Insights in Liver Damage
Chairperson(s): Avinash Kumar, Southern University and A&M College, Baton Rouge, LA; Amy Roe, Procter & Gamble Company, Williamstown, KY; and Shraddha Thakkar, National Center for Toxicological Research, Jefferson, AR.

Abstract 1313, Poster Board P411
High-Throughput Transcriptomics to Dissect the Inter-Individual Variability of the Unfolded Protein Response Activation Using a Large Panel of Primary Human Hepatocytes. B. van de Water1, M. Niemeijer1, S. Huppelschoten1, W. den Hollander1, R. Paules2, and L. Richert3. 1Leiden University, Leiden, Netherlands; 2NIEHS, Research Triangle Park, NC; and 3KalyCell, Strassbourg, France.

Abstract 1345, Poster Board P443

Poster Session: Neurodevelopmental Toxicity II: Autism, ASD, and Childhood Mental Disorders
Chairperson(s): Alison Harrill, NIEHS, Research Triangle Park, NC; and Gaurav Kaushik, University of Wisconsin–Madison, Madison, WI.

Abstract 1436, Poster Board P543

Abstract 1437, Poster Board P544

Poster Session: Food Safety and Nutrition
Chairperson(s): Alexandra Lobach, Intertek Scientific & Regulatory Consultancy, Mississauga, ON, Canada; Sumira Phatak, Utah State University, Logan, UT; and Vinicius D. Venancio, Texas A&M University, College Station, TX.
Abstract 1602, Poster Board P842
Development of a Consensus Approach for Botanical Safety Evaluations. J.C. Griffiths¹, J. Edwards², S. Fitzpatrick³, C.L. Galli⁴, A.W. Hayes⁵, C. Mahony⁶, D.S. Marsman⁷, N.H. Oberlies⁸, L. O’Keeffe⁶, A.L. Roe⁹, N.J. Walker⁹, and C.L. Wilson¹⁰. ¹Council for Responsible Nutrition, Washington, DC; ²DSM Nutritional Products, Kaiseraugst, Switzerland; ³US FDA/CFSAN, College Park, MD; ⁴Universita Degli Studi Di Milano, Milan, Italy; ⁵Michigan State University, East Lansing, MI; ⁶The Procter & Gamble Co., Egham, United Kingdom; ⁷University of North Carolina at Greensboro, Greensboro, NC; ⁸The Procter & Gamble Co., Cincinnati, OH; ⁹NIEHS, Research Triangle Park, NC; and ¹⁰The Coca-Cola Company, Atlanta, GA.

Abstract 1613, Poster Board P853
Evaluating the Applicability of Read-Across Tools and High-Throughput Screening Data for Food Relevant Chemicals. J. Wynder¹,², J. Ovesen³, A. Maier³, R. Judson⁴, N. Kleinstreuer⁵, and M. Krishan². ¹University of Wisconsin-Madison, Madison, WI; ²ILSI North America, Washington, DC; ³University of Cincinnati, Cincinnati, OH; ⁴US EPA, Research Triangle Park, NC; and ⁵NICEATM, Research Triangle Park, NC.

Monday, March 12, 11:30 AM to 1:00 PM, CC Hemisfair Ballroom C1
In Vitro Toxicology Lecture and Luncheon: More Than Skin Deep: When Alternative Approaches Outperform Animal Tests (TICKET REQUIRED)
Chairperson(s): Mindy Reynolds, Washington College, Chestertown, MD. Lecturer: Nicole Kleinstreuer, NIEHS, Research Triangle Park, NC.

Monday, March 12, 12:10 PM to 1:30 PM, CC Room 302
Informational Session: Changes to the Common Rule: Regulations and Implications for Human Research
Chairperson(s): Michael Madden, US EPA, Chapel Hill, NC; and Judith T. Zelikoff, New York University School of Medicine, Tuxedo Park, NY.

Abstract 1653
12:57 PM NIH Human Subject Research: Changes, Challenges, and Expectations. K. Gray, NIEHS, Research Triangle Park, NC.

Monday, March 12, 1:45 PM to 4:30 PM, CC Stars at Night Ballroom B2
Symposium Session: Decoding Oxidative Stress from Inflammation: Implications for Exposure, Toxicity, and Disease
Chairperson(s): Maria B. Kadiiska, NIEHS/NIH, Research Triangle Park, NC; and Thomas J. van’t Erve, NIEHS/NIH, Research Triangle Park, NC.

Abstract 1677
1:45 PM Biomarkers of Oxidative Stress. M.B. Kadiiska. NIEHS/NIH, Research Triangle Park, NC.

Abstract 1679
2:35 PM Overcoming Bias in F2-Isoprostane Oxidative Stress Measurement: Quantifying the Contribution of Inflammation. T.J. van’t Erve. NIEHS/NIH, Research Triangle Park, NC.
Abstract 1680

Monday, March 12, 3:00 PM to 4:30 PM, CC Room 220

Research Funding Insights Session: Research Funding 101: Multiple Perspectives on the NIH Grant Process
 NIH Grants Overview. Michelle Heacock, NIEHS
Keys to Success. Neel Aluru, Woods Hole Oceanographic Institute
Networking/Open Discussion. NIH Staff

Monday, March 12, 5:00 PM to 6:30 PM, Grand Hyatt Republic A

Updates from Multi-Stakeholder Collaborations to Advance Non-Animal Approaches for Respiratory Toxicology
Co-organized by IIVS, PISC, and NICEATM

Tuesday, March 13, 8:00 AM to 10:45 AM, CC Room 304

Platform Session: Immunotoxicity
Chairperson(s): Rebecca Dearman, University of Manchester, Manchester, United Kingdom; and Janice Lansita, ToxStrategies Inc., Kennett Square, PA.

