

Ted W. Simon, Ph.D., DABT



Contact

4184 Johnston Road
Winston, GA USA 30187

email: ted@tedsimon-toxicology.com
website: <http://www.tedsimon-toxicology.com>
mobile: +01 (770)359-9807

Summary

Award winning toxicologist and scientist. 10+ years' experience as a toxicologist employed by the Environmental Protection Agency (EPA). 10+ years consulting and expert witness experience. Served as EPA's senior toxicologist in the waste management division working on risk and soil cleanup. Experienced expert witness on issues including alcohol and cannabis, DUI and dram shop issues, environmental risk, illegal drugs, pharmaceuticals, accidental poisoning, and intellectual property. Well published, including author of textbook on toxicology and environmental risk assessment and a reference work on pesticides. Expertise in toxicology, risk assessment, mathematical modeling, statistics, neuroscience, and environmental/ecological health issues. Interest and expertise in the effects and testing of alcohol, cannabis and pharmaceuticals, per- and poly-fluorinated chemicals, arsenic, chromium, benzene and other solvents. Extensive national and international public speaking experience. 20+ years teaching experience.

Professional Certifications

1994 - Diplomate of the American Board of Toxicology (DABT)

Invited Service

2022 - Board of Directors, *Center for Truth in Science*
2022 - Associate Editor, Predictive Toxicology, *Frontiers in Pharmacology*,
<https://www.frontiersin.org/journals/pharmacology>
2019 - 2021 Member, Chemical Assessment Advisory Committee of EPA's Science Advisory Board
2019 - Editorial Board Member, *Regulatory Toxicology and Pharmacology*, Elsevier
2020 - Editorial Board Member, *Human and Experimental Toxicology*, Sage
2020 - 2021 Guest Editor, Special Issue: Acetaminophen and Cancer, *Regulatory Toxicology and Pharmacology*, Elsevier

Employment History

2004 - present Principal, Ted Simon, LLC, Winston, GA
2006 - present Adjunct Professor, Environmental Health Science, College of Public Health, University of Georgia, Athens, GA
1996 - 2006 Toxicologist, US Environmental Protection Agency, Region 4, Atlanta, GA
2003 Instructor, Department of Biology, Georgia State University, Atlanta, GA
2001 - present Instructor, Department of Environmental Health Science, University of Georgia, Athens, GA
1996 Environmental Health Scientist, Agency for Toxic Substances and Disease Registry/Centers for Disease Control, Atlanta, GA
1994 - 1996 Toxicologist, US Environmental Protection Agency, Region 4, Atlanta, GA
1993 - 1994 Project Scientist, ManTech Environmental Inc., USEPA Region 4, Atlanta, GA
1993 Assistant Professor of Biology, Life College, Marietta, GA
1982 - 1988 Georgia State University, Research/Teaching Assistant, Atlanta, GA

Education

1991-1993 Postdoctoral Fellowship in Neurobiology of Olfaction, Georgia State University, Laboratory of Dr. Charles Derby
1989-1991 Postdoctoral Fellowship in Biology, Emory University, Laboratory of Dr. Ron Calabrese
1989 Ph.D. Neurobiology & Behavior, Georgia State University, Atlanta, GA
1971 B.A. Biology, Middlebury College, Middlebury, VT

Editorial Activities

Editor, SciPinion Peer Reviews: SciPinion, Inc. provides a service for managing peer reviews with paid reviewers that collects both their scientific opinions and demographic data. Charge questions require editing so that they are clear and unbiased.

Peer Reviewer, Health Canada: provides this Canadian National Health Agency with peer reviews of documents when requested.

Grant Reviewer, Dutch National Research Agenda: Research Routes by Consortia (NWO-ORC). Reviews of submitted research proposals.

Professional Memberships

- 2016 - The Toxicology Forum
- 2006 – Roundtable of Toxicology Consultants
- 1995 - Society of Toxicology
- 1997 – Society for Risk Analysis
- 1984 – 1993 Society for Neuroscience

Scientific Publications

BOOKS

- **Simon TW.** *Environmental Risk Assessment: A Toxicological Approach, 2nd Edition.* 2019. Textbook for Graduate Risk Assessment Courses. ISBN 978-0367250973
- Anderson SA, **Simon TW.** (2018) *Defending Pesticides in Litigation 2018 Edition.* Thompson Reuters. ISBN: 978-0-314-84654-9
- **Simon TW.** *Environmental Risk Assessment: A Toxicological Approach* (2014) Textbook for Graduate Risk Assessment Courses CRC Press ISBN 978-1466598294

BOOK CHAPTERS

- **Simon TW** (2021) Cannabinoid Pharmacokinetics and Pharmacodynamics in *Recent Advances in the Science of Cannabis*, Strongin RM, Meehan_Atrash J & Vialpando M (eds.) CRC Press, DOI: 10.1201/9780429274893.
- Vinas R and **Simon TW** (2017) Risk Assessment in the 21st Century: New Technologies and Techniques in *History of Risk Assessment in Toxicology, 1st Edition*, Sol Bobst, Ed., Academic Press, ISBN: 9780128095324
- **Simon T**, Edwards DH (1990) The Caudal Photoreceptor: A Multifunctional Sensory Neuron may select its Outputs by Spike Frequency. In *Frontiers in Crustacean Neurobiology*, Wiese K, Krenz W-D, Tautz J, Reichert H, Mulloney B (eds.) Birkhauser-Verlag, Basel, Boston, Berlin ISBN: 978-3-0348-5691-1

PEER-REVIEWED JOURNAL ARTICLES

- **Simon TW**, Cox LA, Becker RA (2022) Can the Predictive Analytics Toolkit (PAT) handle a Genomic Data Set? *Computational Toxicology* (in press)
- **Simon TW** (2021) How Bias in Cannabis Urine Screening Contributes to Uncertainty in Passive Exposure Studies. In Fall Proceedings of the Cannabis Chemistry Subdivision, American Chemical Society, Nigam B. Arora & Jacqueline L. von Salm, Eds. doi: 10.1021/acs.chas.0c00119
- Cox LA, **Simon TW**, Becker RA (2019) The Predictive Analytics Toolkit (PAT): User-friendly predictive analytics for advancing new approach methodologies (NAMs). *Computational Toxicology*, 12, November 2019, 100107. doi: 10.1016/j.comtox.2019.100107
- Kirman CR, **Simon TW**, Hays SM (2019) Science peer review for the 21st century: Assessing scientific consensus for decision-making while managing conflict on interests, reviewer and process bias. *Regul Toxicol Pharmacol pii: S0273-2300(19)30003-0.* doi: 10.1016/j.yrtph.2019.01.003
- Patlewicz G, Wambaugh JF, Felter SP, **Simon TW**, Becker RA (2018) Utilizing Threshold of Toxicological Concern (TTC) with high throughput exposure predictions (HTE) as a risk-based prioritization approach for thousands of chemicals. *Computational Toxicology* 7:58-67.

- **Simon TW** (2018) Providing context for phosphatidylethanol as a biomarker of alcohol consumption with a pharmacokinetic model. *Regul Toxicol Pharmacol* 94:163-171.
- Bell SM, Chang X, Wambaugh JF, Allen DG, Bartels M, Brouwer KLR, Casey WM, Choksi N, Ferguson SS, Fraczkiwicz G, Jarabek AM, Ke A, Lumen A, Lynn SG, Paini A, Price PS, Ring C, **Simon TW**, Sipes NS, Sprankle CS, Strickland J, Troutman J, Wetmore BA, Kleinstreuer NC. (2017) In vitro to in vivo extrapolation for high throughput prioritization and decision making. *Toxicol In Vitro* 47:213-227.
- Becker RA, Dreier DA, Manibusan MK, Cox LA, **Simon TW**, Bus JS. (2017) How Well Can Carcinogenicity Be Predicted by High Throughput “Characteristics of Carcinogens” Mechanistic Data? *Regul Toxicol Pharmacol* 80:185-196
- **Simon TW**, Zhu Y, Dourson ML, Beck N. (2016) Bayesian Methods for Uncertainty Factor Application for Derivation of Reference Values. *Regul Toxicol Pharmacol* 80:9-24.
- Beck NB, Becker RA, Erraguntla N, Farland WH, Grant RL, Gray G, Kirman C, Lakind JS, Lewis RJ, Nance P, Pottenger LH, Santos SL, Shirley S, **Simon T**, Dourson ML. (2016) Approaches for describing and communicating overall uncertainty in toxicity characterizations: U.S. Environmental Protection Agency's Integrated Risk Information System (IRIS) as a case study. *Environ Int* 89-90:110-128.
- Becker RT, Patlewicz G, **Simon TW**, Rowlands JC, Budinsky RA (2015) The adverse outcome pathway for rodent liver tumor promotion by sustained activation of the aryl hydrocarbon receptor. *Regul Toxicol Pharmacol* 73:172-90.
- **Simon TW**, Budinsky RA, Rowlands JC. (2015) A Model for Aryl Hydrocarbon Receptor-Activated Gene Expression Shows Potency and Efficacy Changes and Predicts Squelching due to Competition for Transcription Co-activators. *PLOS ONE*, 10(6):e0127952
- Becker RA, Friedman KP, **Simon TW**, Marty MS, Patlewicz G, Rowlands JC. (2014) An exposure:activity profiling method for interpreting high-throughput screening data for estrogenic activity-Proof of concept. *Regul Toxicol Pharmacol* 71:398-408.
- Patlewicz G, **Simon TW**, Rowlands JC, Budinsky RA, Becker RA. (2015) Proposing a scientific confidence framework to help support the application of adverse outcome pathways for regulatory purposes. *Regul Toxicol Pharmacol* 71:463-477.
- **Simon TW**, Simons SS Jr., Preston RJ, Boobis AR, Cohen SM, Doerrer NG, Fenner-Crisp PA, McMullin T, McQueen CA, Rowlands JC (2014) The Use of Mode of Action Information in Risk Assessment: Quantitative Key Events / Dose-Response Framework (Q-KEDRF) for Modeling the Dose-Response for Key Events. *Crit Rev Toxicol* 44 Suppl 3:17-43.
- Budinsky, RA, Schrenk D, **Simon T**, Van den Berg M, Reichard JF, Silkworth JB, Aylward LL, Brix A, Kaminski N, Perdew G, Starr TB, Walker NJ, Rowlands JC (2014) Mode of action and dose-response framework analysis for receptor-mediated toxicity: the aryl hydrocarbon receptor as a case study. *Crit Rev Toxicol* 44(1):83-119
- Patlewicz G, **Simon T**, Goyak K, Phillips RD, Rowlands JC, Seidel SD, Becker RA. (2013) Use and Validation of HT/HC Assays to support 21st century toxicity evaluations. *Regul Toxicol Pharmacol* 65(2):259-68.
- Stephens ML, Andersen M, Becker RA, Betts K, Boekleheide K, Carney E, Chapin R, Devlin D, Fitzpatrick S, Fowle JR, Harlow P, Hartung T, Hoffmann S, Holsapple M, Jacobs A, Judson R, Naidenko O, Pastoor T, Patlewicz G, Rowan A, Scherer R, Shakih R, **Simon T**, Wolf D, Zurlo J. (2013) Workshop Report: Evidence-based Toxicology for the 21st Century: Opportunities and Challenges. *ALTEX* 30:74-103.
- Patlewicz G, **Simon T**, Goyak K, Phillips RD, Rowlands, JCR, Seidel S and Becker RA (2013) Use and Validation of HT/HC Assays to Support 21st Century Toxicity Evaluations. *Regul Toxicol Pharmacol* 5:1-7.
- Kirman C, Budinsky, RA, Yost L, Baker BF, Zabik JM, Rowlands JC, Long TF, **Simon T** (2011) Derivation of Soil Clean-Up Levels for 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) Toxicity Equivalence (TEQ_{D/F}) in Soil Through Deterministic and Probabilistic Risk Assessment of Exposure and Toxicity. *Human and Ecological Risk Assessment* 17(1): 125-158.

- Budinsky RA, LeClyuse EL, Ferguson SS, Rowlands JC, **Simon T** (2010) Human and Rat Primary Hepatocyte CYP1A1 and 1A2 Induction with 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD), 2,3,7,8-Tetrachlorodibenzofuran (TCDF) and 2,3,4,7,8-Pentachlorodibenzofuran (4-PeCDF). *Toxicol Sci* **118**(1):224-235.
- **Simon T** (2010) Just Who is at Risk? The Ethics of Environmental Regulation. *Hum Exp Toxicol* **30**(8):795-819.
- **Simon T**, Kirman, CR, Aylward LL, Budinsky RA, Rowlands JC (2009) Estimates of Cancer Potency of 2,3,7,8-Tetrachlorodibenzo(p)dioxin using Linear and Non-linear Dose-Response Modeling and Toxicokinetics. *Toxicol Sci* **112**(2):490-506.
- **Simon T**, Kirman, CR, Aylward LL, Budinsky RA, Rowlands JC, Long T (2008) Estimates of Cancer Potency For 2, 3, 4, 7, 8-Pentachlorodibenzofuran Using Both Nonlinear and Linear Approachs. *Toxicol Sci* **106**(2):519-537.
- **Simon T**, Britt JK, James RC (2007) Development of a Neurotoxic Equivalence Scheme of Relative Potency for Assessing the Risk of PCB Mixtures. *Regul Toxicol Pharmacol* **48**:148-170.
- **Simon T** and Manning R (2006) Development of a Reference Dose for the Persistent Congeners of Weathered Toxaphene based on *in vivo* and *in vitro* effects Related to Tumor Promotion. *Regul Toxicol Pharmacol* **44**:268-281.
- **Simon T** (2000) In Defense of Risk Assessment: a Reply to the Environmental Justice Movement's Critique. *Human and Ecological Risk Assessment* **6**(4):556-560.
- Englehardt JD, **Simon T** (2000) Bayesian statistics in environmental engineering planning. *Journal of Management in Engineering*. **16**(5):21-26
- Englehardt JD, **Simon T** (1999) Order Amid Uncertainty. *Civil Engineering*, American Society of Civil Engineers, **69**(6):8A-13A.
- **Simon T** (1999) Two-Dimensional Monte Carlo Simulation and Beyond: A Comparison of Several Probabilistic Risk Assessment Methods applied to a Superfund Site. *Human and Ecological Risk Assessment* **5**(4):823-843.
- **Simon T** (1997) Combining Physiologically Based Pharmacokinetic Modeling with Monte Carlo Simulation to Derive an Acute Inhalation Guidance Value for Trichloroethylene. *Regul Toxicol Pharmacol* **26**:257-270.
- **Simon T**, Barnes K (1995) Olfaction and Prey Search in the carnivorous leech, *Haemopsis marmorata*. *J Exp Biol* **199**:2041-2051.
- **Simon T**, Derby CD (1995) Mixture Suppression with inhibition for binary mixtures from whole cell patch clamp studies of *in situ* olfactory receptor neurons of the spiny lobster. *Brain Res* **678**(1-2):213-224.
- Derby C, Burgess M, Olson K, **Simon T**, Livermore A. (1994) Mechanisms of detection and discrimination of mixtures in the olfactory system of spiny lobsters. *Olfaction and Taste XI: Proceedings of the 11th International Symposium on Olfaction and Taste and of the 27th Japanese Symposium on Taste and Smell*.
- **Simon T**, Schmidt, J, Calabrese RL (1994) Modulation of High Threshold Transmission Between Heart Interneurons of the Medicinal Leech by FMRF-NH₂. *J Neurophysiol* **71**:454-466.
- De Schutter E, **Simon TW**, Angstadt JD, Calabrese RL (1993) Modeling a neural oscillator that paces heartbeat in the medicinal leech. *American Zoologist* **33**(1):18-28
- **Simon T**, Opdyke CA, Calabrese RL (1992) Modulatory effects of FMRF-NH₂ on the outward currents and oscillatory activity in heart interneurons of the medicinal leech. *J Neurosci* **12**(2):525-537.
- **Simon T**, Edwards DH (1990) Light-evoked walking in crayfish: Behavioral and neuronal responses triggered by the caudal photoreceptor. *J Comp Physiol A* **166**:745-755
- Hershey SJ, **Simon T**, Baste C (1975) Histochemical localization of cytochrome oxidase in gastric mucosa. *J Histochem Cytochem* **4**:271-282.

