

# Engineering & Scientific Consulting

# Philip Bolger, Ph.D., DABT

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### **Professional Profile**

Dr. Bolger is a board-certified toxicologist by the American Board of Toxicology. Since 1980, he has been involved in the hazard, safety, and risk assessment of anthropogenic and naturally derived contaminants in food. Dr. Bolger received his Bachelor's Degree in biology from Villanova University and his Doctoral Degree in physiology and biophysics from Georgetown University.

After a three year postdoctoral position at the Georgetown University Medical Center, he became a staff fellow in toxicology with the Bureau of Foods in the U.S. Food and Drug Administration (FDA). Upon completion of his staff fellowship, he accepted a position as a toxicologist with the Contaminants Branch at the FDA.

Prior to joining Exponent, Dr. Bolger was the Director of the Chemical Hazards Assessment staff in the Office of Food Safety, which is responsible for the hazard, safety, and risk assessment of food borne contaminants, and for reporting FDA monitoring efforts on food-borne environmental contaminants and the conduct of exposure assessments. Dr. Bolger is currently serving as a food safety expert of the World Health Organization and as a member of the Joint Expert Committee on Food Additives and the Foodborne Disease Burden Epidemiology Reference Group of the World Health Organization.

Dr. Bolger is the recipient of the 2009 Arnold J. Lehman Award conferred by the Society of Toxicology and the 2010 Outstanding Risk Practitioner Award conferred by the Society of Risk Analysis.

#### Academic Credentials & Professional Honors

Ph.D., Physiology and Biophysics, Georgetown College, 1976

B.S., Biology, Villanova University, 1971

Outstanding Risk Practitioner of the Year Award, Society of Risk Analysis, December 2010

Commissioner's Special Citatiom, "For significant achievement in protecting public health through the method development and sample analysis of pear juice products for toxic inorganic arsenic species," June 2009

Arnold J. Lehman Award, Society of Toxicology "In recognition of his major contributions to risk assessment and the regulation of chemical agents," March 2009

Appointed as member to the Foodborne Disease Burden Epidemiology Reference Group of the World Health Organization, October 2009

Appointed to the organizing committee for the workshop on establishing methodologies for assessing cancer risk from intermittent or short-term exposure to carcinogens of the International Life Sciences Institute, March 2009

Appointed to the steering committee for the workshop on evaluating epigenetic changes of the International Life Sciences Institute, June 2008

FDA Commissioner's Special Citation Award for exemplary performance to protect the public health from adulterated protein – 2008

FDA Leveraging/Collaboration Award for interagency cooperation in response to polonium in well water – 2008

Member of the organizing committee of the ILSI workshop on the Application of the Margin of Exposure Approach to Genotoxic Carcinogens in Food–2007

Member to the Foodborne Disease Burden Epidemiology Reference Group of the World Health Organization–2008

Advisor to the Foodborne Disease Burden Epidemiology Reference Group of the World Health Organization–2007

FDA Outstanding Service Award, Lead in Candy Guide Group award-2006

FDA/CFSAN Exceptional Achievement Award, Allergen Threshold Workgroup-2006

FDA/CFSAN's Furan Development Team Award–2005

Reappointed as Food Safety Expert of the World Health Organization – 2000.

Charles C. Shephard Science Award, Center for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry–2004

FDA Leadership Award for exceptional contributions in providing leadership in JECFA assessments on cadmium and methylmercury, 2003.

FDA Group Recognition Award, Mycotoxin Work, Group, 2002

FDA Leadership Award for rapidly and effectively prioritizing potential chemical threat agents for foods, 2002

Appointed to the Steering Group of the Project to Update Principles and Methods for the Risk Assessment of Chemicals in Food of the World Health Organization 200

Member of the Expert Advisory Panel on Food Safety of the World Health Organization, appointed in 2000

Appointed as Food Safety Expert of the World Health Organization – 2000.

