

Mark Harris, Ph.D., M.B.A.

MANAGING PRINCIPAL SCIENTIST



CONTACT INFORMATION

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PROFESSIONAL PROFILE

Dr. Mark Harris is a cofounder of ToxStrategies and has more than 25 years of experience in the areas of toxicology, human health risk assessment, and risk-based site investigations. He routinely applies his skills as a toxicologist and human health risk assessor to many types of projects, including designing, placing, and overseeing toxicology laboratory studies; and developing state-of-the-science toxicity values via the application of both default and more rigorous approaches such as benchmark modeling, application of weight-of-evidence techniques, and consideration of mode-of-action information. Other project experience includes estimating human exposures using a variety of approaches, including designing, implementing, and using data from biomonitoring studies; using complex data sets such as NHANES and conducting studies to gather human exposure information; modeling uptake and exposure via a variety of exposure pathways; and conducting both screening-level and complex site-specific risk assessments to quantify human health risks, including conduct of probabilistic risk assessments. Dr. Harris has a strong understanding of a wide variety of regulatory guidance documents that focus on human health risk assessment. He has substantial experience in dealing with regulatory agencies, ranging from implementation of administrative orders to developing site cleanup standards. Additionally, Dr. Harris has extensive experience in developing risk-based site investigations for both industrial and residential sites and in conducting source identification studies using both chemical fingerprinting techniques and historical records searches.

Dr. Harris is a co-author of more than 65 scientific journal articles and has participated in numerous technical seminars. He is a peer reviewer for several scientific journals, including the *Journal of Soil and Sediment Contamination*, *Integrated Environmental Assessment and Management (IEAM)*, the *Journal of Air and Waste Management*, and *Environmental Science and Technology (ES&T)*.

EDUCATION AND DEGREES EARNED

- 1990 Texas A&M University, Ph.D., Toxicology
- 2000 Southern Methodist University, MBA
- 1986 Texas A&M University, B.S., Biochemistry

PROFESSIONAL ASSOCIATIONS

- American Chemical Society (ACS)
- Society of Environmental Toxicology and Chemistry (SETAC)
- Society of Risk Analysis (SRA)

CERTIFICATIONS AND COURSES

- 2002 Texas Risk Reduction Program (GSI Training Course)
- 2000 Hazardous Waste Shipping, DOT Regulation Compliance
- 1997 Spanish Language Immersion (Thunderbird University)
- 1992 OSHA Hazardous Waste Operations
- 1988 Molecular Endocrinology/Hormone Action

PROFESSIONAL HONORS/AWARDS

- 1990–1991 Outstanding Doctoral Research Award, Texas A&M University
- 1990 Outstanding Graduate Student Award, College of Veterinary Medicine, Texas A&M University
- 1989 George T. Edds Award for Graduate Student Research, College of Veterinary Medicine, Texas A&M University

SCIENTIFIC ADVISORY PANELS, COMMITTEES, & WORKGROUPS

- 2000 United States Environmental Protection Agency (USEPA) Expert Panel to evaluate Chapter 9 (Toxic Equivalency Factors) and Integrated Risk Characterization and Summary Section of Dioxin Reassessment (prepared by USEPA, July 2000)

PROFESSIONAL EXPERIENCE

Provided an expert report evaluating potential health effects associated with inhalation exposure to diacetyl incurred by an employee of a flavor manufacturer.

Evaluated a risk assessment prepared by a regulatory agency involving volatile organic chemicals and metals and potential exposure via inhalation by individuals living and working near a waste-handling facility. Prepared a rebuttal expert report describing shortcomings of regulatory agency approach to evaluating potential health risks.

Co-investigator of a study evaluating the mode of action of hexavalent chromium following oral exposure in rodents.

Managed the preparation of a human health risk assessment evaluating exposure via the fish ingestion pathway. The site was a large river in the northeastern United States. Risks associated with metals, PAHs, pesticides, PCBs, and PCDD/Fs were determined.

Co-principal investigator on a large biomonitoring study designed to assess the levels of dioxin-like compounds in the blood serum of workers at a former secondary copper smelting facility. This involved overseeing the development of the study protocol and comprehensive exposure questionnaire, study implementation, development of applicable background blood levels, fingerprinting analyses, data analyses, and interpretation of study findings. In addition, this project involved coordinating with an external Science Advisory Board and an Institutional Review Board.

Managed the design, implementation, and data analysis of a wild and farm-raised catfish sampling program in southern Mississippi. Chemical analyses included PCDD/Fs, dioxin-like PCBs, total PCBs, and PBDEs.

Evaluated the human health risk associated with a consumer food product contaminated by a non-food-grade lubricant. Conducted assessments specific to children's exposure in multiple countries around the globe in which the food product was sold, to aid the client with their implementation of a health-protective strategy to eliminate exposure to the contaminated product.

Evaluated PCB surface soil contamination at six softball fields within a larger recreational facility in Texas. Made recommendations regarding the continued use of the softball fields given the presence of PCBs. Additionally, developed a statistically based soil sampling plan for other areas of the park that were found to contain PCBs.

Reviewed PCDD/F and metal analyses of soils collected outside of a major industrial facility in southern Mississippi following the landfall of Hurricane Katrina, to determine whether these chemicals/metals posed any threat to human health and the environment.

Managed a large, multi-site RI/FS/Remediation in the northeastern United States, which resulted in the expedited closure of 18 industrial sites that contained varying quantities and concentrations of hexavalent chromium. This project involved characterizing affected environmental media, including soils, groundwater, surface water, sediments, and air; conducting a site-specific exposure assessment; developing site-specific hexavalent chromium cleanup standards, and developing and implementing various innovative remediation technologies for addressing hexavalent chromium.

Conducted a county-wide PRP search for industrial dischargers into a former publicly owned treatment works (POTW), to assist the client with the cost of investigation and remediation of the POTW and surrounding land. This project involved the review of historical records, search of various electronic databases, and interviews with knowledgeable individuals from the time period when the POTW operated.

Participated in a third-party review of a human health risk assessment on a former pentachlorophenol wood preservative site in Arkansas. Reviewed the calculations, assumed exposure pathways and conclusions, and made recommendations to the client for modifications to improve the assessment.

Assisted a client on the U.S. West Coast in an environmental-damage lawsuit brought by the National Oceanic Atmospheric Administration (NOAA) involving the discharge of PCBs into a POTW. Specifically, this effort involved utilizing historical data to estimate the amount of PCBs discharged by the client to the POTW that actually reached the environment.

Assisted in the development of chemical fingerprints for various sources of polychlorinated dibenzo-p-dioxins in a large urban river in the eastern United States.

Developed a surface water sampling plan and prepared a preliminary human health risk assessment for pathogens (bacteria, viruses, and parasites) discharged from a combined sewer overflow in a large urban river in the eastern United States.

Provided an expert report evaluating potential health effects associated with alleged exposure to benzene and hydrogen sulfide by employees of a wastewater treatment plant.

Prepared an expert report evaluating PCDD/F concentrations in surface soils adjacent to a large lake in East Texas. Compared the PCDD/F data to known local background concentrations of PCDD/Fs to demonstrate that the surface soils adjacent to the lake were not impacted by industrial operations.

MANUSCRIPTS

Bhat VS, Cohen SM, Gordon EB, Wood CE, Cullen JM, **Harris MA**, Proctor DM, Thompson CM. 2020. An adverse outcome pathway for small intestinal tumors in mice involving chronic cytotoxicity and regenerative hyperplasia: A case study with hexavalent chromium, captan, and folpet. *Crit Rev Toxicol* (open access), <https://doi.org/10.1080/10408444.2020.1823934>.