Abstract 1766
8:32 AM  Prenatal Exposure to Perfluoroalkyl Substances (PFASs) and Associations with Childhood Asthma and Allergy Related Outcomes and Infectious Diseases. U.C. Nygaard¹, A.O. Impinen¹, S.J. London², K.K. Ferguson², L.S. Haug¹, M.P. Longnecker², and B. Granum¹. ¹Norwegian Institute of Public Health, Oslo, Norway; and ²NIEHS, Research Triangle Park, NC.

Tuesday, March 13, 9:15 AM to 4:30 PM, CC Exhibit Hall

Poster Session: Reproductive Toxicology I
Chairperson(s): Enrica Bianchi, Brown University, Providence, RI; Colette N. Miller, US EPA, Research Triangle Park, NC; and Yong Pu, Michigan State University, East Lansing, MI.

Abstract 1775, Poster Board P102
Assessment of Oxybenzone, Octylmethoxycinnamate, Octylsalate, and Octocrylene in Endocrine Disruptor Screening Panel Studies. B. McIntyre¹, L. Zorrilla², S. Borghoff², and P. Foster¹. ¹NIEHS, Research Triangle Park, NC; and ²ILS, Research Triangle Park, NC.

Abstract 1783, Poster Board P110
Biological Relevance of Key Events (KE) In Utero in the Androgen Adverse Outcome Pathway Network (AOPn) to Adverse Effects in F1 Male Rats. L.E. Gray¹, J. Conley¹, C. Lambright¹, N. Evans¹, V. Wilson¹, and P. Foster². ¹US EPA, Research Triangle Park, NC; and ²NIEHS, Research Triangle Park, NC.
Abstract 1799, Poster Board P126
Effects of Developmental Exposure to Bisphenol AF on Sprague Dawley Rats. M. Bharadwaj, J. Warmack, and S.E. Fenton. NIEHS, Research Triangle Park, NC.

Abstract 1817, Poster Board P144
Comparative Assessment of Bisphenol AF and Bisphenol S in Perinatally-Exposed Sprague Dawley Rats Via Dosed Feed. V. Sutherland1, H. Cunny1, B. McIntyre1, J. Furr2, C. Hebert2, K. Turner3, and P.M. Foster4. 1NIEHS, Research Triangle Park, NC; 2Southern Research, Birmingham, AL; and 3Janssen, Spring House, PA.

Abstract 1823, Poster Board P152
Pre- and Post-Natal TBBPA Exposure Affects Thyroid Hormone Levels of Wistar Han Rats. C.M. Samon, S.E. Gillera, A.J. Filgo, R. Wilson, L. Birnbaum, and S.E. Fenton. NIEHS, Research Triangle Park, NC.

Abstract 1828, Poster Board P157
Selective Biological Action of Bisphenol A, AF, and S Involves Differential Coregulator Interactions. Y. Li1, L. Perera1, L. Coons1, K. Burns1, J. Ramsey1, K. Pelch1, R. Houtman2, R. Beuningan1, C. Teng1, C. Teng1, and K. Korach1. 1NIEHS, Research Triangle Park, NC; and 2PamGene International, s-Hertogenbosch, Netherlands.

Abstract 1841, Poster Board P170
Bisphenol A Glucuronide Induces Early Genes Associated with Adipogenesis in Murine 3T3-L1 Preadipocytes. V.A. Chappell, and S.E. Fenton. NIEHS, Research Triangle Park, NC.

Abstract 1874, Poster Board P205
Dioxin-Like Compounds, Cytokines, and Hypertension in the Anniston Community Health Survey Follow-Up. M. Pavuk1, E. Yang1, L. Birnbaum2, and M. Cave3. 1CDC/ATSDR, Atlanta, GA; 2NIEHS, Research Triangle Park, NC; and 3University of Louisville, Louisville, KY.

Abstract 1875, Poster Board P206
Community Cohort: Exposure Distributions and Associations with Thyroid and Kidney Function. B.E. Blake1, S.M. Pinney2, E.P. Hines3, S.E. Fenton1, and K.K. Ferguson1. 1NIEHS, Research Triangle Park, NC; 2University of Cincinnati, Cincinnati, OH; and 3US EPA, Research Triangle Park, NC.

Abstract 1883, Poster Board P214
Association between Environmental Exposures and Steatohepatitis Mechanisms in the Anniston Community Health Survey Phase II. M. Cave1, H. Clair1, C. Pinkston1, S. Rai1, E. Yang2, M. Pavuk2, and L. Birnbaum3. 1University of Louisville, Louisville, KY; 2CDC/ATSDR, Atlanta, GA; and 3NIEHS, Research Triangle Park, NC.
Abstract 1896, Poster Board P229
Maternal Smoking, AhRR Methylation, and Gene Expression in Umbilical Cord Blood CD14+ Monocytes. M.A. Bergens1, A.M. Keshava1, I.J. Thompson1, G.S. Pittman1, M.R. Campbell1, M. Wan1, C. Hoyo2, and D.A. Bell1. 1NIEHS, Research Triangle Park, NC; and 2North Carolina State University, Raleigh, NC. Sponsor: C. Keshava.

Abstract 1905, Poster Board P238
PCB Exposure and Altered DNA Methylation in the Anniston Community Health Survey. G.S. Pittman1, X. Wang1, M.R. Campbell1, S.J. Coulter1, J.R. Olson2, M. Pavuk3, L.S. Birnbaum3, and D.A. Bell1. 1NIEHS, Research Triangle Park, NC; 2University of Buffalo, Buffalo, NY; and 3CDC/ATSDR, Atlanta, GA. Sponsor: C. Keshava.

Abstract 1947, Poster Board P280

Abstract 1962, Poster Board P295
A Distinct Class of Antioxidant Response Elements Is Consistently Activated in Tumors with Nrf2 Hyperactivating Mutations. D. Levings1, X. Wang2, D. Bell2, and M. Slattery1. 1University of Minnesota, Duluth, MN; and 2NIEHS, Research Triangle Park, NC. Sponsor: K. Wallace.

