CURRICULUM VITAE

Name: **Stanley Barone Jr. MS, PhD**
Title: Senior Science Policy advisor for immediate office
Office of Chemical Safety and Pollution Prevention

PROFILE

An executive public service leader, and senior scientist policy manger with a track record of coaching and leading organizations to successful achievement of mission and goals.

- Passion for planning and achieving practical, measurable results
- Focus on mission & goals of protecting human health and the environment
- Commitment to public service & public servants
- Core value driven interest in environmental & human health protection
- Extensive knowledge & experience in public sector management and transparency

EDUCATION:

Institution and Location	Degree	Year	Field
East Carolina University, School of Medicine, Greenville, NC	Ph.D.	1990	Anatomy & Cell Biology (neurobiology- developmental neurotoxicology)
East Carolina University (ECU), Biology Department, Greenville, NC	M.S.	1985	Biology (endocrinology)
Belmont Abbey College, Belmont, NC	B.S.	1982	Biology

INTERESTS and MAJOR ACTIVITIES:

Currently, Dr. Barone serves as a senior science policy advisor in the immediate office of OCSPP. Dr. Barone's experience leading major programs and projects demonstrates his program mangment skills. His scientific background has been applied to policy development in the form of guidance and risk evaluations to support rulemaking and regulatory development in multiple programs including OAR methanol delisting petition and mercury rule, Childrens Risk Assessment Framework, EJ guidance, systematic review guidance, AEGL assessments and TSCA risk evaluations. His technical background has provided him the foundational edge in policy development of strategy for nonanimal test method approaches including leading the endocrine disruption testing program and representing the agency at the OECD and UNEP chemical programs. His key responsibilities included overseeing risk assessment activities related to both new chemicals and existing chemicals programs, administrative, and resource functions for the entire division. He has also served as the OPPT's peer review coordinator. Dr. Barone's health and ecological assessment activities include involvement in IRIS assessments of tetrachloroethylene, trichloroethylene (TCE) and methanol, and leadership of OPPT TSCA risk assessments including TCE, antimony trioxide, methylene chloride, *n*-methylpyrolidone, and several flame-retardant assessments. His key responsibilities included overseeing risk assessment activities related to both new chemicals and existing chemicals programs. He has been instrumental in developing streamlined prioritization and scoping processes for existing chemical assessment. These efforts included evaluation of ecological and health endpoints. In addition, this position included oversight of design and development of new methods and models for pollution prediction and prevention of chemical exposures.

EMPLOYMENT: Leadership and Professional Experience:

March 2022- present, SL position - Senior Science Policy advisor for immediate office of OCSPP. As senior advisor I provides expert technical advice and guidance to senior management concerning scientific integrity, science policy development, and science coordination. This includes, but is not limited to, an understanding of the agency's scientific integrity policy and risk evaluation procedures under the Toxic Substances Control Act (TSCA), the Federal Insecticide, Fungicide, and Rodenticide Act (FIRA), and the Federal Food, Drug, and Cosmetic Act (FFDCA).

October 2020 to February 2022 GS15 Branch Chief Prioritization and Informatics Branch (GS-401-15) Data Gathering and Analysis Division, Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency,

The key challenge is developing data science group post OCSPP reorganization and leading cross office team overseeing systematic review and enterprise-wide data prioritization activities for existing chemical risk assessment. I provided leadership for data gathering efforts for TSCA by leading multi-disciplinary teams team to complete 10 highly complex priority chemical risk evaluations, to meet statutory deadlines, delivering finished analytical products to meet tight statutory deadlines; leading multi-disciplinary scientific team to establish high-profile documentation (protocol) of scientific approach to systematic review of studies that underlie key regulatory program; leading SR team, leading data science team, leading team providing key contributions to PFAS national testing program; coordinating cross-organization team collaborations within EPA's OPPT and across organizational boundaries with ORD; briefing senior Agency leadership on scientific, policy, and regulatory strategies; mentoring staff in leadership positions as well as new staff; formulated budget projection and reported on budget utilization; successfully led recruiting efforts for scientific positions. Key results include developing prioritized list of PFAS chemicals for test orders and national testing strategy and draft systematic review protocol.

February 2019- October 2020 GS15 Deputy Director of Risk Assessment Division of Office of Pollution Prevention & Toxics (OPPT) USEPA. Washington, DC, oversees new and existing chemical risk assessment activities and peer review coordinator OPPT risk evaluations, staff development and training, budget and all administrative and human resource functions of division.

Results Oriented:-

- Developed peer review drafts of risk evaluations for 10 chemicals in response to Lautenberg amendments to TSCA 2016.
- Prioritized TSCA chemicals and developed high priority designations for next 20 chemicals to undergo TSCA risk evaluation process.
- Developed 20 scopes for next 20 risk evaluations.
- Finalized 10 risk evaluations for first set of chemicals

April 2016 to February 2019 (SES level position): *Acting* Office Director, Office of Science Coordination Policy (OSCP), (GS-401-15) Supervisor Biologist, Office of Chemical Safety and Pollution Prevention (OCSPP), USEPA, Washington, DC.

This leadership opportunity presented a myriad of organizational challenges with multiple LER, EEO, MD715 and IG complaints in this Office. This was an opportunity to build trust in leadership and develop my coaching skills to the next level with an interdisciplinary staff of 20. I engaged unions NTEU and AFGE in collaboration with LER to build trust and improve communication. I provided advice and leadership on cross-cutting science policy issues such as the endocrine disruption screening program (EDSP), alternative testing approaches through coordination with ORD, OPP, OPPT and OW. This effort included establishing contractual efforts through ORD to amplify EDSP high-throughput screening and funding of postdoctoral positions in ORD to develop research on thyroid hormone assay battery and cross species extrapolation. I also coordinated activities on children's health-related issues and provided advice to the OCSPP Assistant Administrator and the USEPA Administrator. A key area of emphasis was the transparency of science on emerging scientific and technical issues for all of Office of Chemical Safety and Pollution Prevention (OCSPP). I coordinated quality assurance, science integrity, and peer review programs for OCSPP to assure that sound scientific decisions were made regarding safe pesticides, chemical management, complex pollution prevention and chemical safety approaches. As the Deputy Ethics Official for OCSPP he conducted peer review coordination and leadership of the FIFRA Scientific Advisory Panel (SAP). I established the Science Advisory Committee on Chemicals (SACC) for TSCA website: http://www.epa.gov/scipolicy/sap/. I coordinated and provided leadership on emerging topics such as endocrine disruptors: Endocrine Disruptor Screening Program (EDSP) (http://www.epa.gov/scipoly/oscpendo/).

I developed FACA committees and procedures for FIFRA and TSCA programs with new charters and a new TSCA standing committee of over 100 ad hoc special government employees. This included building coalition and partnering with the EPA SAB to address staffing shortfalls and common science policy issues needing review. I developed methods and procedures for new framework for EDSP screening using high through put techniques for steroid and thyroid pathways through multidisciplinary collaborations. I served as US government representative on OECD Endocrine Committee- OECD EDTA, OECD VMG NA and VMG ECO.

November 2013 to May 2016: Deputy Director, Risk Assessment Division, (GS-401-15) Supervisor Biologist, Office of Pollution Prevention & Toxics (OPPT), Office of Chemical Safety and Pollution Prevention, USEPA, Washington, DC.

I oversaw a reorganization of the risk assessment division affecting both new and existing chemical risk assessment activities, coordinated peer review for OPPT, led development of work plan risk assessments, managed budget and all administrative and human resource functions of the division.

I developed peer review program for TSCA products. I developed a project management tool to track level of effort for risk evaluations, skills assessment, and resource assessment in Salesforce. I developed alternatives analysis approaches to inform risk management decisions in rule making. I developed existing chemical exposure limits (ECELs) approach to support risk-based occupational exposure limits for risk management options.

May 2012 to February 2014: Chief, Science Support Branch, Risk Assessment Division, (GS-401-15) Supervisor Biologist, Office of Pollution Prevention & Toxics (OPPT), Office of Chemical Safety and Pollution Prevention, USEPA, Washington, DC.

I oversaw new and existing chemical risk assessment activities and served as OCSPP peer review coordinator, developed OPPT workplan risk assessments. Identified critical gaps and structure of organization and skills the organization lacked in effectively meeting its mission. These critical needs were incorporated into reorganization plan for OPPT in 2013. Key accomplishments included development an Organo-Halogen Flame-Retardant Assessment Strategy based on structurally related use clusters. I managed and led the acute exposure guideline (AEGL) development program providing nearly 60 new chemical AEGL for use in emergency response to chemicals releases and accidents.

December 2007 - to May 2012: *Acting* National Program Director for Human Health Risk Assessment (HHRA), (GS-401-15) Supervisor Biologist, National Center for Environmental Assessment (NCEA), Office of Research and Development (ORD), USEPA, Washington, DC. I led the development of Human Health Risk Assessment (HHRA) research action plan. I provide leadership for cross program budget planning and accountability for budget execution. I also providing leadership for all of the program translation and communication of assessment products across five divisions of NCEA. Key accomplishment included completion of backlogged IRIS assessments (e.g., TCE, Perchloroethylene) for the Agency and timely completion of integrated science assessments for OAR and PPRTVs for OLEM.