Thompson CM, Donahue DA, Hobbs C, Costecalde Y, Franzen A, Suh M, Proctor DM, **Harris MA**. 2020. Exposure to environmentally-relevant concentrations of hexavalent chromium does not induce ovarian toxicity in mice. *Regul Toxicol Pharmacol* 116, open access: <https://doi.org/10.1016/j.yrtph.2020.104729>.

Chappell G, Rager J, Wolf J, Babic M, Leblanc, Ring C, **Harris MA**, Thompson CM. 2019. Comparison of gene expression responses in the small intestine of mice following exposure to three carcinogens using the S1500+ gene set informs a potential common adverse outcome pathway. *Toxicol Pathol* 47(7):851–864, <https://doi.org/10.1177/0192623319873882>.

Klaren WD, Ring C, **Harris MA**, Thompson CM, Borghoff S, Sipes NS, Hsieh J-H, Auerbach SS, Rager JE. 2018. Identifying attributes that influence *in vitro*-to-*in vivo* concordance by comparing *in vitro* Tox21 bioactivity versus *in vivo* DrugMatrix transcriptomic responses across 130 chemicals. *Toxicol Sci kfy220*, available at <https://doi.org/10.1093/toxsci/kfy220>.

Thompson CM, Kirman CR, Hays SM, Suh M, Harvey SE, Proctor DM, Rager JE, Hays LC, **Harris MA**. 2018. Integration of mechanistic and pharmacokinetic information to derive oral reference dose and margin-of-exposure values for hexavalent chromium. *J Appl Toxicol* 38:351–365. doi: 10.1002/jat.3545.

Bichteler A, Wikoff DS, Loko F, **Harris MA**. 2017. Estimating serum concentrations of dioxin-like compounds in the U.S. population effective 2005–2006 and 2007–2008: A multiple imputation and trending approach incorporating NHANES pooled sample data. *Environ Int* 105:112–125. doi: 10.1016/j.envint.2017.05.003.

- Thompson CM, Wolf JC, McCoy A, Suh M, Proctor DM, Kirman CR, Haws LC, **Harris MA**. 2017. Comparison of toxicity and recovery in the duodenum of B6C3F1 mice following treatment with intestinal carcinogens captan, folpet, and hexavalent chromium. *Toxicol Pathol* 45(8):1091–1101. DOI: 10.1177/0192623317y4324.
- Thompson CM, Suh M, Proctor DM, Haws LC, **Harris MA**. 2017. Ten factors for considering the mode of action of Cr(VI)-induced gastrointestinal tumors in rodents. *Mut Res/Genetic Toxicol Environ Mutagen* 823:45–57.
- Thompson CM, Young RR, Dinesdurage H, Suh M, **Harris MA**, Rohr AC, Proctor DM. 2017. Assessment of the mutagenic potential of hexavalent chromium in the duodenum of big blue® rats. *Toxicol Appl Pharmacol* 330(1):48-52.
- Rager JE, Ring CL, Fry RC, Suh M, Proctor DM, Haws LC, **Harris MA**, Thompson CM. 2017. High-throughput screening data interpretation in the context of *in vivo* transcriptomic responses to oral Cr(VI) exposure. *Toxicol Sci* kfx085. doi: 10.1093/toxsci/kfx085.
- Thompson CM, Wolf JC, Elbekai RH, Paranjpe MG, Seiter JM, Chappell MA, Tappero RV, Suh M, Proctor DM, Bichteler A, Haws LC, **Harris MA**. 2015. Duodenal crypt health following exposure to Cr(VI): micronucleus scoring, γ-H2AX immunostaining, and synchrotron x-ray fluorescence microscopy. *Mut Res* 789–790:61–66.
- Thompson CM, Young RR, Suh M, Dinesdurage HR, Elbekai RH, **Harris MA**, Rohr, AC, Proctor DM. 2015. Assessment of the mutagenic potential of cr(VI) in the oral mucosa of big blue® transgenic f344 rats. *Environ Mol Mutagen*. 56(7):621–628. doi: 10.1002/em.21952.
- Thompson, CM, Seiter J, Chappell MA, Tappero RV, Proctor DM, Suh M, Wolf JC, Haws LC, Vitale R, Mittal L, Kirman CR, Hays SM, **Harris MA**. 2015. Synchrotron-based imaging of chromium and γ-H2AX immunostaining in the duodenum following repeated exposure to Cr(VI) in drinking water. *Toxicol Sci* 143(1):16–25.
- Suh M, Thompson C, Kirman C, Carakostas M, Haws LC, **Harris M**, Proctor D, Abraham L, Hixon JG. 2014. High concentrations of hexavalent chromium in drinking water alter iron homeostasis in F344 rats and B6C3F1 mice. *Food Chem Toxicol* 65:381–388.
- Urban JD, Wikoff DS, Bunch ATG, **Harris MA**, Haws LC. 2014. A review of background dioxin concentrations in urban/suburban and rural soils across the United States: Implications for site assessments and the establishment of soil cleanup levels. *Sci Tot Environ* 466–467: 586–597.
- Bunch AG, Perry CS, Abraham L, Wikoff DS, Tachovsky JA, Hixon JG, Urban JD, **Harris MA**, Haws LC. 2013. Evaluation of impact of shale gas operations in the Barnett Shale region on volatile organic compounds in air and potential human health risks. *Sci Tot Environ* 468–469(2014): 832–842.
- Kirman CR, Aylward LL, Suh M, **Harris MA**, Thompson CM, Haws LC, Proctor DM, Lin SS, Parker W, Hays SM. 2013. Physiologically based pharmacokinetic model for humans orally exposed to chromium. *Chem Biol Interact* 204:13–27. doi:pil: S0009-2797(13)00082-3. 10.1016/j.cbi.2013.04.003
- O'Brien T, Ding H, Suh M, Thompson C, Parsons BL, **Harris MA**, Winkelman WA, Wolf JC, Hixon JG, Schwartz AM, Myers MB, Haws LC, Proctor DM. 2013. Assessment of K-Ras mutant frequency and micronucleus incidence in the mouse duodenum following 90-days of exposure to Cr(VI) in drinking water. *Mutat Res* 754:15–21. pii: S1383-5718(13)00075-2. doi: 10.1016/j.mrgentox.2013.03.008
- Thompson CM, Proctor DM, Suh M, Haws LC, Kirman CR, **Harris MA**. 2013. Assessment of the mode of action underlying development of rodent small intestinal tumors following oral exposure to hexavalent chromium and relevance to humans. *Crit Rev Toxicol* 43(3):244–274.
- Thompson CM, Kirman CR, Proctor DM, Haws LC, Suh M, Hays S, Hixon JG, **Harris MA**. 2013. A chronic oral reference dose for hexavalent chromium-induced intestinal cancer. [J Appl Toxicol](#) 34:525–536.

