Tuesday, June 21, 2022
9:00 AM–10:30 AM Premeeting Virtual Poster Showcase 1

Wednesday, June 22, 2022
9:00 AM–10:30 AM Premeeting Virtual Poster Showcase 2

Friday, June 24, 2022
3:00 PM–6:00 PM Registration Open

Saturday, June 25, 2022
7:30 AM–6:00 PM Registration Open
8:00 AM–8:30 AM Education Course Coffee and Pastries
   *(Education Course Session 1 Registrants Only)*

8:30 AM–12:00 Noon Education Course Session 1
   **Embryology and Toxicology of the Developing Respiratory System**
   *(Separate Registration Required)*
   
   **Organized by the Education Committee**
   
   **Chairperson: Katie J. Turner, Janssen R&D, LLC**

8:30 AM–8:40 AM Welcome
   BDRP President, Susan L. Makris, Center for Public Health and Environmental Assessment, US EPA

8:40 AM–8:45 AM Course Overview
   Education Committee, Chairperson Katie J. Turner, Janssen R&D, LLC

8:45 AM–9:30 AM Morphological Development of the Respiratory System
   Terry C. Hrubec, E. Via Virginia College of Osteopathic Medicine

9:30 AM–10:15 AM Functional Development of the Respiratory System
   Geertje Lewin, Consultant

10:15 AM–10:30 AM Break
10:30 AM–11:15 AM  Developmental Toxicity of the Lung  
*John M. Rogers, ToxStrategies, Inc.*

11:15 AM–12:00 Noon  Animal Models of Respiratory Diseases in Children  
*Ida Washington, The University of Vermont*

12:00 Noon–1:30 PM  Lunch on Your Own

1:30 PM–5:00 PM  Education Course Session 2  
**Birth Defects: Causes and Mechanisms**  
*(Separate Registration Required)*  
Organized by the Education Committee  
Chairperson: Chairperson: *Katie J. Turner, Janssen R&D, LLC*

1:30 PM–1:35 PM  Course Overview  
*Education Committee, Chairperson, Chairperson: Katie J. Turner, Janssen R&D, LLC*

1:35 PM–2:25 PM  Congenital Abnormalities: Common Birth Defects, Genetic Mechanisms, and Diagnosis  
*Sura Alwan, University of British Columbia*

2:25 PM–3:15 PM  Understanding Teratogenesis Due to Disruption of Cell Signaling  
*Elaine M. Faustman, University of Washington*

3:15 PM–3:30 PM  Break

3:30 PM–4:15 PM  Diet, Nutritional Deficiencies, Excesses, and Abnormal Development  
*Susan Meacham, Professor Emerita, University of Nevada Las Vegas and Meacham Consulting*

4:15 PM–5:00 PM  Gene-Environment Interactions and Birth Defects  
*Christine Curran, Northern Kentucky University*

5:00 PM–7:00 PM  Council 1 Meeting  
(Includes incoming Council members and committee chairs and vice-chairs.)

**Sunday, June 26, 2022**

7:00 AM–6:00 PM  Registration Open

7:00 AM–8:00 AM  2023 Program Committee Meeting

7:30 AM–8:00 AM  Morning Coffee

8:00 AM–8:15 AM  President’s Welcome  
*BDRP President, Susan L. Makris, Center for Public Health and Environmental Assessment, US EPA*
8:15 AM–9:00 AM  Josef Warkany Lecture
Finding A Common Ground: Translation of the Principles of Teratology in Today's Regulatory Climate (Joint with DNTS and OTIS)
Chairperson: Susan L. Makris, Center for Public Health and Environmental Assessment, US EPA
Lecturer: Alan M. Hoberman, Charles River

9:05 AM–12:05 PM  Graduate Student and Postdoctoral Fellow Platform Session 1
Organized by the Student Affairs Committee
Chairperson: Melissa J. Beck, Cedarville University

Presenting author is underlined.