January 2006 to December 2007: *Acting* Assistant Center Director, Human Health Risk Assessment, GS15 Supervisor Biologist 401, National Center for Environmental Assessment (NCEA), Washington, DC, Office of Research and Development (ORD), USEPA. Revision of HHRA multi-year plan, Preparation for HHRA Board of Scientific Counselors (BOSC) review of HHRA MYP, responsible for managing PART Implementation on HHRA.

2004- March- to January 2006: GS14 Research Biologist, Effects Identification and Characterization Group (EICG) of National Center for Environmental Assessment (NCEA)-Washington, DC, Office of Research and Development (ORD) USEPA-Neurotoxicology risk assessment and use of mode of action data in harmonized approaches human health risk assessment.

2004- February: GS14 Research Biologist in Cellular and Molecular Toxicology Branch (CMTB), Neurotoxicology Division (NTD), National Health and Environmental Effects Research laboratory (NHEERL), ORD, USEPA, Research Triangle Park (RTP), NC- Development of mechanistically-based markers of developmental neurotoxicity to be used *in vitro* and *in vivo* test systems.

2000-: GS14 Supervisory Research Biologist, Acting Branch Chief, CMTB, NTD, NHEERL, ORD, USEPA. Six month detail

1997- 2003: GS13 Research Biologist, CMTB, NTD, NHEERL, ORD, USEPA - Development of mechanistically-based markers of developmental neurotoxicity to be used with *in vitro* and *in vivo* test systems.

1995- 1997: GS12 Research Biologist, CMTB, NTD, NHEERL, ORD, USEPA – Characterizing alterations in neurotrophic factor interactions and related signal transduction proteins as indices of developmental neurotoxicology.

1994-1995: Research Scientist, ManTech Environmental a contractor for USEPA.

1992-1994: Project Scientist at ManTech Environmental a contractor for USEPA

1990-1992: Senior Scientist at ManTech Environmental a contractor for USEPA

1985-1990: Ph.D. candidate working under the supervision of H.A. Tilson, Ph.D. National Institute of Environmental Health Science (NIEHS) and J.F. McGinty, Ph.D. (ECU). Dissertation project: *The effects of exogenous NGF and transplantation of fetal hippocampal cells after intradentate administration of colchicine*.

1982-1985: Graduate student (Masters Degree) under the supervision of T.M. Louis Ph.D. and E. Simpson Ph.D. Thesis Title: *Effects of vasectomy and exercise on testosterone levels of mice.*

SOCIETIES MEMBERSHIPS:

Society for Neuroscience.	1986-1995
American Association for the Advancement of Science.	1986-present
NC Society for Neuroscience.	1986-2000
International Society for Developmental Neuroscience.	1990-1997
Society of Toxicology (SOT).	1994-present
International Brain Research Organization.	1986-present
NC Society for Toxicology.	1996- life-time member
Teratology Society	2002-2004
Neurobehavioral Teratology Society (NBTS)	1997- present
International Neurotoxicology Association.	1995- present
Society for Risk Analysis (SRA)	2004- present
National Capital Area Society of Toxicology	2005- present

AWARDS AND HONORS (listed by hierarchy and chronology newest to oldest)

SEMI-FINALIST FOR SAMUEL J. HEYMEN SERVICE TO AMERICA AWARD (SAMMIES). Award nomination for leadership and contribution to health and safety for US citizens with the development of risk assessments and approach that address chemical safety (2020).

GOLD MEDAL FOR EXCEPTIONAL SERVICE

Trichloroethylene and Tetrachloroethylene Health Assessment Team

For the extraordinary scientific skill and dedication of the trichloroethylene and tetrachloroethylene technical teams in overcoming multiple challenges to complete state-of-the-art, scientifically rigorous IRIS assessments (2011)

MANAGER OF THE YEAR AWARD IN OPPT/OCSPP

Stanley Barone Jr., for leadership and exemplary performance in managing and leading both scientific and administrative functions in the Risk Assessment Division. (2015)

Bronze Medals for Asbestos (2020)

Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: Asbestos Team.

Bronze Medals for 1-Bromopropane (2020)

Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: 1-Bromopropane Team.

Bronze Medals for 1, 4- Dioxane (2020)

Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: 1, 4- Dioxane Team.

Bronze Medals for Carbon Tetrachloride (2020)

Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: Carbon Tetrachloride Team.

Bronze Medals for Cyclic Aliphatic Bromide Cluster (HBCD) (2020)

Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: Cyclic Aliphatic Bromide Cluster (HBCD) Team.

Bronze Medals for Methylene Chloride (2020)

Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: Methylene Chloride Team.

Bronze Medals for *n*-Methyl-Pyrrolidone (2020)

Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: *n*-Methyl-Pyrrolidone Team.

Bronze Medals for Perchloroethylene (2020)
Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: Perchloroethylene Team.

Bronze Medals for Pigment Violet 29 (2020)
Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: Pigment Violet 29 Team.

Bronze Medals for Trichloroethylene (2020)
Stanley Barone Jr., for leadership and development of one of the first ten scope and risk evaluations mandated by TSCA: Trichloroethylene Team.

Award for Science Leadership in OCSPP with the development of systematic review approaches employed in risk evaluation and scoping. Development of strategy and approaches presented to NASEM 2020.

Bronze Medal for Alternative Testing Strategy In recognition for successfully developing a inventory of current alternative approaches for testing and evaluation and a strategy to address requirements for TSCA within the statutory deadlines (2018).

Bronze Medal for DfE Alternatives Assessments: In recognition for collaborative partnerships on alternatives to decabromodipheyl ether, hexabromocyclododecane, bisphenol-A, and pentabromodiphenyl ether that gives stakeholders the environmental information needed for informed chemical selection decisions. (2014)

Bronze Medal for Enforcement Consent Agreement for Environmental Monitoring for Octamethylcyclotetrasiloxane (D4): In recognition for successfully developing, drafting, and negotiating an enforceable consent agreement with industry to conduct environmental monitoring on a siloxane (D4) widely used in consumer products (2014)

Bronze Medal for Final TSCA Work Plan Chemicals Assessments for TCE, DCM/NMP, ATO, and HHCB: In recognition for significant accomplishment of the TSCA work plan chemical assessment teams for completion and peer review of risk assessments for trichloroethylene (TCE), methylene chloride (DCM), *n*-methylpyrrolidone (NMP), antimony trioxide and 1,2,3,6,7,8- hexahydro-4,6,6,7,8,9-hexamethylcyclopenta-gamam-2-benzopyran (2014)

Bronze Medal for Forging International Partnerships for Advancing EPA's Mission of Protecting Human Health and the Environment
This diverse and dedicated team from EPA has created an outstanding process for international collaborations and assurance of EPA's role as a global leader for protecting the environmental and human health. I served as Project officer on the on the cooperative agreements with World Health Organization through which this effort was forged. (2013)

Bronze Medal for Human Health Risk Assessment Research Action Plan Team
For intense and dedicated effort in developing and delivering EPA's human health risk assessment research action plan. Principal author and leader of team. (2011)

Bronze Medal for the Budget and Program Structure Implementation Team was crucial in implementing the "Path Forward" by developing a new integrated program and budget structure for ORD (2011).

Bronze Medal for Commendable Service for development of Children's Health Risk Assessment (CHRA) framework and leading workgroup 2006.

OPPT Collaboration award (2016) for recognition of outstanding achievements of the TSCA work plan assessment workgroup for 1-Bromopronae for innovation and cross agency and interagency collaboration on the 1 Bromopropane risk assessment.

OPPT Collaboration award (2016) for recognition of outstanding achievements of the governance team in developing and launching OPPT project management tool for risk assessment and risk management activities.

OPPT Mission award (2016) for recognition of outstanding achievements for completion of the Risk Assessment Divisions first annual Quality Assurance Audit focused on targeted technical and scientific contracts

OPPT Mission award (2016) for recognition of outstanding achievements for developing and incorporating a new and scientifically – legally defensible analytical approach and tool for the evaluation of regulatory options for TSCA Section 6 rules for TCE and paint removers.

OPPT Mission award (2016) for recognition of outstanding achievements for developing and incorporating a new and scientifically – defensible analytical approach for the evaluation of alternative products in support of TSCA Section 6 rules for TCE and paint removers.

OPPT Mission award (2015) for recognition of outstanding achievements in enhancing and improving the quality of work OPPT work through planning, budgeting and financial management

OPPT Mission award (2015) for recognition of outstanding achievements in evolving the approach and methods for developing TSCA Work Plans Assessments and collaborating across OPPT to improve the Work plan assessment process enhancing and improving the quality of work OPPT work through

OPPT Mission award (2015) for recognition of completion of the Approach for Estimating Exposures and Incremental Health Effects from Lead Due to Renovation, Repair and Painting Activities in Public and Commercial Buildings

Exceptional/Outstanding ORD Technical Assistance to the Regions or Program Offices 2011: ORD Mercury Air Toxics Support Team for quick and exceptional technical

assistance, specifically in characterizing neurological and cardiovascular health effects of methylmercury, fostering an effective peer review, and describing subpopulations vulnerable to methylmercury exposure through fish consumption.

