**Forty-Third Annual Meeting of the Developmental Neurotoxicology Society**

**Held in Conjunction with the 59th Annual Meeting of the Teratology Society and 32nd Annual Education Meeting for the Organization of Teratology Information Specialists**

**Sheraton San Diego Hotel and Marina**

**San Diego, California**

**June 23–26, 2019**

**2019 Patricia Rodier Mid-Career Award: Terry Hrubec**, Edward Via College of Osteopathic Medicine Virginia Campus and Virginia-Maryland College of Veterinary Medicine, Virginia Tech, Blacksburg, VA, USA

*From Neural Tube Defects to Environmental Contaminants*

**2019 Richard Butcher New Investigator Award: Katherine O'Shaughnessy,** United Stated Environmental Protection Agency, Research Triangle Park, NC, USA, Oak Ridge Institute for Science and Education, Oak Ridge, TN, USA

*Thyroid Hormone Disruption in the Fetal and Neonatal Rat: Predictive Hormone Measures and Bioindicators of Hormone Action in the Developing Cortex*

**2019 DNTS Conference Awards**

**Kiersten Bell,** United Stated Environmental Protection Agency, Research Triangle Park, NC, USA, and Oak Ridge Institute for Science and Education, Oak Ridge, TN, USA

*Examination of the Combined Effects of Iodine Deficiency and Developmental Perchlorate Exposure on Fear Learning in Rats*

**Kelsey Dzwilewski,** University of Illinois at Urbana-Champaign, Urbana, IL, USA

*Characterization of Performance on an Automated Visual Recognition Memory Task in 7.5 Month-Old Infants*

**Katherine Hatcher,** University of Illinois at Urbana-Champaign, Urbana, IL, USA

*Impacts of Dim Light at Night and Phthalate Exposure on Circadian Locomotor and Feeding Behaviors and Hypothalamic Gene Expression in Male and Female Mice*

**Zade Holloway,** Duke University, Durham, NC, USA

*Chronic Paternal THC in Rats Causes Long-Lasting Behavioral Disruption in the Offspring*

**Francheska Merced-Nieves,** University of Illinois at Urbana-Champaign, Urbana, IL, USA

*Association of Prenatal Maternal Stress with Visual Recognition Memory in 7.5-Month-Old Infants*

**Rebekah Petroff,** University of Washington, Seattle, WA, USA

*Domoic Acid Exposure in Pregnancy Produces Behavioral Neurotoxicities in Mothers and Offspring*

**Jack Pfeiffer,** University of Louisville, Louisville KY, USA

*Coal Fly Ash, Aluminum, and Short-Term Memory Among Children 6-14 Years Old*

**Emily Pitzer,** University of Cincinnati, Cincinnati Children’s Research Foundation, Cincinnati, OH, USA

*Deltamethrin Exposure to Sprague-Dawley Rats from Postnatal Days 3-20 Alters Dopaminergic and Glutamatergic Activity and Long-term Potentiation When Tested as Adults*

**Samantha Regan,** University of Cincinnati and Cincinnati Children’s Research Foundation, Cincinnati, OH, USA

*Altered Dopaminergic Markers and Striatal Dopamine Release Dynamics in Hyperactive Lphn3 KO Rats*

**Megan Sieg,** University of Illinois at Urbana-Champaign, Urbana, IL, USA

*Association Between Prenatal Exposure to Environmental Phenols and Attention to the Eyes in 7.5‐Month-Old Infants*

**DNTS 2019 Program**

**Saturday, June 22, 2019**

**4:00 PM-7:00 PM Registration Open Harbor Island Foyer**

**5:00 PM-6:30 PM DNTS Council Meeting Marina 6**

Sunday, June 23, 2019

7:00 AM–6:00 PM Registration Open Harbor Island Foyer

7:00 AM–8:00 AM 2020 Program Committee Meeting Seabreeze

7:30 AM–8:00 AM Morning Coffee Harbor Island Foyer

(Joint with TS)

8:00 AM–8:15 AM Presidential Welcome Harbor Island 1

8:15 AM–9:00 AM DNTS 1: Josef Warkany Lecture Harbor Island 2

Developmental Toxicity of Perfluorinated Compounds: A Voyage from Animal Studies to Engineered Cells