- Kirman CR, Hays SM, Aylward LL, Suh M, **Harris MA**, Thompson CM, Haws LC, Proctor DM. 2012. Physiologically based pharmacokinetic model for rats and mice orally exposed to chromium. *Chem Biol Interact* 200(1):45–64.
- Kopec AK, Kim S, Forgacs AL, Zacharewski TR, Proctor DM, **Harris MA**, Haws LC, Thompson CM. 2012. Genome-wide gene expression effects in B6C3F1 mouse intestinal epithelia following 7 and 90 days of exposure to hexavalent chromium in drinking water. *Toxicol Appl Pharmacol* 259(1):1326.
- Proctor DM, Suh M, Aylward LL, Kirman CR, **Harris MA**, Thompson CM, Gürleyük H, Gerads R, Haws LC, Hays SM. 2012. Hexavalent chromium reduction kinetics in rodent stomach contents. *Chemosphere* 89(5):487–493.
- Thompson CM, Fedorov Y, Brown DD, Suh M, Proctor DM, Kuriakose L, Haws LC, **Harris MA**. 2012. Assessment of Cr(VI)-induced cytotoxicity and genotoxicity using high content analysis. *PLoS ONE* 7(8):e42720.
- Thompson CM, Hixon JG, Proctor DM, Haws LC, Suh M, Urban JD, **Harris MA**. 2012. Assessment of genotoxic potential of Cr(VI) in the mouse duodenum: An in silico comparison with mutagenic and nonmutagenic carcinogens across tissues. *Regul Toxicol Pharmacol* 64(1):68–76.
- Thompson CM, Proctor DM, Suh M, Haws LC, Hebert CD, Mann JF, Shertzer HG, Hixon JG, **Harris MA**. 2012. Comparison of the effects of hexavalent chromium in the alimentary canal of F344 rats and B6C3F1 mice following exposure in drinking water: Implications for carcinogenic modes of action. *Toxicol Sci* 125(1):79–90.
- Thompson CM, Proctor DM, Haws LC, Hebert CD, Grimes SD, Shertzer HG, Kopec AK, Hixon JG, Zacharewski TR, **Harris MA**. 2011. Investigation of the mode of action underlying the tumorigenic response induced in B6C3F1 mice exposed orally to hexavalent chromium. *Toxicol Sci* 123(1):58–70.
- Thompson CM, Haws LC, **Harris MA**, Gatto NM, Proctor DM. 2011. Application of the U.S. EPA mode of action framework for purposes of guiding future research: A case study involving the oral carcinogenicity of hexavalent chromium. *Toxicol Sci* 119(1):20–40.
- Tachovsky JA, Urban JD, Wikoff DS, Haws LC **Harris MA**. 2010. Reduction of a large fish tissue analyte database: Identifying and assessing data specific to a remediation site for risk assessment application. *Chemosphere* 80(5):481–488.
- Urban J, Tachovsky JA, Haws L, Wikoff Staskal D, **Harris M**. 2010. Response to Mugdan et al.'s comment on Urban et al. "Assessment of human health risks posed by consumption of fish from the Lower Passaic River, New Jersey." *Sci Tot Environ* 408(6):1468–1470.
- Urban JD, Tachovsky JA, Haws LC, Staskal DF, **Harris MA**. 2010. Response to Buchanan et al.'s comment on Urban et al. "Assessment of Human Health Risks Posed by Consumption of Fish from the Lower Passaic River, New Jersey." *Sci Total Environ* 408(8): 2004–2007.
- Scott LLF, Staskal DF, Williams ES, Luksemburg WJ, Urban JD, Nguyen LM, Haws LC, Birnbaum LS, Paustenbach DJ, **Harris MA**. 2009. Levels of polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls in southern Mississippi catfish and estimation of potential health risks. *Chemosphere* 74(7):1002–10.
- Urban JD, Tachovsky JA, Staskal DF, Haws LC, **Harris MA**. 2009. Assessment of human health risks posed by consumption of fish from the Lower Passaic River, New Jersey. *Sci Tot Environ* 408(2):209–224.
- Haws LC, **Harris MA**, Scott LLF, Williams ES, Paustenbach DJ. 2008. Assessment of the potential human health risks posed by benzene in a commercial beverage. *J Food Sci* 73(4): 33–41.
- Donovan E, Unice K, Roberts JD, **Harris M**, Finley B. 2008. Risk of gastrointestinal disease associated with exposure to pathogens in the water of the Lower Passaic River. *Appl Environ Microbiol* 74:994–1003.

- Donovan EP, Staskal DF, Unice KM, Roberts JD, Haws LC, Finley BL, **Harris MA**. 2008. Risk of gastrointestinal disease associated with exposure to pathogens in the sediments of the Lower Passaic River. *Appl Environ Microbiol* 74:1004–1018.
- Henry KS, Petura JC, Brooks S, Dentico S, Kessel SA, **Harris M**. 2007. Preventing surface deposition of chromium with asphalt caps at chromite ore processing residue sites: A case study. *Canad Geotech J* 44:814–839.
- Ferriby LL, Knutsen JS, **Harris M**, Unice KM, Scott P, Nony P, Haws LC, Paustenbach D. 2007. Evaluation of PCDD/F and dioxin-like PCB serum concentration data from the 2001–2002 National Health and Nutrition Examination Survey of the United States Population. *J Exp Anal Env Epidemiol* 17:358–371.
- Paustenbach DJ, Fehling K, Scott P, **Harris M**, Kerger B. 2006. Identifying soil clean-up criteria for dioxin in urban residential soils: How have 20 years of research and risk assessment experience affected the analysis? *J Toxicol Environ Health, Part B*. 9:87–145.
- Haws L, Su S, **Harris M**, DeVito M, Walker N, Farland W, Finley B, Birnbaum L. 2006. Development of a refined database of mammalian relative potency estimates for dioxin-like compounds. *Toxicol Sci* 89(1): 4–30.
- Proctor D, Panko J, Liebig E, Mundt K, Buczynski M, Barnhart R, **Harris M**, Morgan R, Finley B, Paustenbach D. 2002. Workplace concentrations of airborne hexavalent chromium for the Painesville, Ohio chromate production plant. *Appl Occup Environ Hyg J* 18(6):430–449.
- Scott P, Petura J, **Harris M**. 2002. Derivation of a liquid to solid ratio for ASTM method D3987 85 for soils containing chromite ore processing residue using selected unsaturated zone models. *Soil Sed Contam* 12(4): 443–480.
- Finley BL, Proctor DM, **Harris M**, Fowler JF. 2000. Letter to the editor. *Am J Contact Derm* 123–125.
- Scott P, Finley B, **Harris M**, Rabbe D. 1997. Determination of background airborne hexavalent chromium concentrations in industrial areas. *J Air Waste Manage Assoc* 47:592–600.
- Costa M, Zhitkovich A, **Harris M**, Paustenbach D, Gargas M. 1997. DNA-protein crosslinks produced by various chemicals in cultured human lymphocytes. *J Toxicol Environ Health* 50:433–449.
- Gargas M, Norton R, **Harris M**, Paustenbach D, Finley B. 1994. Urinary excretion of chromium following ingestion of chromite ore processing residue in humans: Implications for biomonitoring. *Risk Anal* 14(6): 1019–1024.
- Harris M**, Zacharewski T, Safe S. 1993. Comparative potencies of Aroclors 1232, 1248, 1254, and 1260 in male Wistar rats—Assessment of the toxic equivalency factor (TEF) approach for polychlorinated biphenyls (PCBs). *Fund Appl Toxicol* 20:456–463.
- Copeland TL, Paustenbach DJ, **Harris MA**, Otani J. 1993. Comparing the results of a Monte Carlo analysis with EPA's reasonable maximum exposed individual (RMEI): A case study of a former wood treatment site. *Regul Toxicol Pharmacol* 18: 275–312.
- Zacharewski T, **Harris M**, Biegel L, Morrison V, Merchant M, Safe S. 1992. 6-Methyl-1,3,8-trichlorodibenzofuran (MCDF) as an antiestrogen in human and rodent cancer cell lines: Evidence for the role of the Ah receptor. *Toxicol Appl Pharmacol* 113: 311–318.
- Wenning RJ, **Harris MA**, Ungs MJ, Paustenbach DJ, Bedbury H. 1992. Chemometric comparison of polychlorinated dibenzo-p-dioxin and dibenzofuran residues in surficial sediments from Newark Bay, New Jersey and other industrialized waterways. *Arch Environ Contam Toxicol* 22: 397–413.
- Wenning RJ, **Harris MA**, Paustenbach DJ, Bedbury H. 1992. Potential sources of 1,2,8,9-tetrachlorodibenzo-p-dioxin in the aquatic environment. *Ecotoxicol Environ Safety* 23(2): 133–146.