ORD Environmental Justice Award 2010: Environmental Justice Symposium Team for extraordinary achievement in creating a successful Symposium to focus efforts to incorporate environmental justice concerns into analytical and decision frameworks during environmental decision-making.

Scientific and Technical Achievement Award (STAA Honorable Mention) 2006: Mundy, W.R., Shafer T.J, **Barone, S. Jr.**, Gilbert, M.E., Meacham, C.A., Freudenrich, T.M., Lyons- Darden, T., Anderson, W.L., and Sui, L., Evaluation of the appropriate dose metric for neurotoxicants in numerous in vitro models. *This effort included a series of peer reviewed papers.*

Scientific and Technical Achievement Award (STAA Level III) 2003: Rice, D. and **Barone, S. Jr.** (2000) Critical periods of vulnerability for the developing nervous system: Evidence from humans and animal models. *EHP suppl. on Children's Health* **108 (suppl. 3)**, 511-533.

Scientific and Technical Achievement Award (STAA Level III) 2000: Barone, S. Jr., Changes in neurotrophic factor expression and signaling as markers of developmental neurotoxicity. *Developmental Brain Res.* (1998) **109**(1), 13-31, **109**(1), 33-49 and *Neurotoxicity Research*. **1(4)**, 271-283.

Scientific and Technical Achievement Award (STAA Level III) 1999: Kodavanti, P.R.S., Derr-Yellin, E.C., Mundy, W.R., Shafer, T.J., Herr, D.W., **Barone, S. Jr.**, Choksi, N.Y., MacPhail R.C., and Tilson, H.A. (1998) Repeated exposure of adult rats to Aroclor 1254 causes brain region specific changes in intracellular Ca^{+2} buffering and protein kinase C activity in the absence of changes in tyrosine hydroxylase. *Toxicol. Appl. Pharmacol.* **153**(2): 186-198.

Scientific and Technical Achievement Award (STAA Honorable Mention) 1996: Barone, S. Jr., Stanton, M.E., and Mundy, W.R. (1995) Neurotoxic effects of neonatal triethyltin (TET) exposure are exacerbated with aging. *Neurobiology of Aging* **16**(5), 723-735.

Featured Highlight Paper in August 2001 issue of Toxicological Sciences. Moser, V.C., **Barone, S. Jr.**, Smialowicz, R.P., Harris, M.W., Davis, B.J., Overstreet, D., Mauney, M., and Chapin, R.E. The effects of perinatal tebuconazole exposure on adult neurological, immunological, and reproductive functions in rats. *Tox. Sci.* **62**, 339-352.

NHEERL Award for Outstanding Leadership (2002) for developing the Agency's response to the delisting petition for methanol.

NHEERL Award for Exceptional Leadership (2002) impacting NHEERL diversity efforts.

NHEERL Award for Exceptional Leadership (2003) impacting NHEERL workforce equity assessment efforts.

ORD Diversity Award for Exceptional Leadership (2003) impacting ORD diversity efforts.

Scientific Achievement in Neurotoxicology (SAINT) Best paper award for 2001: Rice, D. and **Barone, S. Jr.** (2000) Critical periods of vulnerability for the developing nervous system: Evidence from humans and animal models. *EHP suppl. on Children's Health* **108 (suppl. 3)**, 511-533.

Scientific Achievement in Neurotoxicology (SAINT) Best paper award for 1999: Barone, S. Jr., Haykal-Coates, N., Parran D.K., & Tilson, H.A. (1998) Gestational exposure to methylmercury alters the developmental pattern of *trk*-like immunoreactivity in the rat brain and results in cortical dysmorphology. *Developmental Brain Res.* **109**(1), 13-31.

CERTIFICATION AND PROFESSIONAL TRAINING (chronological order):

Team leadership training- *How to lead a team* (one-day course) – April 7, 1998

Training in quantitative morphometric approaches using stereological techniques (1 week course) New Orleans, LA, 2000.

Training in PBPK modeling and risk assessment methods (2 week course) Colorado State University, 2002.

Self-Expression and Leadership Program takes place through dialogue and exercises during a four-month period. Participants meet monthly on a Saturday or Sunday from 10:00 a.m. until 10:00 p.m.; during each week on weeknights, a 2½ -hour evening session is required to go over exercises to improve leadership skills and provide coaching on community project. Completed Corse Project, Landmark Education, Washington, DC September 2006.

Communication Access Power: Gain access to a new world of communication where listening and speaking—actions that we typically think of as ordinary and commonplace—take on new dimensions and provide unexpected power (3-day course); Landmark Education, Washington, DC, February, 2006.

Advanced Communication Course: The Power to Create: Make communication vivid and real, with structures and tools that leave you with powerful new ways of generating possibilities, designing opportunities, and moving your commitments to fulfillment. (3-day course); Landmark Education, Washington, DC, April, 2006.

Leadership in Communications: Interpersonal Communications- Communication training for scientists and engineers making the transition to management positions, OPM (4-day course) Aurora, CO, June 11-15, 2007.

Written communication training for managers /leaders who need to brief and communicate with OMB, GAO and Congressional staff (1 week), Shepherdstown, WV, 2010

Federal Executive Service Training (FEI)– *Leadership in a Democratic Society*, Class 373 (month long course) Charlottesville, VA. October –November 2011.

Office of Civil Rights Certification of *Special Emphasis Program Manager training* (3-day course), 2012

EPA training -*Working Effectively with Tribal Governments* online 2012/13/14

EPA training *Federal Employee Antidiscrimination and Retaliation Act* (No FEAR Act**)** Training- online 2012/14

EPA training - *IT Security Training*-online 2012/13/14

EPA management Integrity training implementing OMB circular A-123 Appendix A and training for EPA Management Integrity Program Managers –online June 28, 2013

EPA training - *IT Security Training*- online 2013/14/15

EPA training – *Records Management Training*- online 2013

EPA *Rule Effectiveness for Managers: How to Design Regulations That Will Better Achieve Their Intended Benefits*. (4-hour course), 2013

EPA Senior Leadership Development Program- year long developmental assignment 2013.
Completed Module 1 Excellence in Supervision April 15-19, 2013
Completed Module Two Class Situational Frontline Leadership - / May 14-16, 2013

EPA OPPT back to basics skill refresher for managers (40 hrs) 2013.

EPA Training Recertified for Grant's Manager (MANAGER'S ONLY) FY13
http://intranet.epa.gov/ogd/on_line_training/main/manager_traininginfo.htm

EPA Training IA Certification/Recertification: (IAG ONLY) FY13
http://intranet.epa.gov/ogd/on_line_training/main/traininginfoiag.htm

EPA Anti-Harassment Training for managers FY2015

EPA Training Leading at the Speed of Trust training for managers 2-day course July 2016

EPA Supervisory Training - Drug-Free Workplace Program 2-hour course December 2016

COMMITTEES AND CONSULTANT APPOINTMENTS, PROFESSIONAL SOCIETY ELECTED APPOINTMENTS, ADJUNCT FACULTY APPOINTMENTS, ADVISORY AND EDITORIAL APPOINTMENTS. EPA ACTIVITIES (chronological order):

Team and Committee Efforts:

Principal Investigator on Award from Pesticide and Kids Request for Proposals for NHEERL inter-divisional funding FY 1995; *Neurotrophic Mechanisms of Age-related susceptibility to Cholinesterase Inhibiting Pesticides.*

Principal Investigator and participant in Interagency Agreement on Pesticide and Children Project (EPA & NTP/NIEHS 1995-2002).

NHEERL Career Development Team – I served as team leader and reporter to NHEERL senior management on barriers in career development and recommendations (1996-1998).

Scientific Reviewer and Consultant to EPA *Food Quality Protection Act 10X Task Force* (1996-2000).

NTD Team Leader for Goal 8, Sound Science *Markers, mechanisms and models of developmental neurotoxicity team (NTD)* (1996-2001).

NTD Leader on Interagency Agreement to characterize the developmental neurotoxicity of mercury vapor exposure (EPA & NTP/NIEHS 1997-2002).

Scientific Consultant on OECD harmonization of developmental neurotoxicity testing guidelines coordinated NTD response on draft guidelines (1997-2001).

Member of the ORD *Mercury Research Strategy Team* (health effects section 1998-2000)

Scientific Reviewer for *OPP Developmental Neurotoxicity Retrospective Study* (1999) and ORD participant in OPP Scientific Advisory Panel presentation.

Invited Scientific Consultant in EPA sponsored, Critical Windows of Exposure for Children's Health Workshop (coauthor and presenter of background paper on developmental neurotoxicology, Richmond, VA, 1999).

