



Thirty-third Annual Meeting of the Neurobehavioral Teratology Society Held in Conjunction with the 49th Annual Meeting of the Teratology Society and the 22nd Annual Meeting of the Organization of Teratology Information Specialists

Wyndham Rio Mar Beach Resort
Rio Grande, Puerto Rico
June 28th–July 1, 2009

2009 RICHARD BUTCHER NEW INVESTIGATOR AWARD

Sherin Boctor (nominated by Dr. Sherry Ferguson)
Department of Interdisciplinary Biomedical Sciences, University of Arkansas for Medical Sciences, Little Rock, Arkansas
Neonatal PCP is More Potent than Ketamine at Modifying Prewaning Behaviors of Sprague–Dawley Rats

NBTS CONFERENCE AWARDS

Patricia Janulewicz (nominated by Dr. Jane Adams)
University of Massachusetts, Boston, Massachusetts
Attention and Working memory in Children Exposed Prenatally to Anticonvulsant Monotherapy

Amanda A. Braun (nominated by Dr. Charles Vorhees)
Cincinnati Children's Research Foundation, Division of Neurology,
Functional alterations in the 5HT_{1A} receptor following neonatal +/-3,4-methylenedioxymethamphetamine
(MDMA) exposure in rats

SOT NEUROTOXICOLOGY SPECIALTY SECTION CONFERENCE AWARD

Damiyon Sledge (nominated by Dr. Ed Levin)
Duke University Medical Center, Durham, North Carolina
A Zebrafish Model of the Persisting Neurobehavioral Impairment Caused by Developmental Chlorpyrifos

NBTS 2009 Program

Saturday, June 27, 2009

7:30 a.m.–8:00 a.m.	Teratology Society Education Course: Coffee and Continental Breakfast
8:00 a.m.–12:00 p.m.	Teratology Society Education Course Session I: Epigenetic Mechanisms (Separate registration through TS required)
1:00 p.m.–5:00 p.m.	NBTS Registration – Rio Mar 7–8 Foyer
1:00 p.m.–2:00 p.m.	NBTS Public Affairs Committee – Canary Room
1:45 p.m.–5:30 p.m.	Teratology Society Education Course Session II: Adult Disease Outcomes of Developmental Programming (Separate registration through T.S. required)
2:00 p.m.–3:00 p.m.	NBTS Publications Committee Meeting – Canary Room
3:00 p.m.–6:00 p.m.	NBTS Council Meeting – Pelican Room

Sunday, June 28, 2009

8:00 a.m.–5:00 p.m.	NBTS Registration – Rio Mar 7–8 Foyer
1:00 p.m.–1:10 p.m.	President's Welcome and Official Opening of 2009 NBTS Meeting – Rio Mar 7–8

- Kimberly Grant^{1,2}, ¹Department of Environmental and Occupational Health Sciences, ²Eunice Kennedy Shriver Center on Human Development and Disability, University of Washington, Seattle, WA, USA
- 1:10 p.m.–4:50 p.m. **NBTS Symposium 1 – Rio Mar 7–8**
Behavioral Toxicology Symposium
Behavioral Toxicology in the 21st Century: Challenges and Opportunities for Behavioral Scientists
 Chairperson: Phil Bushnell, U.S. Environmental Protection Agency, Research Triangle Park, NC, USA
- 1:10 p.m.–1:25 p.m. NBTS1. The Behavioral Toxicology Society – Past, Present and Future, Ginger Moser, U.S. Environmental Protection Agency, Research Triangle Park, NC, USA
- 1:25 p.m.–1:30 p.m. NBTS2. Behavioral Toxicology in the 21st Century: Challenges and Opportunities for Behavioral Scientists, Philip Bushnell, U.S. Environmental Protection Agency, Research Triangle Park, NC, USA
- 1:30 p.m.–2:00 p.m. NBTS3. The Future of Toxicity Testing – the NRC Vision and the EPA's ToxCast Program National Center for Computational Toxicology, Robert Kavlock, U.S. Environmental Protection Agency, Research Triangle Park, NC, USA
- 2:00 p.m.–2:30 p.m. NBTS4. Developmental Neurotoxicity and Thyroid Hormone Disruptors: Past, Present and Future, Kevin Crofton, U.S. Environmental Protection Agency, Research Triangle Park, NC, USA
- 2:30 p.m.–3:00 p.m. NBTS5. An Acute Toxicity Pathway Based on Ion Channel Perturbation. Philip Bushnell, U.S. Environmental Protection Agency, Research Triangle Park, NC, USA
- 3:00 p.m.–3:20 p.m. Coffee and Refreshments – Rio Mar 7–8 Foyer
- 3:20 p.m.–3:50 p.m. NBTS6. Phthalates as an Example of the NRC's Flawed Vision for Toxicology's Future, Bernard Weiss, University of Rochester School of Medicine and Dentistry, Rochester, NY, USA
- 3:50 p.m.–4:20 p.m. NBTS7. Risk Assessment Implications of the NRC Vision, Deborah Rice, Maine Center for Disease Control, Augusta, ME, USA
- 4:20 p.m.–4:50 p.m. Discussion
- 6:00 p.m.–8:00 p.m. Joint TS/NBTS/OTIS Poolside Welcome Reception