Abstract 1965, Poster Board P298
**Poster Session: Bioinformatics and In Silico Modeling**
Chairperson(s): Gurjot Kaur, University of Konstanz, Konstanz, Germany; Juan C. M. Morales, Florida International University, Miami, FL; and Susan Tilton, Oregon State University, Corvallis, OR.

**Abstract 2103, Poster Board P440**
Identifying and Annotating Hallmark Genes Relevant to Toxicogenomics. B. Kiros¹, D. Mav², L. Everett², R. Shah², R. Paules², and A. Scott³. ¹NIEHS, Research Triangle Park, NC; and ²Sciome LLC, Research Triangle Park, NC.

**Poster Session: Emerging Technologies**
Chairperson(s): Seyoum Ayehunie, MatTek Corporation, Ashland, MA; Mary Beth Genter, University of Cincinnati, Cincinnati, OH; Yong Qian, NIOSH, Morgantown, WV; and Aaron T. Wright, Pacific Northwest National Laboratory, Richland, WA.

**Abstract 2136, Poster Board P473**
Population Variability in Neurotoxicity Outcomes Modeled In Vitro with Diversity Outbred Neural Progenitor Cells. A. Harrill¹, M. Behl¹, T. Choi², L. Page², L. Everett³, M. Balik-Meisner³, D. Porter², K. Witt¹, and R. Paules¹. ¹NIEHS, Research Triangle Park, NC; ²Predictive Biology, La Jolla, CA; and ³Sciome LLC, Research Triangle Park, NC.

**Poster Session: Neurotoxicology: Neurodegenerative Disease II: Parkinson’s Disease and Dopaminergic Toxicity**
Chairperson(s): Qiang Gu, US FDA, Jefferson, AR; and Katrina Jew, University of Rochester School of Medicine and Dentistry, Rochester, NY.

**Abstract 2213, Poster Board P554**
Cytochrome C as a Peroxidase Plays Role in α-Synuclein Radical Formation: Implications of α-Synuclein in Alterations of Biological Pathways and Neuronal Death II Maneb- and Paraquat-Induced Model of Parkinson’s Disease. A. Kumar, D. Ganini, and R. Mason. NIEHS, Research Triangle Park, NC.

**Abstract 2225, Poster Board P566**
Parkinson’s Disease and Environmental Chemical Exposure: A Systematic Evidence Map. W.A. Boyd¹, A. Antonić², V.R. Walker¹, B. Kiros¹, N.S. Sipes³, S.S. Aeurbach¹, M.V. Behl¹, M. Dottori², A.A. Rooney¹, and K.A. Thayer³. ¹NIEHS, Research Triangle Park, NC; ²University of Melbourne, Melbourne, Australia; and ³US EPA, Research Triangle Park, NC.

**Poster Session: Pesticides**
Chairperson(s): David Geter, Bayer CropScience, Research Triangle Park, NC; and Tanzir Mortuza, University of Georgia, Athens, GA.

**Abstract 2273, Poster Board P616**

**Poster Session: AH Receptor**
Chairperson(s): George Acquaah-Mensah, Massachusetts College of Pharmacy and Health Sciences, Worcester, MA; and Barry McIntyre, NIEHS, Research Triangle Park, NC.
Poster Session: Alternatives to Mammalian Models I
Chairperson(s): Stephen Ferguson, NIEHS, Research Triangle Park, NC; Sreenivasa Ramaiahgari, NIEHS, Research Triangle Park, NC; and Qiang Shi, US FDA/NCTR, Jefferson, AR.

Abstract 2354, Poster Board P078
Variability of LD50 Values from Rat Oral Acute Toxicity Studies: Implications for Alternative Model Development. A. Karmaus\textsuperscript{1}, J. Fitzpatrick\textsuperscript{2}, D. Allen\textsuperscript{1}, G. Patlewicz\textsuperscript{2}, N. Kleinstreuer\textsuperscript{3}, and W. Casey\textsuperscript{3}. \textsuperscript{1}ILS, Research Triangle Park, NC; \textsuperscript{2}US EPA, Research Triangle Park, NC; and \textsuperscript{3}NIEHS, Research Triangle Park, NC.

Poster Session: Persistent Organic Pollutants
Chairperson(s): Ian Huck, University of Kansas Medical Center, Kansas City, KS; and Michael Petriello, University of Kentucky, Lexington, KY.

Abstract 2377, Poster Board P731
Telomeres as a Potential Target for the Chronic Toxicity of Polychlorinated Biphenyls (PCBs). S.L. VanEtten\textsuperscript{1}, M.R. Bonner\textsuperscript{1}, X. Ren\textsuperscript{1}, L.S. Birnbaum\textsuperscript{2}, and J.R. Olson\textsuperscript{1}. \textsuperscript{1}University at Buffalo, Buffalo, NY; and \textsuperscript{2}NIEHS, Research Triangle Park, NC.

Poster Session: Exposure Assessment: Applications
Chairperson(s): Clara Chan, Veritox Inc., Redmond, WA; and Ruth N. Wangia, University of Georgia, Athens, GA.

Abstract 2400, Poster Board P756
Potential Health Aspects of Metals’ Exposures in Female Vietnamese Electronic Waste Recyclers. J.S. Kincaid\textsuperscript{1}, A.J. Schecter\textsuperscript{1}, R. Crandall\textsuperscript{1}, and L. Birnbaum\textsuperscript{2}. \textsuperscript{1}University of Louisville, Louisville, KY; and \textsuperscript{2}NIEHS, Research Triangle Park, NC.

Poster Session: Exposure Assessment: Tools and Methods Development
Chairperson(s): Marie Bourgeois, University of South Florida, Tampa, FL; and John Lipscomb, US EPA, Cincinnati, OH.

