



SOT 52nd Annual Meeting and ToxExpo
San Antonio, Texas • March 10-14, 2013
NIEHS and NTP Activities

NIEHS, NTP, and EHP Exhibit

Booth 1218/1217/1117

Monday, March 11, 9:00 AM - 4:30 PM

- NTP CEBS Demonstration: 2:00 PM - 4:00 PM

Tuesday, March 12, 8:30 AM - 4:30 PM

- NTP CEBS Demonstration: 10:00 AM - 12:00 PM
- NTP DrugMatrix: 2:00 PM – 4:00 PM

Wednesday, March 13, 8:30 AM - 4:30 PM

- NTP Meta Data Viewer Graphing Demonstration: 9:00 AM - 11:00 AM & 12:00 PM - 2:00 PM
- NTP CEBS Demonstration: 2:00 PM - 4:00 PM

Special Symposium: Meet the Directors

NIEHS and NTP Director, Linda Birnbaum

Monday, March 11, 1:00 PM - 3:30 PM, Grand Ballroom C1 (CC)

Exhibitor Hosted Session: National Toxicology Program

Implementing Systematic Review at the NTP

Andrew Rooney and Abee Boyles

Tuesday, March 12, 2:45 PM – 3:45 PM; Room 0007B (CC)

Sunday, March 10, 2013

8:15 AM - 12:00 PM, Room 217 C&D (CC), Continuing Education, Chair M P Waalkes

Toxic Effects of Metals

Abstract #: 7

Toxic Effects of Metals (M F Hughes, M P Waalkes)

Metals in Carcinogenesis & Developmental Origins of Adult Disorders (E J Tokar)

1:15 PM - 5:00 PM, Room 217 A&B (CC), Continuing Education, Chair B McIntyre

Gonadal Development, Function, and Toxicology

Abstract #: 9

Gonadal Development, Function, and Toxicology (B McIntyre, J A Flaws)

Sunday, March 10, 2013 (cont'd)

2:00 PM - 3:15 PM, Grand Ballroom K (Marriott Rivercenter), Lecture

Undergraduate Education Program: Career Opportunities in Toxicology

My Career: A Winding Road (L Birnbaum)

Monday March 11, 2013

9:15 AM - 12:00 PM, Room 205 (CC), Platform Session, Speaker M Behl

Advances in Neurobehavioral and Neuropathology Assessment of Chemicals

Abstract #: 53

Perinatal Toxicity and Carcinogenicity Studies of Styrene Acrylonitrile Trimer, a Ground Water Contaminant (M Behl, S A Elmore, M R Hejtmancik, D K Gerken, R S Chhabra)

9:15 AM - 12:00 PM, Grand Ballroom C1 (CC), Symposium Session

Genetic and Epigenetic Determinants of Susceptibility to Environmental and Occupational Toxicants

Abstract #: 17

Integrated Genetic and Genomic Approaches to Understand Susceptibility to Toxicant-Induced Lung Disease (S R Kleeberger)

9:15 AM - 12:00 PM, Room 214 C&D (CC), Symposium Session, Speaker B McIntyre

Translatable Indicators of Testicular Toxicity: Inhibin B, microRNAs, and Sperm Signatures

Abstract #: 25

Translatable Indicators of Testicular Toxicity: Inhibin B, microRNAs, and Sperm Signatures (K Boekelheide, B McIntyre, M Coulson, R E Chapin)

Abstract #: 26

Biomarkers of Testicular Injury: Where Have We Been (B McIntyre)

9:30 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Bioinformatics and Computational Toxicology: Systems and Strategies

Abstract #: 115, Poster Board #: 201

Effect of Technical Variation and Bioinformatics on the Biological Discovery in a Mechanistic Toxicogenomics Study (B Gong, J Xu, Z Su, H Hong, J Meehan, H Fang, W Ge, S S Auerbach, C Wang, L Shi, W Tong)