Scientific Consultant to OPP on Chlorpyrifos FQPA 10X safety factor document (2000) **http://www.epa.gov/oppsrrd1/op/chlorpyrifos/reevaluation.pdf**.

Scientific Consultant to OPP on testing protocol requirements for data call in (DCI) for organophosphate pesticides (2000).

Meeting Reporter and author of case studies for *NHEERL Goal 8.2 Human Health Research (HHR) Strategy* (2000)

NHEERL participant in *ORD Goal 8.2 Human Health Research Multi-Year Research Planning* (2001-2004).

Principal Investigator and participant in Interagency Agreement to characterize the developmental neurotoxicity of organotin mixtures in drinking water (EPA & NTP/NIEHS 2001).

NTD representative to NHEERL HHR implementation team (2001-2004).

- Principal CoAuthor of NHEERL white papers on *Harmonization* and *Susceptible Populations.*
- Facilitator of NHEERL HHR Scientist to Scientist meeting on Harmonization.

CoChair recruitment subcommittee of *NHEERL Diversity Steering Group* (1999-2004).

- Program director of NHEERL 2000-2002 Holiday Diversity Celebration.
- Program director of Gay Lesbian Bisexual Trasgendered (GLBT) Pride Celebration (June 2001 and June 2002).

Research Triangle Park (RTP) representative to GLOBE, the gay, lesbian, bisexual, transgendered (GLBT) employee group of federal employees at EPA (1999-2004).

- Principal Author of Agency white paper on *Business Case for Special Emphasis Program Managers for GLBT Employees at the USEPA submitted to EPA Administrator and Senior management.*
- Presenter at Federal GLOBE meeting *Business Plan for Growing GLBT organization for Employees at the USEPA* (November, 2002).
- Presenter at USDA diversity Council meeting on *Business Case for Special Emphasis Program Managers for GLBT Employees at the USEPA* (January 2003).

- Treasurer for Equality EPA (formerly GLOBE) 2010-2111.
- President of Equality EPA (formerly GLOBE) 2011-2016.

Liaison and Leader of *ad hoc* ORD team reviewing technical information on petition to delist methanol as a hazardous air pollutant (1999-2002) to OAQPS/OAR.

- Author of memo characterizing human health hazard to methanol following developmental exposures. This memo was used in the decision analysis for the denial of delisting request and a significant part of the federal register notice for the published denial of the petition.

CoChair of *NHEERL National Children's Study Research Program, Project on Biomarkers for Goal 8.2 Susceptible Populations*, (2002-2004).

GLBT Diversity Program Manager for USEPA Research Triangle Park, March 1, 2003- January 30, 2004 (20 percent time collateral duty). Reported to Mary Day, Director of Human Resources (HR) in RTP. Responsibilities included development of education and awareness programs for staff and management and serving as a liaison between employees, the Union local/AFGE, Office of Civil Rights and HR office.

Executive liaison to EPA LGBT special emphasis program mangers whose mission is to ensure an inclusive and welcoming workplace for all

Consultant to OPPT/OAR/ATSDR on Toxic Substance Control Act (TSCA) section 4 Proposed Test Rule for Testing Neurotoxicity of Selected Solvents (2004-05). Responsibility included review and revision of findings document, identification of additional testing requirements and suitable guidelines to address testing needs. Additional responsibilities included assistance of OPPT in responding to Office of Management and Budget and industry group comments.

Team leader of effort to develop *A Framework for Assessing Health Risks of Environmental Exposure to Children* (2005-2012). Principal author and editor of this document and leader of the interdisciplinary effort to develop this document.

Team member of effort to develop IRIS documentation for Tetrachloroethylene (PERC) (2004-2012).

Team member of effort to develop IRIS documentation for Ethylene dichloride (EDC; also known as 1, 2 dichloroethylene) (2004-2012).

Team member of effort to develop IRIS assessment for methanol (2004-2013).

Team member of effort to develop IRIS documentation for Trichloroethylene (TCE) (2006-2011).

Team member of effort to develop IRIS documentation for formaldehyde (2008-2011).

ORD Reviewer and coauthor of revised EPA Developmental Neurotoxicity Testing guidelines in response to EPA SAB/SAP comments (2005-2006).

ORD Reviewer and coauthor of revised OECD Developmental Neurotoxicity Testing guidelines. Draft 3 and 4 (2005-2006).

ORD coauthor of National Center for Environmental Research (NCER)- PBPK request for proposals 2006.

Member of NCEA mode of action (MOA) framework (2006-2012)- team to develop approaches document for application of MOA information risk assessment.

Member of ORD MOA workgroup (2006-2012) - broad based membership across EPA to discuss research on MOA and research needs for risk assessment and discusses implementation of MOA information risk assessment.

Member of Risk Assessment Forum technical panel on MOA framework employing human relevance analysis (2006-2012) - Agency expert on application of life stage approach for evaluation of risk using MOA information. This technical panel intends to develop a MOA framework for harmonized use in both cancer and noncancer evaluations.

Member of Risk Assessment Forum Human Health oversight panel (2006-2012)

Member of NHEERL/ORD Title 42 selection panel for division directors for NHEERL/ORD (2009)

ORD/NCEA liaison with GAO on IRIS study **Job Code 361203** (2009-2012).
Agency point of contact on High Risk report as it relates to IRIS program

Agency Liaison to National Academy of Science (NAS) Committee on Emerging Science for Environmental Health Decisions, responsible for planning and determining relevance of workshops and symposium. *Sponsored by NIEHS* 20011-present.

Member of ILSI/HESI Risk 21 steering group on Integrated Evaluation and Tier Testing (2010-2012).

Member of cross agency workgroup mercury air toxics rule – provided technical support to appropriate and necessary analysis and regulatory impact assessment (chapter 4) 2011-12. (http://www.epa.gov/ttn/atw/utility/mats_final_ria_v2.pdf)

Member of Interagency Chemical Toxicity Assessment workgroup under White House Office Science and Technology Policy Office and the Committee of Environment and Natural Resources (OSTP/CENR) (2016-2019).

Science and Technology Policy Council Science manager representative for OCSPP (2016-2019).

National Toxicology Program Interagency Executive council representative for OCSPP (2016-2019).

Deputy Ethics Official and Peer Review Coordinator for OCSPP FACA committees (2016-2019).

Senior Science Integrity Official for OCSPP (2016-2019).

Senior Quality Assurance official for OCSPP (2016-2019).

Senior Science Integrity Official for OCSPP (2022-present).

Expert witness in fluoride litigation Food and Water Watch vs EPA 2023 March to present.

OUTSIDE ACTIVITIES (chronological order by category):

Adjunct and Board Appointments to Five Academic and Not for Profit Organizations

Adjunct appointment to the Anatomy and Cell Biology Department at East Carolina University School of Medicine (1993-2004).

Adjunct appointment to the Toxicology Curriculum, University of North Carolina at Chapel Hill. (2002-2004).

Board of Trustees *Crispus Attucks Park*- Community Park in Washington, DC (2005-06). Responsible for grantsmanship and public outreach

Chair of Board of Trustees Metropolitan Community Church, Washington, DC (2011-2013).

Vice Moderator of Board of Trustees for Holy Redeemer Metropolitan Community Church, College Park, MD (2014-present).

Mentorship of Fifteen Women and Minority Graduate Students and Post Docsin Environmental Science

Mentor to Doctoral Student in Neurobiology Curriculum (UNC-CH) Laura W. Shaughnessy, Ph.D. (1992-1997). Title: *The role of NGF in lesion-induced compensation following colchicine infusion into the rat nucleus basalis.*

CoMentor to Doctoral Student in Experimental Psychology (UNC-CH) John H. Freeman Jr., Ph.D. (1993-1994). Title: *Role of cerebellar maturation in the ontogeny of eye blink conditioning in rats.*

CoMentor to UNC-CH Toxicology Curriculum graduate student, Mr. T. Leon Lassiter (1995-2002). Title: *The role of cholinesterases during development: Toxicological considerations.*

CoMentor to UNC-CH Toxicology Curriculum graduate student, Mr. Damani Parran (1996-2002). Title: *Disruption of the neurotrophin signal transduction cascade leads to altered differentiation?*

Mentor to NRC Postdoctoral Research Fellow, Kaberi Das, Ph.D. (1996-1999). Title of Project: *Qualitative effects of developmental exposures to cholinesterase inhibitors: Involvement of trophic mechanisms.*

CoMentor to UNC-CH Postdoctoral Research Fellow, Sushmita Chanda, Ph.D. (1997). Title of Project: *Characterization of the developmental neurotoxicity of gestational mercury vapor exposure.*

CoMentor for graduate student internship to Tiffany L. Crumpton, Ph.D. (1997) from Meharry Medical College, Department of Pharmacology. *Examination of molecular mechanisms of lead-induced alteration in differentiation.*

CoMentor to UNC-CH Toxicology Curriculum graduate student, Ms. Amy Driver, Masters thesis (1998-1999). Title: *Reactive oxygen species susceptibility in Long-Evans rats due to age and treatment with ferrous iron, methylmercury, and trimethyltin.*