Monday, June 29, 2009

- 8:00 a.m.–5:00 p.m. NBTS Registration – Rio Mar 7–6 Foyer
- 8:00 a.m.–8:30 a.m. Coffee, Tea and Continental Breakfast – Rio Mar 7–8 Foyer
- 8:30 a.m.–9:30 a.m. **Elsevier Distinguished Lectureship – Rio Mar 7–8**
Domestic Issues in Maternal and Child Health: Minority-Based Disparities
 Chairperson: Charles Vorhees, Cincinnati Children's Research Foundation, Cincinnati, OH, USA
 Speaker: Jane Adams, University of Massachusetts Boston, Boston, MA, USA (NBTS8)
- 9:30 a.m.–12:00 p.m. **NBTS Symposium 2 – Rio Mar 7–8**
Marine Biotoxins: A New Frontier in Developmental Neurotoxicology
 Chairperson: Ed Levin, Duke University Medical Center, Durham, NC, USA
- 9:30 a.m.–9:45 a.m. Introduction to Session, Ed Levin, Duke University Medical Center, Durham, NC, USA
- 9:45 a.m.–10:15 a.m. NBTS9. Oceans and Human Health: Lessons Learned and Challenges Ahead, Elaine Faustman, Pacific Northwest Center for Human Health and Ocean Studies, University of Washington, Seattle, WA, USA
- 10:15 a.m.–10:45 a.m. NBTS10. Progressive Neurological Dysfunction Produced by Low-Doses of Domoic Acid During Neonatal Development in Rats, R. Andrew Tasker, University of Prince Edward Island, Charlottetown, Prince Edward Island, Canada
- 10:45 p.m.–11:00 a.m. Coffee and Tea Break – Rio Mar 7–8 Foyer
- 11:00 a.m.–11:30 a.m. NBTS11. Role of Domoic Acid and DDT in an Emerging Epilepsy Disorder of California Sea Lions, John Ramsdell, Marine Biotoxins Program, National Oceanic and Atmospheric Administration, Charleston, SC, USA
- 11:30 a.m.–12:00 p.m. NBTS12. Domoic Acid Neurotoxicity in American Indians: Baseline Characteristics of the CoAsta Cohort, Lynne Grattan¹, Sparkle Roberts¹, Vera Trainer², Carol Boushey³, Thomas Burbacher⁴, Kimberly Grant⁴, Kate Tracy¹, Glen Morris¹, ¹Department of Neurology, Epidemiology and Preventive Medicine, University of Maryland, Baltimore, MD, USA, ²National Marine Fisheries Science Center, Northwest Fisheries Sciences Center, National Oceanic and Atmospheric Agency, Seattle, WA, USA, ³Purdue University, West Lafayette, Indiana, USA, ⁴Department of Environmental and Occupational Health Sciences, University of Washington, Seattle, WA, USA
- 12:00 p.m.–1:10 p.m. **Neurotoxicology and Teratology Editorial Board Meeting**
- 12:00 p.m.–1:15 p.m. Lunch on your own
- 1:15 p.m.–3:15 p.m. **Symposium 3 (Jointly Sponsored by NBTS and TS) – Rio Mar 7–8**
Developmental Toxicity of Environmental Exposures: From Effects on Behavior to Genes
 Chairpersons: Stan Barone Jr., U.S. Environmental Protection Agency, Washington, D.C., USA and Carmen Umpierre, University of Puerto Rico, Cayey, Puerto Rico
- 1:15 p.m.–1:30 p.m. NBTS13. Overview of Environmental Vulnerability to Chemical Exposures, Stan Barone Jr., U.S. Environmental Protection Agency, Washington, DC, USA
- 1:30 p.m.–1:45 p.m. NBTS14. Quantitative Analysis of Early Childhood Floor Behavior and Inhalation Exposure to Toxins, Stuart Shalat¹, Marta Hernandez², Kathleen Black², ¹Environmental and Occupational Health Sciences Institute, Rutgers University, Piscataway, NJ, USA, ²Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey, Piscataway, NJ, USA