9:05 AM–9:10 AM  Introduction
Melissa J. Beck, Cedarville University

9:10 AM–9:30 AM  1 Identification of Chemicals Associated with Retinoid Signaling Pathway Disturbance and Skeletal Dysmorphogenesis for the Development of Computational Toxicology Models for New Approach Methods' (NAMs) Hazard Predictions
1US Environmental Protection Agency, Research Triangle Park, NC, United States, 2Eurofin Medical Device Testing, Lancaster, PA, United States, 3Leidos, Research Triangle Park, NC, United States

9:30 AM–9:50 AM  2 Prenatal Alcohol Exposure Induces Eye Defects in Htt Mutant Mice in a Sex and Dose-Dependent Manner
Boschen KE, Steensen M1, Hunter CE, Hepperla A, Simon JM, Parnell SE. University of North Carolina, NC, Chapel Hill, United States

9:50 AM–10:10 AM  3 Malarial PI4K Inhibitor-Induced Diaphragmatic Hernias in Rat: Potential Link with Mammalian Kinase Inhibition
Demarta-Gatsi C, Donini C, Duffy J, Tornesi B. Medicines for Malaria Venture (MMV), Geneva, Switzerland

Musfee FI1, Politis MD1,2, Cen R1, Magann EF1,2,3, Nembhard WN1,4,1Arkansas Center for Birth Defects Research and Prevention, Fay W. Boozman College of Public Health, University of Arkansas for Medical Sciences, Little Rock, AR, United States, 2Department of Environmental Medicine and Public Health, Icahn School of Medicine at Mount Sinai, New York, NY, United States
10:30 AM–10:45 AM  Break

10:45 AM–11:05 AM  5 Use of Antiepileptic Drugs during Pregnancy and Neonatal Birth Weight Outcomes: A Systematic Review and Meta-Analysis  
Lavu A¹, Vacarro C¹, Zusman E², Aboulatta L¹, Aloud B¹, Alessi-Severini S¹, Rabbani R³, Peymani P¹, Shouman W¹, Eltonts T¹. ¹College of Pharmacy, University of Manitoba, Winnipeg, MB, Canada, ²British Columbia Children’s Hospital Research Institute, Vancouver, BC, Canada, ³George & Fay Yee Center for Healthcare Innovation, Winnipeg, MB Canada, ⁴Community Health Sciences, University of Manitoba, Winnipeg, MB, Canada

11:05 AM–11:25 AM  6 Development of a Human-Relevant Replacement Screening Method to Animal Testing for Environmental Toxicants  
Vera-Colon MK, Madrid JV, Zamora D, zur Nieden NI. University of California, Riverside, Riverside, CA, United States

11:25 AM–11:45 AM  7 The Effect of Maternal Tobacco and Marijuana Co-use on Adverse Birth Outcomes  
Waddell M, Dickson S, Zablocki V, Dodge P, Kopkau H, Nadolski K, Bailey B. Central Michigan University College of Medicine, Mount Pleasant, MI, United States

Aboulatta L¹, Vacarro C¹, Mahmoud F², Aloud B¹, Eltonts T¹. ¹College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, MB, Canada, ²Faculty of Pharmacy, Université de Montréal, Montreal, QC, Canada, ³The Children’s Hospital Research Institute of Manitoba, Winnipeg, MB, Canada

12:05 PM–1:30 PM  Lunch on Your Own

12:05 PM–1:30 PM  Past Presidents’ and Honorees’ Luncheon  
(By Invitation Only)

12:30 PM–1:30 PM  Education Committee Meeting

12:30 PM–1:30 PM  Membership Committee Meeting
1:30 PM–2:00 PM  F. Clarke Fraser New Investigator Award
TBD
Chairperson: Kembra L. Howdeshell, National Institute of Environmental Health Sciences
Lecturer: Mahsa Yazdy, Massachusetts Department of Public Health

2:00 PM–2:30 PM  James G. Wilson Publication Award
Global birth defects app: An innovative tool for describing and coding congenital anomalies at birth in low resource settings Chairperson: Russell S. Kirby, USF College of Public Health
Lecturer: Helen Dolk, Ulster University

2:35 PM–4:30 PM  Gerald G. Briggs Research Symposium
Can Experimental Animal Studies Be Used in Counseling? (Joint with OTIS)
Chairpersons: Sarah Gloria Običan, University of South Florida and Anthony R. Scialli, Reproductive Toxicology Center

2:35 PM–2:40 PM  Introduction

2:40 PM–3:05 PM  S1 What Experimental Animal Testing Is Used to Evaluate the Developmental Toxicity of Drugs
Lori A. Dostal, Lori Dostal Consulting LLC