ABSTRACTS

- Roache JD, Hill-Kapturczak N, Lopez-Crusan M, **Simon TW**, Ginsberg B, Javors MA (2022) Ethanol dose-response of PEth levels following five daily drinking days in the human laboratory, PEth in Mind Conference, Basel, Switzerland

- **Simon TW**, Hill-Kapturczak N, Lopez-Crusan M, Ginsberg B, Moon TJ, Javors M, Roache JD (2022) Conceptual Model for Membrane Phospholipid Kinetics in Human Erythrocytes in the Presence of Alcohol, Texas Research Society on Alcoholism, Virtual Meeting
- **Simon TW** (2021) "Modeling Micturation: An Empirical Approach, Society for Risk Analysis, Annual Meeting
- **Simon TW**, Cox LA, Becker RA (2021) The Predictive Analytics Toolkit and "Big" Data. American Society for Cellular and Computational Toxicology, Fall Virtual Meeting.
- **Simon TW** (2020) Session Chair, The Linear No-Threshold Hypothesis (LNT) in the 21st Century. The Toxicology Forum Virtual Summer Meeting.
- **Simon TW** (2020) Sources of Uncertainty and Bias and Cannabis Urine Drug Screening, American Chemical Society Fall 2020 Virtual Meeting and Expo
- **Simon TW** (2019) Sources of Uncertainty in Cannabis Urine Drug Screening, Society of Risk Analysis Annual Meeting, Arlington, VA
- **Simon TW**, Janus E (2018) Driving Impairment from Cannabis Use: Prediction of Δ^9 -Tetrahydrocannabinol (THC) Blood Levels Using Driving Simulator Results and Alcohol Crash Risk Data, Society of Risk Analysis Annual Meeting, New Orleans, LA
- Patlewicz G, Wambaugh JF, Felter S, **Simon TW**, Becker RA (2018) Use of Threshold of Toxicological Concern (TTC) with High Throughput Exposure Predictions as a Risk-Based Screening Approach to Prioritize More Than Seven Thousand Chemicals. American Society for Cellular and Computational Toxicology, Annual Meeting, Gaithersburg, MD
- **Simon TW**, Zhu Y, Dourson ML, Beck NB. (2016) Bayesian Methods Application: Proof of Concept and Pitfalls. Society of Toxicology Annual Meeting, New Orleans, LA
- **Simon TW**, Beck NB (2015) Bayesian Methods for Uncertainty Factor (UF) Application: Proof of Concept. Society of Risk Analysis Annual Meeting, Arlington, VA
- Canady RA, **Simon TW**. (2015) Disruptive Arrival of Big Data to Food Intake Assessment. Society of Risk Analysis Annual Meeting, Arlington, VA
- Ruiz P, **Simon T**, Mumtaz M (2014) Interpreting NHANES Biomonitoring Data: Dioxins. Abstract 96d, The Toxicologist—An official Journal of the Society of Toxicology, Volume 138, Issue 1, March
- Becker R, **Simon T**, Patlewicz G, Kennedy S, Farhat A, Budinsky R. (2014) Improving the Development Of Adverse Outcome Pathways: Lessons Learned From The AHR Rodent Liver Tumor and AHR Avian Teratogenicity/Embryolethality AOPs. Abstract 2253 The Toxicologist—An official Journal of the Society of Toxicology, Volume 138, Issue 1, March
- **Simon T**. (2014) Evidentiary Standards for Neuroactive and Neurotoxic Drug Testing (2014) Abstract 723, The Toxicologist—An official Journal of the Society of Toxicology, Volume 138, Issue 1, March
- Becker R, Patlewicz G, **Simon T**, Goyak K, Phillips R, Rowlands JC, Seidel S. (2013) Validation of High-Throughput and High-Content (HT/HC) Assays to Support 21st Century Toxicity Evaluations. Abstract 2267. The Toxicologist—An official Journal of the Society of Toxicology, Volume 132, Issue 1, March
- **Simon T**, Stephens M, Yang Y, Manning R, Rowlands JC, Budinsky RA (2012) Applying the "Science and Decisions" Conceptual Models" to Dioxin. Abstract 133. The Toxicologist CD—An official Journal of the Society of Toxicology, Volume 126, Issue 1, March
- **Simon, T**, Rowlands JC, Budinsky RA (2011) The Toxic Equivalence Factor for 2,3,7,8-Tetrachlorodibenzofuran (TCDF): Toxicokinetic and Toxicodynamic Considerations. Organohalogen Compounds 73:1003-1006.
- **Simon T** (2010) Using Human In Vivo AHR Activation as a Functional Dose Metric for Risk Assessment based on Chloracne, Effects in Keratinocytes and Background CYP Induction. Organohalogen Compounds 62:582-585.

- **Simon T**, Budinsky RA, Rowlands JC, Abel TA (2010) Linear vs. Nonlinear Extrapolation for Dose-Response Assessment of TCDD. *Organohalogen Compounds* 72:1418-1421.
- Haws L, Tachovsky A, Staskal D, Aylward L, Burkhalter B, Urban J, **Simon T**, Harris M (2010) An Evaluation of the Influence of Different Soil Cleanup Levels on the Concentration of Dioxin-Like Compounds in Human Serum. *Organohalogen Compounds* 72:1448-1449.
- Harris M, Tachovsky A, Staskal D, Aylward L, Burkhalter B, **Simon T** (2010) Serum Concentrations of Dioxin-Like Compounds in a Population of Midland Michigan: An Evaluation of the Impact of Soil Exposures. *Organohalogen Compounds* 72:1442-1443.
- **Simon T**, Goodrum PE (2010) A Comparison of Three Different Methods of Childrens' Soil Ingestion. *The Toxicologist*, #1916
- Haws L, Tachovsky A, Staskal D, **Simon T**, Burkhalter K, Harris MA (2010) Evaluation of the Impact of Soil Exposures to Dioxin-Like Compounds on Body Burden in a Population in Midland, Michigan. *The Toxicologist*, #1871
- Harris MA, Tachovsky A, Staskal D, **Simon T**, Burkhalter K, et al. (2010) Assessment of the Impact of Various Soil Cleanup Levels on Serum Concentrations of Dioxin-Like Compounds in Humans. *The Toxicologist*, #1872
- **Simon T** (2009) Cancer Potency Estimates for 2,3,7,8-TCDD developed from the National Toxicology Program Bioassay Results, *The Toxicologist*, Program #EA1-2251
- **Simon T** (2009) Why Humans are Less Sensitive to PCBs than Rhesus Monkeys, *The Toxicologist* #EA4-2254
- Kirman C, Budinsky R, Yost L, Rowlands C, Long T, **Simon T** (2008) Development of a Direct Contact Criterion (DCC) for 2,3,7,8-TCDD in Soil Using Deterministic and Probabilistic Methods. *Organohalogen Compounds* 70:1204-1207.
- Kirman C., Crouch E, Aylward L, **Simon T**, Budinsky R, Landenberger B, Long T (2007) Cancer Potency Estimate For 2, 3, 4, 7, 8-Pentachlorodibenzo(P)Dioxin (4-PeCDF) *The Toxicologist*, Program #1561, p323.

Grants, Awards and Honors

- 2019-20** Grant from the American Chemistry Council Foundation for Chemistry Research & Initiatives for work on Quantitative Assessment of Mode of Action
- 2017** Winner, Risk Assessment Specialty Section of the Society of Toxicology, best paper of the year: Becker RA, Dreier DA, Manibusan MK, Cox LAT, Simon TW, Bus JS. (2017) How well can carcinogenicity be predicted by high throughput "characteristics of carcinogens" mechanistic data? 10.1016/j.yrtph.2017.08.021
- 2012-15** Grant from the Dow Chemical Company. Development of a model of the effects of the availability of coregulator proteins on gene transcription.
- 2009** Honorable Mention, Risk Assessment Specialty Section of the Society of Toxicology, best paper of the year: Simon T, Kirman, CR, Aylward LL, Budinsky RA, Rowlands JC (2009) Estimates of Cancer Potency of 2,3,7,8-Tetrachlorodibenzo(p)dioxin using Linear and Non-linear Dose-Response Modeling and Toxicokinetics. *Toxicological Sciences* 112(2), 490-506.
- 2005** Recognition from the SouthWire Company for innovative approaches to Environmental Cleanup.
- 2005** EPA Bronze Medal for Testimony in the Norman Mayes case in Knoxville, TN that led to additional UST regulations being passed by the State of Tennessee
- 2005** EPA Bronze Medal for Developing Guidance on Monitoring Land Use Controls
- 2002** EPA Science Achievement Award for Probabilistic Risk Assessment Guidance
- 1995** EPA Bronze Medal for Commendable Service; For leadership in setting the example in self-directed work team management and in setting the example in "fast-track" multimedia environmental investigation.
- 1992** Environmental Education Enterprises Scholarship in Environmental Science, "Principles of Environmental Drilling and Sampling," Association of Engineering Geologists, Atlanta, GA

- 1992** Special Award from the Vice President for Research, Georgia State University, "Evolution of different prey choice and feeding strategy in two related species," \$1000
- 1989** National Research Service Award F32 NS08394-01A1 from NIH-NINCDS "Modulation of Ionic Channels in an Oscillatory Network, Emory University, \$41,000
- 1989** Honorable Mention, Donald B. Lindsley Prize in Behavioral Neuroscience for Ph.D. Thesis, Honorable Mention for Ph.D. thesis, "The Neural Basis of Light Evoked Walking in Crayfish," Society for Neuroscience

Invited Presentations

- 2022** "Conceptual Model for Membrane Phospholipid Kinetics in Human Erythrocytes in the Presence of Alcohol, Texas Research Society on Alcoholism
- 2021** "Modernizing" Executive Order 12866: Risk Assessment Roundtable, Society for Risk Analysis Annual Meeting
- 2021** "Modeling Micturation: An Empirical Approach," Poster presentation, Society for Risk Analysis Annual Meeting
- 2021** "The Predictive Analytics Toolkit and Big Data," American Society for Cellular and Computational Toxicology, Fall Virtual Meeting
- 2020** "Sources of Uncertainty and Bias in Cannabis Urine Drug Screening," American Chemical Society Fall 2020 Virtual Meeting
- 2019** "Sources of Uncertainty in Cannabis Urine Screening," Society of Risk Analysis Annual Meeting, Arlington, VA
- 2019** "Beyond the Numbers: How to Use an Expert in Alcohol and Drug Cases," Iowa Defense Counsel Association, Sept. 12, Des Moines, IA
- 2019** "Hazard Characterization 101," Global Chemical Regulations Conference, March 6, Washington, DC
- 2018** "Driving Impairment from Cannabis Use: Prediction of THC Blood Levels Using Driving Simulation Results and Alcohol Crash Risk Data," Society of Risk Analysis Annual Meeting, New Orleans, LA
- 2017** "Scientific Issues with the "New" TSCA Risk Assessment Process," ACI Toxic Tort and Environmental Litigation Conference, Chicago, IL
- 2016** "Bayesian Methods for Application of Uncertainty Factors," Society of Toxicology Annual Meeting, New Orleans, LA
- 2016** "Quantitative Prediction of Phenotypic Change from High Throughput Assay Results," EPA Workshop on In Vitro to In Vivo Extrapolation, February, Research Triangle Park, NC
- 2015** "Bayesian Methods for Application of Uncertainty Factors," Society for Risk Analysis Annual Meeting, Arlington, VA
- 2015** "A New Look at Toxicity Factors for Toxaphene related to Fish Consumption in the Great Lakes," Presentation to The Great Lakes Consortium for Fish Advisories
- 2014** "Quantitative Key Event Relationships in the Adverse Outcome Pathway (AOP) for AHR-Mediated Rodent Liver Tumor Promotion," Invited Speaker at a meeting sponsored by the National Institute of Environmental Health Sciences held in Bethesda, MD
- 2014** "Evidentiary Standards for Neuroactive and Neurotoxic Drug Testing" Invited Speaker in a workshop at the 2014 meeting of the Society of Toxicology.
- 2013** "Current Outlook for Improving Uncertainty and Risk Communication." Invited Speaker at Understanding and Communicating Uncertainty in Hazard Assessment, a workshop sponsored by the Center for Advancing Risk Assessment Science and Policy (ARASP) of the American Chemistry Council (ACC).
- 2013** Four Lectures in Graduate Level Environmental Risk Assessment and Risk Communication, University of Georgia, Athens, GA, Spring 2013
- 2012** Four Lectures in Graduate Level Environmental Risk Assessment and Risk Communication, University of Georgia, Athens, GA, Spring 2012