- 1:45 p.m.–2:00 p.m. NBTS15. Prenatal Exposure to Environmental Contaminants is Related to Sub-Clinical Behavioral Impairment in Inuit Children in Arctic Quebec, P. Plusqueux^{1,2}, G. Muckle^{1,2}, E. Dewailly^{1,3}, P. Ayotte^{1,3}. ¹Public Health Research Unit, CHUQ Research Center (CHUL), Quebec City, QC, Canada, ²School of Psychology, Laval University, Quebec City, QC, Canada, ³Department of Social and Preventive Medicine, Laval University, Quebec City, QC, Canada
- 2:00 p.m.–2:15 p.m. NBTS16. Differential Neurobehavioral Responses in PCB-treated Mice Having Different Ahr and Cyp1a2 Alleles, Christine Curran^{1,2}, Krishna Patel², Michael Williams³, Charles Vorhees³, Daniel Nebert², ¹Northern Kentucky University, Highland Heights, KY, USA, ²University of Cincinnati, College of Medicine, Cincinnati, OH, USA, ³Cincinnati Children's Research Foundation, Cincinnati, OH, USA
- 2:15 p.m.–2:30 p.m. NBTS17. Ahr-Mediated Gene Expression in the Developing Mouse Telencephalon, J.M. Gohlke¹, P. Stockton², S. Sieber³, J. Foley², C.J. Portier¹. ¹Environmental Systems Biology Group, Laboratory of Molecular Toxicology, National Institute of Environmental Health Sciences, Research Triangle Park, NC, USA, ²Laboratory of Environmental Pathology, National Institute of Environmental Health Sciences, Research Triangle Park, NC, USA, ³Microarray Group, Laboratory of Molecular Toxicology, National Institute of Environmental Health Sciences, Research Triangle Park, NC, USA
- 2:30 p.m.–2:45 p.m. NBTS 18. Exposure to Pyrethroid Insecticides Alters Expression of Genes Important for Dopaminergic Neuronal Development, Amy Demicco¹, Jason Richardson², Keith Cooper¹, Lori White¹, ¹Rutgers University, New Brunswick, NJ, USA, ²University of Medicine and Dentistry of New Jersey, Piscataway, NJ, USA
- 2:45 p.m.–3:00 p.m. NBTS19. Profiling Developmental Toxicity of 387 Environmental Chemicals Using EPA's Toxicity Reference Database (ToxRefDB), T.B. Knudsen¹, M.T. Martin¹, R.J. Kavlock¹, R.S. Judson¹, D.J. Dix¹, A.V. Singh². ¹NCCT, U.S. Environmental Protection Agency, Research Triangle Park, NC, USA, ²Lockheed Martin, Research Triangle Park, NC, USA
- 3:00 p.m.–3:15 p.m. NBTS20. Scientific Consensus Statement on Environmental Agents Associated with Neurodevelopmental Disorders, Steven Gilbert¹, Elise Miller², ¹Institute of Neurotoxicology and Neurological Disorders, Seattle, WA, USA, ²Collaborative on Health and the Environment, Freeland, WA, USA
- 3:15 p.m.–3:35 p.m. Coffee and Refreshments – Rio Mar 7–8 Foyer
- 3:35 p.m.–5:15 p.m. **NBTS Symposium 4 – Rio Mar 7–8**
Developmental Vulnerability to Environmental Chemical Exposures: Evidence From Analysis of Behavior to Genes: Part 2
 Chairperson: Mary Gilbert, U.S. Environmental Protection Agency, Research Triangle Park, NC, USA
- 3:35 p.m.–3:50 p.m. **SOT Neurotoxicology Specialty Section Conference Award Winner**
- NBTS21. A Zebrafish Model of the Persisting Neurobehavioral Impairment Caused by Developmental Chlorpyrifos Exposure, Damiyon Sledge, Jerry Yen, Terrell Morton, Laura Dishaw, Kathleen Shuler, Susan Donerly, Elwood Linney, Edward Levin, Duke University Medical Center, Durham, NC, USA
- 3:50 p.m.–4:05 p.m. NBTS22. Down-Regulation of DNA Methyltransferase Expression is Associated with Increased Dopaminergic Gene Expression Following Developmental