Abstract 2414, Poster Board P771
The National Toxicology Program Research on Synthetic Turf/Recycled Tire Crumb Rubber: 14-Day Exposure Characterization Studies of Crumb Rubber in Female Mice Housed on Mixed-Bedding or Dosed Via Feed or Oral Gavage. G.K. Roberts\textsuperscript{1}, A. Brix\textsuperscript{2}, M. Cora\textsuperscript{1}, K. Elsass\textsuperscript{3}, D. Fallacara\textsuperscript{3}, W. Gwinn\textsuperscript{1}, S. Masten\textsuperscript{1}, J. Richey\textsuperscript{3}, B. Sparrow\textsuperscript{3}, H. Toy\textsuperscript{3}, S. Waidyanatha\textsuperscript{1}, N. Walker\textsuperscript{1}, and M. Stout\textsuperscript{1}. \textsuperscript{1}NIEHS, Research Triangle Park, NC; \textsuperscript{2}Experimental Pathology Laboratories, Inc., Research Triangle Park, NC; and \textsuperscript{3}Battelle, Columbus, OH.

Abstract 2415 Poster Board P772
The National Program Synthetic Turf/Recycled Tire Crumb Research: Characterization of a Crumb Rubber Lot for Use in In Vitro and In Vivo Studies. T. Cristy\textsuperscript{1}, G. Roberts\textsuperscript{2}, B. Burback\textsuperscript{1}, S. Masten\textsuperscript{2}, and S. Waidyanatha\textsuperscript{2}. \textsuperscript{1}Battelle Memorial Institute, Columbus, OH; and \textsuperscript{2}NIEHS, Research Triangle Park, NC.

Abstract 2416, Poster Board P773
Abstract 2417, Poster Board P774
Benchtop Testing Supporting Feasibility to Conduct In Vivo Studies of Synthetic Turf/Recycled Tire Crumb Rubber. J. Richey¹, H. Toy¹, K. Elsass³, D. Fallacara¹, G. Roberts², M. Stout², and B. Sparrow¹. ¹Battelle, Columbus, OH; and ²NIEHS, Research Triangle Park, NC.

Abstract 2430, Poster Board P787
Targeted and Non-Targeted Analysis of Serum Pools to Provide Chemical Exposure Data for Exposure Modeling and Chemical Prioritization. B.A. Wetmore¹, J.F. Wambaugh¹, K. Favela², A. Yau², S.M. Hays³, R. Church⁴, A. Rice⁴, S. Garantziotis⁴, and L.L. Aylward⁵. ¹US EPA, Research Triangle Park, NC; ²Southwest Research Institute, San Antonio, TX; ³Summit Toxicology, LLP, Bozeman, MT; ⁴NIEHS, Research Triangle Park, NC; and ⁵Summit Toxicology, LLP, Falls Church, VA.

Poster Session: Oxidative Injury and Redox Biology
Chairperson(s): Joshua Chandler, Emory University, Atlanta, GA; Brian Day, National Jewish Health, Denver, CO; and Ashwini Sri Hari, University of Colorado, Aurora, CO.

Abstract 2451, Poster Board P808

Poster Session: Computational Approaches in Safety Assessment
Chairperson(s): Agnes Karmaus, Integrated Laboratory Systems Inc., Research Triangle Park, NC; and Ignacio J. Tripodi, University of Colorado, Boulder, Boulder, CO.

Abstract 2476, Poster Board P835
Channel Interactions and Robust Inference for Ratiometric β-Lactamase Assay Data: A Tox21 Library Analysis. F. Melnikov¹, J. Hsieh², N.S. Sipes³, and P.T. Anastas¹. ¹Yale University, New Haven, CT; ²Kelly Government Solutions, Research Triangle Park, NC; and ³NIEHS, Research Triangle Park, NC.

Abstract 2495, Poster Board P854
A Non-Parametric Approach for Selecting Benchmark Responses for In Vitro or Alternative Animal Model Data. J. Hsieh¹, J. Lin², A. Sedykh³, F. Parham⁴, A. Shapiro⁴, N.S. Sipes⁴, K. Ryan⁴, M. Behl⁴, R.S. Paules⁴, and S.S. Auerbach⁴. ¹Kelly Government Solutions, Research Triangle Park, NC; ²US FDA, Sliver Spring, MD; ³Sciome LLC, Research Triangle Park, NC; and ⁴NIEHS, Research Triangle Park, NC.

Abstract 2508, Poster Board P867
Confidence in Fitting and Hitting Concentration-Response Data: Tox21 10k Library Pipeline Comparison. N.S. Sipes¹, R. Huang², K. Shockley¹, M.T. Martin³, A.J. Shapiro¹, J. Addington⁴, S. Auerbach¹, R. Paules¹, R. Judson³, K. Houck³, H. Hong⁵, and J. Hsieh⁴. ¹NIEHS, Research Triangle Park, NC; ²NCATS, Bethesda, MD; ³US EPA, Research Triangle Park, NC; ⁴Kelly Government Solutions, Research Triangle Park, NC; and ⁵US FDA/NCTR, Jefferson, AR.

Poster Session: Computational Tools for Safety Assessment
Chairperson(s): Yi-Hsien C. Cheng, Kansas State University, Manhattan, KS; Patricia Ruiz, ATSDR/CDC, Atlanta, GA; and Elizabeth B. Shipp, Bayer SAS, Sophia Antipolis Cedex, France.
Abstract 2513, Poster Board P875
BMDExpress 2.2: New Features and Enhancements for Toxicogenomic Dose-Response Modeling.
A. Sedykh\textsuperscript{1}, J. Phillips\textsuperscript{1}, D. Svoboda\textsuperscript{1}, S. Patel\textsuperscript{1}, T. Saddler\textsuperscript{2}, S. Ferguson\textsuperscript{3}, R. Shah\textsuperscript{1}, and S. Auerbach\textsuperscript{2}.
\textsuperscript{1}Sciome LLC, Research Triangle Park, NC; and \textsuperscript{2}NIEHS, Research Triangle Park, NC.