CFSAN's Leadership Award – For exceptional leadership in directing CFSAN chemical health hazard and risk assessments – 1999

FDA Group Recognition Award – 1998 (For meritorious service in the completion of a multi-agency dioxin investigation contribution to significant consumer protection while also minimizing economic impact on industry)

Society of Toxicology Media contact specialist - appointed in 1997 and serving to the present time

Councilor, Risk Assessment Specialty Section, Society of Toxicology, 1997–1999

Candidate for Councilor, Risk Assessment Specialty Section of the Society of Toxicology-1997

Member, Selection Committee for the Risk Assessment Specialty Section of the Society of Toxicology–1996

FDA Group Recognition Award, Wheat Contamination Response Group, 1996

Candidate for Councilor, Risk Assessment Specialty Section of the Society of Toxicology-1995

FDA Group Recognition Award–1996 (For dedication and effective use of resources in responding to the severe contamination of the 1993 wheat and barley crops with the mycotoxin deoxynivalenol)

Public Health Service Special Recognition Award, Department of Health and Human Services–1993 (For leadership in dealing with the hazard and risk assessment of contaminants in seafood and other food)

Appointed to Center for Safety and Applied Nutrition, FDA's Human Health Haz

# Licenses and Certifications

Diplomate of the American Board of Toxicology (DABT)

# **Prior Experience**

Supervisory/Expert Physiologist/Toxicologist and Chief of the Chemical Hazards Assessment Team, Office of Food Safety, Center for Food Safety and Applied Nutrition (CFSAN)/ Food and Drug Administration (FDA), 2000-2012

Supervisory Physiologist/Toxicologist and Chief of the Contaminants Standards, Monitoring and Program, Division of Programs and Enforcement Policy, Office of Plant and Dairy Foods and Beverages, Center for Food Safety and Applied Nutrition (CFSAN)/ Food and Drug Administration (FDA), 1986-2000

Review Physiologist/Toxicologist in the Contaminants and Natural Toxicants Evaluation Branch/ Division of Toxicology/CFSAN/FDA, 1980-1986

Staff Fellow Physiologist/Toxicologist in the Colors and Cosmetics Evaluation Branch/ Division of Toxicology/ Bureau of Foods/ Food and Drug Administration, 1978-1980

Postdoctoral Research Associate in the Department of Physiology and Biophysics/ Georgetown University Medical Center, Washington, DC, 1976-1978

NIH Pre-doctoral Research Trainee (U.S.P.H.S. Training Grant HL 05527), Department of Physiology and Biophysics, Georgetown University Medical Center, 1973-1976

## **Professional Affiliations**

American Association for the Advancement of Science

American Chemical Society (Division of Environmental Chemistry)

American College of Toxicology

American Conference of Governmental Industrial Hygienists

American Heart Association, Nation's Capital Affiliate

American Physiological Society

American Society of Nephrology

International Society for the Study of Xenobiotics

National Capitol Area Chapter of the Society of Toxicology

New York Academy of Sciences

Society for Experimental Biology and Medicine (District of Columbia Chapter)

Society for Occupational and Environmental Health

Society of Environmental Geochemistry and Health

Society of Environmental Toxicology and Chemistry

Society of Risk Analysis

Society of Toxicology

#### **Publications**

Bolger PM, Eisner GM, Ramwell PW Slotkoff LM. Effect of prostaglandin synthesis on renal function and renin in the dog. Nature 1976; 259:244-245.

Bolger PM. The effect of prostaglandin synthesis on canine renal function. Ph.D. thesis, Dahlgren Memorial Library, Georgetown University Medical Center, Washington, D.C. and University of Microfilm, Ann Arbor, MI, 1976.

Bolger PM, Eisner GM, Shea PT, Ramwell PW Slotkoff LM. Effects of prostaglandin D2 on canine renal function. Nature 1977; 267:626-630.

Bolger PM, Eisner GM, Ramwell PW, Slotkoff LM, Corey EJ. Renal actions of prostacyclin. Nature 1978; 271:467-469.

Sinetetos AL, Bolger PM, Ramwell PW. Effects of prostacyclin on isolated canine renal artery and vein. In: Prostacyclin. Vane J, Bergstrom S (eds), Raven Press, New York, NY, pp. 269-274, 1978.

Shea-Donohue PT, Bolger PM, Eisner GM Slotkoff LM. Effects of PGE2 on electrolyte and fluid excretion in the canine kidney. Evidence for a direct tubular effect. Canadian Journal of Physiology and Pharmacology 1979; 57:1448-1452.