(Joint with TS and OTIS)

Chairperson: Dana L. Shuey, Incyte Corporation

Lecturer: Barbara D. Abbott, US Environmental Protection Agency (Retired)

9:05 AM–12:00 PM DNTS Symposium Harbor Island 1  
The Microbiome as a Modulator of Neurodevelopmental Disorders and Neurodegenerative Disease

Chairperson: Lori Driscoll, Colorado College

9:05 AM–9:15 AM **DNTS 2: The Gut-Brain Axis: A Primer**

Lori Driscoll, Colorado College

9:15 AM–9:45 AM **DNTS 3:** **Immune and Microbiota Profiles in Children with ASD and Co-Morbid GI Symptoms**

*Destanie Rose, University of California - Davis MIND Institute*

9:45 AM–10:15 AM **DNTS 4:** **The Microbiota-Gut-Brain Axis and Neurodevelopment in Animal Models**

*Karen-Anne McVey Neufeld, McMaster University Brain-Body Institute*

10:15 AM–10:45 AM **DNTS 5: The Role of the Microbiota in Disorders of the Gut-Brain Axis**

Siobhain O'Mahony, University College Cork

10:45 AM–11:00 AM Break (Harbor Island Foyer)

11:00 AM–11:30 AM **DNTS 6: Mitochondrial Bioenergetics and Gut Metabolites: Implications for Human Disease**

*Christopher Martyniuk, University of Florida*

11:30 AM–12:00 PM **DNTS 7:** **Microbiome Based Translational Strategy in Parkinson’s Disease**

Anumantha Kanthasamy, Iowa State University

**12:00 PM–1:30 PM Lunch on Your Own**

1:30 PM–2:30 PM Elsevier Distinguished Lecture Harbor Island 1

DNTS 8: Can Endocrine Disrupting Compounds Change Basic Brain Function/Structure Over Multiple Generations?

*Emilie Rissman, North Carolina State University*

2:35 PM–5:30 PM DNTS/TS Joint Symposium Harbor Island 2

Ocean-Borne Risks to Pregnant Women and Their Babies

*Chairpersons: Elaine M. Faustman, University of Washington and Edward D. Levin, Duke University*

2:35 PM–3:10 PM **DNTS 9: Organic Chemicals in the Marine Environment and Their Relevance to Human Health**

Lihini Aluwihare, Scripps Institution of Oceanography

3:10 PM–3:45 PM **DNTS 10: Research in the Time of Hurricanes: Puerto Rico 2017**

José F. Cordero, University of Georgia

3:45 PM–4:00 PM Break (Harbor Island Foyer)

4:00 PM–4:35 PM **DNTS 11: Domoic Acid Developmental Neurotoxicity: New Insights from Human and Animal Studies**

Elaine M. Faustman, University of Washington

4:35 PM–5:10 PM **DNTS 12: What Can Fish Tell Us About Developmental Neurotoxic Risks of the Sea?**

Edward D. Levin, Duke University

5:10 PM–5:30 PM Discussion

**5:35 PM–6:00 PM DNTS 13: Patricia Rodier Mid-Career Harbor Island 2**

Award for Research and Mentoring

From Neural Tube Defects to Environmental Contaminants

(Joint with TS)

Chairpersons: **Nicole Churchill Kleinstreuer, NTP Interagency Center for the Evaluation of Alternative Toxicological Methods, NIEHS** and Sonya Sobrian, Howard University College of Medicine

Lecturer: *Terry Hrubec, Edward Via College of Osteopathic Medicine Virginia Campus and Virginia-Maryland College of Veterinary Medicine, Virginia Tech*

6:00 PM–8:00 PM Welcome Reception, Poster Session 1, and Nautilus

Exhibits Attended

(Joint with TS)

**Presenting author is underlined.**

**DNTS P1:** **Effects of Domoic Acid Exposure on Maternal Reproduction and Infant Birth Characteristics in a Preclinical Primate Model**

*Thomas Burbacher, Kimberly Grant, Rebekah Petroff, Sara Shum, Brenda Crouthamel, Courtney Stanley, Noelle McKain, Jing Jing, Nina Isoherranen, University of Washington, Seattle*