Abstract 2523, Poster Board P885
Applying a High-Throughput PBTK Model for IVIVE. G.S. Honda\textsuperscript{1,2}, R.G. Pearce\textsuperscript{1,2}, L.L. Pham\textsuperscript{1,2}, B.A. Wetmore\textsuperscript{1}, N.S. Sipes\textsuperscript{3}, R.W. Setzer\textsuperscript{1}, R.S. Thomas\textsuperscript{1}, and J.F. Wambaugh\textsuperscript{1}. \textsuperscript{1}US EPA, Research Triangle Park, NC; \textsuperscript{2}Oak Ridge Institute for Science and Education, Oak Ridge, TN; and \textsuperscript{3}NIEHS, Research Triangle Park, NC.

Abstract 2524, Poster Board P886
Virtual Screening of Chemicals for Estrogen and Androgen Activities. K. Mansouri\textsuperscript{1,2}, N. Kleinstreuer\textsuperscript{3}, C. Grulke\textsuperscript{2}, A.M. Richard\textsuperscript{2}, I. Shah\textsuperscript{2}, A.J. Williams\textsuperscript{2}, and R.S. Judson\textsuperscript{2}. \textsuperscript{1}ScitoVation, Research Triangle Park, NC; \textsuperscript{2}US EPA, Research Triangle Park, NC; and \textsuperscript{3}NIEHS, Research Triangle Park, NC.

Abstract 2525, Poster Board P887
Improved Searching in the Chemical Effects in Biological Systems (CEBS) Database Leads to Greater Utility of NTP Data. E.R. Sheridan\textsuperscript{1}, J. Jackson\textsuperscript{1}, A. Paleja\textsuperscript{1}, C. Martini\textsuperscript{1}, A. Rashid\textsuperscript{1}, I. Lea\textsuperscript{1}, and J. Fostel\textsuperscript{2}. \textsuperscript{1}ASRC Federal Vistronix, Morrisville, NC; and \textsuperscript{2}NIEHS, Research Triangle Park, NC. Sponsor: M. Hooth.

Abstract 2528, Poster Board P890
A Transparent and Reusable Data Analysis/Data Visualization Infrastructure for Developmental Neurotoxicity Screening Using In Vitro and Alternative Animal Model Systems. A.J. Shapiro\textsuperscript{1}, J. Hsieh\textsuperscript{2}, F. Parham\textsuperscript{1}, J. Addington\textsuperscript{2}, K. Ryan\textsuperscript{1}, and M. Behl\textsuperscript{1}. \textsuperscript{1}NIEHS, Research Triangle Park, NC; and \textsuperscript{2}Kelly Government Solutions, Durham, NC.

Abstract 2534, Poster Board P896
ICE Tools for Aligning Assay Endpoints to Adverse Outcome Pathways. S.M. Bell\textsuperscript{1}, L.D. Burgoon\textsuperscript{2}, J. Phillips\textsuperscript{3}, P. Ceger\textsuperscript{1}, A. Karmaus\textsuperscript{1}, D. Allen\textsuperscript{1}, W. Casey\textsuperscript{4}, and N. Kleinstreuer\textsuperscript{4}. \textsuperscript{1}ILS, Research Triangle Park, NC; \textsuperscript{2}US Army Engineer Research and Development Center, Vicksburg, MS; \textsuperscript{3}Sciome LLC, Research Triangle Park, NC; and \textsuperscript{4}NIEHS, Research Triangle Park, NC.

Abstract 2536, Poster Board P898

Abstract 2537, Poster Board P899

Abstract 2541, Poster Board P903
Identifying Attributes That Influence In Vitro-to-In Vivo Concordance by Comparing Tox21 Bioactivity versus DrugMatrix Transcriptomic Responses to 130 Chemicals. W.D. Klaren¹, C. Ring², M.A. Harris³, C.M. Thompson³, S. Borghoff⁴, N. Sipes⁵, J. Hsieh⁵, S. Auerbach⁵, and J.E. Rager⁵. ¹Texas A&M University, College Station, TX; ²ToxStrategies, Austin, TX; ³ToxStrategies, Houston, TX; ⁴ToxStrategies, Cary, NC; and ⁵NIH, Research Triangle Park, NC.

Tuesday, March 13, 11:00 AM to Noon, CC Stars at Night Ballroom B4

Meet the Directors: A Conversation with Linda S. Birnbaum, Mark Johnson, and Edward Perkins

Chairperson(s): Leigh Ann Burns Naas, Gilead Sciences, Inc., Foster City, CA.
Panelists: Linda S. Birnbaum, NIH, Research Triangle Park, NC; Mark S. Johnson, US Army Public Health Center, Aberdeen Proving Ground, MD; and Edward J. Perkins, US Army Engineer Research and Development Center, Vicksburg, MS.

Tuesday, March 13, 11:00 AM to 12:20 PM, CC Room 301

Roundtable Session: Alternative Toxicology Approaches to Evaluate Next-Generation Nicotine Products

Chairperson(s): John R. Fowle III, Science to Inform, LLC, Pittsboro, NC; and Erin Hill, Institute for In Vitro Sciences, Gaithersburg, MD.

Abstract 2546

Tuesday, March 13, 1:30 PM to 4:15 PM, CC Room 303

Platform Session: Persistent Organic Pollutants

Chairperson(s): Erin P. Hines, US EPA, Research Triangle Park, NC; and Thomas F. Webster, Boston University School of Public Health, Boston, MA.

Abstract 2595
1:50 PM  Environmental PCBs in the Serum and Breast Milk of Lactating North Carolina Women. E.P. Hines¹, G. Kissling², and S.E. Fenton². ¹US EPA, Research Triangle Park, NC; and ²NIH, Research Triangle Park, NC.