- 2011 "The Toxic Equivalence Factor for 2,3,7,8-Tetrachlorodibenzofuran: Chemical-Adjustment Factors for Addressing TEF Uncertainty." Dioxin 2011, Brussels, Belgium, August 23, 2011
- 2010 "Linear vs. Nonlinear Extrapolation for Dose-Response Assessment of TCDD," Dioxin 2010, San Antonio, TX, September 15
- 2010 "Using Human in vivo AHR Activation as a Functional Dose Metric for Risk Assessment Based on Chloracne, Effects in Keratinocytes and Background CYP Induction," Dioxin 2010, San Antonio, TX, September 13
- 2009 "Dose Thresholds in Cancer Risk Assessment: Yes, they do exist." University of Georgia, Department of Environmental Health Science, Athens, GA, October 26
- 2008 "Toxaphene – How Bad is this Pesticide?" University of Georgia, Department of Environmental Health Science, Athens, GA, October 9
- 2008 "Nagging Questions about PCBs" University of Georgia, Department of Environmental Health Science, Athens, GA, October 7
- 2008 "Toxicology of Polychlorinated Biphenyls (PCBs)," Georgia Power Toxic Substances Control Act Training, Georgia Power Headquarters, Atlanta, GA, July 24.
- 2008 "Neurotoxic Modes of Action of Polychlorinated Biphenyls and Brominated Flame Retardants: Implications for Environmental Regulation", National Institute of Environmental Health Science 5th PCB Workshop: New Knowledge gained from old pollutants, May 16-22, Iowa City, IA, invited by Dr. P.R.S. Kodavanti
- 2007 "Neurotoxic Equivalence Scheme of Relative Potency for Assessing the Risk of PCB Mixtures," Dioxin 2007, Tokyo, Japan, invited by Dr. P.R.S. Kodavanti of EPA, September.
- 2007 "Probabilistic Risk Assessment and Exposure," University of Georgia, Department of Environmental Health Science, Athens, GA
- 2006 "Toxaphene – the World's Most Misunderstood Pesticide," University of Georgia Department of Environmental Health Science Seminar Series, Athens, GA
- 2005 "Regulatory Perspectives on Probabilistic Risk Assessment." Society for Risk Analysis and Interstate Regulatory Council Workshop. Michigan State University, East Lansing, Michigan
- 2004 "New Directions in Environmental Issues: an EPA Perspective." Panel Discussion at the Georgia Environmental Law Seminar, Saint Simons Island, GA
- 2003 "Probabilistic Approaches to Dose-Response Assessment." Lecture to EPA's Risk Assessment Forum, Washington, DC
- 2000 "Probabilistic Risk Assessment: Step by Step," Sponsored by NIEHS, EPA and the University of Florida, Safety Harbor, FL
- 1999 "EPA's New Guidance on Citizen Involvement in Superfund Risk Assessment – What Lawyers and Risk Professionals Need to Know." Panel Discussion at the Society of Risk Analysis Annual Meeting, Atlanta, GA
- 1999 "Calculating Cleanup Levels with Monte Carlo: Regulatory Concerns and Perspective." Within a symposium organized by Scott Person, Society for Risk Analysis Annual Meeting, Atlanta, GA
- 1999 "Practical Issues in the Use of Probabilistic Risk Assessment and Its Application to Hazardous Waste Sites," sponsored by NIEHS, EPA and the University of Florida, Sarasota, FL
- 1996 "Evaluating the Risk of Liver Cancer from Occupational Exposure to Trichloroethylene with PBPK Modeling and Monte Carlo Simulation." Chemical Industry Institute of Toxicology, Research Triangle Park, NC

Key Experience

REGULATORY TOXICOLOGY

- 2023 **Development of a Value-of-Information Analysis for the Threshold of Toxicological Concern for Chemical Safety Evaluations**
Prepared a commentary for journal publication based on EPA reports to their Board of Scientific Counselors.

2021-2 Revision of an Adverse Outcome Pathway (AOP) for Sustained Activation of the Aryl Hydrocarbon Receptor leading to Rodent Liver Tumor Promotion

Revised an existing AOP for submission to OECD.

2021-2 Proof-of-Concept Use of a Web Application for statistical modeling and machine learning of genomic data

Used published data on genomics and in vitro toxicology data from EPA's ToxCast® program to test the applicability of CloudCAT, a predictive analytics toolkit, to handle large datasets.

2020-1 Quality Assurance of Pharmacokinetic Models for Pesticides

Examined code for these models written in the R statistical computing language by several EPA contractors.

2020-1 Development of an Adverse Outcome Pathway (AOP) for Peroxisome Proliferator Receptor alpha

This work included rewriting an extant AOP and developing quantitative key event relationships.

2020 Written and Verbal Comments on EPA's Proposal for a Consolidated Human Toxicity Assessment Guideline

As a member of the Chemical Assessment Advisory Committee (CAAC), contributed to the comments on the proposed agency guideline.

2020 Consultation with EPA and Agricultural Companies on Modeling Dermal Absorption

Provided quality assurance for deterministic and probabilistic models written in the statistical computing language R and submitted to EPA's Office of Pesticide Programs; continuing consultation on model development and refinement for dermal absorption for a range of pesticides.

2019 Expert Panel on Quantitative Mode of Action Scoring for Carcinogenesis

Participated with 15 other experts in a questionnaire and in-person two-day meeting to develop a methodology for determining measurable events predictive of cancer occurrence.

2019 Review of Teaching Materials for the Predictive Analytic Toolkit, a web-based platform for inferential statistics

This toolkit provides a range of multivariate methods for use in predictive models. The work was sponsored by a chemical industry trade group and the materials included both videos and written materials.

2018 Comments to California's Office of Environmental Health Hazard Assessment (OEHHA) on Reference Exposure Levels for Toluene

The comments were developed for submission by a chemical industry trade group and dealt specifically with the application of safety/uncertainty factors for human variability.

2018 Lead Author of a Document Developing Toxicity Reference Values for Inorganic Arsenic

The report was developed for Health Canada, the Canadian equivalent of the US EPA. Data from many large epidemiologic studies were used for exposure-response modeling and development of TRVs such as reference doses and cancer slope factor. Custom software for the modeling was written in R software.

2017 Report to Chemical Industry Trade Group on Perfluorinated Compounds

These compounds have been used for stain resistance and waterproofing for many years. They are ubiquitous in the environment and human body burden. The report provides advice about which compounds bear the least risk to human health.

2016-17 Lead Author of a Toxicological Review of Inorganic Arsenic and Organic Arsenicals

The review was developed for Health Canada, the Canadian equivalent of the US EPA and the purpose was to examine the feasibility of the integrating human, animal and in vitro laboratory data to provide an updated toxicity evaluation of arsenic.

2016 Publication titled "How Well Do HTS Carcinogen Characteristics Predict Carcinogenicity?"

Provided statistical analysis, graphics and narrative development for this paper in collaboration with scientists from universities and industry trade groups.

2016 Analysis of Chemical Similarity for Abuse Liability of Candidate Drug Molecules

Conducted a statistical analysis of chemical similarity between two candidate drugs and substances on the DEA Controlled Substance List to address the issue of potential abuse liability.

2015-16 Whitepaper on Causal Associations between Flame Retardant Exposure and Firefighters' Diseases

Developed for the Flame Retardants Alliance.

2015 Adverse Outcome Summary Pathways for Chemicals with Uncertainty about the Mode of Action

Adverse outcome pathways (AOPs) are being used by EPA and OECD to form a data wiki for eventual interpretation of high-throughput in vitro data. Developed separate summaries of AOPs for four chemicals carcinogenic in animals using the assumption of mutagenicity as mode of action and hyperplasia/cell proliferation as the mode of action.

2015 Revision of the Toxicity Factor for the Pesticide Toxaphene for use at the Hercules site in Brunswick, GA

Developed a revised estimate of the toxicity criterion (Reference Dose) for the pesticide toxaphene for use in a new risk assessment for the Hercules site in Brunswick, Georgia.

2014-15 Report on Bayesian Statistical Methods used in the NRC (2014) Review of IRIS

Developed a report examining 24 toxicity factors from EPA's Integrated Risk Information System database, the subject of a recent review by the National Research Council. The report compared EPA's methods with those recommended in the NRC report.

2014 Presentation on arsenic and chromium at EPA's Integrated Risk Information System (IRIS) Bimonthly Meeting

In June, presented mode of action information for arsenic and hexavalent chromium at EPA's IRIS meeting. The purpose of these meetings is to seek input from stakeholders for development of IRIS risk assessments.

2013 Presentation on Quantitative Methods for Mode of Action Analysis to EPA's Bimonthly IRIS Meeting

In December, presented slides and discussion to EPA and other stakeholders based on the paper written with ILSI/HESI titled "The Use of Mode of Action Information in Risk Assessment: Quantitative Key Events / Dose-Response Framework (Q-KEDRF) for Modeling the Dose-Response for Key Events."

2013-16 Development of Wiki files on the Adverse Outcome Pathway for the Organisation for Economic Cooperation and Development (OECD)

Wrote and edited webpages for use in the new AOP Wiki sponsored by OECD, EPA and others. The purpose of the collection of AOPs and the Wiki is to contextualize in vitro data for use in risk assessment.

2013 Preparation of a Report Providing Derived LD50 Values for Metals in Fly Ash

Doses of fly ash representing the LD50 for metals were developed for fly ash produced by an incinerator operated by a large county government in southern California.

2013 Development of Evidence Tables for EPA's Integrated Risk Information System (IRIS) Assessments

Developed tabular format for presenting mode of action and toxicity information consistent with the National Academy of Sciences' Review of the Environmental Protection Agency's Draft IRIS Assessment of Formaldehyde. Presented the tables and accompanying rationale to EPA IRIS staff.

2013 Development and Presentation of Responses to Charge Questions for EPA's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel

Wrote responses on physico-chemical screening and the rainbow trout Expert System for estrogenic effects; presented the responses at the FIFRA/SAP meeting at EPA Headquarters.

2012 Review of EPA's Toxicological Review of Ammonia

Reviewed the EPA draft document for ammonia to determine consistency with recommendations from the National Academy of Sciences. Presented results at EPA's IRIS listening session on Ammonia.

2012 Review of 2012 Texas Commission on Environmental Quality (TCEQ) "Guidelines to Develop Toxicity Factors"

TCEQ develops its own toxicity criteria and does not depend on EPA's IRIS database. Prepared comments on the guidance for submission to TCEQ.

2012 Preparation of a White Paper and manuscript for publication on Validation of EPA's ToxCast™ Suite of High Throughput In Vitro Assays

Wrote narrative paper and manuscript for a chemical industry trade group on issues with validation of these assays for chemical screening and prioritization.

- 2011 Development of Physiologically-based Pharmacokinetic Models for Dioxin, PCBs, DDT, Hexachlorobenzene and Organophosphate Pesticides for use as teaching tools at the Agency for Toxic Substances and Disease Registry (ATSDR)**
Developed PBPK models in Berkeley Madonna software for use as teaching aids for personnel at ATSDR.
- 2011 Review of EPA's Physiologically Based Pharmacokinetic Model for Acrylonitrile Used in the IRIS Risk Assessment**
Reviewed the MATLAB computer code and output for optimization of parameters used in this model.

HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT AND RISK COMMUNICATION

- 2020-1 Development of a Model to Predict Cancer Hazard based on the Occurrence of Cancer Driver Mutations and Genomic Signatures**
Continuing work as part of a team developing statistical and modeling approaches to cancer hazard identification as an adjunct and eventual substitute for animal testing.
- 2014 Development of a Probabilistic Risk Assessment for Nellis Dunes Recreation Area, Nevada**
Worked in conjunction with academic scientists at the University of Nevada, Montana State University and the University of South Carolina to use newly developed information of the geology of Nellis Dunes and site-specific toxicity bioassays of dust to complete a risk assessment for exposure to dust at this recreation area.
- 2012 Participation on a Risk Assessment Team developing methodology to assess a Superfund site consisting of a large area floodplain**
Evaluated risk assessment options and land use to support cleanup decisions at an impacted area comprising several square miles and many river miles.
- 2010 Screening Level Ecological Risk Assessment (SLERA) for a site in Flowery Branch in Hall County, Georgia**
At an industrial park near an interstate highway, the area of potential ecological concern consisted of a storm-water retention pond and a stream. Investigated the site and developed the SLERA document for submission to the Georgia Environmental Protection Division.
- 2009 Streamlined Human Health and Ecological Risk Assessments to support Removal Action at the Nabesna Mine Site in Nabesna, Alaska**
This site is located in the Wrangell-St. Elias National Park and was a functioning gold mine in the early 20th century with high concentrations of metals associated with mine tailings and acid mine drainage; developed both risk assessments to support a non-time-critical action at the site.
- 2009 Development of Georgia Risk Reduction Standards (RRS) for Drexel Chemical Company in Cordele, GA and another site in North Georgia**
Calculated Georgia RRS values for this site; negotiated in person and by teleconference with Georgia Environmental Protection Division personnel regarding the appropriate use of toxicity criteria.
- 2009 Risk Communication and Regulatory Review related to the TVA Coal Ash Spill in Kingston, TN**
Provided risk communication at public availability session for both the American Coal Ash Association and TVA; reviewed submissions to EPA developed by TVA.
- 2008 Quality Assurance for Fish Consumption Risk Assessment on the Passaic River**
Reviewed and provided comments on both the accuracy and conceptualization of the risk assessment.
- 2008 Development of Georgia Risk Reduction Standards for Trivalent and Hexavalent Chromium and several Volatile Organic Chemicals**
Calculated numerical standards under Georgia's Hazardous Site Response Rule 391-3-19 as a subcontractor in support of a property sale and transfer.

- 2008 Evaluation of Soil Concentrations of Arsenic with an Emphasis on Local Background at a Power Plant**
Developed a report for submission to the Georgia Environmental Protection Division regarding a release of waste material containing arsenic that occurred by storm water runoff; the report considered the geology and local background concentration and included a statistical analysis.
- 2008 Statistical Evaluation of Solvent Data in Groundwater and Critique of ATSDR Health Assessment of a Superfund Site**
Provided a report that included suggestions and comments on the ATSDR Report. Performed a statistical analysis to refine the conclusions reached and critiqued the methodology for the Health Assessment.
- 2008 Investigation into the Scientific Basis of Land Disposal Limit of 50 parts per million for PCBs**
Under the 1979 Toxic Substances and Control Act (TSCA), EPA has placed an upper limit of 50 ppm for land disposal of PCBs. Investigated the scientific basis of this value for application at a former chlor-alkali plant.
- 2008 Review of Cleanup Target Levels of Florida Department of Environmental Protection**
Provided a review of the Cleanup Target Levels used for regulation by Florida Department of Environmental Protection.
- 2007 Evaluation of Calculation Methods for the Georgia Risk Reduction Standards of the Georgia HSRA Program**
Examined RRS values for soil and groundwater developed for a site in north Georgia and provided an explanation of the rationale underlying discrepancies in the calculated values.
- 2007-9 Risk Assessment for the Exposure to Mercury and PCBs from contact with Marsh Sediment and Consumption of Fish and Game Birds at the LCP Chemical Superfund Site, Brunswick, GA.**
Conducted a risk evaluation for sediment exposure and, fish consumption with development of site-specific fish consumption estimates and a site-specific sediment exposure estimate for an updated Remedial Investigation Report for submission to the US Environmental Protection Agency.
- 2007 Pro Bono Evaluation of Georgia DNR Fish Advisories for PCBs and Mercury**
Evaluated current fish advisories near Brunswick, GA for Dr. Randy Manning, the Georgia state toxicologist.
- 2007 Georgia Risk Reduction Standards for PCBs, mercury and other chemicals in Soil and Groundwater at the LCP Chemical Superfund Site**
Prepared detailed calculations of soil and groundwater screening values based both on direct exposure and transfer of chemicals from soil to groundwater.
- 2006-10 Risk Assessment for the Residential Exposure Scenario for PCBs and mercury in Upland Soils at the LCP Chemical Superfund Site, Brunswick, GA.**
Conducted a risk evaluation for residential exposure. The original risk assessment for the LCP site did not include an estimate of risk to on-site residents or other human receptors with a small exposure unit (ca. 0.5 acres). This risk evaluation will be part of an updated remedial investigation to submit to USEPA.
- 2006-7 Risk Assessment for Consumption of Estuarine Fish containing Toxaphene Residues by Coastal Georgia Residents related the Hercules Chemical Superfund Site in Brunswick, GA**
Developed fish consumption estimates for coastal Georgia residents based on the previous surveys in the Brunswick area used along with published work on the toxicity of toxaphene to support a probabilistic risk assessment for fish consumption prepared for USEPA.
- 2006 Development of a Physiologically-based Pharmacokinetic Model for Copper in Migratory Birds for Ecological Risk Assessment of Mine-Associated Tailings Ponds**
High copper concentrations in water associated with acid mine drainage may be toxic to birds; developed of a PBPK model of copper absorption, distribution, metabolism and excretion (ADME) in juvenile ducks and adult geese; conducted a feasibility study of incorporating migration physiology in the model.
- 2006 Development of a Preliminary Risk Assessment for Selenium as part of a Proposal to Address Overall Effects of Selenium in a River System**
Developed human health and ecological risk estimates for selenium migrating from coal piles into a river. These estimates included consumption of fish and water by humans.