Safe S, Astroff B, **Harris M**, Zacharewski T, Dickerson R, Romkes M, Biegel L. 1991. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and related compounds as antioestrogens: Characterization and mechanism of action. *Pharmacol Toxicol* 69: 400–409.

Safe S, **Harris M**, Biegel L, Zacharewski T. 1991. Mechanism of action of TCDD as an antiestrogen in transformed human breast cancer and rodent cell lines. *Banbury Report 35: Biological basis for risk assessment of dioxins and related compounds*. Cold Spring Harbor Laboratory Press, pp. 367–377.

Zacharewski T, **Harris M**, Safe S. 1991. Evidence for a possible mechanism of action of the 2,3,7,8-tetrachlorodibenzo-p-dioxin-mediated decrease of nuclear estrogen receptor levels in wild-type and mutant hepa 1c1c7 cells. *Biochem Pharmacol* 41:1931–1939.

Piskorska-Pliszczynska J, Astroff B, Zacharewski T, **Harris M**, Rosengren R, Morrison V, Safe L, Safe S. 1991. Mechanism of action of 2,3,7,8-tetrachlorodibenzo-p-dioxin antagonists: Characterization of 6-[125I] methyl-8-iodo-1,3-dichlorodibenzofuran-Ah receptor complexes. *Arch Biochem Biophys* 284(1): 193–200.

Randerath K, Putman KL, Randerath E, **Harris M**, Zacharewski T, Safe S. 1990. Effects of 2,3,7,8-TCDD and related compounds on the levels of age-dependent I-spot DNA adducts in the liver of female and male Sprague-Dawley rats. *Chemosphere* 20(7–9): 1049–1052.

Randerath K, Putman KL, Randerath E, Zacharewski T, **Harris M**, Safe S. 1990. Effects on 2,3,7,8-tetrachlorodibenzo-p-dioxin on I-compounds in hepatic DNA of Sprague-Dawley rats: sex specific effects and structure-activity relationships. *Toxicol Appl Pharmacol* 103:271–280.

Harris M, Piskorska-Pliszczynska J, Zacharewski T, Safe S. 1990. Human breast cancer cell lines as models for investigating the effects of TCDD and related compounds. *Chemosphere* 20(7–9): 1135–1140.

Harris M, Zacharewski T, Piskorska-Pliszczynska J, Rosengren R, Safe S. 1990. Structure-dependent induction of aryl hydrocarbon hydroxylase activity in C57BL/6 mice by 2,3,7,8-tetrachlorodibenzo-p-dioxin and related congeners: Mechanistic studies. *Toxicol Appl Pharmacol* 105:243–253.

Harris M, Zacharewski T, Safe S. 1990. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin and related compounds on the occupied nuclear estrogen receptor in MCF-7 human breast cancer cells. *Cancer Res* 50: 3579–3584.

Safe S, Mason G, Sawyer T, Zacharewski T, **Harris M**, Yao C, Keys B, Farrell K, Holcomb M, Davis D, Safe L, Piskorska-Pliszczynska J, Leece B, Denomme M, Hutzinger O, Thoma H, Chittim B, Madge J. 1989. Development and validation of in vitro induction assays for toxic halogenated aromatic mixtures: A review. *Toxicol Ind Health* 5(5): 757–775.

Safe S, Zacharewski T, Safe L, **Harris M**, Yao C, Holcomb M. 1989. Validation of the AHH induction bioassay for the determination of 2,3,7,8-TCDD toxic equivalents. *Chemosphere* 18(1–6): 941–946.

Zacharewski T, **Harris M**, Safe S. 1989. Induction of cytochrome P450-dependent monooxygenase activities in rat hepatoma H-4-IIIE cells in culture by 2,3,7,8-tetrachlorodibenzo-p-dioxin and related compounds: Mechanistic studies using radiolabeled congeners. *Arch Biochem Biophys* 272(2):344–355.

Zacharewski T, **Harris M**, Safe S, Thoma H, Hauschulz G, Knorr E, Hutzinger O. 1989. Application of the in vitro AHH induction bioassay for determining 2,3,7,8-TCDD equivalents: Pyrolyzed flame retardant mixtures. *Chemosphere* 18(1–6):383–387.

Harris M, Piskorska-Pliszczynska J, Zacharewski T, Romkes M, Safe S. 1989. Structure-dependent induction of aryl hydrocarbon hydroxylase in human breast cancer cell lines and characterization of the Ah receptor. *Cancer Res* 49: 4531–4535.

Biegel L, **Harris M**, Davis D, Rosengren R, Safe L, Safe S. 1989. 2,2',4,4',5,5'-hexachlorobiphenyl as a 2,3,7,8-tetrachlorodibenzo-p-dioxin antagonist in C57BL/6J mice. *Toxicol Appl Pharmacol* 97: 561–571.

Harris M, Zacharewski T, Astroff B, Kamps C, Safe S. 1989. Characterization of 6-methyl-1,3,8-trichlorodibenzofuran (MCDF) as a 2,3,7,8-TCDD antagonist in male rats: Induction of monooxygenases. *Chemosphere* 19:769–772.

Harris M, Zacharewski T, Astroff B, Safe S. 1989. Partial antagonism of 2,3,7,8-tetrachlorodibenzo-p-dioxin mediated induction of aryl hydrocarbon hydroxylase by 6-methyl-1,3,8-trichlorodibenzofuran: mechanistic studies. *Molec Pharmacol* 35:729–735.

Zacharewski T, **Harris M**, Safe S, Thoma H, Hutzinger O. 1988. Applications of the in vitro aryl hydrocarbon hydroxylase induction assay for determining “2,3,7,8-tetrachlorodibenzo-p-dioxin equivalents”: Pyrolyzed brominated flame retardants. *Toxicology* 51: 177–189.

Harris M, Kamps C, Safe S. 1988. Role of the 4-5S binding protein in the induction of aryl hydrocarbon hydroxylase in the rat. *Carcinogenesis* 9(8): 1475–1479.

BOOKS AND BOOK CHAPTERS

Proctor D, **Harris M**, Rabbe D. 2002. Chapter 9: A risk assessment of chromium contaminated soils: Ten years of research to characterize the health hazards. In: *Human and Ecological Risk Assessment: Theory and Practice*. Paustenbach D (ed). pp. 485–555.

Sanatamaria A, Ferriby L, **Harris M**, Paustenbach D. 2006. Use of biomarkers in health risk assessment. In: *Toxicologic Biomarkers*, DeCaprio A (ed). Informa Healthcare. pp. 85–109.

Proctor D, Finley B, **Harris MA**, Paustenbach DJ Rabbe D (eds). 1997. *Chromium in Soil: Perspectives in Chemistry, Health, and Environmental Regulation*. Lewis Publishers, New York.

ABSTRACTS AND PRESENTATIONS

Perry C, Rish W, Ring C, Mittal L, **Harris M**. Use of probabilistic risk assessment and physiologically based pharmacokinetic modeling in supporting soil remedial objectives for dioxins and furans at a Canadian site. Poster for Society for Risk Analysis, Virtual Annual Meeting, 2020.

Ring C, Fitch S, Haws L, **Harris M**, Wikoff D. Quantitative integration of dose-response data for relative potency estimates of dioxin-like chemicals. Poster for Society of Toxicology, Virtual Annual Meeting, 2020, <https://eventpilotadmin.com/web/page.php?page=Session&project=SOT20&id=P3385>.

Wikoff D, Franzen A, Chappell G, **Harris M**, Thompson C. Systematic characterization of hexavalent chromium and potential female reproductive outcomes: Application of US EPA critical appraisal tools and stepwise inclusion of mechanistic data. Poster for Society of Toxicology, Virtual Annual Meeting, 2020, <https://eventpilotadmin.com/web/page.php?page=Session&project=SOT20&id=P3209>.