Abstract 2599
Workshop Session: Reaching Hazard Conclusions for Endocrine-Disrupting Chemicals: Adapting Systematic Review Methods
Chairperson(s): Johanna R. Rochester, The Endocrine Disruption Exchange (TEDX), Grand Junction, CO; and Vickie R. Walker, NIEHS, Research Triangle Park, NC.

Abstract 2627
9:15 AM Developmental Neurotoxicity of PBDEs: Integrating Evidence and Consideration of Published Reviews in the NAS Case Study Systematic Review. A.A. Rooney. NIEHS, Research Triangle Park, NC.

Workshop Session: Reducing the Uncertainty of Read-Across Predictions by New Approach Methodologies: Application in Regulatory Human Risk Assessments
Chairperson(s): Ivan Rusyn, Texas A&M University, Texas, TX; and Nicole Kleinstreuer, NTP NICEATM, Research Triangle Park, NC.

Abstract 2634
10:10 AM Current and Future Opportunities for US Regulatory Application of Read-Across. N. Kleinstreuer. NIEHS, Research Triangle Park, NC.

Platform Session: Zika Pathophysiology and Potential Intervention
Chairperson(s): Pedro Del Valle, US FDA, Silver Spring, MD; and Anthony M. Franchini, University of Rochester, Rochester, NY.

Abstract 2658
10:20 AM Oral Exposure to 2-[1-Methyl-2-(4-phenoxyphenoxy)ethoxy]pyridine (MPEP) for 28 Days Alters Antibody Responses in Harlan Sprague-Dawley Rats. S.C. Burleson¹, V.J. Johnson¹, F.G. Burleson¹, G.R. Burleson¹, B. McIntyre², V.G. Robinson³, S. Masten², and D.R. Germolec². ¹Burleson Research Technologies, Morrisville, NC; and ²NIEHS, Research Triangle Park, NC.

Poster Session: Nanotoxicity: Inhalation
Chairperson(s): Pius Joseph, NIOSH, Morgantown, WV; and Todd Stueckle, NIOSH, Morgantown, WV.

Abstract 2733, Poster Board P178
Role of Toll-Like Receptor 5 in Multi-Walled Carbon Nanotube-Induced Lung Injury. S. Hussain¹, A. Taylor², L. Degraff¹, M. George¹, A. Rice¹, J.C. Bonner², and S. Garantziotis³. ¹NIEHS, Research Triangle Park, NC; and ³North Carolina State University, Raleigh, NC.
Abstract 2735, Poster Board P180
Multi-Walled Carbon Nanotube Inhalation Alters Expression of SP-D and Inflammation in the Rat Lung.
J.M. Bustamante¹, C.H. Flayer¹, C. Bautista², E. Laing³, A. Gupta², J. Richey², G.L. Baker², M. Stout³, K. Pinkerton¹, A. Haczku¹, and L.S. Van Winkle¹. ¹University of California Davis, Davis, CA; ²Battelle, West Jefferson, OH; and ³NIEHS, Research Triangle Park, NC.

Poster Session: Nanoparticles: Protein Biocorona
Chairperson(s): Vamsi K. Kodali, NIOSH, Morgantown, WV; and Michael Madden, US EPA, Chapel Hill, NC.

Abstract 2750, Poster Board P201
Induction of Beta Amyloid Radical Formation through Immuno-Spin Trapping of Copper Nanoparticles and Ions: Implication of Protein Radicals in Alzheimer’s Disease. J.J. Bang¹,², A. Kumar¹, B. Dalton², and R. Mason¹. ¹NIEHS, Research Triangle Park, NC; and ²North Carolina Central University, Durham, NC.

Abstract 2768, Poster Board P242
Sex-Specific Metabolic and Liver Gene Expression Changes in Wistar Rats following TBBPA Exposure. S.A. Gillera, A. Filgo, G. Kissling, K. Shockley, L. Birnbaum, and S. Fenton. NIEHS, Research Triangle Park, NC.

Abstract 2769, Poster Board P243
Comparative Effects of High Fiber and Standard Diet and Vehicle (Corn Oil or Deionized Water) on the Maternal Health Parameters of New Zealand White (NZW) Rabbits. J. Furr¹, C. Hébert¹, P. Bushdid¹, J. Toomey¹, K. Gilbert¹, A. King-Herbert², B. McIntyre², and H. Cunny². ¹Southern Research, Birmingham, AL; and ²NIEHS, Research Triangle Park, NC.

Poster Session: Respiratory Toxicology: Tobacco Products
Chairperson(s): Daniel Conklin, University of Louisville, Louisville, KY; Brian Day, National Jewish Health, Denver, CO; and Gunnar Johanson, Karolinska Institutet, Stockholm, Sweden.

Abstract 2808, Poster Board P330
Chronic Toxicity and Carcinogenicity of 2,3-Butanedione (Diacetyl) Vapors in Rodents. D.L. Morgan¹, G.P. Flake¹, M.D. Stout¹, C.L. Johnson², and L.H. Kooistra³. ¹NIEHS, Research Triangle Park, NC; and ²Charles River Laboratories, Durham, NC.

Poster Session: Non-Pharmaceutical Safety Assessment
Chairperson(s): James J. Freeman, ExxonMobil Biomedical Sciences Inc., Annandale, NJ; Lynea Murphy, The Dow Chemical Company, Midland, MI; and Gladys Ouedraogo, L’Oreal, Aulnay sous bois, France.