**DNTS P2: Effects of In Utero Domoic Acid Exposure on Neonatal Behavior and Infant Memory in a Preclinical Primate Model**

*Kimberly Grant, Brenda Crouthamel, Caroline Kenney, Noelle McKain, Rebekah Petroff, Sara Shum, Jing Jing, Nina Isoherranen, Thomas Burbacher, University of Washington, Seattle*

**DNTS P3: Exposure to Manganese, Lead, and Barren Cage Stress During Development Has Adverse Long-term Effects on Neurocognitive, Behavioral, and Monoamine Outcomes in Adult Sprague-Dawley Rats**

*Jenna Sprowles, Robyn Amos-Kroohs, Amanda Braun, Chiho Sugimoto, Charles Vorhees, Michael Williams Cincinnati Children's Research Foundation*

**DNTS P4: Ultrasonic Vocalizations in Rat Pups to Examine the Impact of Neurodevelopmental Stressors:  Preliminary Results from Perinatal Stress and Manganese**

*Wendy Oshiro1, Alicia Smith2, Katherine McDaniel1, Tracey Beasley1, David Herr1, 1US Environmental Protection Agency, 2Oak Ridge Institute for Science and Technology*

**DNTS P5: Adult Offspring Performance in Trace Fear Conditioning after Concurrent Developmental Exposure to Variable Stress and Manganese**

*Jason Franklin, Brian Chorley, Virginia Moser, Wendy Oshiro, Tracey Beasley, Katherine McDaniel, David Herr, US Environmental Protection Agency*

**DNTS P6: Using Evidence Mapping to Refine the Evaluation of Neurological Endpoints in a Systematic Review of Polychlorinated Biphenyls (PCBs)**

*Laura Carlson1, Pamela Lein2, Carolyn Klocke2, Michele Taylor1, Geniece Lehmann1, 1US Environmental Protection Agency, 2University of California, Davis School of Veterinary Medicine*

**DNTS P7: Examination of the Combined Effects of Iodine Deficiency and Developmental Perchlorate Exposure on Fear Learning in Rats**

***DNTS CONFERENCE AWARD***

*Kiersten Bell1,2, Wendy Oshiro1, Katie O’Shaughnessy1,2, Jermaine Ford1, Mary Gilbert1, 1US Environmental Protection Agency, 2Oak Ridge Institute for Science and Technology*

**DNTS P8: Extrathyroidal Sites of Chemical Action and Neurodevelopmental Outcome -  An Examination Using Triclosan and Perfluorohexane Sulfonate**

*Mary Gilbert1, Susan Thomas1,2, Katie O'Shaughnessy1,2, Iman Hassan1, Cal Riutta1,2, Jermaine Ford1, Carmen Wood1, Wendy Oshiro1, Alicia Smith1,2, 1US Environmental Protection Agency, 2Oak Ridge Institute for Science and Technology*

**DNTS P9: Brain Thyroid Hormone Measurements in Developing Rats**

*Cal Riutta1,2, Iman Hassan1, Jermaine Ford1, Patricia Kosian1, Katie O'Shaughnessy1,2, Sigmund Degitz1, Mary Gilbert1, 1US Environmental Protection Agency, 2Oak Ridge Institute for Science and Technology*

**DNTS P10: Association Between Prenatal Exposure to Environmental Phenols and Attention to the Eyes in 7.5-Month-Old Infants**

***DNTS CONFERENCE AWARD***

*Megan Sieg, Jenna Sprowles, Andrea Aguiar, Susan Schantz, University of Illinois at Urbana-Champaign*

**DNTS P11: Coal Fly Ash, Aluminum, and Short-Term Memory Among Children 6-14 Years Old**

***DNTS CONFERENCE AWARD***

*Jack Pfeiffer1, Lindsay Tompkins1, Lonnie Sears1, Kristina Zierold2  
1University of Louisville, 2University of Alabama at Birmingham*

Monday, June 24, 2019

7:00 AM–6:00 PM Registration Open Harbor Island Foyer

7:30 AM–8:00 AM Morning Coffee Harbor Island Foyer

(Joint with TS)

8:00 AM–9:00 AM DNTS 14: Keynote Lecture Harbor Island 2

Environmental Influences on Child Health   
Outcomes (ECHO): A National Research Program