- 2006 Evaluation of Georgia DNR Fish Advisories near Brunswick, GA**
Conducted an evaluation of fish advisories for Toxaphene and PCBs published by the Georgia Department of Natural Resources.
- 2006 Development of a white paper presenting the history of Probabilistic Risk Assessment (PRA) at EPA**
Reviewed EPA guidance documents and scientific literature and produced a document that detailed this complete history of PRA at EPA and suggested likely uses of PRA in the future.
- 2005 Risk Communication regarding solvents in groundwater at Augusta, Georgia**
As an EPA toxicologist, provided information to citizens at a public meeting regarding the possible health effects of tetrachloroethylene and trichloroethylene in groundwater relating to a RCRA site.
- 2005 Review of Proposed Arsenic Toxicity Assessment to be placed on EPA's IRIS Database**
As an EPA toxicologist and consensus reviewer for EPA's IRIS database, reviewed and provided comment on proposed changes to the arsenic toxicity assessment.
- 2004-5 Risk Communication to Community Against Pollution (CAP), a citizens group in Anniston, AL**
As an EPA toxicologist, developed a relationship with CAP and presented information on the health effects of PCBs at several public and community meetings.
- 2004 Providence Park Ecological Risk Assessment**
Conducted a screening ecological risk assessment (SLERA) for a site in Fulton County, GA.
- 2004 Risk Communication regarding Trichloroethylene**
As an EPA toxicologist, provided information to the Citizen's Advisory Group (CAG) at Anniston Army Depot and a group of concerned citizens about the health effects of trichloroethylene.
- 2003-5 Development of EPA's *Guidance on Surface Soil Cleanup at Hazardous Waste Sites: Implementing Cleanup Levels***
As an EPA toxicologist, developed a guidance document that presented methods for applying risk-based cleanup levels as area averages rather than not-to-exceed levels.
- 2003 Soil Cleanup Strategy for a Skeet Range at Naval Air Station Cecil Field in Jacksonville, FL.**
As an EPA toxicologist, used both geostatistics and exposure assessment to refine the size of the area needing remediation.
- 2000 Discussion of Florida's Secondary Drinking Water Standards based on Organoleptic Effects**
As an EPA toxicologist, investigated the biological basis of Florida's secondary drinking water criteria for aluminum, iron, manganese and silver for which secondary standards based on esthetics (smell and taste) were below health-based criteria.
- 2000 Memorandum presenting *Amended Guidance on Ecological Risk Assessment at Military Bases: Process Considerations, Timing of Activities, and Inclusion of Stakeholders***
As an EPA toxicologist, authored a memo that enabled ecological risk assessments at DOD facilities to be completed in a timely manner and ensures that risk assessment activities occur at times consistent with DOD funding schedules.
- 1996-9 Development of *Risk Assessment Guidance for Superfund, Part 3. Process for Conducting Probabilistic Risk Assessment***
As an EPA toxicologist, made significant contributions to this guidance, which received EPA's Science Achievement Award in 2001.
- 1995 Region 4 Bulletins: Regional Risk Assessment Guidance**
As an EPA toxicologist, authored Region 4 risk bulletins on Toxicity Assessment and on Development of Remedial Goal Options.

TOXICOLOGY AND REGULATORY ANALYSIS OF DIOXIN-LIKE CHEMICALS INCLUDING POLYCHLORINATED BIPHENYLS

2012-15 Modeling of Dioxin-induced Gene Expression in Breast Cancer Cells

Developed a model of gene expression using stochastic simulation methods that reproduced several phenomena such as non-monotonic dose response curves.

- 2012 Development of a Margin of Exposure for Enzyme Induction from Dioxin Exposure for Comparison with Recent EPA Toxicity Factors for a Weight-of-Analysis**
Using data from both humans and laboratory test species, determined the dose at which an increase in thyroid hormone metabolism could be expected and compared this dose with the current EPA reference dose based on thyroid effects in newborns.
- 2011 Inclusion of 2009 Reference Dose for 2,3,7,8-Tetrachlorodibenzodioxin (TCDD) in the ITER and TOXNET databases**
Presented conclusions from a 2009 publication to a peer review panel convened by Toxicology Excellence in Risk Assessment (TERA) for placement in the International Toxicity Estimates for Risk Assessment (ITER) database and linked to the TOXNET database at the National Library of Medicine.
- 2011 Developed a Revised Toxic Equivalence Factor (TEF) for 2,3,7,8-Tetrachlorodibenzofuran (TCDF)**
TCDF is a dioxin-like chemical that is metabolized and eliminated within hours in contrast to other dioxin-like chemicals that persist in the body for many years; developed an estimate of the TCDF TEF that incorporates this rapid metabolism for presentation at an international conference in Brussels, Belgium.
- 2011 Alliance for Risk Assessment Presentation on Dioxin using Science and Decisions Conceptual Models**
Presented results from the application of dose response methods described National Research Council's 2009 Report "Science and Decisions: Advancing Risk Assessment" to dioxin. The audience was an expert panel that included several of the authors of the NRC report.
- 2010 Report on Biota-Sediment Accumulation Factor (BSAF) for Aroclor 1260, a Commercial PCB Mixture**
Provided a review and commentary on the development of a BSAF for Aroclor 1260 (PCB mixture) and its general applicability to PCB contaminated sites.
- 2010 Rapporteur at a Workshop on Dose-Response Approaches for Nuclear Receptor-Mediated Modes of Action**
Led panel discussion and provided the presentation of the report for the panel examining the mode of action of the aryl hydrocarbon receptor that mediates gene expression from dioxin-like chemicals.
- 2010 Risk Assessment for Dioxin based on the Occurrence of Chloracne in Humans**
Developed a risk assessment for 2,3,7,8-tetrachlorodibenzo-p-dioxin based solely on data from humans and presented the work at the Dioxin 2010 meeting in San Antonio, TX.
- 2010 Analysis of Responses of Human and Rodent Liver Cells to Dioxin-Like Chemicals**
Conducted statistical analysis of genomic and proteomic data in response to three dioxin-like chemicals from human and rodent tissues *in vitro*.
- 2010 Cancer Slope Factors and Toxicity Equivalence Factors for Dioxin-Like Chemicals based on Internal Doses**
Developed a comparison of the toxicity of four dioxin-like chemicals based on tissue concentrations from National Toxicology Program bioassays using physiologically-based pharmacokinetic modeling and dose response models.
- 2009 Evaluation of Toxicity Equivalence Factors for Dioxin-like Chemicals based on external doses**
Developed a comparison of methods used to develop values for TEFs used in risk assessments of dioxin-like chemicals.
- 2009 EPA Federal Advisory Committee Act (FACA) Workshop on Dioxin**
Attended workshop on the risk assessment of 2,3,7,8-tetrachlorodibenzodioxin (TCDD); provided public commentary on EPA's proposed methods for revising the 2003 dioxin reassessment.
- 2008 Review of PCB Ecotoxicology Information in the Baseline Ecological Risk Assessment for the LCP Chemical Superfund Site, Brunswick, GA**
Reviewed the toxicity assessment for PCBs for the ecological risk assessment for this site to ensure consistency with the values and approach used in the human health risk assessment.

- 2007 Comparison between Blood Levels of Dioxin in residents of Midland, MI and those in rats associated with Adverse Effects**
Conducted a comparison between human blood levels of 2,3,7,8-TCDD and 2,3,4,7,8-PeCDF measured in humans in the University of Michigan Dioxin Exposure Study and estimated blood levels in rats from bioassays published by the National Toxicology Program in 2006.
- 2007 Development of a Risk Assessment Methodology Based on Changes in Gene Expression**
With very recent information on dioxin-related gene expression changes in the liver, developed a method for using these changes as a biomarker for the progression to type 2 diabetes.
- 2007 Whitepaper on the Non-cancer effects on humans of Dioxin-like Chemicals**
Collected scientific information related to potential and actual human health effects from published studies of the Yu-Cheng/Yusho poisoning, the Seveso exposure, the BASF plant exposure and the Viet Nam Ranch Hand cohort (Agent Orange handlers) and others to assess the likelihood of various health outcomes from dioxin exposure.
- 2007 Soil Cleanup Standards for Dioxin related to the Georgia Hazardous Substances Response Act for a secondary copper smelter**
Develop a dioxin cleanup level in soil for consideration by the Georgia EPD that included an epidemiological study of dioxin in the blood of workers at the smelter.
- 2005 Development of Surrogate Values for Reported Dioxin Concentrations Below the Analytical Detection Limit**
Performed as an EPA toxicologist; the use of contract-specified reporting limits as nondetect surrogates for dioxin analysis leads to large overestimates of soil concentrations; identified a more accurate nondetect surrogate value based on the actual chemical analysis.
- 2005 Reassessment for the Need for PCB Congener Analysis at the Anniston/Solutia PCB Site**
Performed as an EPA toxicologist; compared results from PCB cancer bioassays of their cancer potency.
- 2004-5 Geostatistical modeling of dioxin concentrations in soil at Superfund Sites in Florida**
Performed as an EPA toxicologist; these analyses demonstrated that cleanup at these sites had been successful and appropriate for the predicted land use; the analyses also showed that dioxin occurring off-site was unrelated to on-site contamination.

PRODUCT LIABILITY AND SAFETY EVALUATIONS

- 2019-20 Consultation on Exposure Assessment for Agricultural Chemicals**
Provided quantitative exposure estimates of dermal exposure to various agricultural chemicals in several use scenarios.
- 2013 Presentation to a French Government Agency on Product Safety**
Provided a report with estimates of both toxicity and exposure to rail workers on the use of a synthetic dielectric compound manufactured by a company in the UK. Presented the findings to French government risk assessment personnel.
- 2012 Assessment of Risk from Metal Plating Flaking from an Auxiliary Faucet used with a Water Filter**
Developed risk estimates for water consumers from dissolved metals and metal flakes from the faucet. This assessment was used internationally and therefore incorporated World Health Organization methodology.

LITIGATION SUPPORT / WORK FOR LEGAL APPLICATION

- 2023 Pro Bono Expert Consultation with Personnel at the University of Texas about Phosphatidylethanol**
Gave advice about writing an expert report relating to this biomarker for alcohol and possible problematic alcohol use by a Department of Energy employee.
- 2023 Pro Bono Expert Consultation on Alcohol Metabolites in Urine from a Pregnant Woman**
Provided advice and appropriate publications to demonstrate that ethyl glucuronide (EtG) could result from a urinary tract infection.

- 2022 Expert Report on Interpretation of Methamphetamine and Marijuana Metabolite in a Worker**
Provided a report on whether the drugs/drug metabolites measured in postmortem blood samples could have contributed to a construction site accident.
- 2022 Pro Bono Expert Memorandum on interpretation of Metals in Hair**
Developed a brief memo on concentration of metals in the hair of an individual, the possible health effects and sources of these metals.
- 2022 Expert Consultation on Mold Exposure**
Provided advice on mold sampling and health effects.
- 2021-2 Expert Consultation and Report on Driving Impairment from Methamphetamine**
Provided a report that performed extrapolations from postmortem drug concentrations to pre-mortem values to determine if an individual was impaired.
- 2021-2 Expert Consultation, Report and Deposition on Driving Impairment from Marijuana**
Developed a report that extrapolated postmortem concentrations of THC and metabolites to in-life concentrations to determine impairment.
- 2021 Pro Bono Expert Report on Interpretation of PEth levels in a Massage Therapist**
Developed a report providing context for PEth concentrations from a single measurement and whether these could be due to hand sanitizer use or alcohol consumption.
- 2021 Expert Consultation and Report on the Death of a Prison Inmate**
Written report on whether prescription anti-psychotic drugs could have contributed to the prisoner's death.
- 2021 Expert Consultation and Report on the Death of an Arrestee**
Developed a report on the potential causes of death for an arrestee who purposely ingested crack cocaine to avoid its discovery by police.
- 2021 Pro Bono Expert Report on the Occurrence of Cocaine in hair**
Used hair and urine testing results as the basis of a report opining on the validity of positive test for cocaine in the hair of a physician regarding employment termination.
- 2021 Expert Memorandum Report and Testimony on the Interpretation of PEth in a Child Custody Dispute**
Provided a brief report and later testified regarding whether or not PEth test results over a five-month period were consistent with abstinence.
- 2021 Expert Testimony on the Interpretation of Phosphatidylethanol (PEth) testing in an Employment Hearing**
Testified regarding the occurrence of PEth in the blood of an employee related to maintenance of a security clearance.
- 2021 Expert Memorandum Report on the Interpretation of Urine Drug Test Positive for Marijuana**
Provided a brief report on the testing procedures and the possible reasons for a false positive test.
- 2021 Expert Consultation and Report on the Exposure and Possible Effects of Pesticides Used to Treat for Bedbugs**
Developed a report that considered both exposure to and toxicity from the pesticides imidacloprid and beta-cyfluthrin used in a residential setting.
- 2021 Two Expert Consultations for different clients on Drug Interactions leading to Death**
Determined the likelihood of occurrence of toxic drug metabolites based on assessing metabolism of multiple administered drugs based on hospital and autopsy reports.
- 2021 Expert Memorandum Report on the Effect of Total Suspended Solids Released from an Industrial Facility into a Water Body**
Providing a brief report using state guidance on dilution to reach conclusions about the impact of the release.

