Janice K. Britt, Ph.D., ERT

SENIOR MANAGING SCIENTIST

CONTACT INFORMATION

ToxStrategies, A BlueRidge Life Sciences Company
Tallahassee, FL
Phone/fax (850) 296-0296
jbritt@toxstrategies.com

PROFESSIONAL PROFILE

Dr. Janice Britt is a toxicologist in ToxStrategies' Health Sciences Practice. She has more than 30 years of experience in toxicology and has worked in the areas of human and animal toxicology, chemical exposure assessment, dose-response analysis, and risk assessment. Dr. Britt also has extensive experience in the areas of human, animal, and mechanistic toxicology; exposure assessment; dose-response analysis; and risk assessment. She has experience in the areas of systematic review, causation analysis, and evidence-based methods of assessment. She has published a retrospective on the use of evidence-based methods in assessing causation in toxicology. She has critically assessed the toxicity of numerous environmental- and occupational-related chemicals, pharmaceutical compounds, over-the-counter medications, dietary supplements, food and beverage products, food additives, herbal products, consumer products, and medical devices.

She has also evaluated exposures involving hazardous waste sites, environmental contamination sites, consumer product exposures, chemical releases, and occupational-, residential, and agriculture-related exposures. Specific compounds that Dr. Britt has worked with include benzene, toluene, chlorinated solvents (e.g., trichloroethylene, tetrachloroethylene, and vinyl chloride), styrene, formaldehyde, talc, chlorine, PFAS compounds (e.g., PFOA and PFOS), pesticides (e.g., acephate, atrazine, carbaryl, chlorpyrifos, cyfluthrin, 2,4-D, DDT, diazinon, dicamba, dichlorvos, diquat, glyphosate, limonene, malathion, paraquat, parathion, permethrin, and simazine), paints, petroleum products, dyes, nitrosamines, acrylamide, heavy metals (e.g., arsenic, lead, manganese, and mercury), polychlorinated biphenyls (PCBs), carbon disulfide, asbestos, silica, sunscreens, carpet emissions, caprolactam, phosphogypsum, ammonia, fire suppressants, hydraulic fracturing-related compounds, and carbon monoxide, as well as a variety of pharmaceutical agents (e.g., acetaminophen, narcotics), herbal products, and products contained in cosmetics and foods (e.g., diacetyl, food colorants, sweeteners).

Dr. Britt has conducted toxicity assessments to evaluate the hazards associated with different occupations and exposures, including painting, welding, printing work, photo processing work, mining, sandblasting, petroleum refinery work, and hydraulic fracturing. She has also performed site-specific risk assessments, developed toxicological profiles for various chemicals, evaluated various regulatory toxicity criteria, and developed safe levels of exposures for chemicals.

Dr. Britt is a member of the Society of Toxicology, the Society for Risk Analysis, the American Conference of Governmental Industrial Hygienists (ACGIH), and EUROTOX. In addition, she is a European Registered Toxicologist (ERT) and a fellow of the Royal Society of Biology (FSRB). She formerly served as a member of USEPA's Human Studies Review Board—a federal advisory committee that provides advice and recommendations on issues of human subject research.

Previously, Dr. Britt worked as the toxicologist for the Florida Department of Agriculture and Consumer Services, where she reviewed toxicity data and made regulatory decisions regarding the registration of pesticides for the State. While at the Department, she served as a toxicologist on the Florida Pesticide Registration Evaluation Committee, which is responsible for conducting scientific and technical reviews of pesticide product registrations for the state of Florida. She played an active role in developing a regulatory procedure for ranking pesticides according to their chronic toxicity and leaching potential, an approach that was published in the peer-reviewed literature.

EDUCATION AND DEGREES EARNED

Ph.D., Toxicology, Texas A&M College of Veterinary Medicine and Biomedical Sciences, College Station, TX

B.S., Zoology, Texas A&M University, College Station, TX

CERTIFICATIONS

European Registered Toxicologist (2012-present)

PROFESSIONAL ASSOCIATIONS

USEPA Human Studies Review Board (former)

Society of Toxicology (Risk Assessment Specialty Section; Southeastern Regional Chapter)

European Registered Toxicologist (ERT)

Society for Risk Analysis

American Conference of Governmental Industrial Hygienists

Fellow, Royal Society of Biology

EUROTOX

JOURNAL PEER REVIEWER

Regulatory Toxicology and Pharmacology

Food and Chemical Toxicology

European Journal of Obstetrics & Gynecology and Reproductive Biology

Human and Experimental Toxicology

Risk Analysis

SELECTED PROFESSIONAL EXPERIENCE

Chemical-Specific Toxicity Assessments

Evaluation of Leukemia and Painting: Completed an evidence-based review of the occupation of painting as it relates to leukemia, particularly acute myelogenous leukemia (AML). As part of this review, evaluated the background incidence and risk factors for AML.