Chappell GA, Rager JE, Wolf JC, Babic M, LeBlanc KJ, Ring CL, **Harris MA**, Thompson C. Similarities in the transcriptomic signatures in the duodenum of mice exposed to hexavalent chromium, captan, or folpet inform the mechanisms of chemical-induced mouse small intestine cancer. Presentation at Society of Toxicology Annual Meeting, Baltimore, MD, March 2019.

Brorby G, Ring C, Loko F, **Harris MA**. Characterization of hexavalent chromium and total chromium in drinking water monitoring data. Poster MP 117. Society of Environmental Toxicology and Chemistry (SETAC) North America 39th Annual Meeting, Sacramento, CA, November 4–8, 2018.

Thompson CM, Suh M, Proctor DM, **Harris MA**. Ten factors for considering the mode of action of Cr(VI)-induced intestinal tumors in rodents. Society of Toxicology Annual Meeting, San Antonio, TX, March 11-15, 2018.

Thompson CM, Wolf JC, Suh M, Proctor DM, Haws LC, **Harris MA**. Toxicity and recovery in the duodenum of B6C3F1 mice following treatment with intestinal carcinogens; captan, folpet, and hexavalent chromium: Evidence for an adverse outcome pathway. Society of Toxicology Annual Meeting, San Antonio, TX, March 11–15, 2018.

Thompson C, Rager J, Suh M, Proctor D, Haws L, **Harris M**. Mechanistic support for nonlinear risk assessment of rat oral cavity tumors induced by exposure to Cr(VI) in drinking water. Poster presented at Society of Toxicology Annual Meeting. March 15, 2017. Baltimore, MD.

Chappell G, Welsh B, Harvey S, **Harris M**, Wikoff D. Validation and application of a text mining tool in the identification and categorization of mechanistic data: A case study in improving problem formulation of carcinogenicity assessments. Poster presented at Society of Toxicology Annual Meeting. March 15, 2017. Baltimore, MD.

Kirman CR, Proctor D, Suh M, Haws L, **Harris M**, Thompson C, Hays S. Using physiologically-based pharmacokinetic modeling to address potentially sensitive subpopulations exposure to hexavalent chromium. Poster presented at Society of Toxicology Annual Meeting. March 15, 2017. Baltimore, MD.

Rager JE, Thompson CM, Ring C, Fry RC, **Harris MA**. Integration of transcriptomics and high-throughput screening predictions with robust *in vivo* data to inform hexavalent chromium mode of action. Poster presented at Society of Toxicology Annual Meeting. March 14, 2017. Baltimore, MD.

Thompson C, Kirman C, Suh M, Proctor D, Haws L, **Harris M**, Hays S. Risk assessment of oral exposure to Cr(VI): Integration of mode of action, pharmacokinetics, and dose-response modeling. Poster presented at Society of Toxicology Annual Meeting. March 14, 2017. Baltimore, MD.

Harris MA, Thompson CM, Proctor DM, Suh M, Wolf JC, Seiter JM, Chappell MA, Haws LC. Analysis of duodenal crypt health following exposure to Cr(VI) in drinking water. Presented at the Society of Toxicology's 54th Annual Meeting, March 22-26, 2015. San Diego, CA.

Thompson CM, Young RR, Suh M, Dinesdurage H, Elbekai R, **Harris MA**, Rohr AC, Proctor DM. Hexavalent chromium does not induce mutations in the oral mucosa of transgenic Big Blue® rats following drinking water exposures at a carcinogenic dose. Presented at the Society of Toxicology's 54th Annual Meeting, March 22-26, 2015. San Diego, CA.

Thompson CM, Proctor DM, Suh M, Wolf JC, Haws LC, Seiter JM, Chappell MA, **Harris MA**. X-ray fluorescence microspectroscopic analysis of duodenal mucosae following Cr(VI) exposure in drinking water. Presented at the Society of Toxicology's 53rd Annual Meeting, March 23-27, 2014. Phoenix, AZ.

Harris MA, Thompson CM, Wolf JC, Fedorov Y, Hixon JG, Proctor DM, Suh M, Haws LC. Assessment of genotoxic potential of Cr(VI) in the intestine via *in vivo* intestinal micronucleus assay and *in vitro* high content analysis in differentiated and undifferentiated Caco-2. Presented at the Society of Toxicology's 51st Annual Meeting, March 11-15, 2012. San Francisco, CA.

O'Brien TJ, Hao D, Suh M, Proctor D, Thompson CM, **Harris MA**, Parsons BL, Meyers MB. K-ras codon 12 GGT to GAT mutation is not elevated in the duodenum of mice subchronically exposed to hexavalent chromium in drinking water. Presented at the Society of Toxicology's 51st Annual Meeting, March 11-15, 2012. San Francisco, CA.

Proctor DM, Thompson CM, Suh M, Haws LC, **Harris MA**. Mode of action for intestinal carcinogenesis of ingested hexavalent chromium in mice. Presented at the Society of Toxicology's 51st Annual Meeting, March 11-15, 2012. San Francisco, CA.

Thompson CM, Hixon JG, Kopec AK, **Harris MA**, Proctor DM, Haws LC. Assessment of genotoxic potential of Cr(VI) in the mouse duodenum via toxicogenomic profiling. Presented at the Society of Toxicology's 51st Annual Meeting, March 11-15, 2012. San Francisco, CA.

Wikoff D, DeVito M, Walker N, Hixon G, **Harris M**, Tachovsky A, Birnbaum L, Haws L. Application of machine learning in the development of a weighting framework for evaluating estimates of relative potency for dioxin-like compounds. Presented at the Society of Toxicology's 51st Annual Meeting, March 11-15, 2012. San Francisco, CA.

Haws LC, DeVito MJ, Walker NJ, **Harris MA**, Tachovsky JA, Birnbaum LS, Farland WH, Wikoff DS. Development of a consensus-based weighting framework for evaluating estimates of relative potency for dioxin-like compounds that includes consideration of data from human cells. Presented at Dioxin 2011, August 21-25, 2011. Brussels, Belgium.

Haws LC, Fitzgerald L, Burkhalter B, **Harris M**, Wikoff DS. Assessment of the US EPA's proposed toxicological values for TCDD for regulation of dioxin-like compounds in foods: Bridging the science divide in a global market. Presented at Dioxin 2011, August 21-25, 2011. Brussels, Belgium.

Wikoff DS, Thompson C, Walker N, DeVito M, **Harris M**, Birnbaum L, Haws L. Derivation of relative potency estimates using benchmark dose modeling: A case study with TCDF. Presented at Dioxin 2011, August 21-25, 2011. Brussels, Belgium.

Fitzgerald L, Burkhalter B, Urban J, Staskal D, **Harris M**, Haws L. VOC serum levels in the general U.S. population: An analysis of the 2003-2004 NHANES dataset. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

Haws L, Proctor D, Thompson C, **Harris M**. Research plan to fill data gaps in the mode of action for cancer risk assessment of hexavalent chromium in drinking water. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

Kim S, Thompson CM, Kopec AK, **Harris MA**, Zacharewski TR. Comparison of basal and CrVI-mediated solute carrier gene expression in rodent duodenal epithelium. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

Proctor D, Thompson C, Haws L, **Harris M**. Use of mode of action and pharmacokinetic findings to inform the cancer risk assessment of ingested Cr(VI): A case study. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

Urban J, Fitzgerald L, Burkhalter B, Staskal D, **Harris M**, Haws L. BTEX serum levels in the general U.S. population: An analysis of 2003-2004 NHANES dataset. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

Harris M, Tachovsky JA, Staskal-Wikoff D, Aylward L, Burkhalter B, Simon T, Haws L. Serum concentrations of dioxin-like compounds in a population in Midland, Michigan: An evaluation of the impact of soil exposures. Presented at Dioxin 2010, September 12-17, 2010, San Antonio, TX.