3:05 PM–3:30 PM  S2 How Animal Test Results Are Used to Inform Product Approval and Labeling
Melissa S. Tassinari, Consultant

3:30 PM–3:45 PM  Break

3:45 PM–4:05 PM  S3 Can Experimental Animal Results Be Used in Counseling Patients?
Sarah Gloria Običan, University of South Florida

4:05 PM–4:30 PM  S4 Can Experimental Animal Results Be Used in Counseling Patients?
Anthony R. Scialli, Reproductive Toxicology Center

4:35 PM–5:35 PM  Innovator Award Finalists Platform Session 2
Chairperson: Kembra L. Howdeshell, National Institute of Environmental Health Sciences

4:35 PM–4:55 PM  9 A High-Throughput Toxicity Screen of 42 Per-And Polyfluoroalkyl Substances (Pfas) And Functional Assessment of Migration and Gene Expression in Human Placental Trophoblasts
Blake BE1,2,3, Rickard BP1, Fenton SE2.
1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 2National Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, NC, United States, 3Chemical and...
4:55 PM –5:15 PM AM 10 Maternal Hyperglycemia Impairs Cardiomyocyte Differentiation to Elevate the Risk of Congenital Heart Disease
Manivannan S¹,², Mansfield C³,⁴, Zhang X⁵, Kodigepall KM⁶, Majumdar U²,³, Garg V²,³,⁷, Basu M²,³,⁷. ¹Research Institute at Nationwide Children's Hospital, Columbus, OH, United States, ²Heart Center, Nationwide Children's Hospital, Columbus, OH, United States, ³Research Institute at Nationwide Children's Hospital, Columbus, OH, United States, ⁴Heart Center, Nationwide Children's Hospital, Columbus, OH, United States, ⁵BioInfoRx Inc., Madison, WI, United States, ⁶Department of Pediatrics, Medical College of Wisconsin, Milwaukee, WI, United States, ⁷Department of Pediatrics, The Ohio State University College of Medicine, Columbus, OH, United States

5:15 PM–5:35 PM 11 Classification of Congenital Malformations Informed by Machine Learning with Human Adjudication
Straub L¹, Huybrechts K¹, Wang SV¹, Gray KJ¹, Holmes LB², Bateman BT², Mogun H², Hernandez-Diaz S³. ¹Brigham and Women's Hospital, Harvard Medical School, Boston, MA, United States, ²Massachusetts General Hospital for Children, Boston, MA, United States, ³Stanford University School of Medicine, Stanford, CA, United States

5:40 PM–6:10 PM Patricia Rodier Mid-Career Award for Research and Mentoring TBD
(Joint with DNTS)
Chairpersons: Kembra L. Howdeshell, National Institute of Environmental Health Sciences and Mary E. Gilbert, US Environmental Protection Agency
Lecturer: Jennifer Anne Willford, Slippery Rock University of Pennsylvania

6:15 PM–7:45 PM Poster Session 1 and Exhibits Attended
BDRP Posters P1–P32

8:00 PM–10:00 PM Graduate Student and Postdoctoral Fellows Career Event
Hosted by Middle Atlantic Reproduction and Teratology Association (MARTA)

Monday, June 27, 2022

7:00 AM–6:00 PM Registration Open
7:00 AM–8:00 AM  
*Birth Defects Research* Journal Editorial Board Meeting

7:00 AM–8:00 AM  
Communications Coordination Committee Meeting

8:00 AM–9:00 AM  
Keynote Lecture  
Functional Correlation of Genome-Wide DNA Methylation Profiles in Genetic and Teratogenic Neurodevelopmental Disorders (L1)  
(Joint with DNTS and OTIS)  
Chairperson: Bruce K. Beyer, Sanofi US, Inc.  
Speaker: Bekim Sadikovic, London Health Sciences Centre

9:05 AM–12:00 Noon  
Novel Approaches for Assessment of Complex Chemical Mixtures in Evaluations of Reproductive and Developmental Effects Symposium  
(Joint with DNTS)  

9:05 AM–9:15 AM  
Introduction

9:15 AM–9:45 AM  
S5  
Exploration of Disinfection Byproduct Mixture Methods in an Epidemiological Study of Birth Defects  
*J. Michael Wright, US Environmental Protection Agency*