(Joint with TS and OTIS)

Chairperson: Christine Perdan Curran, Northern Kentucky University

Speakers: Carol J. Blaisdell, National Institutes of Health/Office of the Director, and Amy Elliott, Avera McKennan Hospital and University Health Center

9:05 AM–12:00 PM DNTS/TS Joint Symposium Harbor Island 2

Perinatal Choline Supplementation and Risk of Neurodevelopmental

Disorders Symposium

Chairpersons: Carl L. Keen, University of California–Davis and  
Helen J. K. Sable, University of Memphis

9:05 AM–9:15 AM Introduction

9:15 AM–9:45 AM **DNTS 15: Choline and Brain Development: An Overview**

Steven H. Zeisel, University of North Carolina–Chapel Hill

9:45 AM–10:15 AM **DNTS 16: Maternal Choline Supplementation: A Therapy for Down Syndrome with Population-Wide Cognitive Benefits**

*Julie Nevins, Cornell University*

10:15 AM–10:30 AM Break (Harbor Island Foyer)

10:30 AM–11:00 AM **DNTS 17: Can Choline Ameliorate the Neurodevelopmental Effects of Prenatal Exposure to Alcohol?**

Christina D. Chambers, University of California–San Diego

11:00 AM–11:30 AM **DNTS 18:** **Perinatal Choline Supplementation Improves Social Behavior in Rodent Models of Autism**

Tiffany J. Mellot, Boston University School of Medicine

11:30 AM–12:00 PM **DNTS 19:** **How Targeted Choline Supplementation Reverses the Negative Neurocognitive and Genomic Impacts of Early-Life Iron Deficiency**

Michael K. Georgieff, University of Minnesota

12:00 PM–1:45 PM Lunch on Your Own

12:00 PM–1:45 PM *NTT* Editorial Board Meeting Marina 6

1:45 PM–4:00 PM DNTS Symposium Harbor Island 1

Honoring the Contributions of DNTS Member Merle Paule

*Chairperson: Jerry Meyer, University of Massachusetts, Amherst*

1:45 PM–1:50 PM **Introduction**

Jerry Meyer, University of Massachusetts, Amherst

1:50 PM–2:20 PM **DNTS 20: Monkeys, Memories, and Merle**

Elizabeth Buffalo, University of Washington

2:20 PM–2:50 PM **DNTS 21:** **Regions of the Basal Ganglia and Primary Olfactory System Are Most Sensitive to the Initial and More Prolonged Increases in Neurodegeneration Seen in 7 d Old Rat Pups After 6 h of Sevoflurane Anesthesia**

John Bowyer, National Center for Toxicological Research

2:50 PM–3:20 PM **DNTS 22: From the Lab to the Clinic and Back Again: The Relevance of Behavioral Endpoints in Nonhuman Subjects to Clinical Outcomes in Humans**

*John Chelonis, National Center for Toxicological Research and University of Arkansas for Medical Sciences/Arkansas Children's Hospital*

3:20 PM–3:50 PM **DNTS 23:** **Celebrating with Dr. Merle Paule**

William Slikker, National Center for Toxicological Research

3:50 PM–4:00 PM **Closing Remarks**

*Merle Paule, National Center for Toxicological Research (retired)*

4:00 PM–4:20 PM Break (Harbor Island Foyer)

**4:20 PM–5:20 PM DNTS Platform Session 1**  **Harbor Island 1***Chairperson: Chip Vorhees, University of Cincinnati and Cincinnati Children’s Research Foundation*

**Presenting author is underlined.**

4:20 PM–4:40 PM **DNTS 24: Domoic Acid Exposure in Pregnancy Produces Behavioral Neurotoxicities in Mothers and Offspring**

***DNTS CONFERENCE AWARD***

*Rebekah Petroff1, Kimberly Grant1, Todd Richards1, Brenda Crouthamel1, Michael Murias2, Zenonia Leung1, Noelle McKain1, Sara Shum1, Jing Jing1, Nina Isoherranen1, Thomas Burbacher1, 1University of Washington, Seattle, 2Duke University*

4:40 PM–5:00 PM **DNTS 25: Prenatal Exposure to PCBs in Cyp1a2 Knock-out Mice Interferes with F1 Fertility, Impairs Long-term Potentiation, Reduces Acoustic Startle, and Impairs Conditioned Freezing Contextual Memory with Minimal Transgenerational Effects**