Benzene and Hematopoietic Cancer Evaluation: Conducted a comprehensive review of the literature related to benzene and hematopoietic cancers, including various types of leukemia, non-Hodgkin's lymphoma, and multiple myeloma.

Critical Review of Solvent Encephalopathy: Critically reviewed the published literature pertaining to the issues surrounding "painters' syndrome," also known as "chronic toxic encephalopathy" or "solvent encephalopathy." Reviewed the literature for effects on neurobehavioral test scores, control for confounders, and reversibility of effects. Drafted a primer summarizing the findings.

Leukemia and Occupation as a Seaman: Considered the epidemiological literature concerning individuals working as seamen, seafarers, or marine engineers, to assess the potential risk of leukemia.

Review of the Toxicity and Risks of Hydraulic Fracturing Compounds: Conducted a comprehensive review of the toxicity of multiple compounds used in hydraulic fracturing (e.g., hydrochloric acid, acetic acid, isopropanol, magnesium oxide, citrate, guar gum) and the assessment of risk associated with drinking water.

Review of the Toxicity of Formaldehyde: Conducted an evidence-based evaluation of the irritancy effects of formaldehyde from emissions from housing units. As part of this project, conducted a comprehensive review of the pharmacokinetics of formaldehyde and exposures of humans to background levels of formaldehyde.

Toxicity of Black Liquor: Reviewed the toxicity and potential effects of black liquor from the pulp and paper industry.

Evaluation of Perchlorate Exposure and Toxicity: Conducted a thorough review of animal and epidemiologic studies of perchlorate toxicity. Created a toxicological profile for client.

Evaluation of Toxicity of Coke Plant Emissions: Reviewed air-monitoring data for emissions near a coke plant to determine whether residents near the plant were at excess risk for health effects.

Diesel Exhaust and Kidney Cancer: Researched the carcinogenicity of diesel exhaust with regard to kidney cancer.

Toxicological Evaluation of PFOA: Evaluated the human health risks of exposure to perfluorooctanoic acid (PFOA) based on a comprehensive review of laboratory animal, epidemiologic, community, and metabolic studies. Evaluated potential health effects associated with measured levels in community drinking water, as well as against serum PFOA levels measured in a human population.

Review of Toxicity of Metalworking Fluids: Evaluation of the potential health effects associated with exposure to metalworking fluids.

Autism and Hazardous Wastes: Reviewed health claims from exposures to postnatal exposure to hazardous wastes in soils (including mercury, lead, and PCBs).

Asthma and exposure to VOCs: Reviewed the literature related to low-level environmental exposure to various VOCs, to evaluate whether a causal association with asthma was present in humans.

Review of Toxicity of Glyphosate: Conducted a review of the reproductive and developmental toxicity of glyphosate in animals and humans, as well as a review of its regulatory status.

Solvent Toxicity Review: Conducted several thorough reviews and evaluations of the literature of the carcinogenic and non-carcinogenic effects of various solvents, including trichloroethylene, perchloroethylene, vinyl chloride, 1,1,1-trichloroethane, ethylbenzene, toluene, xylene, and various other solvents in humans and animals.

Evaluation of Acrylamide Toxicity: Critically evaluated the literature on acrylamide, with particular attention to the carcinogenic effects in humans (e.g., epidemiologic studies, adduct formation). In addition, evaluated the literature on potential excess cancer risks associated with exposures to acrylamide in foodstuffs.

Evaluation of Potential Carcinogenicity of "Take-Home" Asbestos Exposure: Evaluation of the animal and epidemiological asbestos literature (brake worker studies) for mesothelioma.

Reactive Airways Dysfunction Syndrome: Reviewed literature for various chemicals, including ammonia and hydrogen sulfide, and their potential association with respiratory effects, including RADS (reactive airways dysfunction syndrome).

Pesticide Toxicity: Critically reviewed and analyzed the literature related to the neurological (e.g., peripheral neuropathy) and neuropsychological (e.g., toxic encephalopathy) effects of various organophosphate (e.g., chlorpyrifos) and carbamate insecticides.

Review of PCB Neurodevelopmental Toxicity: Evaluated the human and animal evidence concerning the neurodevelopment toxicity of PCBs. Evaluated the potential reproductive and developmental effects of different PCB mixtures using federal and state hazard assessment guidelines.

Evaluation of the Carcinogenicity of Chrysotile Asbestos: Reviewed the various issues related to chrysotile asbestos, examining risk assessment approaches used to assess cancer risk, background exposures to fibers, epidemiologic studies of individuals exposed to chrysotile asbestos, and various risk assessment of governmental/agency positions on asbestos.

Review of Health Effects of Reported Emissions from Phosphogypsum Plant: Reviewed the potential health effects of reported emissions, including sulfur dioxide, particulates, and radiation.

Welding Exposure Evaluation: Evaluated the toxicity of welding fumes and paint solvents, with an emphasis on the cardiovascular toxicity of these various agents.