- 2021 Expert Report and Deposition on the toxicity of Kraft Black Liquor and sulfur-containing gases released from a paper mill**
Developed a report that considered both exposure to and toxicity of liquids and gases released during a failure of an effect evaporator at a paper mill.
- 2021 Expert Memorandum Report and Deposition of the production of toxic gases in a bathroom from use of cleaners and disinfectants**
Provided a brief report on the gases produced by mixing products containing chlorine and those containing ammonia or ammonium compounds.
- 2021 Pro Bono Expert Report on the Occurrence of Cocaine in hair**
Used hair and urine testing results as the basis of a report opining on the validity of positive test for cocaine in the hair of a mother seeking to regain custody of her children.
- 2021 Expert Consultation on whether Methamphetamine found in a decomposed body contributed to death**
Reviewed materials and provided telephone consultation.
- 2021 Expert Consultation of Effects of Multiple Pharmaceuticals in the Death of a Hospital Patient**
Examined autopsy and medical records to determine the effects of multiple drugs given during a hospital stay.
- 2021 Pro Bono Expert Report on the Death of a Possible Rape/Murder Victim**
Using autopsy findings, toxicology reports, and an independent pathology report, developed my own opinion whether the death was due to opioid toxicity or strangulation.
- 2021 Two Expert Reports regarding Concentration of Phosphatidyl Ethanol (PEth) in the blood of a Pilot and a Nurse**
PEth is a biomarker for chronic alcohol consumption. Report demonstrated that the measured concentration was likely due to hand sanitizer use consistent with recommended medical practice rather than alcohol consumption.
- 2021 Expert Report on Effects of Quaternary Ammonium Disinfectants introduced into a Consumer Beverage**
Developed a report on the irritant effect of these disinfectants in an individual consuming the beverage.
- 2020-21 Expert Consultation on the Death of a Convenience Store Worker**
Performed an analysis and delivered a verbal opinion whether the use of a bleach-containing cleansing product could have contributed to the worker's death; testimony is expected in 2021
- 2020 Expert Consultation on the Effect of Marijuana on Driving Ability**
Provided a brief written opinion on the effect of marijuana on driving as contributing to the death of a motorist.
- 2020 Expert Consultation, Report and Telephone Testimony on the Role of Alcohol in the Death of a Construction Worker**
Developed a report on impairment due to alcohol in a construction worker who fall from a hotel balcony based on evidence from autopsy.
- 2020 Pro Bono Expert Opinion on the Validity of Hair Testing for Cannabis**
Developed a report on the occurrence of carboxy-THC, the main metabolite of cannabis in hair and the validity of such measurements to determine purposeful use.
- 2020 Pro Bono Expert Report and Testimony on Methamphetamine in Hair**
Developed a report and testified by Zoom/Phone in a Tennessee family court about the occurrence of methamphetamine in the hair of children and negative hair tests in their mother.
- 2020 Pro Bono Expert Report on the Interpretation of Methamphetamine Testing in a Criminal Case**
Developed a report on the interpretation of the drug and metabolites in blood and urine of a woman claiming recent sexual assault and whether exposure to the drug could have occurred during the assault.
- 2020 Expert Consultation on the Role of Cannabis and Alcohol in a Motor Vehicle Death**
Provided verbal opinion regarding whether the driver of a vehicle that was struck by a train was impaired based on blood testing.

- 2020 Pro Bono Expert Opinion on Amphetamines and Opiates as Contributory to the Death of a Patient**
Following contact from the patient's daughter, reviewed medical records to determine whether the occurrence of these drugs in urine were from medical intervention or other sources.
- 2020 Expert Consultation on Cause of Death in a Apartment Maintenance Worker Using Lacquer Thinner**
Provided verbal opinions about the cause of death based on the autopsy and toxicology reports.
- 2020 Expert Consultation on Health Effects of Carbon Monoxide Exposure**
Provided a verbal opinion about the possibility of delayed neurocognitive effects in five police officers exposed to CO.
- 2020 Expert Consultation on the Concentrations of Phosphatidylethanol in blood and Ethyl Glucuronide**
Provided verbal opinion on the levels of PeTH in blood and EtG in hair in a nurse.
- 2020 Pro Bono Expert Report on the Effect of Physical and Cognitive Disabilities and Assessment of Intoxication**
Developed a report on the effect of physical and cognitive disabilities in the performance of the Standardized Field Sobriety Test (SFST) and the opinion of a police Drug Recognition Expert (DRE).
- 2020 Expert Report on Alcohol Consumption and Consequent Intoxication in Pedestrian struck by a vehicle**
Based on hospital lab data determined the pedestrian's level of intoxication and whether it was a contributing factor to the accident.
- 2020 Expert Consultation on Alcohol Consumption and Intoxication in a Gunshot Victim**
Provided verbal report on the blood alcohol concentration in the victim at the time of the shooting.
- 2019-20 Pro Bono Expert Consultation on a Positive Hair Test for Cocaine in a Police Officer**
Gathered and provided scientific publications and verbal reports.
- 2019-21 Expert Consultation and deposition regarding the Use of Librium during Alcohol Withdrawal**
Provided verbal report on the effect of Librium in a suicide following alcohol withdrawal.
- 2019 Expert Consultation on Carbon Monoxide (CO) Poisoning**
Developed report from examination of medical records and other materials to determine potential long-term effects from CO inhalation due to a faulty heating system.
- 2019 Expert Report on Chronic Marijuana Use as a Causal Factor in a Construction Accident**
Considered a single use test result and documented historical use of marijuana and the continuing cognitive effects of chronic use.
- 2019 Expert Consultation on Health Effects of Ethylene Oxide**
Provided discussions about the potential health effects from air concentrations near a sterilization facility.
- 2019 Pro Bono Expert Report and Testimony in Family Court in Coweta County, GA**
Developed report and opinion on the occurrence of methamphetamine in hair samples of grandparents seeking custody of twin grandchildren.
- 2019 Expert Report on Possible Involvement of Alcohol as a Causal Factor in a Traffic Accident**
Provided report on retrograde extrapolation of blood alcohol levels.
- 2019 Pro Bono Expert Report and Telephone Testimony about Continuing Cannabis Use in an Individual Released from Federal Prison.**
Developed expert opinion on possible continuing cannabis use based on test results from three urine samples taken several days apart.
- 2019 Expert Opinion and Report on the Respiratory Effects of Inhaling Solder Fumes**
Exposure to rosin in solder has long been associated with lung damage; documented this association confirming biopsy evaluation by medical pathologists.
- 2019 Expert Report and Testimony on Interpretation of Cannabis metabolites in urine resulting from Hemp Oil Use**
Testified before a school board about urine drug screens from an assistant principal who used hemp oil on advice from health providers.

- 2019 Pro Bono Expert Report and Telephone Testimony in a Child Custody Matter**
Examined drug test reports and provided a report on testimony about drug use during pregnancy.
- 2018-19 Expert Consultation / Report / Deposition on the Interpretation of blood levels of a Cannabis metabolite in an accident with two fatalities**
Developed a means of estimating other cannabinoid concentration in a postmortem blood sample from a fatally injured person and determined whether cannabis contributed to the fatal accident.
- 2019 Expert Consultation / Report / Deposition on the Occurrence of False Positive Serum Alcohol Measurements following the use of Lactated Ringer's Solution**
Lactated Ringer's solution is used for volume replacement following trauma. This use can lead to false positive alcohol determinations by many hospital labs and can be wrongfully interpreted as alcohol use.
- 2019 Expert Consultation and Report regarding the Urinary Metabolites resulting from Use of Opiates**
The metabolic products of hydrocodone, used for pain management, may include hydromorphone, also prescribed for pain, and the occurrence of hydromorphone depends on genetic variation. The report provided context for the levels of hydromorphone observed in urine.
- 2018 Pro Bono Expert Report about Concentration of Phosphatidyl Ethanol (PEth) in the blood of an Emergency Room Physician**
PEth is a biomarker for chronic alcohol consumption. Report demonstrated that the measured concentration was likely due to hand sanitizer use consistent with recommended medical practice rather than alcohol consumption.
- 2018 Expert Report regarding the Assessment of Intoxication from Methamphetamine, Cannabinoids and Benzodiazepines in a Fatal Motor Vehicle Accident**
The state toxicology laboratory provided only screening results, i.e. "positive" or "negative" and the report indicated whether these could be used to infer intoxication as described by the state.
- 2018 Expert Consultation and Report regarding a Death Ascribed to Multiple Drug Intoxication**
Developed an opinion about the effect of multiple prescription drugs as a possible cause of death related to a Workman's Compensation Issue.
- 2018 Expert Reports providing context for the Interpretation of Cannabis metabolites in urine resulting from Hemp Oil Use**
Hemp oil contains cannabidiol, a substance from cannabis without psychoactive effects and is sold over-the-counter throughout the US. Report provided context for employment decisions.
- 2018 Expert Report and Testimony on the Interpretation of THC blood levels and Cannabis Use as a Factor in a Non-fatal Motor Vehicle Accident**
Prepared a report that estimated time of cannabis use from blood sampled after the accident and whether the effects of THC could have been a contributing factor.
- 2018 Expert Consultation on the Exposure and Toxicity of Titanium Dioxide during Sunscreen Production**
Gave suggestions for laboratories to conduct testing and provided initial problem formulation.
- 2018 Expert Consultation/Deposition Alcohol Use as a Contributory Factor in an Accident**
Provided consultation and deposition to opposing counsel regarding the use of alcohol as a contributory factor to an injury crash in an all-terrain vehicle.
- 2018 Pro Bono Expert Consultation regarding the Detection of Amphetamines in Urine in a Military Firefighter**
Developed an opinion and attended military hearing regarding the likely false positive detection of amphetamines in urine due to cross-reactivity from non-amphetamine prescription medications.
- 2017-18 Expert Report and Testimony about alcohol as a factor in a motor vehicle death in a dram shop matter**
Provided report testimony in New Jersey regarding 2017 Expert Report about estimation of blood alcohol from postmortem measurements and the ability of servers to recognize impairment/intoxication.
- 2018 Pro Bono Expert Consultation regarding cocaine and metabolites in the hair of a bartender**
Provided a memorandum indicating that hair in cocaine is likely due to passive exposure, and, in the case of a bartender, the likely source was cocaine contamination of US banknotes.

- 2018 Expert Opinion on Cannabis Use for a Federal Sentencing Hearing**
Examined three urine screens spaced over two months for the defense to determine if cannabis had been used during this time.
- 2018 Pro Bono Expert Consultation regarding hair testing for drugs used in drug-facilitated sexual assault**
For an advocacy group for rape victims, developed a memorandum and list of suggested drugs for possible testing in victim's hair following incidents.
- 2018 Expert Consultation and Deposition about interpretation of postmortem drug levels in blood**
Provided verbal opinions to attorneys; gave deposition testimony to opposing counsel.
- 2017 Expert Opinions and Testimony on Phosphatidylethanol (PEth) in Blood**
PEth concentrations provide a measure of the amount of chronic alcohol consumption; provided an estimate of daily alcohol use corresponding to specific PEth concentrations. Gave testimony (examination and cross-examination) in Bartow County, GA family court to provide context to PEth blood levels as a marker of chronic alcohol consumption.
- 2017 Expert Consultation about Benzene as a Causal Factor in Leukemia due to Residence near a Former Gas Station**
Provided several discussions with counsel regarding the environmental evidence and collection of additional data.
- 2017 Expert Testimony about the effects and disposition of marijuana in a Workman's Comp case**
Underwent examination and cross-examination about the significance of measurements of THC and its metabolite THCCOOH as a causal factor in a traffic accident.
- 2017 Expert Testimony in a DUI case**
Provided testimony about the validity of a reading from the Alcometer V-XL.
- 2017 Expert Litigation Support about occupational exposure to solvents at a Cement Plant**
Developed model of exposure to solvent vapors occurring in a testing laboratory with multiple fume hoods to assess the effects of mixed solvent exposure on cognitive deficits in a worker.
- 2017 Expert Opinion on Drug Use by a Truck Driver**
Considered deposition and blood test results to determine if the use of Adderall was a contributing factor to an accident.
- 2017 Expert Opinion on Alcohol Blood Testing**
Read medical records and blood test for alcohol to determine if a blood test about 15 hours after an injury was useful in determining impairment at the time of the injury.
- 2017 Expert Report on THC Test Results in Blood and Urine and Cognitive/Psychomotor Effects**
Considered medical records and drug test results from an employee injured at work to conclude whether marijuana use may have contributed to the injury.
- 2016 Expert Consultation on Chemicals found in Floor Coverings and Possible Links to Multiple Chemical Sensitivity**
Examined material safety data sheets, deposition transcripts and the scientific literature to determine the whether a manufactured floor covering could account for effects in humans. Testimony expected in early 2017.
- 2016 Expert Consultation on the Effects of Prescribed Anti-Depressants, Opiates and Epilepsy Medications during Pregnancy**
Wrote an opinion about the effects of these various drugs during pregnancy, including possible effect on the infant after its birth.

- 2016 Expert Consultation on Effects of Anti-Depressant and Opiate Drugs in Humans**
Provided a written opinion regarding the combined effects of a selective serotonin reuptake inhibitor, a benzodiazepine and an opiate on an individual's mental state. Exposure to these drugs likely occurred from a poisoning attempt.
- 2016 Expert Report on the Interpretation of Positive Urine Tests for Marijuana following Weight Loss**
Provided report regarding the increases observed in the levels of THC-COOH (metabolite of THC from marijuana) in urine that are due to release of THC from fat. The THC was likely used several weeks or months prior to testing.
- 2016 Consultation about the Association of Disinfection Byproducts in Drinking Water with Various Health Effects**
Conducted an investigation of the scientific literature regarding a claim that chlorine and trihalomethanes were associated with a range of diseases, including kidney disease and cancer.
- 2015-16 Expert Report on the Toxicity of Dioxin-like Chemicals**
Provided a report and deposition on differences in toxicity of the various dioxin-like chemicals.
- 2015 Consultation with a Water Utility regarding the Health Effects of Radium in Drinking Water**
Worked with a health physicist to develop a joint opinion about the health effects of radium and potential treatment technologies to enable the utility in an acquisition.
- 2015 Deposition to State and Federal Environmental Regulators and Private Sector Attorneys about the Effects of Selenium on Human Health**
Provided deposition regarding the toxicity of selenium discharged into streams near Appalachian coal mines.
- 2015 Expert Report on the Likelihood of Fungal Eye Infection after Contact with Fertilizer**
Investigated exposure of plaintiff to airborne fertilizer particles during spreading operations resulting in loss of an eye.
- 2015 Expert Opinion on the Toxicity and Health Effects of Synthetic Cannabinoids**
In January, provided a memorandum to the Fairfax County, VA Police Department detailing the health effects of synthetic cannabinoids used in the illegal drugs known as "spice" or "K-2."
- 2014-15 Development of Statistical Background Screening Methods for Use at a Potential Superfund Site**
In December, provided a comparison to background for concentrations of arsenic and polycyclic aromatic hydrocarbons at a site currently going through the Hazard Ranking System.
- 2008-14 Expert Consultation and Deposition on Regulatory Decisions at a Superfund Site**
Provided an expert report to attorneys about how the presence of dioxin-like chemicals and PCBs affected the regulatory activities/decisions at a Superfund site. In 2014, provided deposition in Wash. DC.
- 2014 Report on TSCA Compliance Status of Recent Data and Publications on the Health Effects of Chromium**
Prepared a report on the determinations of whether these data and publications could be considered "new" information. The purpose was to provide attorneys with risk information as indicated in the 1978 TSCA Section 8(e) Policy Statement on Substantial Risk Notifications to EPA.
- 2010 Rebuttal Report on Hexavalent Chromium**
Prepared a report rebutting a report submitted by the expert working for opposing counsel regarding the health and environmental effects of hexavalent chromium.
- 2008-10 Expert Testimony regarding the Effects of Inorganic Mercury**
Provided an expert report to attorneys in a child custody matter regarding the long term neurological and psychological effects of inorganic mercury. Provided expert testimony on this matter in family court in Fulton County, GA regarding the toxicity of inorganic mercury.
- 2009 Consultation and Statistical Modeling regarding the Dose-Response of Perfluorooctanoic Acid (PFOA) in Humans**
PFOA is used in the production of Teflon. Provided consultation about dose-response modeling as a subcontractor to a consulting firm in Tallahassee, FL to be used in litigation support.