9:45 AM–10:15 AM  
S6  
Application of Sufficient Similarity Analyses for Complex Polychlorinated Biphenyl Mixtures  
*Catheryne Chiang, US Environmental Protection Agency*

10:15 AM–10:30 AM  
Break

10:30 AM–10:55 AM  
S7  
Impact of Prenatal Exposure to Phthalate Mixture on Uterine Function in Female Offspring  
*Indrani C. Bagchi, University of Illinois at Urbana Champaign*

10:55 AM–11:30 AM  
S8  
Prenatal Consumer Product Chemical Mixtures and Size-for-Gestational Age at Birth  
*Paige A. Bommarito, National Institute of Environmental Health Sciences*

11:30 AM–11:55 AM  
S9  
Association between Exposure to a Metal Mixture and Neurobehavior at Six to Seven Years of Age  
*Francheska M. Merced-Nieves, Icahn School of Medicine at Mount Sinai*

11:55 AM–12:00 Noon  
Discussion
9:05 AM–12:00 Noon  Platform Session 3
Chairperson: Sura Alwan, University of British Columbia

Presenting author is underlined.

9:05 AM–9:15 AM  Introduction
TBA

9:15 AM–9:30 AM  12 Science-Based Approach to Harmonize Contraception Recommendations in Clinical Trials and Pharmaceutical Labels
Bowman CJ1, Becourt-Lhote N2, Boulifard V3, Cordts R4, Corriol-Rohou S5, Enright B6, Erkman L7, Harris J8, Hartmann A7, Hilpert J9, Kervyn S10, Mattson B11, Morford L12, Muller M7, Powell M13, Sobol Z11, Srinivasan S14, Stark C9, Thompson KE15, Turner K15, Barrow P16. 1Pfizer, Inc., Groton, CT, United States, 2Servier, Gidy, France, 3Ipsen Pharma, Les Ulis, France, 4Boehringer Ingelheim Pharma GmbH & Co. KG, Biberach, Germany, 5AstraZeneca, Paris, France, 6AbbVie, Inc., North Chicago, IL, United States, 7Novartis Pharma, Basel, Switzerland, 8AstraZeneca, Cambridge, United Kingdom, 9Bayer AG, Berlin, Germany 10UCB Pharma, Braine-l’Alleud, Belgium, 11Merck & Co., Inc., West Point, PA, United States, 12Lilly Research Laboratories, Indianapolis, IN, United States, 13GlaxoSmithKline, Research Triangle Park, NC, United States, 14Sanofi, Marcy L’Etoile, France, 15Janssen Pharmaceuticals, Spring House, PA, United States, 16F. Hoffmann-La Roche Ltd., Basel, Switzerland

9:30 AM–9:45 AM  13 Differences in Survival Among White, Black, and Hispanic Infants with Central Nervous System Defects: Texas 1999–2017
Ahmed M1, Shumate C2, Canfield MA2, Bojes H2, Patel K2. 1Epidemic Intelligence Officer, Centers for Disease Control and Prevention (CDC), Atlanta, GA, United States, 2Texas Department of State Health Services, Birth Defects Epidemiology and Surveillance Branch, Austin, TX, United States

9:45 AM–10:00 AM  14 Survival of Severe Microcephaly Cases in the Texas Birth Defects Epidemiology and Surveillance Registry for Delivery Years 1999–2015
Marengo LK1, Canfield MA1, Shumate C1, Archer N2, Drummond-Borg M2. 1Texas Department of State Health Services, Birth Defects Epidemiology and Surveillance Branch, Austin, TX, United States, 2Texas Department of State Health Services, Environmental Epidemiology & Disease Registries Section, Austin, TX, United States
10:00 AM–10:15 AM  15  A Novel Investigation of Seropositivity to Pathogens among Women Prenatally Diagnosed with and without Gastroschisis

Feldkamp ML¹, Baum-Jones E², Krikov S¹, Enioutina E³, Kamath K². ¹Division of Medical Genetics, Department of Pediatrics, University of Utah School of Medicine, Salt Lake City, UT, United States; ²Serimmune, Inc., Goleta, CA, United States; ³Division of Pediatric Clinical Pharmacology, Department of Pediatrics, University of Utah School of Medicine, Salt Lake City, UT, United States