Toxicity of Pentachlorophenol: Reviewed the toxicity literature on pentachlorophenol to assess the health effects from potential exposures to pentachlorophenol as a result of residing in a log home.

Effects of Tire-Derived Fuel Burn: Evaluated the adverse effects of inhalation exposure to various compounds (including mercury and zinc) and particulate matter from a tire-derived fuel test burn.

Paints and Asthma: Evaluated the respiratory toxicity of paints and mildewicides to determine whether they were causally associated with asthma.

Neurotoxicity of Carbon Disulfide: Critically evaluated the literature to assess the neurotoxicity of carbon disulfide.

Toxicity of Trichloroethylene (TCE): Conducted a comprehensive critical review of the literature for TCE and various endpoints (e.g., cancer and non-cancer effects, pharmacokinetics, etc._, focusing on animal studies, volunteer studies, and epidemiological studies.

Lead in Drinking Water: Evaluated lead concentrations in "first draw" water.

Toxicity of Carbon Monoxide: Reviewed the carbon monoxide toxicity literature, in particular the literature concerned with the neuropsychological effects of exposure.

Toxicity of X-ray Processing Chemicals: Determined whether certain x-ray processing chemicals (e.g., glutaraldehyde) were causally associated with the so-called "Multiple Chemical Sensitivity" syndrome and pulmonary effects.

Assessment of Exposure to Sodium Pentachlorophenate (Sodium Salt of Pentachlorophenol): Reviewed the toxicological literature to determine whether a causal association exists between sodium pentachlorophenate and reactive airways dysfunction syndrome (RADS).

Solvents and Kidney Disease: Performed a critical evaluation of the literature on the issue of solvent nephropathy. Reviewed epidemiology studies of gasoline, petroleum, painters, printers, and many other solvent-exposed cohorts, as well as case-control studies, registry studies, and meta-analyses of individuals exposed to solvents. In addition, examined issues surrounding biological plausibility.

Evaluation of Ammonia Toxicity: Evaluated the neurotoxicity and pulmonary effects associated with ammonia exposures generated from the removal of sediments from mine waste-stream receiving ponds. Evaluated the acute and chronic effects of ammonia in humans, along with biological exposure data and industrial hygiene data.

Evaluation of Trace Benzene Exposure and Myelodysplastic Syndrome (MDS): Conducted a comprehensive review of the literature related to benzene and MDS from exposure to petroleum-based solvents. Part of this assessment included a review of industrial hygiene measurements.

Sinonasal Cancer and Metals: Identification, retrieval, and organization of scientific literature pertaining to sinonasal cancer and various metals at issue (arsenic, cadmium, hexavalent chromium, and nickel). Researched the etiology and possible causes of sinonasal cancer.

Exposure to Multiple Chemicals and Brain Cancer: Evaluated exposures and carcinogenicity literature of multiple chemicals, including vinyl chloride and acrylonitrile, to assess whether the evidence was sufficient to indicate that these compounds were neurocarcinogenic in humans.

Exposure to Vaporized Petroleum Distillate and Surfactant: Reviewed the toxicological literature (especially respiratory toxicity and neuropsychological related effects) related to vaporization of petroleum distillate/surfactant product added to hot sodium hydroxide. Industrial hygiene sampling data were reviewed as part of the assessment.

Evaluation of Toxicity of Sulfates, Nitrates, and Boron in Groundwater: Reviewed the toxicity of boron in animals and humans via exposure through groundwater. Also, included in the assessment were the effects of these compounds on livestock.

Food Additives and Flavorings

Safety Evaluation of a Food Additive: Reviewed the numerous mechanistic, animal, and epidemiologic studies of various butter flavoring compounds (primarily diacetyl) to evaluate potential pulmonary effects in humans. Evaluated NIOSH Health Hazard Evaluations (HHEs) conducted on worker populations. Evaluated pulmonary function tests results and effects reported. Evaluated potential confounders.

Regulatory History and Gap Assessment of Food Additive: Development roadmap and gap assessment for product to be used for pet and human food use. Evaluated US and European regulatory and toxicology historical documents.

Evaluation of Safety Profile of Herbal Products: Conducted assessments of various herbal products, focusing on chemical identity, historical and present uses, regulatory history, animal and human toxicity data, and data gaps.

Generally Recognized as Safe (GRAS) Assessment: Identified and summarized information on chemical identity, historical and present use, relevant animal and human toxicity data, and data gaps for a product for potential human food use.

Evaluated Hazards of Solvents for Food Use Compounds: Prepared hazard assessment summaries of various solvents for use in food packaging. Reviewed primary and secondary toxicity literature as well as regulatory information on compounds to assess toxicity of identified compounds.

Safety of Farmed vs. Wild Salmon: Evaluated the concentrations of PCBs in farmed and wild salmon compared with the USFDA's tolerance level.