- 2009 Expert Consultation regarding USEPA's Arsenic Toxicity Value**
 Provided a memorandum to attorneys and personnel from electric companies on the ramifications of EPA's proposed change in the oral cancer slope factor for Arsenic.
- 2008 Risk Communication and Expert Consultation regarding Aerosol Emissions**
 Retained as an expert in toxicology by attorneys for Georgia Power to provide scientific consultation and risk communication regarding emissions of several inorganic chemicals from power plants.
- 2007 Pro Bono Evaluation of Exposure to para-dichlorobenzene (PDB)**
 Provided an expert report on exposure and potential liver damage in an individual working in a botany laboratory in which PDB was used as an insect fumigant for plant specimens.
- 2006 Assessment of Possible Drug/Alcohol Impairment in for Workman's Compensation**
 Examined quick urine drug screen results showing alcohol and marijuana use and developed an assessment of possible impairment.
- 2006 Expert Consultation on the Recent History of Arsenic Regulation by EPA**
 Provided a memorandum detailing the history of arsenic regulation as a soil contaminant by EPA headquarters and by Region 4 EPA (Southeast) since 1988 to support the efforts of attorneys regarding a Superfund site.
- 2006 Consulting Expert regarding Indoor Dampness and Mold**
 Served as a consulting expert regarding adverse effects of exposure to indoor dampness, associated mold and bacteria and the disinfectant chemicals used in the cleanup.
- 2003-4 Model of Chemical Release from a Railroad Tank Car**
 Developed a mathematical model for the release and dispersion of a dense gas, ethyl acrylate, from a railroad tank car. The gas produced both sensory irritation and toxic effects. Dispersion modeling was performed for dense gas dispersion in complex terrain.
- 2003 Expert Testimony in EPA vs. Norman C. Mayes**
 As an EPA toxicologist, provided testimony to Administrative Law Judge Barbara Gunning regarding the health effects of benzene and other fuel components and environmental sampling around underground storage tanks.
- 2002-4 Air and Exposure Modeling and PBPK Model Development of Creosote Exposure at a Wood Treatment Facility**
 Developed a comprehensive database of chemicals in wood preservative made with coal tar creosote, a mathematical model of the air concentrations of these chemicals at a wood treatment facility, and a second model for human internal exposure to these chemicals that included ingestion, inhalation and dermal routes.
- 2001-2 Expert Testimony regarding Calibration of the Intoxilyzer 5000**
 Developed testimony regarding the calibration procedures of the Intoxilyzer 5000, the "breathalyzer" used in Georgia for DUI testing. Charges in DUI cases were dropped prior to his testimony in the three cases in which Dr. Simon was involved.
- 2000 Chemical Release from a Railroad Tank Car**
 Developed a model of release and transport of acrylamide from a railroad tank car for use in litigation.

TEACHING

- 2023 Guest lecturer, Environmental Risk Assessment and Communication, EHSC 8510, University of Georgia**
 Five lectures in Spring 2023.
- 2022 Guest lecturer, Environmental Risk Assessment and Communication, EHSC 8510, University of Georgia**
 Three lectures in Spring 2022.
- 2021 Guest lecturer, Environmental Risk Assessment and Communication, EHSC 8510, University of Georgia**
 Three lectures in Spring 2021.
- 2020 Guest lecturer, Environmental Risk Assessment and Communication, EHSC 8510, University of Georgia**
 Two lectures in Spring 2020.

- 2014 Instructor, Environmental Risk Assessment and Communication, EHSC 8110, University of Georgia**
Taught a graduate level course in the School of Public Health using his textbook, "Environmental Risk Assessment: A Toxicological Approach."
- 2008 Lecture on the Toxicology of PCBs**
Developed and presented a training segment as part of the Toxic Substance Control Act (TSCA) training for electric power company personnel at the Georgia Power Company.
- 2008 Introduction to Risk Assessment, a two-day class for the Ontario Ministry of Environment**
With another scientist, developed and taught a class on risk assessment for newly hired Ministry personnel.
- 2005 Probabilistic Risk Assessment and Statistics, a short course to Michigan Department of Environmental Quality**
With another scientist, presented a 1 ½ day class on probabilistic risk assessment and statistics as part of a workshop sponsored by the Society for Risk Analysis and Interstate Technology Regulatory Council.
- 2003 Graduate Course in Simulation Modeling, Georgia State University**
Taught a graduate level course in Simulation Modeling including statistics, probabilistic methods and time-dynamic differential equation models.
- 2003 Short Course to Ontario Ministry of Environment on Probabilistic Risk Assessment**
With another scientist, developed and taught a class on probabilistic risk assessment, including probabilistic approaches to dose-response to personnel at the Ontario Ministry of Environment in Toronto, Canada
- 2001-06 University of Georgia Graduate Course in Environmental Risk Assessment**
On three separate occasions, taught a graduate-level class on Environmental Risk Assessment lasting 15 weeks, 3 hours per week.
- 2001 Short Course to Texas Natural Resources Conservation Commission on Probability Distributions**
With another scientist, developed and taught a class on statistics and probability distributions to data to TNRCC personnel.
- 2000 Workshops on Probabilistic Risk Assessment**
Performed as an EPA toxicologist. In 1999 and 2000, worked with Dr. Steve Roberts of the University of Florida to organize two workshops on PRA sponsored by EPA, NIEHS and the University of Florida.
- 1999 Short Course to Texas Natural Resources Conservation Commission on Probabilistic Risk Assessment**
With another scientist, developed and taught a class on probabilistic risk assessment to TNRCC personnel.
- 1997 Short Course to Navy Environmental Health Center personnel on Probabilistic Risk Assessment**
With another scientist, developed and taught a class in probabilistic risk assessment Navy personnel in Norfolk, VA.

ADDITIONAL WORK IN TOXICOLOGY

- 2021-23 Collaboration with Scientists at the University of Texas Health Science Center, San Antonio, TX**
Engaged in weekly meetings to develop a refinement of a pharmacokinetic model for phosphatidylethanol (PEth), a biomarker for alcohol consumption, first published in 2018.
- 2014-16 Development of an Adverse Outcome Pathway Document for a Mutagenic Mode of Action for Cancer**
Worked with individuals from both government and the private sector, collaborated on a manuscript detailing the mode of action / adverse outcome pathway for liver tumorigenesis in animals and humans by aflatoxin B1, a toxin produced by fungi and ubiquitous in grains and ground nuts.
- 2009-16 Ongoing Scientific Consultation on the Health Effects of Hexavalent Chromium**
Provides ongoing support for toxicological and risk assessment information for toxicological issues related to hexavalent chromium for a Fortune 100 company.
- 2010 Statistical Analysis of Reproductive Endpoints in Rats Exposed to Flame Retardant Chemical**
Performed statistical analysis of dichotomous data for reproductive endpoints to inform a European consortium about the most appropriate methods for data analysis.

- 2009 Responses to EPA Charge Questions for Review of the 2009 Toxicological Review of 1,4-Dioxane**
Wrote responses to EPA's "Charge to External Reviewers for the Toxicological Review of 1,4-Dioxane" related to uncertainty analysis, physiologically-based pharmacokinetic (PBPK) modeling and benchmark dose modeling.
- 2009 Physiologically-based Pharmacokinetic Models for Methylmercury, Arsenic, Cadmium and Bisphenol-A for use as teaching tools**
Translated existing models into the Berkeley Madonna computer software for use as teaching aids for personnel at the Agency for Toxic Substances and Disease Registry,
- 2008 Whitepaper on the Ethics of Environmental Regulation and Compounding Conservatism in Risk Assessment for the Ontario Ministry of the Environment**
Used historical sources, philosophical literature and modern scientific publications to provide an understanding of the extent to which environmental regulations and standards are based on the precautionary principle.
- 2008 Assessment of Conservatism of Soil and Groundwater Standards for the Ontario Ministry of the Environment**
Assessed the level of conservatism of proposed environmental media standards using statistical methods.
- 2007 Expert Panel Developing a Protocol for Toxicity Testing of a Legacy Pesticide Mixture**
Served on a panel to refine a protocol for toxicity testing of soil considering both individual pesticide isomers and mixtures.
- 2004 Consultation with EPA Region 4 Mercury Study Group**
As an EPA toxicologist, provided information to a group of Region 4 personnel to address a newspaper editorial regarding human health and mercury.

Peer Reviews, Peer Consultations and Editorial Activities

- 2023 Computational Toxicology, Daniel Dietrich, Editor-in-Chief, "A Computational Model of Hydrogen Peroxide Production in Liver and its Removal by Catalase and GSH-reliant Enzymes that Can Predict Intracellular H₂O₂ Concentration and Cell Death During Incidents of Extreme Oxidative Stress: (1) Applications to PBPK/PD Modeling of the Trivalent Arsenical DMAIII, (2) Insights Obtained into (a) the Role of Critical GSH Depletion in Apoptosis and (b) How Intracellular H₂O₂ Concentration is So Tightly Regulated"**
- 2023 Frontiers in Public Health, Sophie Ndaw, Handling Editor, "The relevance of oral exposure in the workplace: A systematic review and meta-analysis"**
- 2023 Environmental Science and Pollution Research, Phillippe Garrigues, Managing Editor, "Editorial trend: Adverse Outcome Pathway (AOP) and computational strategy – Towards new perspectives in ecotoxicology"**
- 2023 Regulatory Toxicology and Pharmacology, Lesa L. Aylward, Co-Editor-in-Chief, "Detailed aggregate exposure analysis shows that exposure to fragrance ingredients in consumer products is low: Many orders of magnitude below thresholds of concern"**
- 2023 Environmental Research, Ki-Hyun Kim, Associate Editor, "A novel iron-doped mineral/carbon interwoven structure synthesized from coal gasification fine slag for synergistically improving electrocatalytic effectiveness toward m-cresol degradation"**
- 2023 Computational Toxicology, Daniel Dietrich, Editor-in-Chief, "Guided Optimization of ToxPi Model Weights Using a Semi-Automated Approach"**
- 2023 F1000 Research, "Community review: a robust and scalable selection system for resource allocation within open science and innovation communities"**
- 2023 Regulatory Toxicology and Pharmacology, Lesa L. Aylward, Co-Editor-in-Chief, Biomonitoring Equivalents for N,N-Diethyl-meta-toluamide (DEET)"**

- 2023 **Regulatory Toxicology and Pharmacology**, Lesa L. Aylward, Co-Editor-in-Chief, "The 2022 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Polychlorinated Dioxins, Dibenzofurans and Biphenyls"
- 2023 **Regulatory Toxicology and Pharmacology**, Lesa L. Aylward, Co-Editor-in-Chief, "Considerations on the use of animal models of underlying diseases in nonclinical toxicity evaluation,"
- 2023 **Toxicological Sciences**, Chris Corton, Deputy Editor, "A Mode of Action-Based Probabilistic Framework of Dose- Response Assessment for Non-mutagenic Liver Carcinogens: A Case Study of PCB-126"
- 2023 **Regulatory Toxicology and Pharmacology**, Lesa L. Aylward, Co-Editor-in-Chief, "Biomonitoring Equivalents for Glyphosate"
- 2023 **Computational Toxicology**, Daniel Dietrich, Editor-in-Chief, "Using Read-Across to Build Physiologically-Based Kinetic Models Part 1. Development of a KNIME Workflow to Assist Analogue Selection for PBK Modelling"
- 2023 **Computational Toxicology**, Daniel Dietrich, Editor-in-Chief, "In-silico screening of potential bioactives against inflammatory diseases by targeting Cyclooxygenase-2 (COX-2) using bioinformatic approaches"
- 2023 **Environmental Research**, Chunsheng Liu, Associate Editor, "Effects of exposure to chlorine disinfected on the antioxidant system and neurotoxicity of zebrafish."
- 2023 **Regulatory Toxicology and Pharmacology**, Lesa L. Aylward, Co-Editor-in-Chief, "A Minimal PBPK Model for the Prediction of AUC and Cmax of Drugs in Subjects with Hepatic Impairment: A Comparison With Whole Body PBPK Models."
- 2023 **Computational Toxicology**, Daniel Dietrich, Editor-in-Chief, "Discover the Design of Novel 3,5-disubstituted Indole Compounds as Advanced Hematological Anticancer Agents by 2D-QSAR, Molecular Docking and AMES Toxicity Analysis."
- 2023 **Regulatory Toxicology and Pharmacology**, Lesa Aylward, Co-Editor-in-Chief, "Regulatory and cost implications of extrapolating the harmonized oral acute toxicity classification of a pure substance to its mixture? A case study of a Pilocarpine mixture!"
- 2023 **Environmental Research**, Chunsheng Liu, Associate Editor, "Understanding ecotoxicological drivers and responses of freshwater green algae, *Raphidocelis subcapitata*, to cationic polyquaternium polymers."
- 2023 **Environmental Research**, Robert James Letcher, Editor-in-Chief, "Fish muscle mercury concentration and bioaccumulation fluctuate year-round - insights from cyprinid and percid fishes in a humic boreal lake."
- 2023 **Environmental Research**, Robert James Letcher, Editor-in-Chief, "Assessment of chlorinated pesticide exposure to White-rumped Vulture *Gyps Bengalensis* in India."
- 2023 **Environmental Research**, Robert James Letcher, Editor-in-Chief, Elucidating the Mechanisms of Developmental Abnormality Induced by Graphene and Triphenyl Phosphate: In Silico Toxicogenomic Data-Mining, In Vivo, and Toxicity Pathway-Oriented Approach."
- 2023 **Environmental Research**, Robert James Letcher, Editor-in-Chief, "Can human antidepressants disrupt fish behaviour? What is known for selective serotonin reuptake inhibitors (SSRIs)?"
- 2023 **Environmental Research**, Robert James Letcher, Editor-in-Chief, "Understanding ecotoxicological drivers and responses of freshwater green algae, *Raphidocelis subcapitata*, to cationic polyquaternium polymers"
- 2023 **Frontiers in Pharmacology**, Handling Editor for "Prediction of in vivo prenatal chlorpyrifos exposure leading to developmental neurotoxicity in humans based on in vitro toxicity data by quantitative in vitro-in vivo extrapolation."
- 2023 **Regulatory Toxicology and Pharmacology**, Lesa Aylward, Co-Editor-in-Chief, "Acute, subacute toxicity, and genotoxicity evaluations of LPM5260148, a new vesicular monoamine transporter 2 inhibitor."
- 2023 **Regulatory Toxicology and Pharmacology**, Martin van den Berg, Co-Editor-in-Chief, "Development and Application of a Systematic and Quantitative Weighting Framework to Evaluate the Quality and Relevance of Relative Potency Estimates for Dioxin-Like Compounds (DLCs) for Human Health Risk Assessment."
- 2023 **Regulatory Toxicology and Pharmacology**, Martin van den Berg, Co-Editor-in-Chief, "A Multi-tiered Hierarchical Bayesian Approach to Derive Toxic Equivalency Factors for Dioxin-Like Compounds."