Mentor to EPA Postdoctoral Research Fellow, David Mason, Ph.D. (1999-2001). Title of Project: *Convergence of the effects of methylmercury and polychlorinated biphenyls on developmental processes: A study of the developmental neurotoxicity of mixtures of persistent bioaccummulated toxicant (PCB's and CH_3Hg).*

CoMentor to Visiting Scientist, Estefânia Gastaldello Moreira, PhD. (2000-2002), from the Center for Toxicological Assistance, San Paulo State University, Brazil. Title of Project: *Behavioral, biochemical and neuroanatomical evaluation of weaned and adult rats exposed to lead during pregnancy and lactation.*

Mentor to UNC-CH Postdoctoral Research Fellow, Scott Jenkins, Ph.D. (2001-2004). Title of Project: *Evaluation of the in vitro and in vivo developmental neurotoxicity of organotin mixtures found in PVC leachates.*

CoMentor to Visiting Scientist/Predoctoral Research Fellow, Julia M. Gohlke (2001-2004) Univ Washington, Department of. Environmental Health Title of Project: *Pharmacodynamic modeling of altered proliferation and apoptosis following developmental neurotoxicity in the neocortex.*

Mentor to EPA Postdoctoral Research Fellow, Tara Lyons-Darden, Ph.D. (2002-2005). Title of Project: *Evaluation of surrogate biomarkers of developmental neurotoxicity in animal and humans.*

Mentor to Margaret Adgent, MPH fellow, (2004-2005) Association of School of Public Health. Project: *Investigation of effects perinatal environmental tobacco smoke on neurological outcomes.*

Mentor to Christine Robles, MPH fellow, (2005- 2006) Association of School of Public Health. Project: *Investigating biomarkers of effect for children's health risk assessment for adverse neurodevelopmental health outcomes.*

Organizer of Over Twenty-Six External Symposia and Workshops (1994- Present)

1. Organizer and participant in Workshop on *Mechanisms of Developmental Neurotoxicity* (EPA & NIEHS, 1994).

2. Organizer and participant in Panel Discussion on *Relevance of Neurotrophic Factors to Neurotoxicology. Fifth International Neurotoxicology Association* (1995).

3. CoOrganizer, participant and Chair of Society of Toxicology 1998 Symposium; *Unique Roles of Cholinesterases and Acetylcholine in the Developing Nervous System.*

4. Organizer for 5th NHEERL symposium on *Use of Indicators of Health and Ecology in Risk Assessment* and Cochaired session on *Indicators for Persistent Bioaccumulating Toxicants* (1999-2000)**.**

5. Invited Chair of symposium on Children's Health and the Environment: Mechanisms and Consequences of Developmental Neurotoxicity (Little Rock, AK, 1999).

6. Invited Chair of Poster Discussion on Apoptosis for Society of Toxicology Annual meeting (2000).

7. Invited Chair of Poster Discussion on Children's Health and the Environment: Mechanisms and Consequences of Developmental Neurotoxicity (Colorado Springs, CO, 2000), *Use of in vitro simulations for in vivo developmental neurotoxicity.*

8. Organizer, chair and participant in Symposium for Society of Toxicology 2001 meeting; *The role of apoptosis in developmental neurotoxicity and neurodegeneration in adults.*

9. Invited Chair of Session 5: "*Environmental Influences as Etiologic Factors in Autism*" in Symposium on, Potential Cellular and Molecular Mechanisms in Autism and Related Disorders, sponsored by NICHD and NIEHS, Co-sponsored by NIMH, NINDS, and NIDCD, Bethesda, MD, September 6-8, 2001.

10. Organizer and participant in Workshop on *Harmonization of Risk Assessment Approaches* (sponsored by EPA- NCEA and NHEERL, 2003).

11. CoOrganizer of National Children's Study Workshop on Neurobehavioral Development and Environmental Exposures: Measures for the National Children's Study, September 27–28, 2004.

12. CoOrganizer of Symposium: *Updated Approaches to Assessing Risk in IRIS: Issues from Recent Chemical Risk Assessments of Ethylene Oxide, Perchloroethylene and Tricholoroethylene*, Society for Risk Analysis Meeting, December 4-7, 2005, Orlando, FL

13. CoOrganizer of WHO-IPCS workshop on *Biomarkers for Assessing Risk to Children Following Environmental Exposures.* Buenos Aires, Argentina. November 14-16, 2005

14. CoOrganizer of OCHP/NCEA *State Risk Assessors Workshop on Children's Health Risk Assessment*. June 7-9 2006

15. CoOrganizer of Symposium *Contemporary Issues in Children's Health Risk Assessment.* Toxicology and Risk Assessment Conference. The conference will be held in April 23-26, 2007 Cincinnati, OH.

16. Organizer and participant in Workshop on *Challenges and opportunities in incorporating mode of action (MOA) information into Risk Assessment Approaches* (sponsored by EPA-NCEA and ACC 2008). *34th Annual Summer Toxicology Forum.* Aspen, CO, July 7-10, 2008.

17. CoOrganizer of *TestSmart meeting II; Alternative neurotoxicity testing meeting*, November 14-16, 2008, Reston, VA.

18. CoOrganizer of Symposium: *Developmental Vulnerability to Environmental Chemical Exposures: Evidence from Analysis of Behavior to Genes*. 49th Annual Meeting of Teratology and Neurobehavioral Teratology Meeting, Puerto Rico, June 27- July 1, 2009.

19. Organizer of Symposium: *Incorporating and Addressing Environmental Justice/Disproportionate Impacts in EPA's Decision-Making Process using a Risk Assessment Framework,* Strengthening Environmental Decision making: A symposium on Science of Disproportionate Environmental Health Impacts. (Sponsored by EPA) Washington, DC, March 17-19, 2010.

20. CoOrganizer of EPA workshop: *Advancing the Next Generation (NexGen) of Risk Assessment: Approaches for Chemicals with Less Data.* Research Triangle Park, NC, November 1-3, 2010

21. CoOrganizer of SOT Round Table: Reforming the Toxic Substances Control Act (TSCA): Challenges, Opportunities, and Timing. Society of Toxicology 2011 meeting, March 7, 2011 Washington, DC.

22. Organizer of Agency workshop on flame-retardant research and alternative and risk assessment for EPA. Washington, DC April 1-2, 2014.

23. Organizer of Interagency workshop on flame-retardant research and assessment and policy oversight for federal government. Research Triangle Park, NC May 8-9, 2014.

24. CoOrganizer of International Workshop. Accelerating the Pace of Chemical Risk Assessment Workshop, Washington, DC. September 14-15, 2016

25. Invited chair- for how can knowledge from new in vitro DNT tests contribute to epidemiology and vice versa? OECD/EFSA Workshop on Developmental Neurotoxicity (DNT): The Use of Non-Animal Test Methods for Regulatory Purposes. Brussels, Belgium. October 16-20, 2016

26. Appointment to Organizing Committee on Understanding the Paradigm Change at the Interface of Emerging Sources of Environmental Health Data and Decision Making. For NAS Emerging Science Committee of Board of Life Science. November 22-23, 2017.

Ad Hoc Reviewer for over Twenty Peer Reviewed Journals

Hippocampus.
Toxicological Sciences.
NeuroToxicology.
Experimental Neurology.
Pharmacology & Toxicology.
European Journal of Neuroscience.
Neuroscience Letters.
Critical Reviews in Toxicology.
Journal of Neurochemistry.
Toxicology & Applied Pharmacology.
Neurotoxicology and Teratology.
Environmental Health Perspectives.
Neurochemical Research.
Mental Retardation and Research Reviews.
Journal of Toxicology & Environmental Health.
Reproductive Toxicology.
Neuropharmacology.
Neuroscience Research.
European Journal of Neuropsychopharmacology.
Human and Ecological Risk Assessment.
(Guest Handling Editor for NHEERL symposium supplement).

Ad Hoc Advisory Role and Member of Twenty-Five Peer Review Boards

Ad hoc reviewer for EPA experimental myopia proposals (1996).

Ad hoc reviewer of Post Doc Proposal for UNC-Chapel Hill Toxicology Curriculum Proposals (1996).

Ad hoc reviewer for proposals to Center for Alternatives to Animal Testing, John Hopkins University, Baltimore, MD (1996-1997).

Ad hoc member of NIH specialty section (ALTX4) on Neurotoxicology & Alcohol, (April 1997).

Reviewer for Investigator Initiated Research proposal for Jeffress Research Grant from the Jeffress Memorial Trust (1999).

Reviewer for US Army specialty section on Neurotoxicology Investigator Initiated Research proposals (November 2000).

Reviewer for USEPA Office of Children's Health Protection request for proposal on developmental neurotoxicology (February 2001).

Reviewer and Scientific Advisory Board Member for Cure Autism Now (CAN) Investigator Initiated Research proposal on developmental neurotoxicology (2001).

Reviewer for Center for Environmental and Rural Health (CERH) at Texas A&M University pilot grants program (May 2001).