Consumer and Personal Care Products

Systematic Review of the Safety of Caffeine: Participated in an evidence-based review of the health effects (cardiotoxicity) associated with the consumption of caffeine. Screened relevant articles using DistillerSR.

Evaluation of Hand Sanitizing and Surface Disinfecting Products: Evaluated hand sanitizing products to identify which were safe and effective for humans based on relevant health agencies' recommendations (e.g., use of ethanol, isopropyl alcohol, etc.). Also evaluated appropriateness of various surface disinfecting products (appropriate use of disinfecting compound). Researched United States and international regulatory and scientific body's recommendations and guidelines.

Heavy Metal Concentration in Juices: Researched the current regulatory landscape for several heavy metals in juices, as well as intake of various juices and current acceptable concentrations of various metals in juices.

Laminate and Wood Flooring: Reviewed the potential health effects associated with exposure to laminate and wood flooring. Examined the methods and results of analytical testing on flooring and the regulations for wood flooring, as well as the toxicity of formaldehyde.

Consumer Safety Review: Reviewed the safety of a dye component in a consumer product used by infants and toddlers, as well as adults. Evaluated *in vitro* toxicological studies conducted by outside contract laboratories and produced report summarizing relevant issues for the client.

Review of a Feminine Hygiene Product: Researched and evaluated the potential exposures associated with a feminine hygiene product. Also assessed the existing regulatory information and testing associated with similar products.

Evaluation of Potential Effects of Carpet Emissions: Reviewed the toxicity literature on multiple chemicals that were emitted from a carpet product to determine whether they could be the cause of the so-called "Multiple Chemical Sensitivity" syndrome.

Evaluation of a Perfluorinated Acid in Carpet: To address potential concerns from PFOA in carpet-related products, a comprehensive evaluation of PFOA literature was undertaken, including all published and unpublished chemistry, environmental exposure, pharmacokinetic, animal, volunteer, and occupational studies. A 100+ page primer was developed for the client detailing the findings.

Evaluation of Potential Respiratory Toxicity of Paint Solvent Emissions: Evaluated the toxicity and exposure literature regarding whether exposure to solvents emitted from a particular paint product could cause or exacerbate asthma.

Review of Toxicity of Portland Cement Concrete: Comprehensive review of the toxicity of the various components of Portland cement concrete. Evaluated a case of potential over-exposure to Portland cement via the dermal route.

Review of Malathion Toxicity: Conducted a review of the general toxic effects that would be expected from exposure to malathion following its use as a general insecticide.

Evaluation of the Carcinogenicity of Benzene, Trichloroethylene (TCE), and 1,1,1-Trichloroethane (TCA) and Brain Cancer: Evaluated the animal and epidemiological literature to determine whether exposure to these solvents from a hot glue product were causally associated with brain cancer. Chemical testing on the glue product was conducted and results evaluated to assess other potential exposures.

Review of the Acute Toxicity of Gasoline Exposure: A review of the published literature was undertaken to determine the health effects of an acute exposure to gasoline.

Aplastic Anemia and Exposure to Art Products: Causal evaluation of aplastic anemia and various products reportedly present in art product supplies at an art school. The animal and human toxicity of the following chemicals were researched: the benzene metabolites hydroquinone and benzoquinone; glycol ethers; and mixed petroleum solvents (e.g., Stoddard solvent, kerosene, and naphtha).

Evaluation of Solvent-Related Renal Disease: Reviewed relevant published literature to determine whether there was a causal relationship between exposure to various solvents utilized in the printing industry and renal failure.

Evaluated Safety of Plant Emissions: Evaluated the potential adverse effects from low-level emissions of various aldehydes and ketones emitted from a plant.

Toxicity of Nail Products: Reviewed the respiratory, neurological, and cardiovascular toxicity from exposure to ethyl methacrylate as a component of nail products.

Photocopying Chemicals Toxicity Review: Reviewed the toxicity and possible health effects of exposure to multiple photocopying chemicals. Included in the review was an evaluation of the levels of exposure that might exist for individuals working near photocopying machines.

Pesticide Product Evaluation: Evaluated the teratogenicity of a termiticide (active ingredient chlorpyrifos) in animals and humans.

Toxicity of Materials in Lighting Ballasts: Conducted a review of the toxicity of materials related to ballast lighting and materials that might be emitted from an over-heated ballast (e.g., asphalt, carbon monoxide, PAHs), in particular, the respiratory and neurological toxicity of these compounds.

Evaluation of Odo-Ban®: Evaluated the potential inhalation toxicity of the active ingredient in Odo-Ban®, benzalkonium chloride.