Harris M, Tachovsky JA, Staskal-Wikoff D, Simon T, Burkhalter B, Urban J, Haws L. Assessment of the impact of various soil cleanup levels on serum concentrations of dioxin-like compounds in humans. Presented at the 49th Annual Meeting of Society of Toxicology. March 7-11, 2010. Salt Lake City, Utah.

Haws L, Tachovsky JA, Staskal-Wikoff D, Aylward L, Burkhalter B, Urban J, Simon T, **Harris M**. An evaluation of the influence of different soil cleanup levels on the concentration of dioxin-like compounds in human serum. Presented at Dioxin 2010, September 12-17, 2010, San Antonio, TX.

Staskal-Wikoff D, Burkhalter B, Stapleton H, **Harris M**. PBDEs in Newark Bay sediments. Presented at Dioxin 2010, September 12-17, 2010, San Antonio, TX.

Tachovsky A, Staskal D, Urban J, **Harris MA**, Haws L. Assessment of environmental data collected in a community with numerous petroleum refining and petrochemical facilities. Presented at the 49th Annual Meeting of Society of Toxicology. March 7-11, 2010. Salt Lake City, Utah.

Urban J, Burkhalter B, Tachovsky JA, Haws L, **Harris M**. Evaluation of polychlorinated naphthalenes (PCNs) in Newark Bay sediment. Presented at Dioxin 2010, September 12-17, 2010, San Antonio, TX.

Haws LC, DeVito MJ, Walker NJ, Birnbaum LS, Farland WH, **Harris MA**, Tachovsky JA, Unice KM, Scott PK, Staskal-Wikoff DF. Development of distributions of relative potency estimates to quantitatively assess uncertainty inherent in the TEFs for dioxin-like compounds: A proposed consensus-based weighting. Presented at Dioxin 2009. Beijing, China.

Staskal-Wikoff DF, **Harris MA**, Haws LC, Birnbaum LS, Tachovsky JA. Probabilistic evaluation of cancer and non-cancer risk associated with exposure to BDE 209 in automobiles. Presented at Dioxin 2009. Beijing, China.

Urban JD, Tachovsky JA, Staskal DF, Haws LC, **Harris MA**. Human health risk assessment of consumption of fish from the Lower Passaic River. Presented at the 48th Annual Meeting of Society for Toxicology. March 15-19, 2009. Baltimore, MD.

Harris MA, Shay E, Unice KM, Scot LF, Haws LC. 2008. Preliminary evaluation of health risks posed by PCDD/Fs and PCBs from the ingestion of fish from the Lower Passaic River. Presented at Dioxin 2008, August 17-22, 2008. Birmingham, England.

Staskal DF, Tachovsky JA, **Harris MA**, Haws LC. 2008. Preliminary evaluation of human health risks associated with exposure to PBDEs in the United States. Presented at Dioxin 2008, August 17-22, 2008. Birmingham, England.

Tachovsky JA, **Harris MA**, Scott L, Luksemburg W, Paustenbach D. 2008. Analysis of fish tissue concentrations of dioxins and furans using principal components analysis. Presented at Dioxin 2008, August 17-22, 2008. Birmingham, England.

Staskal D, Urban J, Scott L, Scott P, Tachovsky A, Unice K, **Harris M**. 2008. A framework for evaluating serum dioxin data derived from biomonitoring studies. Presented at Dioxin 2008, August 17-22, 2008. Birmingham, England.

Haws L, Unice K, Tachovsky A, **Harris M**, DeVito M, Walker N, Birnbaum L, Farland W, Nguyen L, Staskal D. 2008. Assessment of the impact of using weighted distributions of REPs to develop exposure estimates for dioxin-like compounds. Presented at Dioxin 2008, August 17-22, 2008. Birmingham, England.

Harris MA, Tachovsky JA, Williams ES, Paustenbach DP, Haws LC. 2008. Assessment of the health risks posed by benzene in soft drinks. Society of Toxicology Annual Meeting. March 16–20, 2008. Seattle, WA. *The Toxicologist* 102:142.

Haws LC, DeVito MJ, Walker NJ, Birnbaum LS, Unice KM, Scott PK, **Harris MA**, Tachovsky A, Farland WH, Finley BF, Staskal DF. 2008. Development of weighted distributions of REPs for dioxin-like compounds: Implications for risk assessment. Society of Toxicology Annual Meeting. March 16–20, 2008. Seattle, WA. *The Toxicologist* 102:242.

Scott LLF, Staskal DF, **Harris MA**, Finley BL, Haws LC. 2008. Evaluation of dioxin-like compounds in workers from a primary magnesium production facility relative to levels observed in the general US population. Society of Toxicology Annual Meeting. March 16–20, 2008. Seattle, WA. *The Toxicologist* 102:358.

Staskal DF, Donovan EP, Haws LC, Roberts JD, Unice KM, Finley BL, **Harris MA**. 2008. Human health risks associated with exposure to pathogens in waters and sediments of the Lower Passaic River. Society of Toxicology Annual Meeting. March 16–20, 2008. Seattle, WA. *The Toxicologist* 102:370.

Urban JD, Haws LC, Scott LF, Scott PS, Staskal DF, Tachovsky AT, Unice KM, **Harris MA**. 2008. A framework for evaluating serum dioxin data derived from biomonitoring studies. Society of Toxicology Annual Meeting. March 16–20, 2008. Seattle, WA. *The Toxicologist* 102:246.

Haws LC, Scott LLF, Staskal DF, **Harris MA**, Finley BL. 2007. Dioxin-like compounds in workers at a primary magnesium production facility. *Organohalogen Compounds*, 69:2098–2101.

Scott P, Haws L, Scott L, **Harris M**. 2007. Evaluation of background dioxin-like PCB congener profiles in human serum collected during NHANES 2001–2002 using principal components analysis. *Organohalogen Compounds*, 69:2014–2017.

Scott P, Haws L, Scott L, **Harris M**. 2007. Evaluation of background 2,3,7,8-PCDD/F congener profiles in human serum collected during NHANES 2001–2002 using principal components analysis. *Organohalogen Compounds* 69:2010–2013.

Harris M, Haws LC, Tachovsky A, Williams ES, Nguyen LM, Scott LF. Interactive processes in toxicity assessments. *Air Toxics Research: Implications of Research on Policies to Protect Public Health*. June 12–13, 2007. Houston, TX.

Haws LC, Scott LLF, Staskal DF, **Harris M**, Finley B. 2007. Evaluation of biomonitoring data for dioxin-like compounds in workers at a primary magnesium production facility. Society for Risk Analysis Annual Meeting. December 9–12, 2007. San Antonio, TX. Abstract Book-M5-69:84–85.

Harris M, tachovsky JA, Williams ES, Scott LLF, Nguyen L, Haws LC. 2007. Risks posed by air pollutants in the Houston metropolitan area. Society for Risk Analysis Annual Meeting. December 9–12, 2007. San Antonio, TX. Abstract Book-T2-G.4:82–83.

Staskal DF, Donovan EP, Haws LC, Roberts JD, Unice KM, Finley BL, **Harris MA**. 2007. A quantitative microbial risk assessment for exposure to pathogens in waters and sediments of the Lower Passaic River. Society for Risk Analysis Annual Meeting. December 9–12, 2007. San Antonio, TX. Abstract Book-M2-G.1:135.

Tachovsky JA, Haws LC, Scott LLF, Williams ES, **Harris M**. 2007. Benzene in soft drinks and other beverages: Do measured levels pose a human health risk? Society for Risk Analysis Annual Meeting. December 9–12, 2007. San Antonio, TX. Abstract Book-M5.70:138.