- Pyrethroid Exposure, Jason Richardson^{1,2}, ¹Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey, Piscataway, NJ, USA, ²Environmental and Occupational Health Sciences Institute, Rutgers University, Piscataway, NJ, USA
- 4:05 p.m.–4:20 p.m. NBTS23. Late-emerging Cognitive Impairment in Male Rats after Neonatal Parathion Exposure, Olga Timofeeva, Liwei Yang, Frederic Seidler, Theodore Slotkin, Edward Levin, *Duke University Medical Center, Durham, NC, USA*
- 4:20 p.m.–4:35 p.m. NBTS24. Development of a Robotic Surrogate for Measurement of Young Children's Exposure to Environmental Toxins, Stuart Shalat^{1,2}, Adam Stambler³, Marta Hernandez², Kathleen Black², ¹Environmental and Occupational Health Sciences Institute, Rutgers University, Piscataway, NJ, USA, ²Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey, Piscataway, NJ, USA, ³Rutgers, the State University of New Jersey, New Brunswick, NJ, USA
- 4:35 p.m.–4:50 p.m. NBTS25. Behavioral Sensitization to d-Amphetamine is Reduced in Rats Developmentally Exposed to PCBs. Helen Sable¹, Emily Poon², Supida Monaiikul², Susan L. Schantz^{2,3}, ¹University of Memphis, Department of Psychology, Memphis, TN, USA, ²University of Illinois at Urbana-Champaign, Neuroscience Program, Urbana, IL, USA, ³University of Illinois at Urbana-Champaign, Department of Veterinary Biosciences, Urbana, IL, USA
- 4:50 p.m.–5:05 p.m. NBTS26. Persisting Cognitive Effects of Pre vs. Postnatal Domoic Acid Exposure in Rats, Edward Levin, *Duke University Medical Center, Durham, NC, USA*
- 5:30 p.m.–7:30 p.m. **NBTS/TS/OTIS Joint Poster Session I and Exhibits Open – Rio Mar 1–5 (Posters set up at 11:45 a.m., attended 5:30 – 7:30 p.m.)**
- NBTS27. Adolescent Methylphenidate Treatment Does Not Alter Adult Levels of Hedonia in Male and Female Sprague–Dawley Rats, Sherry A Ferguson^{1,2}, Sherin Y Boctor^{1,2}, ¹Div Neurotoxicology/NCTR/FDA, Jefferson, AR, United States, ²Dept Interdisciplinary Biomedical Sciences/UAMS, Little Rock, AR, USA
- NBTS28. Health Risks in Children From Environmental Chemicals: Contributions from Studies with Monkeys, Kimberly Grant^{1,2}, Deborah Rice³, ¹Department of Environmental and Occupational Health Sciences, University of Washington, Seattle WA, USA, ²Eunice Kennedy Shriver Center on Human Development and Disability, University of Washington, Seattle, WA, USA, ³Maine Center for Disease Control, Augusta, ME, USA
- NBTS29. Effects of Body Weight on Locomotor Activity and Auditory Startle Response in Neonatal Rats, Melissa Beck, Julie Varsho, Donald Stump, Mark Nemeec, *WIL Research Laboratories, LLC, Ashland, OH, USA*
- NBTS30. Undernutrition in Early Life Does Not Impair Learning in Young or Aged Animals, Mary Gilbert, Robert MacPhail, J. Baldwin, N. Chernoff, *U.S. Environmental Protection Agency, Research Triangle Park, NC, USA*
- NBTS31. Innovative Methodology Using Computerized Touch-Sensitive Technology to Evaluate Learning and Memory in Infant Monkeys, Thomas Burbacher^{1,2}, Noelle McKain^{1,2}, Kimberly Grant^{1,2}, Dorothy Mandel¹, ¹Department of Environmental and Occupational Health Sciences, University of Washington, Seattle WA, USA, ²Eunice Kennedy Shriver Center on Human Development and Disability, University of Washington, Seattle, WA, USA, ³Washington National Primate Center, University of Washington, Seattle, WA, USA
- NBTS32. 12 Year Growth Trajectories of Children Prenatally Exposed to Cocaine, Lynn Singer, Elizabeth Short, Meeyoung Min, Barbara Lewis, Sonia Minnes, *Case Western Reserve University, Cleveland, Ohio, USA*
- NBTS33. An Examination of the Relationship Between Time Estimation and Time Production, John J. Chelonis^{1,2}, Claire R. Gravelin², ¹National Center for Toxicological Research, Jefferson, AR, USA, ²The College at Brockport, SUNY, Brockport, NY, USA