General Pesticide Experience: Evaluated the toxicity of numerous pesticides, including acephate, atrazine, azinphos-methyl, biological compounds (e.g., *Bacillus thuringiensis*, rotenone), carbaryl, chlorothalonil, 2,4-dichlorophenoxyacetic acid (2,4-D), DDT, chromated copper arsenate (CCA), chlorpyrifos, diazinon, dicamba, dimethoate, diquat, heptachlor, glyphosate (Roundup®), limonene, malathion, methyl bromide, paraquat, pentachlorophenol, picloram, propoxur, permethrin, and simazine.

Pharmaceutical Agents and Medical Devices

Safety Assessment of Excipients Used in Pharmaceutical Products: Evaluated the pharmacokinetic and animal and human toxicity data related to excipient compounds.

Teratogenicity of Clomid: Evaluated potential adverse effects of the fertility drug clomiphene citrate and its ability to cause birth defects.

Opioid Medications: Evaluated the potential health effects and interactions of various opioid compounds (e.g., hydrocodone, fentanyl), alone or in combination with other medications (e.g., diazepam).

L-tryptophan: Critically evaluated the literature pertaining to eosinophilia myalgia syndrome (an eosinophil excess) that resulted from contaminants in an over-the-counter amino acid sleep aid.

Drug Master File (DMF): Assisted in drafting a gap assessment of the safety information for a DMF submission to the US Food and Drug Administration.

Evaluation of an Herbal Supplement Product: Evaluated various components of an herbal supplement that contained ephedra, caffeine, and other compounds with respect to mechanism of action and possible side effects. Reviewed the pharmacokinetics of these compounds and doses associated with toxicity.

Assessment of Side Effects of a Popular Over-the-Counter Medication: Conducted detailed assessment of pharmacologic, toxicologic, and pharmacoepidemiologic literature concerning a common over-the-counter medication to determine whether Stevens-Johnson syndrome (SJS)/toxic epidermal necrolysis (TEN) was causally associated with the product.

Hip Implant Literature Evaluation: Assisted in the evaluation of a systematic review of the literature concerning individuals with hip implants.

Evaluation of Pharmaceutical Product for Potential Cardiovascular Side Effects of Phenylpropanolamine: Participated in a review of the published and unpublished literature to determine whether a causal relationship exists between popular cough-and-cold preparations containing phenylpropanolamine (PPA) and strokes.

Evaluation of the Safety Profile of a Pharmaceutical Product: Evaluated the acute, chronic, and carcinogenicity safety profile of metronidazole for a prospective buyer of a company manufacturing this product.

Tamoxifen: Assisted in the editing and managing of the supplement "Scientific Review of Tamoxifen" for the journal *Seminars in Oncology*.

Evaluation of a Medication Adverse Effect: Conducted a comprehensive review of the literature on prednisone and conducted a dose-response analysis to determine whether the compound could be responsible for the specific side effect of avascular necrosis.

Safety Evaluation of a Nasal Spray Product: Participated in a safety evaluation of a nasal product containing zinc. Evaluated historical as well as recent safety data on the product.

Regulatory Compliance

Evaluation of Respiratory Regulatory Limit for Caprolactam: Conducted an extensive review of the chemical and pharmacokinetic properties of caprolactam, as well as the toxicity of this compound in animals and humans, in response to proposed California's OEHHA Reference Exposure Levels (RELs). Prepared rebuttal comments to OEHHA in response to these proposed RELs.

Preparation of Comments for Submittal to ATSDR: Participated in project that consisted of a review of the human clinical and epidemiological data on PCBs. Developed a 100+-page document for the client to submit to ATSDR's Draft Toxicological Profile for PCBs Update.

Review of Allowable Effluent Concentration for d-Limonene. Reviewed the applicability of a city government's allowable effluent concentration of d-limonene. Evaluated ecological testing data in support of this risk assessment.

Review of Manganese Water Standard: Conducted a critical review of studies that were being considered in support of a standard for manganese in potable water.

Derivation of Toxicity Constants for 1,1-Dichloroethylene (VDC): Participated in benchmark dose (BMD) derivation and calculation of acceptable indoor air exposure levels for VDC based on the BMD approach for the Colorado Department of Transportation.

Site Assessments/Risk Assessments

Risk Assessment for Chemicals Used in a Fire Suppression System: Evaluated the potential toxicity to human health and potential for damage to possessions from possible contact with water and/or residues that might contain products used in a fire suppression system.

Risk Assessment for Hexavalent Chromium and Trichloroethylene (TCE) at a Site in California: Calculated inhalation and ingestion short-term and lifetime risks for exposures to CrVI and TCE. This evaluation included a review of the recent literature on the relevant toxicological endpoints at issue.

Risk Assessment of Trichloroethylene from Vapor Intrusion: Assessed exposure, as well as the theoretical risks associated with these exposures, to trichloroethylene via inhalation from vapor intrusion in a home basement.

Exposure and Risk Assessment of Site in Utah: Evaluated the non-carcinogenic and carcinogenic risks posed by calculated levels of exposure to arsenic, cadmium, copper, lead, and nickel present in site soil.