- 2023 **Regulatory Toxicology and Pharmacology, Matthew Valcke**, “Non-sugar sweeteners and cancer: toxicological and epidemiological evidence”
- 2023 **Environmental Research, Ki-Hyun Kim, Associate Editor**, “Enhanced direct gaseous CO₂ fixation into higher bio-succinic acid production and selectivity”
- 2023 **Environmental Research, Marco Race, Associate Editor**, “Competitive adsorption of ten pesticides from water using biochars derived from rice husk, date pit, and sugarcane bagasse biowastes”
- 2022 **Environmental Research, Robert James Letcher, Co-Editor-in-Chief**, Field observations of organic ultraviolet absorbents in soil-plant system from a typical industrial area: Plant uptake and translocation and their environmental implications”
- 2022 **Environmental Research, Jose Domingo, Co-Editor-in-Chief**, “Development of Fluorescent Probes for Remediation of Persistent heavy Metals contaminants of Environmental Concern in Aqueous Matrices”
- 2022 **Environmental Research, Jose Domingo, Co-Editor-in-Chief**, “Using lightweight self-adaption ant lion optimizer to improve artificial neural networks for prediction of green treatment effect of sewage from ready-mixed concrete plants”
- 2022 **Regulatory Toxicology and Pharmacology, Danielle Wikoff, Associate Editor**, “Gamma-hydroxybutyrate (GHB), 1,4-butanediol (1,4BD), and Gamma-butyrolactone (GBL) intoxication: A state-of-the-art review”
- 2022 **Environmental Research, Ki-Hyun Kim, Associate Editor**, “Effectiveness and degradation paths of bisphenol A (BPA) initiated by hydroxyl radicals and sulfate radicals in water: initial reaction sites based on DFT prediction”
- 2022 **Environmental Research, Ki-Hyun Kim, Associate Editor**, “Effects of short-term hyposalinity stress on four commercially important bivalves: a proteomic perspective”
- 2022 **Regulatory Toxicology and Pharmacology, Lesa L. Aylward, Co-Editor-in-Chief**, “Statistical analysis of preclinical inter-species concordance of histopathological findings in the eTOX database”
- 2022 **Environmental Research, Ki-Hyun Kim, Associate Editor**, “Inferring metal homeostatic regulation thresholds from whole body residues in natural populations of the freshwater macroinvertebrate *Asellus aquaticus*”
- 2022 **Environmental Research, Ki-Hyun Kim, Associate Editor**, “Responses and tolerance mechanisms of microalgae to heavy metals stress: A review”
- 2022 **Regulatory Toxicology and Pharmacology, Martin van den Berg, Editor-in-Chief**, “Best Practices for Exposure Model Peer Review – A SciPinion Advisory Panel Report”
- 2022 **Regulatory Toxicology and Pharmacology, Lesa L. Aylward, Editor-in-Chief**, “Statistical analysis of preclinical inter-species concordance of histopathological findings in the eTOX database”
- 2022 **Regulatory Toxicology and Pharmacology, Lesa L. Aylward, Editor-in-Chief**, “Use of Biomarker Data and Metabolite Relative Potencies to Support Derivation of Noncancer Reference Values for 1,3-Butadiene”
- 2022 **Environmental Research, Jose L. Domingo, Co-Editor in Chief**, “Self-reported heat-induced health impacts and the drivers: Implications on precision heat health plans and guidelines”
- 2022 **Regulatory Toxicology and Pharmacology, Lesa L. Aylward, Editor-in-Chief**, “Retrospective analysis of the potential use of virtual control groups in preclinical toxicity assessment using the eTOX database”
- 2022 **Regulatory Toxicology and Pharmacology, Lesa L. Aylward, Editor-in-Chief**, “Model systems and organisms for addressing inter- and intra-species variability in risk assessment”
- 2022 **Environmental Research, Chunsheng Liu, Associate Editor**, “Inferring metal homeostatic regulation thresholds from whole body residues in natural populations of the freshwater macroinvertebrate *Asellus aquaticus*”
- 2022 **Regulatory Toxicology and Pharmacology, Lesa L. Aylward, Editor-in-Chief**, “Characterization of population variability of 1,3-butadiene derived protein adducts in humans and mice”
- 2022 **Frontiers in Pharmacology, Yu-Syuan Luo, Editor**, “Application of an Accessible Interface for Pharmacokinetic Modeling and In Vitro to In Vivo Extrapolation”
- 2022 **Critical Reviews in Toxicology, Roger McClellan, Editor-in-Chief**, “Chlorpyrifos occurrence and toxicological risk assessment - a review.”
- 2022 **Environmental Research, Chunsheng Liu, Associate Editor**, “What contributes to the metal-specific partitioning in the chub-acanthocephalan system?”

- 2021 *Environmental Research*, Chunsheng Liu, Associate Editor, "Decarboxylases as targets for actions of organophosphates: Molecular modeling for prediction of hidden and unexpected health threats."
- 2021-2 *Regulatory Toxicology and Pharmacology*, Lesa L. Aylward, Editor-in-Chief, "A Double-Blind, Randomized, Two-Part, Two-Period Crossover Study to Evaluate the Pharmacokinetics of Caffeine versus d9-Caffeine in Healthy Subjects."
- 2021 *Regulatory Toxicology and Pharmacology*, Martin van den Berg, Editor-in-Chief, "Screening of different cytotoxicity methods for the assessment of ENDS toxicity relative to tobacco cigarettes."
- 2021 *Environmental Research*, Denny Rigby, Managing Editor, "Probiotic cultures as a potential strategy for decontamination of human body from environmentally relevant toxic substances: a review."
- 2021 *Regulatory Toxicology and Pharmacology*, Martin van den Berg, Editor-in-Chief, "Screening of different cytotoxicity methods for the assessment of ENDS toxicity relative to tobacco cigarettes."
- 2021 *Environmental Research*, Denny Rigby, Managing Editor, "Ovotoxicant 4-vinylcyclohexene diepoxide destroys the dynamic equilibrium of N6-methyladenosine RNA methylation related to the activation of the YAP."
- 2021 *Environment International*, Lesa Aylward, Associate Editor, "An integrated exposure and pharmacokinetic modeling framework for assessing population-scale risks of phthalates and their substitutes."
- 2021 *Environmental Research*, Dr. Ki-Hyun Kim, Editor, "Triple combination of natural microbial action, etching, and gas foaming to synthesize hierarchical porous carbon for efficient adsorption of VOCs."
- 2021 *Environmental Research*, Dr. Chungsheng Liu, Editor, "Mutagenic emerging micropollutants in drinking water in southern Brazil: a new challenge."
- 2021 *Regulatory Toxicology and Pharmacology*, Martin van den Berg, Editor-in-Chief, "Nutrivigilance in the Netherlands: reporting adverse events of non-registered products."
- 2021 *Hepatology Communications*, Dr. Ekihiro Seki, Associate Editor, "A negative feedback loop and transcription factor cooperation regulate zonal gene induction by TCDD in the mouse liver."
- 2020 *Environmental Research*, Dr. Chungsheng Liu, Editor, "Transcriptomic profiling of atrazine phytotoxicity and comparative study of atrazine uptake, movement, and metabolism in *Potamogeton crispus* and *Myriophyllum spicatum*."
- 2020 *Regulatory Toxicology and Pharmacology*, Lesa L. Aylward, Editor-in-Chief, "Derivation of an occupational exposure limit for β -glucans."
- 2020 *Regulatory Toxicology and Pharmacology*, Lesa L. Aylward, Editor-in-Chief, "Determination of "Fitness-for-Purpose" of Quantitative Structure-Activity Relationship (QSAR) Models to Predict (Eco-)Toxicological Endpoints for Regulatory Use."
- 2020 *Toxicology Reports*, Aristidis Tsatskis, Editor-in-Chief, "Determination of Reference Concentration (RfC) of Toluene Exposure to Workers at Home Industry of Shoe in Romokalisari Surabaya."
- 2020 *Regulatory Toxicology and Pharmacology*, Martin van den Berg, Editor-in-Chief, "II. Derivation of an Inhalation Unit Risk Factor for Ethylene Oxide Using a Scientifically Justified Dose-Response Model."
- 2020 *Regulatory Toxicology and Pharmacology*, Martin van den Berg, Editor-in-Chief, "Hazard Assessment for Human Cancer Associated with Exposure to Ethylene Oxide."
- 2020 *Regulatory Toxicology and Pharmacology*, Martin van den Berg, Editor-in-Chief, "Omalizumab pediatric (6 to <12 years of age) Chinese indication extension in moderate to severe allergic asthma; PKPD rationale for not conducting a clinical trial via full model extrapolation"
- 2020 *Regulatory Toxicology and Pharmacology*, Martin van den Berg, Editor-in-Chief, "Human Biomonitoring (HBM)-II values for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) - description, derivation and discussion."
- 2020 *Regulatory Toxicology and Pharmacology*, Martin van den Berg, Editor-in-Chief, "Human Biomonitoring (HBM)-I values for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) - description, derivation and discussion."

- 2020 **Regulatory Toxicology and Pharmacology**, Martin van den Berg, Editor-in-Chief, "Utilisation of parametric methods to improve percentile-based estimates for the carcinogenic potency of nitrosamines."
- 2020 **Environmental Research**, Ki-Hyun Kim, Associate Editor, "Complete and rapid degradation of glyphosate with Fe₃Ce₁₀O_x catalyst for peroxymonosulfate activation at room temperature."
- 2020 **Computational and Structural Biotechnology**, Gianni Panagiotou, Editor-in-Chief, "Intestinal microbiota alterations by dietary exposure to carcinogens from food cooking and processing. Application of Data Science for risk prediction."
- 2020 **Environmental Research**, Ki-Hyun Kim, Associate Editor, "Degradation of ibuprofen by a Co-doped carbon matrix as a peroxymonosulphate activator derived from peat."
- 2020 **Environmental Research**, Chunsheng Liu, Associate Editor, "Impacts of the invasive seaweed *Asparagopsis armata* exudate on rockpool invertebrates."
- 2020 **Regulatory Toxicology and Pharmacology**, Daniele Wikoff, Associate Editor, "Non-Dioxin-Like Polychlorinated Biphenyl Neurotoxic Equivalents Found in Environmental and Human Samples."
- 2020 **Regulatory Toxicology and Pharmacology**, Martin van den Berg, Editor-in-Chief, "Science Advisory Panels: State of the Science."
- 2020 **Current Pharmaceutical Biotechnology**, Nikolaos Labrou, Editor-in-Chief, "Gut bacteria of *Columbia livia* are a potential source of anti-tumor molecules."
- 2020 **Regulatory Toxicology and Pharmacology**, Lesa Aylward, Editor-in-Chief, Guest Editor, "A Comprehensive Weight of Evidence Assessment of Published Acetaminophen Genotoxicity Data: Implications for its Carcinogenic Hazard Potential."
- 2020 **Regulatory Toxicology and Pharmacology**, Lesa Aylward, Editor-in-Chief, "Use of mechanistic information to derive chemical-specific adjustment factors - refinement of risk assessment."
- 2020 **Environment International**, Lesa Aylward, Associate Editor, "Pregnancy-specific physiologically-based toxicokinetic models for bisphenol A and bisphenol S."
- 2020 **Human and Experimental Toxicology**, Kai Savolainen, Editor-in-Chief, "LncRNA PART1 promotes lung squamous cell carcinoma progression via miR-185-5p/Six1 axis."
- 2020 **Regulatory Toxicology and Pharmacology**, Martin van den Berg, Editor-in-Chief, "Use of Computational Toxicology (CompTox) Tools to Predict In Vivo Toxicity for Risk Assessment."
- 2020 **Environment International**, Lesa Aylward, Associate Editor, "Physiologically Based Kinetic (PBK) modelling and Human Biomonitoring Data for Mixture Risk Assessment."
- 2020 **CRC Press, Taylor & Francis Group**, Steven M. Zollo, Senior Editor, book proposal for "Predictive Analytics in Toxicology: A Handbook in Discovery Science"
- 2020 **Human and Experimental Toxicology**, A. Wallace Hayes, Editor (Americas), "Does the herbicide Glyphosate cause non-Hodgkin lymphomas?"
- 2020 **Current Pharmaceutical Biotechnology**, Nikolaos Labrou, Editor-in Chief, "The levels of plasma miR-9 and miR-106a are associated with the development of peritoneal carcinomatosis in patients with gastric cancer."
- 2020 **Environmental Research**, Xiaowei Zhang, Associate Editor, "Novel Perspectives of Environmental Proteomics."
- 2020 **Journal of Toxicology and Environmental Health, Part A: Current Issues**, Sam Kacaw, Editor-in-Chief, "Impact of stressors in the aviation environment on xenobiotic dosimetry in humans: physiologically-based prediction of the effect of +Gz-forces"
- 2020 **Environment International**, Lesa Aylward, Associate Editor, "Application of a Unified Probabilistic Framework to the Dose-Response Assessment of Acrolein."
- 2020 **Regulatory Toxicology and Pharmacology**, Martin van den Berg, Editor-in-Chief, "Preclinical pharmacological profile of QF-036, a potent HIV-1 maturation inhibitor."
- 2020 **Regulatory Toxicology and Pharmacology**, Angelo Moretto, Associate Editor, "Omalizumab pediatric (6 to <12 years of age) Chinese indication extension in moderate to severe allergic asthma; PKPD rationale for not conducting a clinical trial via full model extrapolation."