Tuesday, June 30, 2009

- 8:00 a.m.–5:00 p.m. NBTS Registration – Rio Mar 7–8 Foyer
- 7:45 a.m.–8:15 a.m. Coffee, Tea and Continental Breakfast – Rio Mar 1–5
- 8:30 a.m.–9:30 a.m. **Joint NBTS/TS/OTIS State of the Art Lecture – Rio Mar 6**
Environment and Child Health
 Chairperson: Elaine Faustman, *University of Washington, Seattle, WA, USA*
 Speaker: Lizbeth Lopez Carrillo, *Nacional Institute of Public Health, Mexico (NBTS34)*
- 9:30 a.m.–12:15 p.m. **Symposium 5 (Jointly Sponsored by TS, NBTS, and OTIS) – Rio Mar 6**
Global Issues in Maternal and Child Health
 Chairpersons: Gary Kimmel and Carole Kimmel, *Private Consultants, NC, USA*
- 9:30 a.m.–9:35 a.m. Introduction
- 9:35 a.m.–10:10 a.m. NBTS35. HIV and Perinatal Transmission, Clemente Diaz, *Dept. of Pediatrics, University of Puerto Rico School of Medicine, San Juan, Puerto Rico, USA*
- 10:10 a.m.–10:45 a.m. NBTS36. Environmental Disasters and Children's Health, Phil Landrigan, *Mount Sinai School of Medicine, New York, NY, USA*
- 10:45 a.m.–11:00 a.m. Coffee and Tea Break – Rio Mar 6 Foyer
- 11:00 a.m.–11:35 a.m. NBTS37. Maternal and Child Nutrition: Long Term Impacts on Disease in Low and Middle Income Countries, Linda Adair, *The University of North Carolina at Chapel Hill, Chapel Hill, NC, USA*
- 11:35 a.m.–12:10 a.m. NBTS38. Treating Severe Malaria With Pre-Referral Artesunate Saves Lives and Prevents CNS Damage, Melba Gomes, M.A. Faiz, Jo Gyapong, M. Warsame, T. Agbenyega, A. Babiker, F. Baiden, E. Bin Yunus, F. Binka, C. Clerk, P. Folb, R. Hassan, A. Hossain M.D., O. Kimbute, A. Kitua, S. Krishna, C. Makasi, N. Mensah, Z. Mrango, P. Olliaro, R. Peto, T.J.Peto, M.R. Rahman, I. Ribeiro, R. Samad, N.J. White, *Study 13 Research Group, World Health Organization, Geneva, Switzerland*
- 12:10 a.m.–12:15 p.m. Conclusions
- 12:15 p.m.–1:15 p.m. Lunch on your own
- 1:15 p.m.–4:15 p.m. **NBTS Symposium 6 – Rio Mar 7–8**
Drugs of Abuse and the Developing Nervous System
 Chairperson: Sonya Sobrian, *Howard University College of Medicine, Washington, DC, USA*
- 1:15 p.m.–1:30 p.m. NBTS39. Do Rodents Have An IQ? A Historical Overview, R. Robert Holson, *Dept. of Psychology, New Mexico Tech, Socorro, NM, USA*
- 1:30 p.m.–1:45 p.m. NBTS40. Search for the Critical Period in Rats Neonatally Treated With 3,4-(±)-Methylenedioxymethamphetamine (MDMA): Effects On Behavior, Charles Voorhees, Matthew Skelton, Devon Graham, Tori Schaefer, Curtis Grace, Amanda Braun, Michael Williams, *Cincinnati Children's Research Foundation, Cincinnati, OH, USA*
- 1:45 p.m.–2:00 p.m. NBTS41. Prenatal Cocaine and/or Nicotine Differentially Alter the Acquisition of Active Avoidance as a Function of the Age of the Offspring, Sonya Sobrian¹, Katherine Ressman¹, Lara Mara¹, R. Robert Holson², Martha Gay¹, ¹Howard University College of Medicine, Washington, DC, USA, ²Dept. of Psychology, New Mexico Tech, Socorro, NM, USA
- 2:00 p.m.–2:15 p.m. **2009 Richard Butcher New Investigator Award Recipient**
- NBTS42. Neonatal PCP Is More Potent than Ketamine at Modifying Prewaning Behaviors of Sprague–Dawley Rats, Sherin Boctor¹, Cheng Wang^{1,2}, Sherry Ferguson^{1,2}, ¹Department of Interdisciplinary Biomedical Sciences, University of Arkansas for Medical Sciences, Little Rock, AR, USA, ²Division of Neurotoxicology, National Center for Toxicological Research/FDA, Jefferson, AR, USA
- 2:15 p.m.–2:30 p.m. NBTS43. Prenatal THC and Effects on Executive Function in the Rat, Diana Dow-Edwards, Ning Zhao, April Jackson, Maiko Iijima, Stacy Stephenson, Lauren Harte, *SUNY Downstate, Brooklyn, NY, USA*
- 2:30 p.m.–2:45 p.m. Coffee and Refreshments – Rio Mar 7–8 Foyer
- 2:45 p.m.–3:00 p.m. NBTS44. Effects of Prenatal Cocaine Exposure on Adolescent Development, Gale Richardson¹, Lidush Goldschmidt², Nancy Day¹, ¹University of Pittsburgh School of Medicine, Pittsburgh, PA, USA, ²University of Pittsburgh Medical Center, Pittsburgh, PA, USA
- 3:00 p.m.–3:15 p.m. NBTS45. The Effects of Chronic Methylphenidate Treatment on the Performance of Rhesus Monkeys in the NCTR Operant Test Battery, Tucker Patterson¹, Mi Li¹, Suzanne Morris², Jesse Rodriguez¹, William Slikker³, Jr., Donald Mattison⁴, Merle Paule¹, ¹Division of Neurotoxicology, National Center for Toxicological Research/U.S. FDA, Jefferson, AR, USA, ²Division of Genetic & Reproductive Toxicology, National Center for Toxicological Research/U.S. FDA, Jefferson, AR, USA, ³Office of the Director, National Center for Toxicological Research/U.S. FDA, Jefferson, AR, USA, ⁴National Institute of Child Health & Human Development, Rockville, MD, USA
- 3:15 p.m.–3:30 p.m. NBTS46. Effects of Moderate Prenatal Alcohol Exposure on Measures of Volume, Asymmetry, and Shape in the Caudate Nucleus in Young Adults, Jennifer Willford¹, Richard Day², Aizenstein Howard¹, Bethany Ground¹, Ryan Kruk³, Neil Cypert², Matthew Zeglen³, Nancy Day¹, ¹University of Pittsburgh, School of