Evaluation of Human Health Effects from Munitions Plant Emissions: Reviewed the human health effects of RDX, MNRDX/DNRDX/TNRDX, dimethylnitrosamine, hydrazine, and dimethyl-hydrazines potentially associated with emissions from a munitions plant in Utah.

Review of the Toxicity of Trichloroethylene (TCE), Chromium, and 1,1-Dichloroethylene (DCE): Undertook a comprehensive review of the toxicological literature on TCE, chromium, and 1,1-DCE (chemicals present as drinking-water contaminants near an airport) to assess their potential cancer and non-cancer effects.

Assessment of PCB Exposure at State Building: Participated in an assessment of the potential health effects associated with exposure to PCBs (and combustion products) resulting from a fire that occurred at a State building in Pennsylvania. Determined a surface cleanup level that would render the building safe for long-term occupancy.

Evaluation of Vinyl Chloride (VC) Carcinogenicity: Conducted an assessment of the animal and epidemiologic evidence to determine whether a causal association exists between vinyl chloride and liver or brain cancer among individuals exposed to VC in the environment.

Toxicity of Acetaldehyde: Conducted a thorough review of the non-cancer and cancer effects of exposure to acetaldehyde resulting from a train derailment in West Virginia.

Toxicity Assessment and Toxicity Profile Generation for Former Electronics Site (Seminole County, Florida): Reviewed the toxicity of multiple chemicals for multiple diseases. Generated toxicity profiles for benzene, Freon, lead, methylene chloride, rosin, 1,1-dichloroethylene, 1,1,1-trichloroethane, trichloroethylene, toluene, 1,4-dioxane, and vinyl chloride. Provided thorough research regarding confounders for over 30 cancer and non-cancer conditions.

Risks from Acute Spill of Coal Tar Light Oil (CTLO): Evaluated the risks from an acute CTLO spill from a tanker. Considered the potential toxicities and risks associated with the components of CTLO spills for the vicinity surrounding the spill. Readings taken near the time of spill were considered as part of the analysis.

Miscellaneous Projects

Evaluation of a Possible Cancer Cluster: Studied potential cancer clusters and whether these were related to environmental exposures to dioxin (TCDD).

Risk Communication Services at a Public Meeting: Provided risk communication and toxicology support at a public meeting regarding issues related to phosphogypsum.

Risk Communication Services at a Public Meeting: Provided risk communication services at a public meeting, discussing the use of a chlorophenoxy herbicide in a Florida waterway.

Historical Perspective of PCB: Provided a historical perspective on the toxicological properties of PCBs, showing how this knowledge developed over the years (~1929–2010).

Medical Monitoring Program Rebuttal: Researched recommendations for and against various medical monitoring protocols for multiple diseases and cancers from several major medical and scientific organizations and agencies. Researched the criteria that have been proposed by various scientific, medical, and regulatory bodies as being appropriate and necessary prior to instituting a medical monitoring program. Calculated excess cancer rates from the use of various diagnostic techniques that required the use of radiation.

Lead Toxicity Presentations: Summarized the regulatory standards for lead and the toxicity of lead based on target organs and presented the information to companies at their request.

BOOK CHAPTERS

Britt JK. 2023. Insect repellents (DEET) and others. In: Patty's Industrial Hygiene and Toxicology. John Wiley & Sons; https://doi.org/10.1002/0471125474.tox140.

Britt JK. 2022. Properties and effects of pesticides. In: Principles of Toxicology: Environmental and Industrial Applications, 4th Ed. John Wiley & Sons, Inc., Hoboken, NJ.

Britt JK, James RC. 2017. Toxicology. In: Kirk-Othmer Encyclopedia of Chemical Technology. John Wiley & Sons, Inc., Hoboken, NJ; doi: 10.1002/0471238961.2015240902011212.a01.pub3.

Britt JK. 2015. Properties and effects of pesticides. In: Principles of Toxicology: Environmental and Industrial Applications, 3rd Ed. John Wiley and Sons, New York.

Britt JK, James RC. 2006. Toxicology. In: Kirk-Othmer Encyclopedia of Chemical Technology. John Wiley & Sons, Inc., Hoboken, NJ.

Britt JK. 2000. Health effects of pesticides. In: Principles of Toxicology: Environmental and Industrial Applications. John Wiley and Sons, New York, NY.

PEER-REVIEWED ARTICLES

Lea IA, Buerger AN, Vincent MJ,..., Choksi NY, Schaefer H, **Britt J**, Fitch S, Haws L, Borghoff SJ. 2026. Evaluating the potential carcinogenic hazard of diisononyl phthalate in humans via systematic integration of human, animal cancer studies, and mechanistic data. Curr Res Toxicol 10(Apr 30):100295; doi: 10.1016/j.crtox.2026.100295.