Abstract 2910, Poster Board P436
Evaluation of FXR-Active Chemicals Identified from Tox21 Screening. J. Hamm¹, P. Ceger¹, X. Chang¹, E. Mauill², D. Mahapatra³, M. Knuth³, M.A. Lingerfelt⁴, S. Ekins⁴, M. Xia⁵, and S.W. Kullman⁵. ¹ILS, Research Triangle Park, NC; ²NIEHS, Research Triangle Park, NC; ³North Carolina State University, Raleigh, NC; ⁴Collaborations Pharmaceuticals, Inc., Raleigh, NC; and ⁵NCATS, Bethesda, MD.

Poster Session: Natural Products
Chairperson(s): Luisa Camacho, US FDA, Jefferson, NC; and Monica Valentovic, Marshall University School of Medicine, Huntington, WV.
Abstract 2923, Poster Board P451
An Approach to Evaluate Chemical-Induced Biological Response Similarities across Multiple Echinacea purpurea Extracts. K. Ryan¹, S. Ferguson¹, S. Ramaiahgari¹, J. Rice¹, P. Dunlap¹, M. DeVito¹, S. Auerbach¹, J. Pierfelice², T. Cristy², E. Mutlu¹, S. Waidyanatha¹, and C. Rider¹. ¹NIEHS, Research Triangle Park, NC; and ²Battelle Memorial Institute, Columbus, OH.

Poster Session: Metals and Metal Mixtures
Chairperson(s): Joseph R. Landolph, University of Southern California, Los Angeles, CA; Chionyedua T. Onwordi, Lagos State University, Lagos, Nigeria; Alicia L. F. Taylor, Exponent, Inc., Bellevue, WA; and James Wise, University of Kentucky, Lexington, KY.

Abstract 2991, Poster Board P543
Development and Validation of an Analytical Method for Total Vanadium in Sprague-Dawley Rat Plasma by Inductively Coupled Plasma-Mass Spectrometry (ICP-MS). J.M. Harrington¹, L.G. Haines¹, A.S. Essader¹, E.P. Poitras¹, F.X. Weber¹, K.E. Levine¹, R.A. Fernando¹, V.G. Robinson², and S. Waidyanatha². ¹Research Triangle Institute, Research Triangle Park, NC; and ²NIEHS/NTP, Research Triangle Park, NC.

Poster Session: Neurotoxicology: General
Chairperson(s): Ayse Basak Engin, Gazi University, Ankara, Turkey; Carla Garza-Lombo, National Autonomous University of Mexico, Mexico City, Mexico; and Brad Hobson, University of California Davis, Davis, CA.

Abstract 3040, Poster Board P595

Abstract 3041, Poster Board P596

Poster Session: Skin
Chairperson(s): Yoke-Chen Chang, Rutgers, The State University of New Jersey, Piscataway, NJ; and Emily N. Reinke, Army Public Health Center, Aberdeen Proving Ground, MD.

Abstract 3062, Poster Board P637
Dermal Uptake of Three Brominated Phenols: Tetrabromobisphenol A (TBBPA), Tetrabromobisphenol A bis (2,3-dibromopropyl ether) (TBBPA-BDBPE), and 2,4,6-Tribromophenol (TBP). A.C. Richards¹, G.A. Knudsen¹, M.F. Hughes², and L.S. Birnbaum¹. ¹NCI, Research Triangle Park, NC; and ²US EPA, Research Triangle Park, NC.
Abstract 3070, Poster Board P645
A Multi-Centre Validation Study of Amino Acid Derivative Reactivity Assay (ADRA):
A Novel In Chemico Alternative Test Method for Skin Sensitization. A. Ono1, S. Watanabe2,
T. Sugawara2, K. Wakabayashi3, Y. Tahara3, N. Horie4, K. Fujimoto4, K. Kusakari5, Y. Kurokawa5,
T. Sozu6, T. Nakayama6, T. Kusao6, T. Kawakami7, K. Kojima8, H. Kojima9, J. Richmond9,
N. Kleinstreuer10, K. Bae-Hwa11, Y. Yamamoto12, M. Fujita12, and T. Kasahara12. 1Okayama
University, Okayama, Japan; 2Lion Corp., Kanagawa, Japan; 3Mitsui Chemical Inc., Chiba, Japan;
4Sumitomo Chemical Co., Ltd., Osaka, Japan; 5Nissan Chemical Ind. Ltd., Saitama, Japan; 6Nissan
Chem. Ind. Ltd., Saitama, Japan; 7Tokyo University of Science, Tokyo, Japan; 8National Institute of
Health Sciences, Tokyo, Japan; 9Food and Drug Safety Center, Kanagawa, Japan; 10Dr. Jon Richmond:
Advice and Consultancy, Cupar, United Kingdom; 11NICEATM, Research Triangle Park, NC; 12Keimyung
University, Dalseo-Gu, Korea, Republic of; and 13Fujifilm Corp., Kanagawa, Japan.

Poster Session: Alternatives to Mammalian Models III: Liver, Ocular, and Skin Alternatives
Chairperson(s): Johan Lundqvist, Swedish University of Agricultural Sciences, Uppsala, Sweden; Rosie
Sneed, University of the District of Columbia, Washington, DC; Zhengxi Wei, University of Rhode Island,
Kingston, RI; and Ravi Sajja, Texas Tech University HSC, Amarillo, TX.

Abstract 3153, Poster Board P786
Total Number of Benchmark Concentrations from High-Throughput Transcriptomics and Organotypic
Liver Models as Quantitative Indicators of Liver Injury Potential. S.S. Ferguson, S.C. Ramaiyahgari,
T. Saddler, S. Auerbach, N. Sipes, J.R. Rice, P.E. Dunlap, B. Merrick, R. Shah, M.J. DeVito, and
R.S. Paules. NIEHS, Research Triangle Park, NC.

Abstract 3154, Poster Board P787
Functional Characterization of Human and Rat 3D Hepatocyte Models and Application of High-
Throughput Transcriptomics (S1500+) in Toxicology Screening. S.C. Ramaiyahgari, T. Saddler,
S. Waidyanatha, D. Dixon, N.S. Sipes, A.B. Merrick, J.R. Rice, P.E. Dunlap, M.J. DeVito, R.S. Paules,
S.S. Auerbach, and S.S. Ferguson. NIEHS, Research Triangle Park, NC.