Abstract #: 127, Poster Board #: 213

Compound Toxicity Profiling and Prioritization Using Tox21 Phase I Quantitative High-Throughput Screening (qHTS) Cytotoxicity Data (J Hsieh, A Sedykh, R Huang, M Xia, R R Tice)

Abstract #: 144, Poster Board #: 230

Modelability of ToxCast Phase I Datasets (A Golbraikh, A Sedykh, E Muratov, R Shah, W A Boyd, M Smith, G Zhao, H Zhu, J H Freedman, A Tropsha)

Monday March 11, 2013 (cont'd)

9:30 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Biotransformation/Cytochrome P450

Abstract #: 303, Poster Board #: 522

Metabolism and Disposition of 2-Ethylhexyl-*P*-Methoxycinnamate in Male and Female Harlan Sprague-Dawley Rats and B6C3F1/N Mice after Gavage and Intravenous Administration (S Waidyanatha, R Snyder, Y Hong, S Watson, S Black, B McIntyre, J Mathews)

Abstract #: 308, Poster Board #: 527

Metabolism and Disposition of Bisphenol AF in Male and Female Harlan Sprague-Dawley Rats following Gavage and Intravenous Administration (T Fennell, R Snyder, P Patel, S Black, J Mathews, M Mercado-Feliciano, S Waidyanatha)

Abstract #: 309, Poster Board #: 528

Absorption, Distribution, Metabolism, and Excretion Studies of *n*-Butylbenzenesulfonamide in Harlan Sprague-Dawley Rats following Gavage Administration (S Black, S Watson, J Mathews, C Rider, S Waidyanatha)

9:30 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Inflammation and Disease

Abstract #: 258, Poster Board #: 452

Role of Mannose-Binding Lectin in the Pulmonary Response to Ozone (J Ciencewicki, K E Gerrish, P Bushel, S R Kleeberger)

9:30 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Inhalants and Cardiopulmonary

Abstract #: 209, Poster Board #: 403

Gene Expression in Bronchiolitis Obliterans-Like Lesions in Rats Exposed to 2,3-Pentanedione (D L Morgan, B A Merrick, K E Gerrish, P S Stockton, J F Foley, W M Gwinn, G P Flake)

Abstract #: 226, Poster Board #: 420

An *In Vitro* Cell-Based Assay to Measure the Solubilization of Indium-Containing Particles by Macrophages (W M Gwinn, W Qu, R W Bousquet, M P Waalkes, D L Morgan)

1:00 PM - 3:30 PM, Grand Ballroom C1 (CC), Featured Session

Meet the Directors (L Birnbaum)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Chemical Mixtures

Abstract #: 564, Poster Board #: 417

Evaluation of Additivity of Binary Mixtures of Perfluoroalkyl Acids (PFAAs) on Peroxisome Proliferator-Activated Receptor-Alpha (PPAR α) Activation *In Vitro* (C J Wolf, C Rider, C Lau, B D Abbott)

Monday March 11, 2013 (cont'd)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Chemical Mixtures (cont'd)

Abstract #: 578, Poster Board #: 431

Generalized Concentration Addition Models Some but Not All Interactions of Mixtures of Androgen- and Estrogen-Receptor Active Compounds in High-Throughput Screening Assays (F Parham, M DeVito, R Huang, M Xia, B Collins, C Rider, R R Tice)

Abstract #: 581, Poster Board #: 434

Chemical Characterization of Complex Aromatic Flame Retardants for Toxicological Studies (R Harris, M Kroenke, J Van Scoy, Q Lawrence, B O'Brien, A Ammenhauser, L Siemann, K Aillon, J Algaier, B Collins, S Waidyanatha)

Abstract #: 582, Poster Board #: 435

Preparation of Toxicological Studies: Principal Component Analysis of Isopropylated Phenol Phosphate (J Algaier, M Kroenke, L Lucas, K Bauer, K Aillon, L Siemann, R Harris, B Collins, S Waidyanatha)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Epigenetics