10:15 AM–10:30 AM  Break

10:30 AM–10:45 AM  16  Prenatal Alcohol Exposure Impacts Infant Heart Rate Variability during Recovery Phase

Maxwell JR¹, Stephen J², DiDomenico J¹, Beauman SS¹, Lacy CB¹, Kuan EC¹, Rai R¹, Rodriguez D¹, Stacy LK¹, Enriquez Marquez L¹, Jacobson SW², Weinberg J³, Bakhireva LN¹. ¹University of New Mexico, Albuquerque, NM, United States; ²The Mind Research Network, Albuquerque, NM, United States; ³Wayne State University School of Medicine, Detroit, MI United States; ⁴University of British Columbia, Vancouver, BC, Canada

10:45 AM–11:00 AM  17  Topiramate during Pregnancy and the Risk of Neurodevelopmental Disorders in Children

Hernandez-Diaz S¹, Straub L², Bateman BT³, Suarez EA², Zhu Y², Pennell PB⁴, Huybrechts KF². ¹Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA, United States; ²Division of Pharmacoepidemiology and Pharmacoeconomics, Department of Medicine, Brigham and Women’s Hospital and Harvard Medical School, Boston, MA, United States; ³Department of Anesthesiology, Perioperative and Pain Medicine, Stanford University School of Medicine, Stanford, United States; ⁴Department of Neurology, University of Pittsburgh School of Medicine, Pittsburgh, United States

11:00 AM–11:15 AM  18  Integrated Microphysiological and Computational Models of Thyroid Homeostasis to Elucidate Teratogenic Mechanisms and Identify Sensitive Populations

Johnson BP¹, Zhang Q², Terrian L¹, Gardner K¹. ¹Michigan State University, Lansing, MI, United States; ²Texas Department of State Health Services, Birth Defects Epidemiology and Surveillance Branch, Granbury, United States
Shumate C1, Navarro L1, Betancourt D1, Nguyen J1, Agopian AJ2, Canfield MA1. 1Birth Defects Epidemiology and Surveillance Branch, Texas Department of State Health and Human Services, Austin, TX, United States; 2Division of Epidemiology, Human Genetics and Environmental Sciences, University of Texas School of Public Health, Houston, TX, United States

11:30 AM–11:45 AM 20 Evaluation of Pleiotropic Role of p53 in Dysmorphic Astrocytes due to Pre and Postnatal Exposure to Bisphenol A in Wistar Albino Offspring
Singha S1, Memon S2, Memon F3, Isaac AD2, 1Isra University, Hyderabad, Pakistan, 2Liaquat University of Medical and Health Sciences, Jamshoro, Pakistan, 3Altamash, Hospital, Karachi, Pakistan

11:45 AM–12:00 Noon 21 Believing in Science
Vekemans M. Université de Paris, Hôpital Necker-Enfants Malades, France

12:00 Noon–2:00 PM Lunch on Your Own

12:05 Noon–1:45 PM Professional Development Workshop
Publication Approaches from Different Perspectives
Organized by the Student Affairs Committee
Chairpersons: Melissa J. Beck, Cedarville University

12:05 Noon–12:10 PM Lunch Pick-Up

12:10 PM–12:40 PM Editorial Board of Birth Defects Research Tips on How to Get Your Manuscript Published
John M. Rogers, ToxStrategies, Inc.

12:40 PM–1:45 PM Interactive Discussion with BDRP Mentors to Obtain Guidance/Insight into Publishing in Different Sectors

1:00 PM–2:00 PM Science Committee Meeting

2:00 PM–2:30 PM Agnish Fellowship Lecture
Confession of an Accidental Leader
Chairperson: Katie J. Turner, Janssen R&D, LLC
Speaker: Christopher S. Lau, US Environmental Protection Agency
2:35 PM–5:55 PM The Legacy of Dr. Robert L. Brent: Accurate Assessment and Communication of Teratogen Risks Symposium (Joint with DNTS and OTIS)
Chairpersons: Janine E. Polifka, Retired and Christine Perdan Curran, Northern Kentucky University

2:35 PM–3:00 PM S10 Tribute to Dr. Robert L. Brent: Let the Yolk Sac Speak—A Small Drop in the Deep Water of Bob’s Legacy in Science
Asher Ornoy, Hebrew University, Hadassah Medical School, Adelson School of Medicine, Ariel University