Reviewer for National Toxicology Program Center for the Evaluation of Risks to Human Reproduction (CERHR) review of developmental and reproductive toxicity data for methanol (February-October, 2001).

Reviewer for NCER-EPA/NIEHS proposals for Centers for Environmental Excellence on Children's Health (June, 2001)

Ad hoc reviewer for Food & Drug Administration (FDA) National Center for Toxicological Research (NCTR)- Intramural research proposals (July 2002).

Member of Interagency Workgroup on Development and Behavior to National Children's Study (NCS), (2002-2005).

- Facilitator of Interagency Workgroup meeting in April, July, and December 2002.
- Principal CoAuthor of Core Hypothesis on *Gene and Environmental Interactions for Neurodevelopment & Behavior Workgroup of National Children Study.*
- Developed expert peer panel workshop to provide recommendations for early neurological testing to be employed in (NCS).

Reviewer for Center for Environmental and Rural Health (CERH) at Texas A&M University pilot grants program (May 2003).

Reviewer for NCER-EPA/NIEHS proposals for Centers for Environmental Excellence on Children's Health (August, 2003)

Reviewer for Veterans Administration on role of cholinesterase inhibition in Gulf War Illness (September, 2004)

Invited Expert Panel member of Hershey Medical Center Technical Workshop: Optimizing the Design and Interpretation of Epidemiologic Studies for Assessing Neurodevelopmental Effects from *in Utero* Chemical Exposure, Research Triangle Park, NC September 14, 2005

Reviewer Department of Veterans Affairs' Environmental Hazards Research Centers Proposals (June, 2006).

Reviewer for NCER-EPA/NIEHS proposals for Centers for Environmental Excellence on Children's Health (August, 2006, July 2010, June 2015)

Reviewer for US Army specialty section on Neurotoxin Exposure Treatment Research Program (December 2006).

Member of NBTS Constitution and Bylaws Committee (2009-2011)

Appointment to organizing committee as agency representative to NAS Emerging Science

Committee of Board of Life Science. November 2016- present

LEADERSHIP WITH INTERNATIONAL ORGANIZATIONS with MAJOR EXTRAMURAL EXPERIENCE

Project Officer on World Health Organization cooperative agreements for the Agency.
Conduct External Peer review of International Programme on Chemical Safety (IPCS) (value-11.2 million) and Public Health and the Environment (PHE) proposals (value- 8.2 million) 2006-to 2012.

Project Officer and technical liaison on National Academy of Science (NAS) risk assessment issues contract. Organized 6 workshops and two symposia for ORD/EPA for NAS risk assessment issues contract (value- 5 million) 2006-2010.

1) Dose-response for receptor-mediated toxic events and low dose population cancer risk assessment,
2) Quantitative approaches to characterizing uncertainty in human cancer risk assessment based on bioassay results,
3) Relevancy of mouse liver tumors: benefits and constraints on use in human health risk assessment, qualitative and quantitative aspects,
4) Quantitative approaches to characterizing uncertainty in human risk assessment based on epidemiological results,
5) Risk Assessment Considerations for Interpretation of Data from Bioassays for Thyroid Activity and from Human Biomonitoring Data: Issues of Variability, Critical Reproductive-Developmental Periods, and Cross-Species Comparisons, Toxicity,
6) Approaches to Screening for Risk from Pharmaceuticals In Drinking Water and Prioritization for Further Evaluation,
7) Symposium-Pathway-Based Risk Assessment: Preparing for Paradigm Change, and
8*)* Symposium-Exposure Science in the 21st Century.

INVITED SEMINARS: <u>Invited to give Sixty National Level Seminars from 1995-Present</u>

1. **Barone, S. Jr.** TMT-induced increases in GFAP immunoreactivity in the developing rat brain. *Sigma Xi, FDA Chapter.* NIH Bethesda, MD, April 21-24, 1992.

2. **Barone, S. Jr.** Trophic factors as indicators of developmental neurotoxicity. *Neurotoxicology Panel Discussion: Neural markers of injury-pros and cons. Society for Neuroscience*, Anaheim, CA. October 28, 1992.

3. **Barone, S. Jr.** Developmental differences in neural damage following trimethyl-tin as demonstrated with GFAP immunohistochemistry. *Association of the Learning Disabled*. San Francisco, CA, February 26, 1993.

4. Fierke, L., & **Barone, S. Jr.** Developmental effects of methylmercury on a nerve growth factor's second messenger cascade. *Third Annual North Carolina State University Undergraduate Research Symposium.* April 7, 1994.

5. **Barone, S. Jr.**, Freeman J. H. Jr., Mundy, W.R., & Stanton, M. E. Age-related sensitivity and latent effects of developmental CNS damage induced by triethyltin. *Eastern Carolina Chapter Society for Neuroscience*. Greenville, NC. April 29, 1994.

6. Shaughnessy, L.W., **Barone, S. Jr.**, Mundy, W.R., & Tilson, H.A. (1995) Neurochemical and behavioral recovery after colchicine lesions of the nucleus basalis magnocellularis in rats. *Sun Coast Conference on Neurobiology of Aging*, Amelia Island, Florida April 11-14, 1995.

7. **Barone, S. Jr.**, Mundy, W.R. and Stanton, M.E. Neurotoxic effects of neonatal triethyltin (TET) exposure are exacerbated with aging. *Neurobehavioral Teratology Society.* Keystone, Colorado, June 23-26, 1996

8. **Barone, S. Jr.**, Empirical data supporting the accelerated aging hypothesis. *North Carolina Society for Neuroscience, Neurotoxicology Round table.* NIEHS, October 24, 1996

9. **Barone, S. Jr.**, Possible effects of cholinergic tone on neurotrophic factor expression and neural development. *Society for Toxicology Symposium*; Unique Roles of Cholinesterases and Acetylcholine in the Developing Nervous System. Seattle, WA, March 5, 1998.

10. **Barone, S. Jr.**, Markers of developmental neurotoxicity: The study of methylmercury a prototypic developmental neurotoxicant. *Meharry Medical College Seminar Series*, Nashville, TN, May 8, 1998.

11. **Barone, S. Jr.**, Gilbert, M. E., Royland, J.E., Shafer, T., and Mundy, W.R. Mechanistic Determinants of Developmental Neurotoxicity. *NIEHS/EPA Workshop on Application and Use of Biomarkers in Risk Assessment*. Chapel Hill, NC, August 30-31, 1999.

12. **Barone, S. Jr.**, Preliminary efforts to construct a Biologically-Based Dose Response Model for developmental effects of exposure to chlorpyrifos. *Seminar Series, University of Washington*, Seattle, WA, April 28, 2000.

13. **Barone, S. Jr.**, Development and maturation of the nervous system: Neurobiological basis of vulnerability to environmental contaminants. California EPA sponsored conference, *Children's Environmental Health-Risk Assessment Issues and Challenges*, Oakland Ca. May 1, 2000.

14. **Barone, S. Jr.**, Development and maturation of the nervous system: Anatomical Evaluation of Developmental Neurotoxicity. *Training Course for HED/OPP staff*, Washington, DC. May 23, 2000.

15. **Barone, S. Jr.**, Summary of past and present use of indicators in human health risk assessment for persistent bioaccumulated toxicants. *5th NHEERL Symposium*. Research Triangle Park, NC, June 6-8, 2000.

16. **Barone, S. Jr.,** Effects of Chlorpyrifos and its metabolites on developmental processes: Evidence from *in vitro* and *in vivo* test systems. Symposium on: *Organophosphate Pesticide Impacts on Neural Development: Dish to Fish to Rodents to Humans.* Duke University. December 4, 2000.

17. **Barone, S. Jr.** The role of apoptosis in neurotoxicology. *Society of Toxicology*, San Francisco, CA. March 26, *2001* symposium talk

18. **Barone, S. Jr.**, Integration of mechanistic data into the weight evidence considerations for risk assessment of developmental exposure to chlorpyrifos. *Children's Environmental Health- Developing a Framework*. California EPA, Monterey, California. April 23-24, 2001.

19. **Barone, S. Jr.**, Examination of the effects of chlorpyrifos on developmental processes: Evaluation of biochemical, morphological and behavioral indices of developmental neurotoxicity. *Continuing Education Course on Developmental Neurotoxicology, Teratology Society.* Scottsdale, Arizona, June 23, 2002,

20. **Barone, S. Jr.**, Effects of Toxicants on Neural Differentiation *Colloquium In Vitro Neurotoxicology: Tools for Cellular Neurobiology, American Society for Neurochemistry.* West Palm Beach, FLA, June 25, 2002.

21. **Barone, S. Jr.**, Biomarkers of exposure and biomarkers of effect for developmental neurotoxicology: A case study with chlorpyrifos. *Region 10 Seminar Series.* Seattle, Washington, March 17, 2003.

22. **Barone, S. Jr.**, Update on children' health risk assessment framework. *Office of Children's Health Protection Federal Advisory Committee Meeting.* Washington, DC, Washington Hotel. February 22, 2005,

23. **Barone, S. Jr.**, Overview of Office of Research and development children's health research program. *Children's Environmental Health Network*. Methodist Building. Washington, DC March 24, 2005.