Staskal DF, Scott LLF, Williams ES, Luksemburg WJ, Haws LC, Birnbaum LS, Nguyen LM, Paustenbach DJ, **Harris MA**. 2007. Daily intake estimates of PBDEs associated with consumption of catfish in the U.S. Presented at the Fourth International Workshop on Brominated Flame Retardants. April 24–27, 2007. Amsterdam, the Netherlands.

Ferriby LL, **Harris MA**, Unice KM, Scott PK, Haws LC, Paustenbach DJ. 2007. Development of PCDD/F and dioxin-like PCB serum concentration reference values for the general U.S. population using the 2006 WHO TEFs and the 2001–2002 NHANES data. Presented at the Society of Toxicology's 46th Annual Meeting. March 25–29, 2007. Charlotte, NC.

- Haws LC, Walker NJ, DeVito MJ, Birnbaum LS, Unice KM, Scott PK, **Harris MA**, Farland WH, Finley BL, Staskal DF. 2007. Development of weighted distributions of REPs for dioxin-like compounds (DLCs). Presented at the Society of Toxicology's 46th Annual Meeting. March 25–29, 2007. Charlotte, NC.
- Williams ES, Ferriby LL, Haws LC, Paustenbach DJ, **Harris MA**. 2007. Assessment of potential human health risks posed by benzene in a commercial beverage. Presented at the Society of Toxicology's 46th Annual Meeting. March 25–29, 2007. Charlotte, NC.
- Nguyen LM, Staskal DF, Ferriby LL, Williams ES, Luksemburg WJ, Haws LC, Birnbaum LS, Paustenbach DJ, **Harris MA**. 2007. Dietary intake of PBDEs based on consumption of catfish in southern Mississippi. Presented at the Society of Toxicology's 46th Annual Meeting. March 25–29, 2007. Charlotte, NC.
- Scott LLF, **Harris M**, Unice KM, Scott P, Nguyen LM, Haws LC, Paustenbach D. 2007. Effects of excluding serum PCDD/F and dioxin-like PCB data of individuals with incomplete congener profiles on estimates of total TEQ. *Ann Epidemiol* 17:732.
- Paustenbach DJ, Scott LLF, Nguyen LM, Unice KM, Scott P, Haws LC, **Harris M**. 2007. Referent concentrations of PCDD/Fs and dioxin-like PCBs in sera of persons in the U.S. based on the new WHO 2006 TEFs and 2001–2002 NHANES data. *Ann Epidemiol* 17:734.
- Nguyen LM, Scott LLF, **Harris M**, Haws LC. 2007. Factors contributing to blood lead levels in U.S. children based on NHANES Data. *Ann Epidemiol* 17:734–735.
- Harris M**, Scott LLF, Nguyen LM, Haws LC. 2007. Trends in elevated blood lead levels of U.S. children and associated demographic characteristics. *Ann Epidemiol* 17:748.
- Scott LLF, Nguyen LM, Craft E, Haws LC, **Harris M**. 2007. Comparison of acute lymphocytic leukemia cancer rates among urban areas and counties within Texas. *Am J Epidemiol* 165:S6.
- Staskal DF, Ferriby LL, Williams ES, Luksemburg WJ, Haws LC, Birnbaum LS, Paustenbach DJ, **Harris MA**. 2006. Polybrominated diphenyl ethers in southern Mississippi catfish. *Organohalogen Compounds* 68:1839–1842.
- Paustenbach DJ, **Harris MA**, Ferriby LL, Williams ES, Haws LC, Unice KM, Scott PK. 2006. Development of PCDD/F TEQ serum reference values for the U.S. population for use in evaluating biomonitoring results. *Organohalogen Compounds* 68:480–483.
- Scott PK, Haws LC, Staskal DF, Birnbaum LS, Walker NJ, DeVito MJ, **Harris MA**, Farland WH, Finley BL, Unice KM. 2006. An alternative method for establishing TEFs for dioxin-like compounds. Part 1. Evaluation of decision analysis methods for use in weighting relative potency data. *Organohalogen Compounds* 68.
- Haws LC, DeVito MJ, Birnbaum LS, Walker NJ, Scott PK, Unice KM, **Harris MA**, Farland WH, Finley BL, Staskal DF. 2006. An alternative method for establishing TEFs for dioxin-like compounds. Part 2. Development of an approach to quantitatively weight the underlying potency data. *Organohalogen Compounds* 68.
- Staskal DF, Unice KM, Walker NJ, DeVito MJ, Birnbaum LS, Scott PK, **Harris MA**, Farland WH, Finley BL, Haws LC. 2006. An alternative method for establishing TEFs for dioxin-like compounds. Part 3. Development of weighted distributions of REPs for PCB126 and 2,3,4,7,8-PeCDF. *Organohalogen Compounds* 68.
- Ferriby LL, Williams ES, Luksemburg WJ, Paustenbach DJ, Haws LC, Birnbaum LS, and **Harris MA**. 2006. Comparing polychlorinated biphenyls in farm-raised and wild-caught catfish from southern Mississippi. *Organohalogen Compounds* 68:2527–2530.
- Ferriby LL, Williams ES, Luksemburg WJ, Paustenbach DJ, Haws LC, Birnbaum LS, **Harris MA**. 2006. Comparing PCDDs, PCDFs, and dioxin-like PCBs in farm-raised and wild-caught catfish from southern Mississippi. *Organohalogen Compounds* 68:612–615.

Haws LC, Scott PK, Unice KM, Gough M, **Harris MA**, Staskal DF, Paustenbach DJ, Pavuk M. 2006. Are dioxin body burdens surrogates for other risk factors in associations between dioxin and diabetes? *Organohalogen Compounds* 68.

Ferriby LL, Franke K, Unice KM, Scott P, Haws LC, **Harris M**, Paustenbach DJ. 2006. Serum reference levels of PCDD/Fs and dioxin-like PCBs stratified by race/ethnicity, gender and age for the general U.S. population. Presented at the American Public Health Association's 134th Annual Meeting and Exposition. November 4–8, 2006. Boston, MA.

Staskal DF, Ferriby LL, Williams ES, Luksemburg WJ, Haws LC, Birnbaum LS, Paustenbach DJ, **Harris MA**. 2006. Polybrominated diphenyl ethers in southern Mississippi catfish. Presented at the 26th International Symposium on Halogenated Environmental Organic Pollutants and POPs. August 21–25, 2006. Oslo, Norway.

Paustenbach DJ, **Harris MA**, Ferriby LL, Williams ES, Haws LC, Unice KM, Scott PK. 2006. Development of PCDD/F TEQ serum reference values for the U.S. population using results from the 2001–2002 National Health and Nutrition Examination Survey (NHANES). Presented at the 26th International Symposium on Halogenated Environmental Organic Pollutants and POPs. August 21–25, 2006. Oslo, Norway.

Harris M, Ferriby L, Knutsen J, Nony P, Unice K, Paustenbach D. 2006. Evaluation of PCDD/F and dioxin-like PCB serum concentration data from the 2001–2002 National Health and Nutrition Examination Survey in the United States. *Society of Toxicology*. March 5–9, 2006. San Diego, CA.

Gough M, Paustenbach D, Kerger B, Leung H, Scott P, **Harris M**. 2006. Dioxin and diabetes: Does the current weight of evidence demonstrate a relationship? *Society of Toxicology*. March 5–9, 2006. San Diego, CA.

Harris M, Finley B, Scott P. 2005. Development of a relative estimate of potency distribution for 2,3,7,8-TCDF. 25th International Symposium on Halogenated Environmental Organic Pollutants and Persistent Organic Pollutants (POPs). *Dioxin 2005*. August 21–26, 2005. Toronto, Canada.