Abstract #: 526, Poster Board #: 345

Epigenetics of Arsenic Carcinogenesis and Location of Methylated DNA Sites Underlying Gene Expression Changes (B Alex Merrick, E J Tokar, D P Phadke, R R Shah, M Wang, O Gordon, G M Wright, M Burke, S A Baxter, K E Pelch, R R Tice, M P Waalkes)

Abstract #: 529, Poster Board #: 348

Chromatin Context Modulates Genome-Wide p53 Sequence-Specific Occupancy and Exposure-Induced Gene Expression (D A Bell, D Su, M R Campbell, X Wang)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Liver

Abstract #: 643, Poster Board #: 518

Leptin Modulates Toxicity Associated Steatohepatitis through Peroxynitrite in Kupffer Cells (S Das, A Kumar, D Ganini, E J Tokar, J Corbett, M Kadiiska, M P Waalkes, A Diehl, R P Mason, S Chatterjee)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Nanotoxicology-Carbonaceous Materials

Abstract #: 433, Poster Board #: 208

Loss of Epithelial Monolayer Integrity following Exposure of Primary Human Airway Cells to Multiwalled Carbon Nanotubes (R J Snyder, S Hussain, R Wine, J Roberts, J M Brown, N J Walker, S Garantziotis)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Pharmacokinetics and Disposition

Abstract #: 484, Poster Board #: 302

Disposition and Kinetics of Tetrabromobisphenol a (TBBPA) in Female Wistar-Han Rats
(G A Knudsen, J M Sanders, A M Sadik, L S Birnbaum)

Abstract #: 487, Poster Board #: 305

Dose-Response Relationship of an Environmental Mixture of Pyrethroids following an Acute Oral Administration in the Rat (M F Hughes, D G Ross, J M Starr, E J Scollon, M J Wolansky, K M Crofton, M DeVito)

Abstract #: 489, Poster Board #: 307

Preliminary Toxicokinetics of N-butylbenzenesulfonamide after a Single Intravenous or Gavage Administration to Harlan Sprague-Dawley Rats and B6C3F1/N Mice (S Hong, S Gibbs, S Graves, D Kobs, C Rider, A Martone, S Waidyanatha)

Abstract #: 491, Poster Board #: 309

Characterization of the Fate of β -Hexabromocyclododecane (HBCD) in Mice (J M Sanders, G A Knudsen, A M Sadik, L S Birnbaum)

Abstract #: 495, Poster Board #: 313

Analysis of tris(2-Chloroisopropyl)phosphate Metabolites in Rat Plasma for Toxicology Studies (B Collins, S Waidyanatha, M Stout, A Gutierrez, R Mathias, C Dillon, D Slade, C Crutch, K Aillon, J Algaier, R Harris)

Abstract #: 500, Poster Board #: 318

Accumulation of β -N-Methylamino-L-Alanine in Tissues following Repeat Oral Administration to Harlan Sprague-Dawley Rats (C Garner, C J Wegerski, M Doyle-Eisele, J Lucak, S Waidyanatha, J D McDonald, J M Sanders)

Abstract #: 502, Poster Board #: 320

Development of Sustained Release Buprenorphine for Use as an Improved Analgesic in Toxicology Studies: Assessment of Formulation Pharmacokinetics (L Koetzner, W Stokes, W Lance, G Wnorowski, N South, J Boulet)

Abstract #: 513, Poster Board #: 331

Comparative Disposition and Metabolism of 2, 2'-Dithiobisbenzanilide following Dermal, Oral, and Intravenous Administration to Harlan Sprague-Dawley Rats and B6C3F1/N Mice (J Lucak, C Garner, C J Wegerski, J M Sanders, M Doyle-Eisele, J D McDonald, S Waidyanatha)

Monday March 11, 2013 (cont'd)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Pharmacokinetics and Disposition (cont'd)