24. **Barone, S. Jr.**, Children's health risk assessment framework looking toward implementation. *Regional Risk Assessors Meeting*. Kansas City, Kansas. May 1, 2005.

25. **Barone, S. Jr.** Overview of Neurotoxicity issues to be considered in IRIS Assessments. Chemical Managers Seminar Series. July 28, 2005

26. **Barone, S. Jr.** & Scott, C.S. Characterization of uncertainties: How do we define these uncertainties per application of Uncertainty Factors. *Society for Risk Analysis Meeting*, December 4-7, 2005, Orlando, FL

27. **Barone, S. Jr.** Brown, R.C., Euling, S., Hubal, E., Kimmel, C.A., El-Masri, H., Moya, J., Selevan, S.G., Sonawane, B., Employing A Children's Health Risk Assessment Framework Using a Life-Stage Approach. *Society for Risk Analysis Meeting*, December 4-7, 2005, Orlando, FL

28. **Barone, S. Jr.** Overview of Neurotoxicity issues to be considered by Risk Assessors. Risk Assessment Teleconference for Superfund (RATS) - Regional and State Risk Assessors Seminar Series. January 11, 2005

29 **Barone, S. Jr.** Overview of Contemporary Children's Health Risk Assessment Approaches. RATS- Regional and State Risk Assessors Seminar Series. November 8, 2006

30. **Barone, S. Jr.**, Postnatal CNS Development. *Continuing Education Course on Functional Developmental of the CNS: Positive and Negative Factors, Teratology Society.* Monterey, CA, June 28, 2008.

31. **Barone, S. Jr.**, Overview of environmental vulnerability to chemical exposures. *Society Presidents Symposium -49th Annual Meeting of Teratology and Neurobehavioral Teratology Meeting,* Puerto Rico, June 27- July 1, 2009.

32. **Barone, S. Jr.**, How can science inform risk-based decisions and protect children's health? *Society of Toxicology*, Salt Lake City, UT, Symposium talk March 7-11, 2010.

33. **Barone, S. Jr.**, Putting High Throughput Chemical Risk Characterization into Real-World Practice Symposium Faster Science for Better Decisions: Characterizing Environmental Contaminant Risk from High Throughput Data *Society of Toxicology*, Salt Lake City, UT, Talk March 7-11, 2010.

34. **Barone, S. Jr.**, Next Generation Risk Assessment Overview. Regional Risk Assessors Training Conference. Atlanta, Ga, June 8-10, 2010

35. **Barone, S. Jr.,** Challenges and Opportunities in Putting High-Throughput Chemical Risk Characterization into Real-World Practice. National Capital Area Chapter - Society of Toxicology. Washington, DC, April 19, 2011

36. **Barone, S. Jr.,** Update on IRIS Cumulative Hazard Assessment for Phthalates: EPA Design for the Environment Program's Phthalates Alternatives Analysis Kick-off Meeting, Washington, DC, August 24, 2011

37. **Barone, S. Jr.,** TSCA Work Plan Chemical Risk Assessments: Upcoming Actions. OMNE meeting. Washington, DC, February 2, 2015

38. **Barone, S. Jr.,** TSCA Work Plan for Chemical Assessment and Flame Retardants Overview for DTSC. Consultation with California Department of Toxic Substances Control. Washington, DC, March 26, 2015

39. **Barone, S. Jr.,** TSCA Work Plan for Chemical Assessment and Flame Retardants Overview Assessment Approaches. Phosphorus, Inorganic and Nitrogen Flame Retardants Association (PINFA) Tampa, FL, April 2, 2015

40. **Barone, S. Jr.,** Technical overview of Flame Retardants Assessment and Approaches. National TSCA Tribal Council Washington, DC, September 30, 2015

41. **Barone, S. Jr.,** Overview of Systematic Review Framework Office of Chemical Safety & Pollution Prevention (OCSPP). National Academies of Science (NAS) Committee on Low Dose NonMonotonic Dose Response. Washington, DC November 17, 2015

42. **Barone, S. Jr.,** Current Practices in OCSPP to Estimate Human Health Risk in the Context of Temporal Exposures Scenarios. Temporal Exposure Issues for Environmental Pollutants: Health Effects and Methodologies for Estimating Risk Research Triangle Park, NC, January 27–29, 2016

43. **Barone, S. Jr.,** Overview of EPA's OPPT TSCA work plan assessment of new and existing chemicals. Texas AM Integrated Toxicology Program College Station, TX March 27, 2016

44. **Barone, S. Jr.,** Endocrine Disruptor Screening Program (EDSP) Overview. National Tribal Caucus Update, Washington, DC, June 9, 2016

45. **Barone, S. Jr.,** Overview of EPA's Pivot in the Endocrine Disruptor Screening Program (EDSP). NTP executive committee, HHS, Washington, DC November 10, 2016

46. **Barone, S. Jr.,** Overview of EPA's Endocrine Disruptor Screening Program (EDSP) with emphasis on path forward. Crop Life America Ecological Risk Assessment Committee. Washington DC, December 12, 2016

47. **Barone, S. Jr.,** Strengthening Chemical Safety Decision Making with Information on Low Dose Toxicity. Toxicology Forum Washington, DC, February 6, 2017

48. **Barone, S. Jr.,** Update on EPA's Endocrine Disruptor Screening Program (EDSP) SOT 21st Century Toxicology Baltimore, MD, February 24, 2017

49. **Barone, S. Jr.,** Overview of EPA's Update of OPPT TSCA work plan assessment of new and existing chemicals. Texas AM Integrated Toxicology Program College Station, TX March 27, 2017

50. **Barone, S. Jr.,** Overview of EPA's Endocrine Disruptor Screening Program (EDSP) Pivot with emphasis on path forward. Texas AM Integrated Toxicology Program College Station, TX March 27, 2017

51. **Barone, S. Jr.,** Decision Making Within Endocrine Disruptor Screening Program: A Conversation on Replacing the Uterotrophic Assay. Understanding the Paradigm Change at the Interface of Emerging Sources of Environmental Health Data and Decision Making. For NAS Emerging Science Committee of Board of Life Science. Washington, DC November 22-23, 2017 YouTube Stan Barone- Replacing the Uterotrophic Assay

52. **Barone, S. Jr.,** Overview of the Pivot in EPA's Endocrine Disruptor Screening Program (EDSP) with an emphasis on high throughput and computational approaches. Toxicology Forum Annapolis, MD July 9-11, 2018,

53. **Barone, S. Jr.,** TSCA Risk Evaluations: Lessons Learned from the First 10 Risk Evaluations." ACC 2020 GlobalChem Webinar Series Session, March

54. **Barone, S. Jr.,** Overview of TSCA Risk Evaluation Process. Committee To Review EPA's Toxic Substances Control Act (TSCA) Systematic Review Guidance Document Virtual Meeting 2.1. June 18, 2020

55. **Barone, S. Jr.,** Panel Discussion- Session IV: Future Directions For Risk Assessment And Public Health Protection. Environmental Neuroscience: Advancing the Understanding of How Chemical Exposures Impact Brain Health and Disease—A Virtual Workshop June 25, 2020

56. **Barone, S. Jr.,** and Wong E**.** Evidence Integration Supporting Exposure and Hazard Assessments for TSCA Risk Evaluations. Committee To Review EPA's Toxic Substances Control Act (TSCA) Systematic Review Guidance Document Virtual Meeting 2.2. July 23, 2020

57. **Barone, S. Jr.,** TSCA Section 6: Overview of Risk Evaluations and Lessons Learned. **Children's Health Protection Advisory Committee (CHPAC)** Washington, DC, July 25, 2020

58.**Barone, S. Jr.,** Connecting Data Evaluation & Evidence Integration Supporting Exposure and Hazard Assessments for TSCA Risk Evaluations Committee To Review EPA's Toxic Substances Control Act (TSCA) Systematic Review Guidance Document Virtual Meeting 2.3. August 24, 2020

59. **Barone, S. Jr.,** TSCA Section 6: Overview of Risk Evaluations and Lessons Learned Children's Health Protection Advisory Committee July 24, 2020

60. **Barone, S. Jr.,** Organohalogen (OFR) and Other Flame Retardants – EPA Toxic Substances Control Act (TSCA) Review. The Scientific Challenges in Regulating Organohalogen Flame Retardants (OFRs) as a Class in Consumer Products" (ID 61), for the 2021 SOT Annual Meeting, March 14–18, 2021, in Orlando, Florida.

INVITED SEMINARS: <u>Invited to give Seventeen International Seminars from 1994-Present</u>

1. **Barone, S. Jr.** Regional ontogeny of PKC activity: Effects of methylmercury. *10th Biennial Meeting of the International Society for Developmental Neuroscience.* San Diego, CA. August 2, 1994.

2. **Barone, S. Jr.** The role of neurotrophic factor receptors in methylmercury-induced neurotoxicity. Neurotoxicity of mercury: Indicators and effects of low-level exposure. *Twelfth International Neurotoxicology Conference.* Hot Springs, AK. October 30 to November 2, 1994.