Bolger PM, Ramwell PM, Eisner GM, Slotkoff LM. The effect of components of the arachidonate cascade on the intact dog kidney. In: Hemostasis, Prostaglandins and Renal Disease. G. Remuzzi, G. Mecca and G. de Gactano (eds), Raven Press, New York, NY, pp.189 198, 1980.

Hattan DG, Henry SH, Montgomery SG, Bleiberg MJ, Rulis AM, Bolger PM. The role of the Food and Drug Administration in the regulation of neuroeffective food additives. In: Nutrition and the Brain. R. Wurtman and D. Wurtman (eds), Raven Press, pp. 31-99, 1983.

Wagstaff DJ, Meaburn M, Bolger M, Conrath S, Hackley B. Status of data sources on fish consumption in the United States. Marine Fisheries Review 1986: 48:20 23.

Boyer IJ, Bolger PM, Henry S, Kokoski C. Role of the FDA in establishing tolerable levels for dioxin and PCBs in aquatic organisms. Journal of Toxicology and Environmental Health 1990; 33:91-100.

Henry SH, Bolger PM, Cramer G, Lorentzen R, Scheuplein R, Springer J, Kuznesof P, Lewis C, Schwartz P. U.S. Food and Drug Administration assessment of upper bound lifetime risk from various products contaminated with dioxins from paper mill effluent or from contact with bleached paper products. Organohalogen Compounds - Dioxin 90 1990; 3:243-246.

Cramer G, Bolger PM, Henry SH, Kuznesof P, Lewis C, Lorentzen R, Scheuplein R, Schwartz P, Springer J. USFDA assessment of exposure to 2,3,7,9 TCDD and 2,3,7,8 TCDF from foods contacting bleached paper products. Organohalogen Compounds - Dioxin 90 1990; 3:227-230.

Bolger PM, Carrington C, Capar S, Adams M. Reductions in dietary lead exposures in the United States. Chemical Speciation Bioavailability 1991; 3:31-36.

Carrington C, Bolger PM. An assessment of the hazards of lead in food. Regulatory Toxicology and Pharmacology 1992; 16:265-272.

Carrington C, Sheehan D, Bolger PM. Hazard assessment of lead. Food Additives and Contaminants 1993; 10:325-335.

Adams M, Bolger M. Dietary intake and hazards of arsenic. In: Arsenic—Exposure and health. Science Technology Letters 1995; 41-49.

Bolger M, Yess N, Gunderson E, Troxell T, Carrington C. Identification and reduction of sources of dietary lead in the United States. Food Additives and Contaminants 1996; 13:53-60.

Carrington C, Bolger M, Scheuplein R. Risk analysis of dietary lead exposure. Food Additives Contaminants 1996; 13:61-76.

Bolger M, Carrington C. Methylmercury hazards and risks—What is the question. Proceedings of Intersociety of Energy Conversion, 1996.

Bolger M, Henry S, Carrington C. Hazard and risk assessment of crude oil contaminants in subsistence seafood samples from Prince William Sound. American Fisheries Society Symposium 1996; 18:837-843.

Bolger M, Carrington C, Henry S. Risk assessment for risk management and regulatory decision-making at the U.S. Food and Drug Administration. In: Toxicology and Risk Assessment: Principles, Methods and Applications. A. Fan and L. Chang (eds), Marcel Dekker, Inc., New York, pp.791-798, 1996.

Bolger M, Carrington C. Methylmercury hazards and risks—What is the question? Proceedings, 31st Intersoc. Energy Conf., pp. 2330-2334, 1997.

Bolger M. International/U.S. Approaches to risk assessment/management. Risk Assessment-what is the question? Chapter 6. In: Risk Harmonization - Federal/State Approaches to Health Risks from Environmental Hazards. John Wiley Publisher, pp.51-60, 1997.

Bolger M. A case study. sport fish consumption advisories in the Great Lakes region. Chapter 13. In: Risk Harmonization - Federal/State Approaches to Health Risks from Environmental Hazards, John Wiley Publisher, pp. 167-168, 1997.

Bolger M. Safety/risk assessment of neurodevelopmental toxins in food. Mental Retardation and Developmental Disabilities Research Reviews 1997; 3:275-278.

Adams M, Kuznesof P, Bolger M. Non-plastic beverage containers. potential migrants and possible health effects. European Journal of Oncology 1997; 2:553-557.