Abstract #: 514, Poster Board #: 332

Effect of Vehicle on the Dermal Absorption of 2-Hydroxy-4-Methoxybenzophenone Harlan Sprague-Dawley Rats and B6C3F1/N Mice (C J Wegerski, C Garner, M Doyle-Eisele, J M Sanders, J D McDonald, S S Auerbach, S Waidyanatha)

2:00 PM - 4:45 PM, Room 206 (CC), Platform Session, Chair: M Kadiiska

Biomonitoring: Emerging Markers and Methods

Abstract #: 801

Antioxidants and Oxidative Modification of Biomolecules: Can They Identify a Biomarker of Ozone Oxidative Stress? (M Kadiiska)

2:00 PM - 4:45 PM, Room 214 A&B (CC), Workshop Session, Speaker P M Foster

Life-Course Models for Ensuring Children's Health Protection

Abstract #: 784

New Strategies for Addressing Toxicity Testing across the Lifespan (P M Foster)

2:00 PM - 4:45 PM, Room 205 (CC), Platform Session

Mode of Action and Human Relevance of Rodent Tumors

Abstract #: 806

Liver Effects in CD1 Mice Prenatally-Exposed to Low Doses of Perfluorooctanoic Acid (PFOA): Novel Modes of Action (S E Fenton, A J Filgo, C A Cummings, M Hoenerhoff, D Malarkey, E M Quist)

2:00 PM - 4:45 PM, Room 207 (CC), Platform Session, Chair N J Walker

Toxicity of Nanoparticles—Cerium Oxide

Abstract #: 817

Mechanistic Insights into the Toxicity of Multiwalled Carbon Nanotubes and Cerium Dioxide Nanoparticles in Primary Human Bronchial Epithelial Cells (S Hussain, R Snyder, S M Anderson, J D Marshburn, A B Rice, N J Walker, S Garantzotis)

Tuesday, March 12, 2013

9:00 AM - 11:45 AM, Room 217 C&D (CC), Symposium Session, Chair G J Harry

The Dynamics of Neuroinflammation and Inflammatory Cell Responses in Neurologic Disease

Abstract #: 832

The Dynamics of Neuroinflammation and Inflammatory Cell Responses in Neurologic Disease (G Jean Harry, C P Curran)

Abstract #: 833

Microglia Heterogeneity in Neuroinflammation and Neurotoxicity (G J Harry)

Tuesday, March 12, 2013 (cont'd)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Alternative Models—Eye and Skin

Abstract #: 964, Poster Board #: 345

Performance Standards and Alternative Assays: Practical Insights from Skin Sensitization
(D Basketter, S N Kolle, S Casati, W S Stokes, J Strickland, H Vohr, B van Ravenzwaay,
R Landsiedel)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Biomarkers I: Preclinical and Translational Approaches

Abstract #: 939, Poster Board #: 316

Whole Transcriptome RNA-Seq of FFPE Liver (S S Auerbach, B A Merrick, R R Shah, D Phadk,
B Xie, J Shin, Y Gao, R R Tice)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Carcinogenesis: Models and Mechanisms

Abstract #: 1092, Poster Board #: 537

Expression Profiles of Hematopoietic Stem Cell, Endothelial Cell, and Myeloid Cell Antigens in
Spontaneous and Chemically Induced Hemangiomas and Hemangiosarcomas in Mice
(S Kakiuchi-Kiyota, C A Torrie, L L Arnold, K L Pennington, J C Cook, D Malarkey, S M Cohen)

Abstract #: 1094, Poster Board #: 539

Transcriptomic Profiling of Hepatoblastomas and Associated Hepatocellular Carcinomas in
B6C3F1 Mice (S Bhusari, A Pandiri, Y Wang, J Foley, H Hong, T Ton, K R Shockley, S Peddada,
K E Gerrish, D Malarkey, R Sills, M Hoenerhoff)