*Charles Vorhees1,2, Jillian Hufgard3, Jenna Sprowles4, Emily Pitzer1,2, Sheryl Koch5, Min Jiang5, Qin Wang5, Xiang Zhang5, Jacek Biesiada5, Jack Rubinstein5, Alvaro Puga5, Michael Williams1,2, 1University of Cincinnati, 2Cincinnati Children's Research Foundation, 3Indiana University School of Medicine, Indianapolis, 4University of Illinois at Urbana-Champaign, 5University of Cincinnati College of Medicine*

5:00 PM–5:20 PM **DNTS 26: Chronic Steady Low-Dose Prenatal Diazinon Exposure of Rats Causes Locomotor Hyperactivity, Increased Risk-taking Behavior and Cognitive Impairment**

*Edward Levin, Erica Pippen, Hannah White, Joseph Kim, Bruny Kenou, Andrew Hawkey, Zade Holloway, Duke University*

**6:00 PM–8:00 PM Poster Session 2 and Exhibits Attended Nautilus**

(Joint with TS and OTIS)

**Presenting author is underlined.**

**DNTS P12: Maternal pre-pregnancy body mass index and behavioral problems in offspring**

*Patricia Janulewicz, Lindsey Butler, Martha Werler, Nehemiah Kebede, Samantha Kelleher, Boston University*

**DNTS P13: Prenatal Cocaine Exposure and the Transition from Teen Drug Use to Problematic Drug Use (17-21 years)**

*Sonia Minnes, Meeyoung Min, Lynn Singer, June-Yung Kim, Sun Kyung Kim, Case Western Reserve University*

**DNTS P14: Prenatal Cocaine Exposure Predicts Adult Behavior Problems**

*Gale Richardson1, Natacha De Genna1, Lidush Goldschmidt2  
1University of Pittsburgh, 2 University of Pittsburgh Medical Center*

**DNTS P15: Phonological Processing Outcomes in Prenatally Cocaine Exposed Late Adolescents**

*Barbra Lewis, Gregory Powers, Sonia Minnes, Meeyoung Min, Lynn Singer, Case Western Reserve University*

**DNTS P16: Association of Fatty Acid Ethyl Esters in Meconium and Behavior During Childhood**

*Lynn Singer1, Meeyoung Min1, Cynthia Bearer2, Sonia Minnes1, Hasina Momotaz1, 1Case Western Reserve University, 2University of Maryland*

**DNTS P17:** **Prenatal Substance Exposure and Trajectories of Internalizing Problems Across Childhood: The Maternal Lifestyle Study**

*Meeyoung Min1, Sonia Minnes1, Linda LaGasse2, Barry Lester2,Hyunyong Park3, Hasina Momotaz1, Gregory Powers1, Lynn Singer1, 1Case Western Reserve University, 2Brown University, 3Sungshin University*

**DNTS P18: Frontal Brain Volume Asymmetry: A Neurobiological Marker for Prenatal Tobacco Exposure in Young Adults**

*Jenna Simon1, Gale Richardson2, Nancy Day2, Jennifer Willford1,   
1Slippery Rock University, 2University of Pittsburgh School of Medicine*

**DNTS P19: Chronic Paternal THC in Rats Causes Long-Lasting Behavioral Disruption in the Offspring**

***DNTS CONFERENCE AWARD***

*Zade Holloway, Andrew Hawkey, Erica Pippen, Hannah White, Bruny Kenou, Joseph Kim, Eva Greengrove, Edward Levin, Duke University*

**DNTS P20: Prolonged Methamphetamine Exposure During a Critical Period in Neonatal Sprague-Dawley Rats Does Not Exacerbate Egocentric and Allocentric Learning but Increases Reference Memory Impairment**

*Michael Williams, Robyn Amos-Kroohs, Charles Vorhees, University of Cincinnati College of Medicine, Cincinnati Children's Research Foundation*

**DNTS P21:** **Executive Function in the Lphn3-\- Rat: Relevance to Attention-Deficit/Hyperactivity Disorder (ADHD)**

*Hunter Nolen1, Deranda Lester1, Samantha Regan2,3, Michael Williams2,3, Charles Vorhees2,3, Helen Sable1, 1University of Memphis,* *2University of Cincinnati College of Medicine, 3Cincinnati Children's Research Foundation*