3:00 PM–3:25 PM S11 Radiation Risks and Information Needs of Pregnant and Lactating Women
Fred Mettler, University of New Mexico School of Medicine

3:25 PM–4:00 PM S12 Professionally Responsible Counseling of Pregnant Women about COVID-19 Vaccination
Frank A. Chervenak, Lenox Hill Hospital

4:00 PM–4:15 PM Break

4:15 PM–4:40 PM S13 Using Supervised Learning Methods to Create Prediction Models Based on Narrative Descriptions of Fetal Risk
Elizabeth C. Ailes, Centers for Disease Control and Prevention

Jan M. Friedman, University of British Columbia

5:05 PM–5:55 PM Sharing Memories of Dr. Robert L. Brent

2:35 PM–5:55 PM The Key Characteristics Approach for Hazard Identification: Alternative Perspectives Symposium
Sponsored by Bayer Crop Science
Chairpersons: Donna R. Farmer, Bayer Crop Science and John DeSesso, Exponent

2:35 PM–2:40 PM Introduction

2:40 PM–3:20 PM S15 Ten Characteristics of Carcinogens: Key to Nothing
James E. Klaunig, Indiana University

3:20 PM–4:00 PM S16 Statistical Considerations in Data Analysis and Quantification of Uncertainty
Claudio Fuentes, Oregon State University

4:00 PM–4:15 PM Break
4:15 PM–4:55 PM  S17  Endocrine Disruption: Conceptual and Mechanistic Issues
Christopher J. Borgert, University of Florida College of Veterinary Medicine and APT, Inc.

4:55 PM–5:35 PM  S18  Case Study on Glyphosate: Key Characteristics versus Weight of Evidence
Donna R. Farmer, Bayer Crop Science

5:35 PM–5:55 PM  Discussion

6:00 PM–7:30 PM  Poster Session 2 and Exhibits Attended
BDRP Posters P33–P63

Tuesday, June 28, 2022

7:00 AM–5:00 PM  Registration Open

7:30 AM–8:00 AM  Morning Coffee

7:00 AM–8:00 AM  DEI Workgroup Meeting

7:00 AM–8:00 AM  Publications Committee

8:00 AM–9:00 AM  Robert L. Brent Lecture—Teratogen Update (L2)
Developmental Origins of Health and Disease in the ECHO Program
(Joint with OTIS)
Chairperson: Bruce K. Beyer, Sanofi US, Inc.
Lecturer: Matthew W. Gillman, National Institutes of Health

9:05 AM–12:00 Noon  Disparities in Pregnancy and Birth Outcomes Symposium
(Joint with DNTS and OTIS)
Organized by the Diversity, Equity, and Inclusion Workgroup
Chairpersons: José Cordero, University of Georgia and Nicole R. Sparks, University of California, Riverside

9:05 AM–9:40 AM  S19  Disparities in Research Funding for Health Issues that Affect People of Color
José Cordero, University of Georgia

9:40 AM–10:15 AM  S20  Disparities in Maternal Health and Neurodevelopmental Outcomes
Natacha M. De Genna and Gale A. Richardson, University of Pittsburgh

10:15 AM–10:30 AM  Break

10:30 AM–11:05 AM  S21  The Influence of Social Disparities on Congenital Anomalies in the North
Laura Arbour, UBC Department of Medical Genetics
11:05 AM–11:45 AM  S22  Structural and Interpersonal Racism and Adverse Birth Outcomes: From Associations to Advocacy  
Renee Mehra, University of California, San Francisco

11:45 AM–12:00 Noon  Discussion

9:05 AM–12:00 Noon  The DARTable Genome: Bringing Molecular and Developmental Biology to DART Symposium

Organized by the Science Committee in collaboration with and sponsorship from the Health and Environmental Sciences Institute (HESI)

Chairpersons: Thomas B. Knudsen, US Environmental Agency and Richard A. Currie, Syngenta, Jealott's Hill International Research Centre

9:05 AM–9:40 AM  S23  Overview of the DARTable Genome  
Richard A. Currie, Syngenta, Jealott's Hill International Research Centre

9:40 AM–10:15 AM  S24  Retinoic Acid Signaling in Developmental and Reproductive Toxicology: In Vitro and In Silico Approaches to Assess Toxicity  
Joshua F. Robinson, University of California, San Francisco