Abstract #: 883, Poster Board #: 134

Quantitative Extrapolation of *In Vitro* Data to Risk Management
Decisions: Using Hepatic Ah Receptor and Its Agonists as an Example (X Chang, M DeVito,
M Easterling)

Abstract #: 985, Poster Board #: 402

Integrating Genome and Transcriptome Data to Understand Susceptibility to Postnatal Lung
Injury (J Nichols, A Burkholder, J Lu, Z McCaw, O Suzuki, D Fargo, P Bushel, T Wiltshire,
S R Kleeberger)

Abstract #: 986, Poster Board #: 403

Analysis of the Developmental Origins of Health and Disease (DOHaD) Grant Portfolio at the
NIEHS (A Haugen, T T Schug, J J Heindel)

Tuesday, March 12, 2013 (cont'd)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Developmental Toxicity

Abstract #: 1015, Poster Board #: 434

Addressing the Mode of Action for Developmental PFOA-Induced Mammary Gland Delays
(M B Macon, S E Fenton)

Abstract #: 1019, Poster Board #: 438

Development and Validation of an Analytical Method for Monobutylphthalate, a Metabolite of Di-n-Butylphthalate, in Harlan Sprague-Dawley Rat Plasma and Amniotic Fluid by UPLC-MS/MS
(V G Robinson, M A Silinski, T A Freed, R A Fernando, C S Smith, S Waidyanatha)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Metals I

Abstract #: 1153, Poster Board #: 605

The Cadmium-Responsive Genes *Numr-1* and *Numr-2* Are Regulated by Multiple Pathways
(Q Ding, J H Freedman)

Abstract #: 1157, Poster Board #: 609

Cadmium Exposure Affects Insulin Signaling in *Caenorhabditis elegans* (Y Sun, J H Freedman)

Abstract #: 1175, Poster Board #: 627

Development and Optimization of a Procedure for the Determination of Indium-Tin Oxide Particle Size and Concentration in Cellular Media (K Levine, L Han, W M Gwinn, D L Morgan, A S Essader, R A Fernando, C S Smith, V G Robinson)

Abstract #: 1187, Poster Board #: 639

Metallothionein Transcriptional Regulation, Aging, and the Insulin Signaling Pathway (J Hall, M McElwee, J H Freedman)

Abstract #: 1188, Poster Board #: 640

Metal-Regulatory Transcription Factor-1 Regulates Metal-Responsive Transcription of *Fos1*
(E Braithwaite, J H Freedman)

9:30 AM - 4:30 PM, Room 209 (CC)

Research Funding Information Room

NIEHS Division of Extramural Research and Training

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Alternative High-Throughput Models I

Abstract #: 1450, Poster Board #: 507

A High-Throughput Mechanism-Based Toxicity Screen Using *C. elegans* (R B Goldsmith, J R Pirone, W A Boyd, M V Smith, J H Freedman)

Tuesday, March 12, 2013 (cont'd)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Alternative High-Throughput Models I (cont'd)

Abstract #: 1452, Poster Board #: 509

Quantitative Assessment of Phase II ToxCast™ Chemical Toxicity in *C. elegans* (W A Boyd, M V Smith, J R Pirone, J R Rice, J H Freedman)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Natural Products - *In Vivo* Safety Assessment

Abstract #: 1300, Poster Board #: 302

Toxicology Profile of Virginia Cedarwood Oil Delivered via Dermal Application (I Surh, R A Herbert, G S Travlos, M Vallant, L M Fomby, M R Hejtmancik, P Chan)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Pharmaceutical Safety Assessment: Drug Development II

Abstract #: 1227, Poster Board #: 139

Immunomodulatory Activity of Orphan Drug Elmiron® in Female B6C3F1/N Mice (S Thakur, N Abraham, K L White, M J Smith, W Auttachoat, D R Germolec)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Regulatory Policy: Programs and Approaches