Vincent MJ, Fitch S, Bylsma L, Thompson C, Rogers S, **Britt J**, Wikoff D. 2024. Assessment of associations between inhaled formaldehyde and lymphohematopoietic cancer through the integration of epidemiological and toxicological evidence with biological plausibility. Toxicol Sci 199(2):172–193; doi: 10.1093/toxsci/kfae039.

Borghoff SJ, Cohen SS, Jiang X, Lea IA, Klaren WD, Chappell GA, **Britt JK**, Rivera BN, Choksi NY, Wikoff DS. 2023. Updated systematic assessment of human, animal and mechanistic evidence demonstrates lack of human carcinogenicity with consumption of aspartame. Food Chem Toxicol 172:113549; doi: https://doi.org/10.1016/j.fct.2022.113549.

Wikoff DS, Urban JD, Ring C, **Britt J**, Fitch S, Haws LC. 2020. Development of a range of plausible non-cancer toxicity values for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) based on effects on sperm count: Application of systematic review methods and quantitative integration of dose response using meta-regression. Toxicol Sci 179(2):162-182; doi: https://doi.org/10.1093/toxsci/kfaa171.

Chappell GA, **Britt JK**, Borghoff, SJ. 2020. Systematic assessment of mechanistic data for FDA-certified food colors and neurodevelopmental processes. Food Chem Toxicol 140:111310; doi: https://doi.org/10.1016/j.fct.2020.111310.

Wikoff D, Welsh BT, Henderson R, Brorby GP, **Britt J**, Myers E, Goldberger J, Lieberman HR, O'Brien C, Peck J, Tenebein M, Weaver C, Harvey S, Urban J, Doepker C. 2017. Systematic review of the potential adverse effects of caffeine consumption in healthy adults, pregnant women, adolescents, and children. Food Chem Toxicol 109(Pt1):585–648; doi: https://doi.org/10.1016/j.fct.2017.04.002.

Wikoff DS, **Britt JK**. 2016. The role of systematic review in the practice of toxicology and risk assessment — An appreciation for the primary tool in evidence-based approaches. Toxicology: Open Access 2(110):1–4.

James RC, **Britt JK**, Halmes NC, Guzelian PS. 2015. Evidence-based causation in toxicology: A 10-year retrospective. Human Exper Toxicol 34:1245-1252.

Wikoff D, Doepker C, Welsh B, Urban J, Henderson R, Brorby G, **Britt J**, Harvey S, et al. 2015. Systematic review of the adverse cardiovascular effects of caffeine consumption in healthy adults, pregnant women, adolescents, and children. PROSPERO 2015:CRD42015026673. Available from htttp://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42015026673 (Systematic Review Protocol Registration).

James RC, **Britt J**, Halmes NC, Guzelian PS. 2013. Comments on recent discussions providing differing causation methodologies. Human Exper Toxicol 33:109–112.

James HR, Barfield L, **Britt JK**, James RC. 2008. Worker exposure to secondhand smoke: Evaluating a prediction model. Prof Safety 53(9):34–44.

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.

Warren DA, Kerger BD, **Britt JK**, James RC. 2004. Development of an oral cancer slope factor for Aroclor 1268. Regul Toxicol Pharmacol 40:42–53.

Roberts SM, Jordan KE, Warren DA, **Britt JK**, James RC. 2002. Evaluation of the carcinogenicity of 1,1-dichloroethylene (vinylidene chloride). Regul Toxicol Pharmacol 35(1):44–55.

Britt JK, Dwinell SE, McDowell TC. 1992. Matrix decision procedure to assess new pesticides based on relative ground water leaching potential and chronic toxicity. Environ Toxicol Chem 11:721–728.

ABSTRACTS AND PRESENTATIONS

Buerger AN, Lea IA, Vincent MJ, Rivera BN, Choksi NY, **Britt J**, Fitch S, Rogers S, et al. Systematic evaluation of the carcinogenic potential of di-isononyl phthalate in humans. Abstract 3314, Society of Toxicology 65th Annual Meeting, San Diego, CA, March 2026.

Lynn SG, Lea IA, Urban J, Borghoff SJ, Wikoff D, Fitch S, Perry C, Choksi N, **Britt J**, Heintz M, Klaren W, et al. Development and application of systematic approach to inventory and interrogate thyroid hormone network information. Abstract 4357, Society of Toxicology Annual Meeting, Salt Lake City, UT, March 2024.

Vincent M, Fitch S, Bylsma L, Thompson C, Rogers S, **Britt J**, Wikoff D. Integration of toxicological and epidemiological information to evaluate biological plausibility and causality of associations between inhaled formaldehyde (FA) and lymphohematopoietic (LHP) cancers. Abstract 5157, Society of Toxicology Annual Meeting, Salt Lake City, UT, March 2024.