10:15 AM–10:30 AM  Break

10:30 AM–11:05 AM  S25  Thalidomide: Historical Perspective and New Insights into Molecular Mechanisms of Teratogenicity  
David G. Belair, AbbVie

11:05 AM–11:45 AM  S26  Valproic Acid: Linking In Vitro and In Silico Techniques to Understand and Predict Developmental Toxicity  
Nicole Churchill Kleinstreuer, NIEHS,NICEATM

11:45 AM–12:00 Noon  Discussion

12:00 Noon–1:45 PM  Lunch and Learn Mini Course
New Technologies for Developmental and Reproductive Toxicity Testing: Microphysiological Systems  
(Separate Registration Required)

Organized by the Education Committee

Chairperson: Katie J. Turner, Janssen R&D, LLC

12:00 Noon–12:10 PM  Lunch Pick-Up

12:10 PM–12:40 PM  Advances in the Development of Microphysiological Systems and Application to the Developing Embryo  
Sid Hunter, US Environmental Protection Agency
12:40 PM–1:10 PM  A Human Brain Spheroid Model for Developmental Neurotoxicity Testing  
*Lena Smirnova, Johns Hopkins University Center for Alternatives to Animal Testing*

1:10 PM–1:40 PM  Bioengineered Ovarian Models for Female Reproductive Toxicity Testing  
*Shuo Xiao, Rutgers University, Ernest Mario School of Pharmacy*

1:40 PM–1:45 PM  Discussion

12:00 Noon–2:00 PM  Lunch on Your Own

2:00 PM–5:00 PM  Per- and Polyfluoroalkyl Substances (PFAS) and Children's Health Symposium  
(Joint with DNTS)

*Organized by the Public Affairs Committee*

*Chairpersons: Suzanne E. Fenton, National Institute of Environmental Health Sciences and Tamarra James-Todd Harvard T.H. Chan School of Public Health*

2:00 PM–2:15 PM  Introduction to PFAS: Exposures and Biomonitoring  
*Rachel D. Rogers, ATSDR, CDC*

2:15 PM–2:45 PM  S27 Underlying Conditions and PFAS Exposures: A Risky Mix in Pregnancy  
*Tamarra James-Todd Harvard T.H. Chan School of Public Health*

2:45 PM–3:15 PM  S28 GenX Effects in Pregnant Mice and Persistent Effects in Their Offspring  
*Suzanne E. Fenton, National Institute of Environmental Health Sciences*

3:15 PM–3:30 PM  Break

3:30 PM–4:00 PM  S29 Cardiometabolic and Bone Health Effects of PFAS Exposure in Adolescents  
*Joseph M. Braun, Brown University School of Public Health*

4:00 PM–4:30 PM  S30 Immunotoxic Effects of PFAS in Children  
*C. Amalie G. Timmermann, University of Copenhagen*

4:30 PM–4:45 PM  S31 Approaches to Protect Susceptible Populations from PFAS Health Effects  
*Rachel D. Rogers, ATSDR, CDC*

4:45 PM–5:00 PM  Discussion
2:00 PM–5:00 PM  Predicting and Preparing for the Next Pandemic: Protecting Pregnant Persons, the Fetus, and the Children Workshop

Organized by the Science Committee

Sponsored by the Health and Environmental Sciences Institute (HESI)

Chairpersons: Anthony R. Scialli, Scialli Consulting LLC and Sonja A. Rasmussen, University of Florida College of Medicine

2:00 PM–2:40 PM  W1 Preparing for the Next Pandemic
Sonja A. Rasmussen, University of Florida College of Medicine

2:40 PM–3:15 PM  W2 Special Populations: Pregnant Persons and the Unborn
Sarah Gloria Običan, University of South Florida

3:15 PM–3:30 PM  Break

3:30 PM–4:05 PM  W3 Predicting and Preparing for the Next Pandemic: Special Populations: Pediatrics
Srinivas Murthy, The University of British Columbia

4:05 PM–4:40 PM  W4 Ethical Considerations in the Prevention and Treatment of Disease in Pregnant Persons
Anthony R. Scialli, Scialli Consulting LLC