Abstract #: 1570, Poster Board #: 631

A New Approach to Academic and Guideline Research: The CLARITY-BPA Research Program (A F Johnson, J Aungst, J R Bucher, C Luisa, K Delclos, J J Heindel, P C Howard, D Keefe, R Newbold, W Nigel, T T Schug)

Abstract #: 1572, Poster Board #: 633

Animal Use for Testing Involving Unrelieved Pain and Distress (M Paris, L Rinckel, W Casey, W Stokes)

Abstract #: 1573, Poster Board #: 634

A Reference Database for the Evaluation of Alternative Tests for Acute Dermal Systemic Toxicity (J Strickland, F Stack, M Paris, L Rinckel, W Casey, W Stokes)

Abstract #: 1574, Poster Board #: 635

Regulatory Acceptance of the BG1Luc Estrogen Receptor Transactivation Test Method (W Casey, P Ceger, J Strickland, L Rinckel, E Grignard, S Bremer, H Kojima, S Han, W Stokes)

Abstract #: 1576, Poster Board #: 637

The Dermal Up-And-Down Procedure: An Alternative Test Method for Acute Dermal Systemic Toxicity Testing (W Stokes, J Strickland, R Morris, L Ho, J Wilkerson, F Stack, M Paris, L Rinckel, W Casey)

Tuesday, March 12, 2013 (cont'd)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Stems Cells: Emerging Applications in Toxicology

Abstract #: 1191, Poster Board #: 103

Hypersensitivity of Stem Cells and Cancer Stem Cells to Cadmium Toxicity (E J Tokar, M Rogers, M P Waalkes)

Abstract #: 1192, Poster Board #: 104

Recruitment of Normal Stem Cells into an Oncogenic Phenotype by Noncontiguous Carcinogen-Transformed Malignant Epithelia Is Dependent on the Transforming Carcinogen (Y Xu, E J Tokar, R J Person, R Orihuela, M P Waalkes)

Abstract #: 1193, Poster Board #: 105

Aberrant microRNA Expression Correlates with RAS Activation in Malignant Transformation of Human Prostate Epithelial and Stem Cells by Arsenic (N N Ngalame, E J Tokar, M P Waalkes)

1:30 PM - 4:15 PM, Grand Ballroom C2 (CC), Symposium Session, Chair P M Foster

Nonmonotonic Dose-Response Curves and Endocrine-Disrupting Chemicals: Fact or Falderal?

Abstract #: 1592

Nonmonotonic Dose-Response Curves and Endocrine-Disrupting Chemicals: Fact or Falderal? (L E Gray, P M Foster)

Abstract #: 1597

Low Dose and Nonmonotonic Dose-Response Curves for Endocrine Disruptors (L S Birnbaum)

2:45 PM - 3:45 PM, Room 007 B (CC), Exhibitor Hosted Session, Andrew Rooney and Abee Boyles

Implementing Systematic Review at the NTP: Presented by National Toxicology Program

4:30 PM – 5:50 PM, Room 214 A&B (CC), Education-Career Development Session, Speaker N Walker

The Symbiosis of Mentoring: Getting the Most Out of the Mentor-Mentee Relationship

Abstract #: 1630

The Symbiosis of Mentoring: Getting the Most Out of the Mentor-Mentee Relationship (B Hannas, N Walker, S Safe, E Carney, O Olivero)

Supervisors, Mentors and Yodas: A Perspective on Their Role in Your Career Development (N J Walker)

7:30 PM - 9:00 PM, Alamo Ballroom D (Marriott Riverwalk)

Tox ShowDown (L S Birnbaum)

Wednesday, March 13, 2013

9:00 AM - 11:45 AM, Grand Ballroom C2 (CC), Symposium Session

Role of Systems Biology in Characterizing Risk of Developmental Origins of Disease

Abstract #: 1633

Multiple Organ-Omic Integration for HBCD Developmental Neurotoxicity Hazard Identification
(D T Szabo, L S Birnbaum)