- Medicine, Pittsburgh, PA, USA, ²University of Pittsburgh, Graduate School of Public Health, Pittsburgh, PA, USA, ³University of Pittsburgh Medical Center, Pittsburgh, PA, USA
- 3:30 p.m.–3:45 p.m. NBTS47. Do the Neuroprotective Effects of Adolescent MDMA Pretreatment on a Subsequent MDMA Binge Generalize to Methamphetamine?, Christina Henderson, Jerrold Meyer, *University of Massachusetts – Amherst, Amherst, MA, USA*
- 3:45 p.m.–4:00 p.m. NBTS48. Using Litter as the Unit of Analysis: Where Do We Stand?, R. Robert Holson, *New Mexico Tech, Socorro, NM, USA*
- 4:00 p.m.–4:15 p.m. **NBTS Conference Award Recipient**
Functional Alterations in the 5HT_{1A} Receptor Following Neonatal +/-3,4-methylenedioxymethamphetamine (MDMA) Exposure in Rats, Amanda A. Braun, Tori L. Schaefer, Charles V. Vorhees, Michael T. Williams, *Cincinnati Children's Res. Fnd., Div. of Neurology, University Cincinnati College of Medicine, Cincinnati, OH, USA*
- 4:15 p.m.–4:30 p.m. BREAK
- 4:30 p.m.–5:30 p.m. **Annual NBTS Business Meeting – Rio Mar 7–8**
- 5:30 p.m.–7:30 p.m. **NBTS/TS Joint Poster Session II and Exhibits – Rio Mar 1–5 (Posters set up at 11:45 a.m., attended 5:30 – 7:30 p.m.)**
- NBTS49. Connecting Science and People for Better Policy, Steven Gilbert, Sean Foley, *Institute of Neurotoxicology and Neurological Disorders, Seattle, WA, USA*
- NBTS50. Self-Report Behavioral Outcomes of 12-year-old Cocaine-Exposed Children, Sonia Minnes, Lynn Singer, Meeyoung Min, Cintia Ramos, Sudtida Satayathum, *Case Western Reserve University, Cleveland, OH, USA*
- NBTS Conference Award Recipient.** NBTS51. Attention and Working memory in Children Exposed Prenatally to Anticonvulsant Monotherapy, Patricia Janulewicz¹, Jessica Walsh¹, Tanya Nixon¹, Sam Olson¹, Lewis Holmes², Jane Adams¹, ¹*University of Massachusetts, Boston, MA, USA*, ²*MassGeneral Hospital for Children, Boston, MA, USA*
- NBTS52. The Use of Developmental Neurotoxicity Data in Pesticide Risk Assessments, Kathleen Raffaele¹, Jess Rowland², Brenda May², Susan Makris¹, Kelly Schumacher⁴, Louis Scarano³, ¹*Office of Research and Development, U.S. Environmental Protection Agency, Washington, DC, USA*, ²*Office of Pesticide Programs, U.S. Environmental Protection Agency, Washington, DC, USA*, ³*Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Washington, DC, USA*, ⁴*Region 7, U.S. Environmental Protection Agency, Kansas City, KS, USA*
- NBTS53. Effects of Dextromethorphan on Zebrafish Larval Development, Frank Scalzo, Mike Levine, *Bard College, Annandale-on-Hudson, New York, USA*
- 8:00–10:00 p.m. NBTS Casino Night – Charitable Event