4:40 PM–5:00 PM  Discussion

5:05 PM–6:30 PM  Multidisciplinary Research Needs Workshop

Chairpersons: Dana L. Shuey, Incyte and William Slikker, Jr., National Center for Toxicological Research, US FDA

5:05 PM–5:20 PM  Overview of Workshop Goals and Progress from 2021

5:20 PM–6:00 PM  Concurrent Breakout Sessions

6:00 PM–6:30 PM  Reassemble to Discuss Progress from Breakout Sessions

Wednesday, June 29, 2022

6:30 AM–7:30 AM  BDRP 41st Annual Volleyball Game

7:30 AM–2:30 PM  Registration Open

7:30 AM–8:00 AM  Morning Coffee
8:00 AM–8:55 AM  BDRP and European Teratology Society Exchange Lecture
   Read Across for DART
   Chairpersons: Susan L. Makris, Public Health and Environmental Assessment, US EPA and Steven Van Cruchten, University of Antwerp

European Teratology Society
   Jason C. Manton, Penman Consulting Ltd

BDRP
   George P. Daston, Procter & Gamble Company

9:05 AM–12:00 Noon  Wiley Symposium
   Environmental Justice in Birth Defects Research
   (Joint with DNTS)
   Chairpersons: Bevin E. Blake, US Environmental Protection Agency and Brandy Beverly, National Institute of Environmental Health Sciences

   9:05 AM–9:30 AM  S32  Traffic-Related Air Pollution and Hypertensive Disorders of Pregnancy
                     Brandy Beverly, National Institute of Environmental Health Sciences

   9:30 AM–10:00 AM  S33  Health Disparities in Pregnancy and Postpartum Care During Public Health Emergencies
                     Sonja A. Rasmussen, University of Florida

   10:00 AM–10:30 AM  S34  Developmental Lead Exposure, Brain and Behavioral Outcomes: A Forty-Year Prospective Study.
                       Kim Dietrich, The University of Cincinnati College of Medicine

   10:30 AM–11:00 AM  Warkany Tea

   11:00 AM–11:30 AM  S35  Race Differences in Phthalate Exposure and Consequent Risk of Preterm Birth: Findings from Sixteen US Cohorts
                        Kelly K. Ferguson, Perinatal and Early Life Epidemiology Group, NIEHS

   11:30 PM–12:00 Noon  S36  TBA

12:00 Noon–1:00 PM  Lunch on Your Own

12:00 Noon–1:00 PM  Awards Committee Meeting

12:00 Noon–1:00 PM  Public Affairs Committee Meeting

12:00 Noon–1:00 PM  Student Affairs Committee Meeting
Novel Insights into the Genomics of Structural Birth Defects: Findings from the Gabriella Miller Kids First Pediatric Research Program Symposium

Chairpersons: Philip J. Lupo, Baylor College of Medicine and Sonja A. Rasmussen, University of Florida

1:05 PM–1:10 PM  Introduction

1:10 PM–1:45 PM  S37 Genetics of Congenital Diaphragmatic Hernia in Mouse and Man
Wendy Chung, Columbia University

1:45 PM–2:15 PM  S38 Whole Genome Sequencing Reveals Varied Genetic Architectures of Orofacial Clefts
Elizabeth J. Leslie, Emory University

2:15 PM–2:30 PM  Break

2:30 PM–3:05 PM  S39 Kids First Data Resource Center: A Platform for Genomic Data-Driven Discovery and Collaboration
Adam Resnick, Children's Hospital of Philadelphia

3:05 PM–3:40 PM  S40 The Genomics of Acute Leukemia in Children with Down Syndrome
Philip J. Lupo, Baylor College of Medicine

3:40 PM–3:55 PM  Discussion

4:00 PM–5:15 PM  Annual Meeting Awards Presentation and Business Meeting

Graduate Student and Postdoctoral Fellow Travel Awards
Wilson Presentation Awards
Marie Taubeneck Award
James C. Bradford Memorial Student Poster Awards
Edward W. Carney Trainee Awards
BDRP Innovator Award
Birth Defects Research Distinguished Scholar Awards
Edward W. Carney Distinguished Service Award
Recognition of Other Awards Presented throughout the Week
Annual Business Meeting

5:30 PM–6:30 PM  Council 2 Meeting
(2022–2023 Council members.)

7:00 PM–9:00 PM  Closing Celebration
Separate Ticket Required