Abstract #: 1635

Mechanistic Pathways Underlying Low-Dose PFOA Effects on Mammary Gland Growth
(M B Macon, S E Fenton)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Children's Health and Juvenile Toxicity

Abstract #: 1828, Poster Board #: 358

Maternal and Child Polybrominated Diphenyl Ether (PBDE) Levels in US National Children's Study
(NCS) Formative Research (A J Schecter, D Cherry, L S Hynan, D Cheng, N Imran, M Hommel,
K Kannan, L Wang, S H Yun, N Thiex, B Specter, J Moye, L S Birnbaum)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Endocrine Toxicology

Abstract #: 1934, Poster Board #: 521

Formulation Development and Analysis Methods for Bisphenol AF in 5K96 Verified Casein Feed
(K Aillon, V Ault, A Sullivan, R Mathias, J Algaier, R Harris, B Collins, S Waidyanatha)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Genetic Toxicology and DNA Repair

Abstract #: 1701, Poster Board #: 116

Comparison of Two High-Throughput Methods for *In Vitro* Micronucleus Assessment
(B Goodwin, J Bemis, Z Liu, S Bryce, K Luu, K L Witt, C P Austin, R R Tice, M Xia)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Nanotoxicology-*In Vitro*

Abstract #: 1751, Poster Board #: 218

The Effects of Ceria Nanoparticles on Primary Human Monocyte-Derived Macrophages and
Bronchial Macrophages (J D Marshburn, A B Rice, M D George, S M Anderson, N J Walker)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Persistent Organic Pollutants

Abstract #: 1982, Poster Board #: 572

Structure-Activity Relationships for Perfluoroalkane-Induced Interference with Rat Liver
Mitochondrial Respiration (K B Wallace, G E Kissling, R Melnick, C R Blystone)

Wednesday, March 13, 2013 (cont'd)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Persistent Organic Pollutants (cont'd)

Abstract #: 1992, Poster Board #: 582

Alterations in Xenobiotic Metabolizing Enzyme and Immune Relevant Genes following Administration of Brominated and Chlorinated Dioxins and Furans in Female B6C3F1 Mice (R Frawley, M Smith, K White Jr, N J Walker, L S Birnbaum, T Maynor, M DeVito, D R Germolec)

Abstract #: 1999, Poster Board #: 589

Development of Weighted Distributions of Relative Potency Estimates for Dioxin-Like Compounds (L C Haws, G Hixon, M DeVito, N J Walker, L Kuriakose, L S Birnbaum, M Harris, D Wikoff)

9:00 AM - 12:30 PM, Exhibit Hall C-D (CC), Poster Session

Risk Assessment II: Critical Considerations and Characterizations

Abstract #: 1944, Poster Board #: 534

Benchmark Dose Models for Benzene Genotoxicity Using the Diversity Outbred Mouse (K L Witt, G E Kissling, D L Morgan, K R Shockley, D M Gatti, G A Churchill, J E French)

Abstract #: 1957, Poster Board #: 547

The Use of Genetically Modified Mice in Cancer Risk Assessment: Challenges and Limitations (S V Vulimiri, D A Eastmond, J E French, B Sonawane)

9:30 AM - 4:30 PM, Room 209 (CC)

Research Funding Information Room

NIEHS Division of Extramural Research and Training

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Alternative High-Throughput Models II

Abstract #: 2251, Poster Board #: 449

Comparison of the Manual and Quantitative High-Throughput Versions of the BG1Luc Estrogen Receptor Transactivation Test Method (P Ceger, W Casey, J Strickland, L Rinckel, W Stokes)

Abstract #: 2269, Poster Board #: 467

Use of a Cell-Based Assay to Monitor the Stability of the Tox21 10K Compound Library (R Huang, J Zhao, M Xia, K L Witt, K Houck, R R Tice, D Dix, C P Austin)

Abstract #: 2275, Poster Board #: 473

In Vitro to *In Vivo* Extrapolation Using Data from ToxCast (M DeVito, S S Auerbach, A Merrick, K L Witt, K Janardhan, D Malarkey, H Nagai, I Shah, C Corton, R Judson)