Abstract 3160, Poster Board P793
Performance of the OptiSafe Ocular Irritation Assay in a Three-Laboratory Validation Study.
N. Choksi1, A. Daniel1, S. Lebrun2, M. Nguyen3, G. DeGeorge1, J.A. Willoughby2, W. Casey3, and
D. Allen1. 1ILS, Research Triangle Park, NC; 2Lebrun Labs, LLC, Anaheim, CA; 3MB Research Laboratories,
Spinnerstown, PA; 4Cyprotec/Evotec, Kalamazoo, MI; and 5NIEHS, Research Triangle Park, NC.

Poster Session: Pharmacokinetics and Disposition
Chairperson(s): Xanthi I. Couroucli, Pediatrics, Baylor College of Medicine, Houston, TX; and John Yu,
University of Georgia, Athens, GA.

Abstract 3204, Poster Board P844
Comparative Disposition of Bisphenol S and Bisphenol AF following Gavage Administration in Harlan
Sprague Dawley Rats and B6C3F1/N Mice and Hepatocytes In Vitro. S. Waidyanatha1, S.R. Black2,
V. Sutherland1, V.G. Robinson1, and T.R. Fennell2. 1NIEHS, Research Triangle Park, NC; and 2RTI
International, Research Triangle Park, NC.

Abstract 3205, Poster Board P845
2,4,6-Tribromophenol (TBP) Disposition and Kinetics in Female Sprague-Dawley Rats after Single and
Park, NC.
Symposium Session: Atherosclerosis as a Model to Understand the Combined Effects of Environmental Chemical and Non-Chemical Stressors
Chairperson(s): Danielle J. Carlin, NIEHS, Research Triangle Park, NC; and Michelle Olive, NHLBI, Bethesda, MD.

Abstract 3225
1:30 PM  Introduction. D. Carlin. NIEHS, Research Triangle Park, NC.

Regional Interest Session: Toxicology and Public Health Solutions for Environmental Emergency-Related Contamination Events
Chairperson(s): Ivan Rusyn, Texas A&M University, College Station, TX; and Michael Honeycutt, Texas Commission on Environmental Quality, Austin, TX.

Abstract 3254
2:15 PM  Designing Effective Rapid Toxicological Research in Response to Environmental Public Health Disasters. S. Masten. NIEHS, Research Triangle Park, NC.

Platform Session: Alternative Models for Assessing Developmental Toxicity
Chairperson(s): Ellen Fritsche, IUF, Düsseldorf, Germany; and Thomas B. Knudsen, US EPA, Research Triangle Park, NC.

Abstract 3262
2:50 PM  Valproate Analogue Developmental Toxicity Potency in a Human Pluripotent Stem Cell-Based Assay Is Concordant with In Vivo Potency. J. Palmer¹, A. Smith¹, R. Burrier¹, E. Donley¹, F. Kirchner³, D. Kroese², R. Stober³, and N. Kleinstreuer⁴. ¹Stemina Biomarker Discovery, Madison, WI; ²The Netherlands Organization for Applied Scientific Research (TNO), The Hague, Netherlands; ³IfADo – Leibniz Research Centre for Working Environment and Human Factors, Dortmund, Germany; and ⁴NIEHS, Research Triangle Park, NC.

Platform Session: Male Reproductive Toxicity: Evaluating Key Events and Adverse Outcomes
Chairperson(s): Bethany Hannas, The Dow Chemical Company, Midland, MI; and Pei-Li Yao, North Carolina State University, Cary, NC.

Abstract 3278
3:10 PM  Assessment of Endocrine and Developmental Toxicity of Tris(4-chlorophenyl)methane (TCPMe) in Perinatally-Exposed Harlan Sprague Dawley Rats Via Dosed Feed. T.D. Hubbard², N.R. Catlin², V. Sutherland¹, H. Cunny¹, B. McIntyre¹, J. Furr⁴, C. Hébert³, and P.M. Foster¹. ¹NIEHS, Research Triangle Park, NC; ²Pfizer Inc., Groton, CT; and ³Southern Research, Birmingham, AL.
Informational Session: The US Tox21 Collaboration: A Decade of Experience and a New Vision for the Future
Chairperson(s): Bette Meek, University of Ottawa, Ottawa, ON, Canada; and Kevin M. Crofton, US EPA, Research Triangle Park, NC.

Abstract 3291
5:02 PM  The Future of Tox21: Changing the NTP Landscape. R. Paules. NIEHS, Research Triangle Park, NC.
5:34 PM  Validation for 21st-Century Science. W. Casey. NIEHS, Research Triangle Park, NC.

Thursday, March 15, 8:30 AM to 11:15 AM, CC Stars at Night Ballroom B4

Workshop Session: A Search for Biomarkers of Neurotoxicity: A Practical Approach
Chairperson(s): David Herr, US EPA, Research Triangle Park, NC; and Michael Aschner, Albert Einstein College of Medicine, Bronx, NY.

Abstract 3318
10:40 AM  Workshop Discussion. A. Li¹, and A. Harrill².¹Exponent, Oakland, CA; and ²NIEHS, Research Triangle Park, NC.

Thursday, March 15, 8:30 AM to 11:15 AM, CC Stars at Night Ballroom B1

Informational Session: The NIEHS Nanotechnology Health Implications Research (NHIR) Consortium
Chairperson(s): Srikanth S. Nadadur, NIEHS, Research Triangle Park, NC; and Robert L. Tanguay, Oregon State University, Corvallis, OR.

Abstract 3319
8:30 AM  Introduction. S. Nadadur. NIEHS, Research Triangle Park, NC.