Wednesday, July 1, 2009

- 7:30 a.m.–8:00 a.m. Coffee, Tea and Continental Breakfast – Rio Mar 7–8 Foyer
- 8:00 a.m.–9:00 a.m. **Joint NBTS/TS State of the Art Lecture – Rio Mar 6**
Monkey Models for Studies of Maternal and Child Health: When and Why?
Chairperson: Kimberly Grant, *University of Washington, Seattle, WA, USA*
Speaker: Deborah Rice, *Maine Center for Disease Control and Prevention, Augusta, ME, USA (NBTS55)*
- 9:00 a.m.–12:00 p.m. **Symposium 7 – Rio Mar 7–8**
Primate Models of Children's Health and Developmental Disabilities
Chairperson: Thomas Burbacher, *University of Washington, Seattle, WA, USA*
- 9:00 a.m.–9:15 a.m. Introduction
- 9:15 a.m.–9:50 a.m. NBTS55. Nonhuman Primate Models for Pediatric AIDS, Nancy Haigwood^{1,2}, Koen Van Rompay³, ¹*Oregon National Primate Research Center, Beaverton, OR, USA*, ²*Oregon Health & Sciences University, Beaverton, OR, USA*, ³*California National Primate Research Center, Davis, California, USA*
- 9:50 a.m.–10:25 a.m. NBTS56. Nutrition and Brain Development: Role of Nonhuman Primate Models, Mari Golub, *California National Primate Research Center, Davis, California, USA*
- 10:25 a.m.–10:40 a.m. Coffee and Tea Break – Rio Mar 7–8 Foyer
- 10:40 a.m.–11:15 a.m. NBTS57. Alteration in Nonhuman Primate Brain Function as a Consequence of Developmental Exposure to Drugs of Abuse, Merle Paule, *National Center for Toxicological Research/FDA, Jefferson, AR, USA*
- 11:15 a.m.–11:50 a.m. NBTS58. Twins, Chimeras and Stem Cells: Nonhuman Primate Models for Neurobehavioral Research, Eric Hayes, Jennifer Potter, Eliza Curnow, Thomas Burbacher, *Washington National Primate Research Center, University of Washington, Seattle, WA, USA*
- 11:50 a.m.–12:00 p.m. Discussion
- 12:00 p.m. NBTS 2009 Formally Adjourned