Wednesday, March 13, 2013 (cont'd)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Arsenic

Abstract #: 2280, Poster Board #: 503

Comparative Early Oncogenic Effects of Cadmium and Arsenic in Human Lung Epithelial Cells
(R J Person, E J Tokar, M P Waalkes)

Abstract #: 2281, Poster Board #: 504

Metallothionein Blocks Arsenic-Induced Oxidative DNA Damage (W Qu, M P Waalkes)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Food Safety and Nutrition

Abstract #: 2326, Poster Board #: 553

Development and Validation of an Analytical Method for Vomitoxin in Gavage Dose Formulations Used in Rodent Toxicology Studies (J C Blake, D P Coleman, J Gilliam, M A Silinski, R A Fernando, C S Smith, B Collins, V G Robinson)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Male Reproductive Toxicology

Abstract #: 2127, Poster Board #: 240

Simvastatin and Dipentyl Phthalate Lower Testosterone Production and Exhibit Dose Additive Effects on the Fetal Testis via Distinct Mechanistic Pathways (B Beverly, C Lambright, J R Furr, H Sampson, B McIntyre, P M Foster, G S Travlos, V S Wilson, L E Gray)

4:30 PM - 5:50 PM, Room 214 A&B (CC), Informational Session, Chair and Speaker L S Birnbaum

Exposure Science in the 21st Century: Perspectives from the NAS and What It Means for Toxicology

Abstract #: 2463

Exposure Science in the 21st Century: Perspectives from the NAS and What It Means for Toxicology (L S Birnbaum, J Orme-Zavaleta)

7:00 PM - 8:30 PM, Lone Star Ballroom B (Grand Hyatt)

SOT President's Reception

Thursday, March 14, 2013

9:00 AM - 11:45 AM, Room 217 A&B (CC), Workshop Session, Chair C Rider

Cumulative Risk: Toxicity and Interactions of Physical and Chemical Stressors

Abstract #: 2497

Cumulative Risk: Toxicity and Interactions of Physical and Chemical Stressors (J Simmons, C Rider)

Thursday, March 14, 2013 (cont'd)

9:00 AM - 11:45 AM, Grand Ballroom C2 (CC), Symposium Session, Chair N J Walker

From Immunotoxicity to Nanotherapy: The Effects of Nanomaterials on the Immune System

Abstract #: 2466

From Immunotoxicity to Nanotherapy: The Effects of Nanomaterials on the Immune System
(M J Smith, D R Germolec, N J Walker)

Abstract #: 2467

Overview of Concepts and Strategies Needed for Assessing the Safety of Nanoscale Materials
(N J Walker)

Abstract #: 2469

Evaluating the Local and Systemic Immunomodulatory Effects of Nanomaterials (M J Smith,
D R Germolec, C E McLoughlin, W Auttachoat, K L White)

9:00 AM - 11:45 AM, Room 217 C&D (CC), Symposium Session, Chair R Woychik

Modeling Human Genetic Variability and Susceptibility in the Laboratory

Abstract #: 2472

Modeling Human Genetic Variability and Susceptibility in the Laboratory (R Woychik,
D Threadgill)

Abstract #: 2474

The Use of Population-Based Inbred Panels and Diversity Outbred Mouse Models to Explore
Individual Variability and Toxicity to Benzene (J E French)

1:00 PM - 4:30 PM, Exhibit Hall C-D (CC), Poster Session

Late Breaking Poster Session 3

Abstract #: , Poster Board #:

PBDEs, PCBs, TEQs, Dioxins, Metals and Persistent Pesticide Exposure in Female Vietnamese
Electronic Waste Recyclers (A Schechter, H T Quynh, A Sjodin, K Caldwell, D Cheng,
T T Tuyet-Hanh, M Hommel, N Imran, L S Birnbaum)