Borghoff S, Fitch S, **Britt J**, Franke K, Wikoff D. Application of the EFSA/ECHA endocrine disruption guidance as a framework for evidence integration in a weight-of-evidence (WoE) analysis for oxybenzone (BP-3). Poster at Evidence Integration in Chemical Assessments: Challenges Faced in Developing and Communicating Human Health Effect Conclusions. National Academies of Sciences, Engineering, and Medicine, Washington, DC, June 2019.

Urban J, Wikoff D, Suh M, **Britt J**, Fitch S, Chappell G, Haws L. Comparison of NTP OHAT and US EPA TSCA study quality criteria: Trichloroethylene (TCE) and congenital heart defects (CHDs) as a case study. Abstract 2801, The Toxicologist 168:424, March 2019.

Wikoff DW; Welsh BT, Henderson R, Brorby G, **Britt J**, Myers E, Goldberger J, Lieberman HR, O'Brien C, Doepker C. Application of systematic review in the evaluation of caffeine safety: Potential adverse effects of caffeine consumption in healthy adults, pregnant women, adolescents, and children. Society of Risk Analysis Annual Meeting, Arlington, VA, December 10–14, 2017.

Britt JK, James RC. Welding and occupational exposure to manganese fumes and Parkinson's disease: An evidence-based causation analysis. Abstract 776, Toxicologist 144:166, March 2015.

Lamm SH, Robbins SA, **Britt JK**, James RC. Multiple myeloma risk and benzene exposure among Pliofilm workers—A reanalysis using an internal reference group. Abstract 481, Toxicologist 132:103, March 2013.

Britt JK, Halmes NC, Kerger B, James RC. Evidence-based analysis defining a formaldehyde vapor concentration NOEL for irritant responses in humans. Abstract 1947, Toxicol Sci 120:417, 2011.

Kerger BD, **Britt J**, Barfield L, James RC. Mesothelioma diagnosis: Should genetic screening be used to evaluate primary site and plausibility of asbestos causation? Abstract 1662, Toxicol Sci 108:345, 2009.

Fedoruk MJ, Kerger BD, Israel L, Hoyt S, **Britt J**, James RC. Pilot study of vapor reaction products from mixing diacetyl and chlorine bleach. Toxicologist 102(1):1476, March 2008.

Freeman RW, **Britt JK**, Halmes C, Kind A, James RC. Predicting blood lead levels with IEUBK: Over–prediction at moderate soil lead levels? Toxicologist 90(1):449, March 2006.

Britt JK, Halmes NC, James RC. Painting and acute leukemia: An evidence–based causation analysis. Toxicologist 90(1):176, March 2006.

Guzelian P, **Britt J**, Warren A, Halmes C, Kind J, Roberts SM, James, R. Relevance of chemically-induced rat liver cancers to humans. Toxicology 164(1-3):4, 2001.

Britt JK. Risk to nontarget organisms in freshwater and estuarine environments due to drift from the aerial application of ultra-low volume permethrin. Presented at Society of Toxicology 31st Annual Meeting, February 23-27, Seattle, WA, February 1992.

Britt JK. Matrix decision to determine registration of new pesticides. Presented at the 14th Annual Conference of the Florida Association for Water Quality Control. Naples, FL, June 2-4, 1991.

Britt JK. Pesticides: Toxicity and regulatory aspects." Taught as a part of the Florida Department of Health and Rehabilitative Services and Tallahassee Memorial Hospital's "Training Course on General Principles of Toxicology and Risk Assessment." Wakulla Springs, FL, May 1-2, 1991, and Ft. Lauderdale, FL, May 21-22, 1991.

SEMINARS AND CONTINUING EDUCATION

Introduction to the Fundamentals of Epidemiology. London School of Hygiene and Tropical Medicine. 2012.

Society of Toxicology Meeting Continuing Education Courses: (1) Toxicology of Pesticides; (2) Risk Assessment, (3) Methods for Assessment of Neurotoxicity, (4) Comparative Endocrine Toxicology; and (5) Evaluating Toxicity of Engineered Nanomaterials: Issues with Conventional Toxicology Approaches; and (6) Protecting Human Health: Use of Toxicological and Epidemiological Data in Determining Safe Levels for Human Exposure.

Society of Toxicology Contemporary Concepts in Toxicology Perfluoroalkyl Acids and Related Chemistries: Toxicokinetics and Mode of Action Workshop. Arlington, VA. February 14-16, 2007.

New England Epidemiology Institute Summer Program. Course: (1) The Design of Epidemiologic Studies; (2) Causal Inference. Tufts University. June 8-12, 1998.

Practical Issues in the Use of Probabilistic Risk Assessment and its Application to Hazardous Waste Sites. Center for Environmental and Human Toxicology, and the Superfund Program at the University of Florida & the National Institute of Environmental Health Sciences. March 29-31, 1998. Sarasota, Florida.

Florida State University Center for Biomedical and Toxicological Research, and multiple other state and federal agencies. Mercury Contamination in Florida: Impacts and Solutions. Tallahassee, FL. June 1990.