3. **Barone, S. Jr.** Relevance of neurotrophic factors to neurotoxicology. Panel Discussion. *Fifth International Neurotoxicology Association* Port Ludlow, WA. June 25-30, 1995.

4. **Barone, S. Jr.**, Tutorial: Vulnerable periods of nervous system development. *Sixteenth International Neurotoxicology Conference.* Pesticides and susceptible populations: who is at risk and when? Little Rock, AK. September 13-15, 1998.

5. **Barone, S. Jr.**, Primer on vulnerability of nervous system development. Mechanisms of Developmental Neurotoxicology, *Seventeenth International Neurotoxicology Conference* Little Rock, AK. October 17, 1999.

6. **Barone, S. Jr.**, Latent effects of developmental exposure to neurotoxicants indicate compensation may come at cost late in life. *International Federation of Teratology Societies Symposium*, Matsue, Japan. July 12-14, 2000.

7. **Barone, S. Jr.**, Development and evaluation of *in vitro* imaging techniques used to screen agents that affect neuronal differentiation. *Molecular Biomarkers, Transgenics, and Imaging: Technologies Ushering in a New Millennium of Neurotoxicology*. Interagency Committee on Neurotoxicology, Washington, DC. Nov. 27-Dec. 1, 2000.

8. **Barone, S. Jr.**, Effects of gestational mercury exposure on neurotrophic factor signaling and altered development of the nervous system. *Microbiology, Immunology & Toxicology of Autism and Other Neurodevelopmental Disorders.* Sponsored by March of Dimes, CAN, MIND, Banbury Center, Cold Springs Harbor, New York. February 11-14, 2001.

9. **Barone, S. Jr.**, Developmental neurotoxicity of methanol in animals. *Symposium and Panel discussion- Methanol- is it a developmental toxicant? 28th Annual Summer Toxicology Forum.* Aspen, CO, July 7-12, 2002.

10. **Barone, S. Jr.**, Overview of children's health risk assessment. *Healthy Environments, Healthy Children: Increasing Knowledge and Taking Action.* Sponsored by WHO. Panamericano Crowne Plaza Hotel, Buenos Aires, Argentina, November 14-16, 2005

11. **Barone, S. Jr.**, Case Example for Use of High Throughput and Computational Approaches in Decision Making for Endocrine Disruption Potential. Accelerating Risk Assessment Workshop, Washington, DC. September 14-15, 2016

12. **Barone, S. Jr.,** Overview of EPA's Pivot in the Endocrine Disruptor Screening Program (EDSP). Meeting with French Ministry of Environment & French Ministry of Ecology Washington, DC, July 12, 2016

13. **Barone, S. Jr.**, US Regulatory Perspective on Developmental Neurotoxicity Testing with Special Focus on Endocrine Disrupting and Industrial Chemicals. OECD/EFSA Workshop on Developmental Neurotoxicity (DNT): The Use of Non-Animal Test Methods for Regulatory Purposes. Brussels, Belgium. October 16-20, 2016

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OPPT Work Plan Risk Assessment for Methylene Chloride / Dichloromethane (CASRN: 872-50-4) paint stripping use. Management Lead**. Final 2014** This final risk assessment finds health risks to both workers and consumers who use these products, and to bystanders in workplaces and residences where methylene chloride is used. EPA is considering a range of possible voluntary and regulatory actions to address risks from the use of methylene chloride-containing paint and coating removal products.
http://www.epa.gov/oppt/existingchemicals/pubs/DCM_OPPTWorkplanRA_final%208_27_14.pdf

OPPT Work Plan Risk Assessment for Antimony Trioxide (CASRN: 1309-64-4) This risk assessment addresses effects on ecological receptors from the use of antimony trioxide (ATO) as a synergist in halogenated flame retardants. Management Lead**. Final 2014**
http://www.epa.gov/oppt/existingchemicals/pubs/ATO%20RA_(8-28-14)_FINAL.PDF

OPPT Work Plan Risk Assessment for *n*-Methylpyrrolidone (CASRN: 872-50-4) paint stripping use. Management Lead**. Final 2015** This final risk assessment finds health risks to people, particularly pregnant women and women of childbearing age, who have high exposure to NMP through paint or coating removal products. EPA is considering a range of possible voluntary and regulatory actions to address risks from the use of NMP-containing paint and coating removal products.
http://www.epa.gov/oppt/existingchemicals/pubs/nmp_ra_3_23_15_final.pdf

OPPT Work Plan Risk Assessment for 1-Bromopropane (CASRN: 106-94-5) This draft risk assessment (2016) addresses effects of 1-BP on human health from occupational and consumer uses of 1-Bromopropane (1-BP), also referred to a *n*-propyl bromide, in spray

adhesives, dry-cleaning (including spot cleaners) and degreasing operations. EPA did not evaluate potential risks to the environment associated with 1-BP because it has a low hazard profile for ecological receptors and low persistence and bioaccumulation if released into aquatic or terrestrial environments. https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-work-plan-chemical-risk-assessment-peer-review

OPPT Problem Formulation Assessment for Chlorinated Phosphate Esters Cluster (2015) Chlorinated Phosphate Esters are used as flame retardants in furniture foams and textiles. The goal of this problem formulation was to identify scenarios where further risk analysis may be necessary. The EPA will assess risks to consumers, the general population and aquatic organisms exposed as a result of manufacture, processing and use of chlorinated phosphate esters cluster members. https://www.epa.gov/sites/production/files/2015-09/documents/cpe_fr_cluster_problem_formulation.pdf

TSCA Risk Evaluation for Methylene Chloride / Dichloromethane (CASRN: 872-50-4) (2019) This final risk assessment finds health risks to both workers and consumers who use these products, and to bystanders in workplaces and residences where methylene chloride is used.https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-evaluation-methylene-chloride-0

TSCA Risk Evaluation for 1-Bromopropane / *n*-Propyl Bromide (CASRN: 872-50-4) (2020) This final risk assessment finds health risks to both workers and consumers who use these products, and to bystanders in workplaces and residences where **1-Bromopropane** is used. https://www.epa.gov/sites/production/files/2020-08/documents/risk_evaluation_for_1-bromopropane_n-propyl_bromide.pdf

TSCA Risk Evaluation for Cyclic-Aliphatic-Bromide-Cluster-HBCD (CASRN: 25637-99-4; 3194-55-6; and 3194-57-8) (2020) This final risk assessment finds environmental risks and health risks to workers who are involved in demolition and disposal of some uses of HBCD containing products. https://www.epa.gov/sites/production/files/2020-09/documents/1._risk_evaluation_for_cyclic_aliphatic_bromide_cluster_hbcd_casrn25637-99-4_casrn_3194-5_casrn_3194-57-8.pdf

TSCA Risk Evaluation of Asbestos (CASRN: 1332-21-4) (2020) This final risk assessment finds health risks to both workers and bystanders in workplaces and consumers who use these products. https://www.epa.gov/sites/default/files/2020-12/documents/1_risk_evaluation_for_asbestos_part_1_chrysotile_asbestos.pdf

TSCA Risk Evaluation of 1, 4- Dioxane (CASRN: 123-91-1) (2020) This final risk assessment finds health risks to both workers and bystanders in workplaces and consumers who use these products. https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-evaluation-14-dioxane#riskevaluation

TSCA Risk Evaluation of Carbon Tetrachloride (CASRN: 56-23-5) (2020) This final risk assessment finds health risks to both workers and to bystanders in workplaces where

used. Final Risk Evaluation for Carbon Tetrachloride CASRN:56-23-5 (epa.gov)

TSCA Risk Evaluation of *n*-Methyl-Pyrrolidone (CASRN: 872-50-4) (2020) This final risk assessment finds health risks to both workers and bystanders in workplaces and consumers who use these products. https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-evaluation-n-methylpyrrolidone-nmp-0#riskevaluation

TSCA Risk Evaluation of Perchloroethylene (CASRN: 127-18-4) (2020) This final risk assessment finds health risks to both workers and bystanders in workplaces and consumers who use these products. https://www.epa.gov/sites/default/files/2020-12/documents/1_risk_evaluation_for_perchloroethylene_pce_casrn_127-18-4_0.pdf

TSCA Risk Evaluation of Trichloroethylene (CASRN: 79-01-6 (2020) This final risk assessment finds health risks to both workers and bystanders in workplaces and consumers who use these products. https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/final-risk-evaluation-trichloroethylene

TSCA Risk Evaluation of Pigment Violet 29 (CASRN: 81-33-4) (2021) This final risk assessment finds health risks to both workers and bystanders in workplaces. https://www.epa.gov/sites/default/files/2021-01/documents/1_final_risk_evaluation_for_c.i._pigment_violet_29.pdf

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

Case Number: 3:17-cv-02162-EMC

PLTF / DEFT EXHIBIT
NO. 651

Date
Admitted:_____

By:_____

Vicky Ayala, Courtroom Deputy