**DNTS P22: Altered Dopaminergic Markers and Striatal Dopamine Release Dynamics in Hyperactive *Lphn3* KO Rats**

***DNTS CONFERENCE AWARD***

*Samantha Regan1,2, Michael Cryan1, Ashley Ross1, Michael Williams1,2, Charles Vorhees1,2, 1University of Cincinnati, 2Cincinnati Children's Research Foundation*

**8:00 PM–10:00 PM Teratology Society and MARTA Seabreeze  
Graduate Students and Postdoctoral**

**Fellows Career Event**

(Open to Teratology Society, DNTS, and OTIS Graduate Students  
and Postdoctoral Fellows)

Tuesday, June 25, 2019

7:00 AM–6:00 PM Registration Open Harbor Island Foyer

7:30 AM–8:00 AM Morning Coffee Harbor Island Foyer

(Joint with TS)

**8:00 AM–9:00 AM** **DNTS 27: Workshop** **Harbor Island 1**

**State-of-the-Art Statistical Solutions for Litter Effects: Litter as a Random Effect in Generalized Linear Regression Models**

*Lecturers: Christina Sobin1 and Mari Golub2, 1University of Texas, El Paso, 2California National Primate Research Center*

9:05 AM–12:00 PM DNTS/TS Joint Symposium Harbor Island 2

Establishing Scientific Confidence in Alternate Approaches

*Chairpersons: Nicole Churchill Kleinstreuer, NTP Interagency Center for the Evaluation of Alternative Toxicological Methods, NIEHS and Jessica A. Palmer, Stemina Biomarker Discovery, Inc*

9:05 AM–9:45 AM **DNTS 28:** **Federal Agency Activities to Identify and Implement Alternatives**

Nicole Churchill Kleinstreuer, NTP Interagency Center for the Evaluation of Alternative Toxicological Methods, NIEHS

9:45 AM–10:25 AM **DNTS 29:** ***In Vitro* to *In Vivo* Extrapolation Using Maternal-Fetal Models**

Annie Lumen, US Food and Drug Administration

10:25 AM–10:40 AM Break (Harbor Island Foyer)

10:40 AM–11:20 AM **DNTS 30: International Progress on Alternative Approaches for Developmental Neurotoxicity: Evaluation of Assay Batteries and Development of IATAs and AOPs**

Timothy J. Shafer, US Environmental Protection Agency

11:20 AM–12:00 PM **DNTS 31: Integrated Testing Strategies for Developmental Neurotoxicity Testing**

Mamta Behl, National Toxicology Program, NIEHS

12:00 PM–1:30 PM Lunch on Your Own

**1:30 PM–3:00 PM DNTS Platform Session 2** **Harbor Island 1***Chairperson: Melissa Bailey, Emporia State University*

**Presenting author is underlined.**

1:30 PM–1:50 PM **DNTS 32: Association Between Prenatal Bisphenol Exposure and Problematic Behaviors at Age 2**

*Jennifer Hill1, Sarah Geiger2,3, Salma Musaad3, Andréa Aguiar3, Susan Schantz3, 1Southern Illinois University School of Medicine, 2Northern Illinois University, 3University of Illinois at Urbana-Champaign*

1:50 PM–2:10 PM **DNTS 33: Characterization of Performance on an Automated Visual Recognition Memory Task in 7.5-Month-Old Infants**

***DNTS CONFERENCE AWARD***

*Kelsey Dzwilewski, Francheska Merced-Nieves, Andrea Aguiar, Susan Schantz, University of Illinois at Urbana-Champaign*

2:10 PM–2:30 PM **DNTS 34: Association of Prenatal Maternal Stress with Visual Recognition Memory in 7.5-Month-Old Infants**

***DNTS CONFERENCE AWARD***

*Francheska Merced-Nieves, Kelsey Dzwilewski, Andrea Aguiar, Susan Schantz, University of Illinois at Urbana-Champaign*

2:30 PM–2:50 PM **DNTS 35:** **Co-exposure to Tobacco and Cannabis: Effects on Stress Reactivity at Early School Age**