- 2020 **Regulatory Toxicology and Pharmacology**, Lesa Aylward, Editor-in-Chief, "Chronic Inflammation, Adverse Outcome Pathways, and Risk Assessment: A Diagrammatic Exposition."
- 2020 **Regulatory Toxicology and Pharmacology**, Daniele Wikoff, Associate Editor, "'Natural' is not Synonymous with 'Safe': Toxicity of Natural Products Alone and in Combination with Pharmaceutical Agents (Symposium Summary from the Annual Meeting of the Society of Toxicology 2019)"
- 2020 **Regulatory Toxicology and Pharmacology**, Martin van den Berg, Editor-in-Chief, "Derivation of Biomonitoring Equivalents (BE values for Bismuth)."
- 2020 **Environment International**, Lesa Aylward, Associate Editor, "Pharmacokinetic bias analysis of an association between clinical thyroid disease and two perfluoroalkyl substances."
- 2020 **Environment International**, Daniel Doerge, Guest Editor, "Physiologically Based Kinetic (PBK) modelling and Human Biomonitoring Data for Mixture Risk Assessment"
- 2019 **Taylor & Francis Group**, Nicole Salazar, Development Editor, *Introduction to Toxicology, 3rd Edition* by John Timbrel
- 2019 **Human and Experimental Toxicology**, Kai Savolainen, Editor-in-Chief, "Difficulties in establishing a causal link between exposures and cancer cannot be overcome by court assessments"
- 2019 **Environmental Research**, Ki-Hyun Kim, Associate Editor, "Web-based visualization of scientific research findings: national-scale distribution of air pollution in South Korea"
- 2019 **National Center for Environmental Health/Agency for Toxic Substances and Disease Registry**, Shirley Little, Peer Review Coordinator, "Toxicological Profile for 2,4-Dichlorophenoxyacetic Acid (2,4-D)"
- 2019 **Environmental Research**, Ya Tang, Managing Guest Editor, "Drinking water consumption patterns, household practices, and risk perception on endocrine disrupting compounds"
- 2019 **Regulatory Toxicology and Pharmacology**, Lesa Aylward, Editor-in-Chief, "Linking Internal Dosimetries of the Propyl Metabolic Series in Rats and Humans Using Physiologically Based Pharmacokinetic (PBPK) Modeling"
- 2019 **Human and Experimental Toxicology**, A. Wallace Hayes, Editor-in-Chief, "Features reported after exposure to automatic dishwashing rinse aids"
- 2019 **Regulatory Toxicology and Pharmacology**, Martin van den Berg, Editor-in-Chief, "Plasticizer Migration from Toys and Child Care Articles"
- 2019 **Toxicology Reports**, Kok Meng Chan, Associate Editor, "Determination of Reference Concentration (RfC) of Toluene Exposure to Workers at Home Industry of Shoe in Romokalisari Surabaya"
- 2019 **Regulatory Toxicology and Pharmacology**, Daniele Wikoff, Associate Editor, "Development of novel in silico prediction model for drug-induced ototoxicity by using naïve Bayes classifier approach"
- 2019 **Regulatory Toxicology and Pharmacology**, Chiharu Tohyama, Associate Editor, "Determination and Prediction of Permeability across Intestinal Epithelial Cell Monolayer of a Diverse Range of Industrial Chemicals/Drugs for Estimation of Oral Absorbance as a Putative Marker of Hepatotoxicity"
- 2019 **Environment International**, Lesa Aylward, Associate Editor, "Estimating half-lives of dioxin like and non-dioxin like polychlorinated biphenyls and other POPs after occupational exposure using up to 6 biomonitoring follow ups"
- 2019 **Regulatory Toxicology and Pharmacology**, Lesa Aylward, Co-Editor-in-Chief, "A weight of evidence approach to investigate potential common mechanisms in pesticide groups to support cumulative risk assessment: A case study with dinitroaniline pesticides"
- 2019 **Environment International**, Lesa Aylward, Associate Editor, "Correlates of Brominated Flame Retardants in the Study of Environment, Lifestyle, and Fibroids"
- 2019 **Regulatory Toxicology and Pharmacology**, Martin van den Berg, Co-Editor-in-Chief, "Comparative Pharmacokinetic and Biodistribution Analysis of Two Distinct Squalene-Containing Oil-in-Water Emulsion Adjuvants in H5N1 Influenza Vaccines"

- 2019 **Critical Reviews in Toxicology**, Roger O. McClellan, Editor-in-Chief, "Toxicity of Mercury: Molecular Evidence"
- 2019 **Risk Analysis**, Charles Haas, "Predicting the Probability That a Chemical Causes Steatosis Using Adverse Outcome Pathway Bayesian Networks (AOPBNs)"
- 2019 **Regulatory Toxicology and Pharmacology**, Glo Bata Gori, Editor, "Derivation of Biomonitoring Equivalents (BE values) for Zinc"
- 2019 **Environment International**, Lesa Aylward, Associate Editor, "Prediction of maternal and foetal exposures to perfluoroalkyl compounds in a Spanish birth cohort using toxicokinetic modelling"
- 2018 **Journal of Forensic, Legal and Investigative Sciences**, Katherine Chelsea, "Drunk Drivers"
- 2018 **Environment International**, Heather Stapleton, Associate Editor, "High concentrations of PCBs in breast milk among Czech women: interpretation of biomonitoring data using a Physiologically Based Pharmacokinetic Model"
- 2018 **Environment International**, Lesa Aylward, Associate Editor, "Age-dependent Human Elimination of Dioxin-like Polychlorinated Biphenyls Derived from Cross-Sectional Biomonitoring Data in the General Population."
- 2018 **Current Pharmaceutical Biotechnology**, Davide Prosperi, Editor, "A microplate-based platform with immobilized human glutathione transferase A1-1 for high-throughput inhibitor screening"
- 2018 **Agency for Toxic Substances and Disease Registry (CDC)** "Comparative Analysis of Blood/Gas Partition Coefficients across Species."
- 2018 **Science of the Total Environment**, Pavlos Kassomenos, Associate Editor, "Comparing Apples to Oranges: Interpreting Ozone Concentrations from Observational Studies in the Context of the United States Ozone Regulatory Standard"
- 2018 **Regulatory Toxicology and Pharmacology**, Gio B. Gori, Editor, "Residual behaviors and risk assessment of prochloraz in bayberries and bayberry wine for Chinese population"
- 2018 **Environment International**, Lesa Aylward, Associate Editor, "Age-Based and Time Trends of Chemical Exposure Biomarkers in the US Population 1999-2014"
- 2018 **EClinicalMedicine**, Derek Anane, Senior Editor, "Remote alcohol monitoring to facilitate incentive-based treatment for alcohol use disorder: A randomized trial"
- 2018 **Regulatory Toxicology and Pharmacology**, Gio B. Gori, Editor, "Biomonitoring Equivalents for Cyanide"
- 2017 **Environment International**, Lesa Aylward, Editor, "An analysis of cumulative risks based on biomonitoring data for six phthalates using the Maximum Cumulative Ratio"
- 2017 **Toxicological Sciences**, William H. Farland, Assoc. Editor, "Identification of novel uncertainty factors for health hazard and risk assessment: Application to cleaning product ingredients"
- 2017 **Environment International**, Lesa Aylward, Editor, "Excretion of Di-2-ethylhexyl Phthalate (DEHP) Metabolites in Urine is Related to Body Mass Index Because of Reverse Causality"
- 2017 **Risk Analysis**, L. Anthony Cox, Editor, "Cumulative Low-Dose Response Assessment: An Emergent Model For Carcinogens, Noncarcinogens, And Mixtures"
- 2017 **Regulatory Toxicology and Pharmacology**, Gio Bata Gori, Editor-in-Chief, "Guidelines for Performing Systematic Reviews in the Development of Toxicity Factors"
- 2017 **Risk Analysis**, Tony Cox, Editor-in-chief, "Cumulative Low-Dose Response Assessment: An Autocorrelated First-Order Model"
- 2017 **Chemical Research in Toxicology**, F. Peter Guengerich, Associate Editor, "Identification of potential aryl hydrocarbon receptor ligands by virtual screening of industrial chemicals"
- 2016 **Combinatorial Chemistry & High Throughput Screening**, Rathnam Chaguturu, Editor, "A Big Data Approach with Artificial Neural Network and Molecular Similarity for Chemical Data Mining and In-Silico Toxicity Prediction"
- 2016 **Science of the Total Environment**, Dr. Jay Gan, Editor, "Occurrence, Sources and Estimation of Air-Soil Exchange of Polychlorinated biphenyls in Indian cities"

- 2016 **Scientific Research and Essays**, Dr. N. J. Tonukari, Editor, "Bayesian Analysis to Detect Change-point in Two-Phase Laplace Model"
- 2016 **Environmental Science and Technology**, Dr. Beate Escher, Assoc. Editor, "Toxicogenomics of Developmental Toxicity of 6-OH-BDE47 in Chicken Embryo"
- 2016 **Environmental Health Perspectives**, Dr. Martin Van den Berg, Assoc. Editor, "Defining the neurotoxic potential of nondioxin-like polychlorinated biphenyls present in fish from US lakes using a ryanodine receptor-based equivalency scheme"
- 2016 **Science of the Total Environment**, Dr. Jay Gan, Editor, "Occurrence, Sources and Estimation of Air-Soil Exchange of Polychlorinated biphenyls in Indian cities"
- 2015 **Structured peer review of a comparison between the effects of tobacco smoke and nicotine vapor from modified risk tobacco products on the lungs of mice**
Answered a series of charge questions and also provided suggestion for future research.
- 2015 **IUMB Life**, Dr. Angelo Azzi, Editor, "Identification of differentially expressed three novel transcript variants of mouse Arnt gene."
- 2015 **Environmental Research**, Dr. Jose L. Domingo, Editor, "Antioxidant activity as a potential mechanism explaining the negative influence of lead and cadmium on working memory during aging."
- 2015 **Toxicological and Environmental Chemistry**, Dr. Sam Kacew, Editor, "Headspace and small chamber studies of airborne diacetyl release from selected food flavoring mixtures: Activity coefficients and air modeling implications"
- 2015 **Environmental Research**, Dr. Jose L. Domingo, Editor, "Transcriptomic and visual gene-network analysis of silver nanoparticles potentially induced Alzheimer's disease progression in mouse brain neural cells"
- 2015 **Environmental Research**, Dr. Jose L. Domingo, Editor, "Identification of Free Phthalate Metabolites in Human Cerebrospinal Fluid."
- 2014 **Critical Reviews in Toxicology**, Dr. Roger O. McClellan, Editor, "Risk assessments for chronic exposure of children and prospective parents to ethylbenzene (CAS No. 100-41-4)"
- 2014 **Environmental Research**, Dr. Jose L. Domingo, Editor, "Impact of early-life bisphenol A exposure on precortical dopamine and serotonin systems in juvenile and adult male rats."
- 2014 **Environmental Research**, Dr. Jose L. Domingo, Editor, "Bisphenol A is associated with insulin resistance and modulates adipokines gene expression in obese children."
- 2014 **Human and Experimental Toxicology**, Dr. Kai Savolainen, Assoc. Editor, "Global Methaemoglobinaemia Research Output (1940–2013): A Bibliometric Analysis Based on Scopus Database."
- 2014 **Human and Experimental Toxicology**, Dr. A. Wallace Hayes, Assoc. Editor, "Pharmacokinetic Study of Omeprazole and its Metabolites in Males and Females, Females Exposed to Higher Levels of Omeprazole."
- 2013 **Consultation to a Water Utility Regarding the Quality of Water Provided to a Community**
Provided initial consultation and coordinated a peer review of a risk assessment of the pesticide toxaphene occurring in trace amounts in the water.
- 2013 **Human and Ecological Risk Assessment**, Dr. Barry Johnson, Editor, "Assessment of Soil Screening Levels due to Accidental Ingestion of Chrysene and Benzo[k]fluoranthene at Iran's TOR Site."
- 2012 **Human and Experimental Toxicology**, Dr. A. Wallace Hayes, Editor. "Effect of nicotine pre-treatment on arsenic induced oxidative stress in Wistar rats."
- 2012 **Human and Experimental Toxicology**, Dr. A. Wallace Hayes, Editor, "Elemental impurities in Nigerian pediatric syrups: Mercury in violation of standard guidelines."
- 2011 **Journal of Toxicology and Environmental Health**, Dr. Sam Kacew, Editor, "Screening Level Risk Assessment for SAN Trimer Detected in Soil and Groundwater"
- 2011 **Human and Ecological Risk Assessment**, Dr. Barry Johnson, Ed. "Monte Carlo Simulation-based Health Risk Assessment of Heavy Metal Pollution - A Case Study in the Qixia Mining Area, China"

- 2011 **Risk Analysis**, Dr. Tony Cox, Editor, "A Gradient Markov Chain Monte Carlo Algorithm for Computing Multivariate Maximum Likelihood Estimates and Posterior Distributions: Mixture Dose Response Assessment"
- 2010 **Environmental Research**, Ellen Silbergeld, Ed. "Structural Neuroimaging Evaluation of Adults with Childhood Lead Exposure"
- 2010 **Human and Experimental Toxicology**, Prof. Kai Savolainen, Editor in Chief. "The World Library of Toxicology, Chemical Safety and Environmental Health (WLT)"
- 2010 **Journal of Exposure Science and Environmental Epidemiology**, Dr. Natalie Freeman, Assoc. Ed. "Comparison of a toxicokinetic and a questionnaire-based approach to assess methylmercury intake in exposed individuals"
- 2010 **Environmental Research**, Dr. Ellen Silbergeld, Ed. "Varying coefficient function models to explore interactions between maternal nutritional status and prenatal methylmercury toxicity in the Seychelles Child Development Nutrition Study"
- 2009 **Regulatory Toxicology and Pharmacology**, Gio Batta Gori, Ed. "Derived Reference Doses (RfDs) for the Environmental Degradates of the Herbicides Alachlor and Acetochlor: Results of an Independent Expert Panel Deliberation"
- 2009 **Environmental Research**, Ellen Silbergeld, Ed. "Environmental Policy and Children's Health in Mexico"
- 2009 **Toxicological Sciences**, Dr. John Lipscomb, Assoc. Editor, "Age-, Dose- and Time-Dependency of Plasma and Tissue Distribution of Deltamethrin in Immature Rats."
- 2009 **Chemosphere**, Heidelore Fiedler, Ed. "Quantitative structure-activity relationship (QSAR) studies for predicting activation of the ryanodine receptor type 1 channel complex (RyR1) by polychlorinated biphenyl (PCB) congeners"
- 2009 **Environmental Research**, Ellen Silbergeld, Ed. "Determination of bromadiolone residues in fox faeces by LC/ESI-MS in relationship with toxicological data and clinical signs after repeated exposure."
- 2008 **Chemosphere**, Heidelore Fiedler, Ed. "Tissue Distribution of Polychlorinated Biphenyls and Effects on Alaskan Northern Fur Seals Assessed with Five Congener Classification Schemes"
- 2008 **Chemosphere**, Heidelore Fiedler, Ed. "Levels of Polychlorinated Dibenzo-p-dioxins, Dibenzofurans, and Biphenyls in Southern Mississippi Catfish and Estimation of Potential Health Risks"
- 2007 **Critical Reviews in Toxicology**, Roger O. McClellan, Ed. "Risk Assessment of Toxaphene and its Breakdown Products: Time for a Change"
- 2006 **Environmental Forensics**, Ioana Petrisor, Ed. "Identifying Metals Contamination in Groundwater Using Geochemical Correlation Evaluation"
- 2002 **Environmental Science and Technology**, Mitchell J. Small, Ed. "Why and how should we assess occupational health impacts in integrated product policy?"
- 2001 **Ohio Environmental Protection Agency**, "Human Health Risk Assessment Concept Paper"
- 2000 **Toxicology Excellence in Risk Assessment**, "Lifetime Estimate of Skin Cancer Risk from use of Coal Tar Containing Shampoos"
- 1999 **Environmental Science and Technology**, Mitchell J. Small, Ed. "Chlordane Uptake and its Translocation in Food Crops"
- 1997 **Agency for Toxic Substances and Disease Registry**, "Public Health Interventions to Prevent or Mitigate Possible Adverse Health Effects Related to Methyl Parathion Pesticide Exposure"
- 1995 **National Research Council**, "Human Health Preliminary Risk Evaluation of the Jinkampo Incinerator Complex Activities in the Naval Air Facility, Atsugi, Japan"