Paustenbach D, Fehling K, **Harris M**, Scott P, Kerger B. 2005. Identifying a soil-clean-up criteria for dioxin in residential soils: How has 20 years of research and risk assessment experience impacted the analysis? 25th International Symposium on Halogenated Environmental Organic Pollutants and Persistent Organic Pollutants (POPs). *Dioxin 2005*. August 21–26, 2005. Toronto, Canada.

Harris M, Finley B. Estimating the total TEQ in human blood from naturally-occurring vs. anthropogenic dioxins: A dietary study. *Society of Toxicology*. March 6–10, 2005. New Orleans, LA.

Connor K, **Harris M**, Edwards M, Chu A, Clark G, Finley B. 2004. Estimating the total TEQ in human blood from naturally-occurring vs. anthropogenic dioxins: A dietary study. *Dioxin 2004*. September 6–10, 2004. Berlin, Germany.

Haws L, **Harris M**, Su S, Birnbaum L, DeVito M, Farland W, Walker N, Connor K, Santamaria A, Finley B. 2004. Development of a refined database of relative potency estimates to facilitate better characterization of variability and uncertainty in the current mammalian TEFs for PCDDs, PCDFs, and dioxin-like PCBs. *Dioxin 2004*. September 6–10, 2004. Berlin, Germany.

Haws L, **Harris M**, Su S, Walker N, Birnbaum L, DeVito M, Farland W, Connor K, Santamaria A, Finley B. 2004. A preliminary approach to characterizing variability and uncertainty in the mammalian PCDD/F and PCB TEFs. *Dioxin 2004*. September 6–10, 2004. Berlin, Germany.

Skaggs MM Jr, **Harris M**. 2001. A management trend: Towards special remedial organizations. SPE/ EPA/DOE Exploration and Production Environmental Conference. February 26–28, 2001. San Antonio, TX.

Harris M, Skaggs MM. A review of chromium treatment technologies. YPF Environmental Congress. September 1998. Buenos Aires, Argentina.

- Harris M**, Biegel L, Zacharewski T, Safe S. 6-methyl-1,3,8-trichlorodibenzofuran (MCDF) as an antiestrogen: Effects on nuclear estrogen receptor levels, cell growth and the 17 β -estradiol-induced secretion of proteins in MCF-7 Cells. Society of Toxicology 30th Annual Meeting. February 25–March 1, 1991. Dallas, TX.
- Safe S, **Harris M**, Zacharewski T, Biegel L. 1990. 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) as an antiestrogen in human breast cancer cells: Mechanistic studies. Proceedings Dioxin '90, Eco-Inforna Press. Bayreuth, Germany, 1:137–140.
- Harris M**, Zacharewski T, Safe S. 2,3,7,8-Tetrachlorodibenzo-p-dioxin as an antiestrogen: Effects of nuclear estrogen receptor levels in MCF-7 Cells. Society of Toxicology Meeting. February 12–16, 1990. Miami Beach, FL.
- Harris M**, Romkes M, Safe S. Human breast cancer cells as models for investigating Ah receptor mediated processes. Dioxin '89. September 17–22, 1989. Toronto, Canada.
- Harris M**, Romkes M, Safe S. Human breast cancer cells as models for investigating Ah receptor mediated processes. Society of Toxicology 28th Annual Meeting. February 27–March 3, 1989. Atlanta, GA.
- Harris M**, Zacharewski T, Astroff B, Kamps C, Safe S. Characterization of 6-methyl-1,3,8-trichlorodibenz-furan (MCDF) as a 2,3,7,8-TCDD antagonist in male rats: Induction of monooxygenases. Dioxin '88 Symposium. August 21–26, 1988. Umea, Sweden.
- Harris M**, Kamps C, Safe S. Role of 4s binding protein in the induction of aryl hydrocarbon hydroxylase in the rat. Society of Toxicology 27th Annual Meeting. February 15–19, 1988. Dallas, TX..
- Skaggs MM Jr, **Harris MA**. 1997. Risk management strategies for site closure actions. National Association for Environmental Management. October 1997. Dallas, TX.
- Fernandez P, **Harris M**, Safe S. 1991. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on T47-D human breast cancer cell lines. Society of Toxicology 30th Annual Meeting. February 25–March 1, 1991. Dallas, TX.
- Arrellano L, **Harris M**, Safe S. 1991. Induction of Cyp1a1 gene transcription by TCDD in MDA-MB-231 human breast cancer cells. Society of Toxicology 30th Annual Meeting. February 25–March 1, 1991. Dallas, TX.
- Harris M**, Finley B, Wenning R, Paustenbach D. 1991. Evaluation of potential sources of 1,2,8,9-TCDD in aquatic biota from Newark Bay. Society of Toxicology 30th Annual Meeting. February 25–March 1, 1991. Dallas, TX.
- Piskorska-Pliszczynska J, Astroff B, Zacharewski T, **Harris M**, Rosengren R, Morrison V, Safe L, Safe S. 1991. Mechanism of action of 2,3,7,8-tetrachlorodibenzo-p-dioxin antagonists: Characterization of [125I]-6-methyl-8-Iodo-1,3-dichlorodibenzofuran-Ah receptor complexes. Society of Toxicology 30th Annual Meeting. February 25–March 1, 1991. Dallas, TX.
- Copeland T, **Harris M**, Finley B, Paustenbach D. 1991. Health effects and environmental characterization of Octachlorodibenzo-p-dioxin (OCDD): Impact on risk assessment of former wood treatment sites. Society of Toxicology 30th Annual Meeting. February 25–March 1, 1991. Dallas, TX.
- Harris M**, Wenning R, Finley B, Paustenbach D. 1990. Evaluation of potential sources of 1,2,8,9-TCDD in aquatic biota from Newark Bay. Society of Environmental Chemistry and Toxicology. November 11–15, 1990. Washington, DC.
- Zacharewski T, Piskorska-Pliszczynska J, Rosengren F, Astroff B, **Harris M**, Safe L, Safe S. 1990. 8-Iodo-1,3-dichlorodibenzofuran (I-MCDF) and 125I-MCDF as a 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) antagonist. Society of Toxicology Meeting. February 12–16, 1990. Miami Beach, FL.
- Zacharewski T, **Harris M**, Safe S. 1989. Structure dependent induction of aryl hydrocarbon hydroxylase of TCDD and related compounds: mechanistic studies. Society of Toxicology 28th Annual Meeting. February 27–March 3, 1989. Atlanta, GA.

Randerath K, Putman KL, Randerath E, **Harris M**, Zacharewski T, Safe S. Effects of 2,3,7,8-TCDD and related compounds on the levels of age-dependent i-spot DNA adducts in the liver of female and male Sprague-Dawley rats. Dioxin '89. September 17–22, 1989. Toronto, Canada.

Zacharewski T, **Harris M**, Safe S. 1988. Validation of the in vitro bioassay: Determination of 2,3,7,8-TCDD equivalents in pyrolyzed flame retardants and great lakes fish extracts. Gulf Coast Society of Toxicology and Southwest Environmental Mutagens Society Meeting. 1988. Houston, TX.

Zacharewski T, **Harris M**, Safe S, Thoma H, Hauschulz G, Knorr E, Hutzinger O. 1987. Applications of the in vitro AHH induction bioassay for determining 2,3,7,8-TCDD equivalents: Pyrolyzed flame retardant mixtures. Dioxin '87 Symposium. October 4–9, 1987. Las Vegas, NV.

Safe S, Zacharewski T, **Harris M**, Yao C, Holcomb M. 1987. Validation of the AHH induction bioassay for the determination of 2,3,7,8-TCDD toxic equivalents. Dioxin '87 Symposium. October 4–9, 1987. Las Vegas, NV.

Kamps, C., **M. Harris**, and S. Safe. 1987. Polynuclear aromatic hydrocarbon—4s binding protein interactions. Structure activity relationships. Society of Toxicology 26th Annual Meeting. February 1987. Washington DC.