*Rina Eiden1, Shannon Shisler1, Douglas Granger2, Pamela Schuetze3,  
1University at Buffalo 2University of California, Irvine, 3State University of New York at Buffalo State*

2:50 PM–3:15 PM Break (Harbor Island Foyer)

3:15 PM–4:30 PM DNTS Business Meeting Harbor Island 1

5:00 PM – 9:00 PM DNTS Social Event Meet in Hotel Lobby

Old Town Trolley City Tour *(Trolley departs hotel at 5:15 pm)*

Taco Bar at Ballast Point Brewery Little Italy *(Return trips on Trolley to Hotel at 8:00 and 9:00 pm)*

Wednesday, June 26, 2019

7:00 AM–6:00 PM Registration Open Harbor Island Foyer

7:30 AM–8:00 AM Morning Coffee Harbor Island Foyer

(Joint with TS)

**8:15 AM–8:45 AM** **DNTS 36: Richard Butcher New Investigator Award Harbor Island 1**

**Thyroid Hormone Disruption in the Fetal and Neonatal Rat: Predictive Hormone Measures and Bioindicators of Hormone Action in the Developing Cortex**

*Katherine O'Shaughnessy1,2, Susan Thomas1,2, Carmen Wood1, Richard Ford1,2, Jermaine Ford1, Michelle Hotchkiss1, Patricia Kosian1, Sigmund Degitz1, Mary Gilbert1, 1US Environmental Protection Agency, 2Oak Ridge Institute for Science and Education*

8:45 AM–10:25 AM DNTS Mini-Symposium Harbor Island 1

#Trending Topics in Developmental Neurotoxicology

*Chairperson: Helen Sable, University of Memphis*

8:45 AM-9:00 AM **Introduction**

Presenter: Helen Sable, University of Memphis

9:00 AM – 9:30 AM **DNTS 37**: **The Developmental and Toxicological Role of an Evolutionarily Conserved AHR-Dependent Long Non-Coding RNA in Zebrafish**

Robert Tanguay, Oregon State University

9:30 AM – 10:00 AM **DNTS 38**: **Developmental Neurotoxicity of Perfluoroalkyl Substances**

*Erin Hines, US Environmental Protection Agency*

10:00 AM – 10:30 AM **DNTS 39**: **Your Teenager’s Brain on Pot: What Do We Have To Look Forward To?**

*Diana Dow-Edwards, SUNY Downstate*

10:30 AM–11:00 AM Break: Warkany Tea (Harbor Island Foyer)

(Joint with TS)

**11:00 AM – 12:00 PM DNTS Platform Session 3** **Harbor Island 1***Chairperson: Jennifer Wilford, Slippery Rock University*

**Presenting author is underlined.**

11:00 AM–11:20 AM **DNTS 40: Serotonin Transporter (SERT) Binding Potentials in Brain of Juvenile Monkeys One Year After Discontinuation of a Two-year Treatment with Fluoxetine**

*Mari Golub1, Casey Hogrefe2, Lillian Campos2, Andrew Fox2, 1California National Primate Research Center, 2University of California, Davis*

11:20 AM–11:40 AM **DNTS 41: Impacts of Dim Light at Night and Phthalate Exposure on Circadian Locomotor and Feeding Behaviors and Hypothalamic Gene Expression in Male and Female Mice**

***DNTS CONFERENCE AWARD***

*Katherine Hatcher, Yesha Patel, Megan Mahoney, University of Illinois at Urbana-Champaign*

11:40 AM–12:00 PM **DNTS 42: Deltamethrin Exposure to Sprague-Dawley Rats From Postnatal Days 3-20 Alters Dopaminergic and Glutamatergic Activity and Long-term Potentiation When Tested as Adults**

***DNTS CONFERENCE AWARD***

*Emily Pitzer1,2, Chiho Sugimoto2, Gary Gudelsky1, Michael Williams1,2, Charles Vorhees1,2, 1University of Cincinnati, 2Cincinnati Children’s Research Foundation*

**SAVE THE DATE: DNTS 2020 Meeting, June 28–July 1, 2020**

Charleston Marriott

170 Lockwood Boulevard

Charleston, SC

(Joint with the Teratology Society)