Carrington C, Bolger M. A risk assessment for methylmercury in tuna. Water, Air Soil Pollution 1997; 97:273-283.

Humphreys S, Bolger M. A public health analysis of dietary aluminum. Chapter 16. In: Aluminum Toxicity in Infants and Health and Nutrition. Wiley Publishers, pp. 226-238, 1997.

Assimon S, Adams M, Jacobs, R. Bolger M. Preliminary assessment of potential health hazards associated with barium leached from glazed ceramicware. Food Additives and Contaminants 1997; 5:483-490.

Gaylor D, Bolger M, Schwetz B. U.S. Food Drug Administration perspective of the inclusion of effects of low level exposures in safety/risk assessment. Environmental Health Perspectives 1998; 106:391-394.

Henry S, Page S, Bolger M. Hazard assessment of Akee fruit (Blighia sapida). Human and Ecological Risk Assessment 1998; 4:1175-1187.

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Humphreys S, Carrington C, Bolger M. A risk assessment for Fumonisin B. Corn, Food Additives and Contaminants 2001; 18:211-220.

Egan K, Tao S, Pennington J, Bolger M. U.S. Food and Drug Administration's Total Diet Study. Intake of nutritional and toxic elements, 1991-1996. Food Additives and Contaminants 2001; 19:103-125.

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Dolan S, Nortrup D, Bolger M, Capar S. Analysis of dietary supplements for arsenic, cadmium, mercury and lead using inductively coupled plasma mass spectrometry. Journal of Agricultural and Food Chemistry 2003; 51:1307-1312.

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Carrington C, Montwill B, Bolger M. An intervention analysis for the reduction of exposure to methylmercury from the consumption of seafood by women of child-bearing age. Regulatory Toxicology and Pharmacology 2004; 40:272-280.

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Vavasour E, Renwick A, Engell B, Barlow S, Castle L, Dinovi M, Slob W, Schlatter J, Bolger M. Ethyl carbamate, WHO Food Additive Series 55: WHO, Geneva, 2006: 205-316.

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Egan SK, Bolger PM, Carrington CD. Update of US FDA's Total Diet Study food list and diets. Journal of Exposure Science and Environmental Epidemiology 2007 Nov; 17(6):573-582.

Barlow S, Bolger M, DiNovi M, Renwick A, Street D, Schlatter J. Methylmercury (addendum)WHO Food Additives Series: 58 World Health Organization, Geneva, 2007; 269-316.

Bolger M. Threshold Working Group. Approaches to establish thresholds for major food allergens and for gluten in food. Journal of Food Proteins 2008; 71:1043-1088.

Murray C, Egan S, Kim H, Beru N, Bolger M. US Food and Drug Adminstration's Total Diet Study. Dietary intake of perchlorate and iodine. Journal of Exposure Science and Environmental Epidemiology 2008; 18:571-580.

Carrington C, Bolger M. Letter to the Editor. Risk Analysis 2008; 28:1-3.

Mindak WR, Cheng J, Canas BJ, Bolger PM. Lead in women's and children's vitamins. Agric Food Chemistry 2008 Aug 27; 56(16):6892-6896.

Barlow S, Bolger PM, Pitt JI, Verger P. Ochratoxin A (addendum). WHO Food, Additive, Series: 59 World Health Organization, Geneva, 2008: 357-431.

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Bolger PM, LeBlanc JC, Setzer RW. Application of the margin of exposure (MOE) approach to substances in food that are genotoxic and carcinogenic. Example. acrylamide (CAS No. 79-06-1). Food Chem Toxicol 2010 Jan; 48 Suppl 1:S25-S33.

Bolger PM, Tao S, Dinovi M. Hazards of dietary furan. In: Process-induced Food Toxicants. R. Stadler and D. Lineback (eds), A. John Wiley & Sons, Hoboken, NJ, pp. 117-133, 2009.

Carrington C, Bolger M. The limits of regulatory toxicology. Tox Appl Pharm 2010; 243:191-197.

Barlow S, Bolger M, DiNovi M, Rao M, Slob W, Wu Y. Pechlorate, WHO Food Additives Series: 63 FAO JECFA monographs. World Health Organization, Geneva, 2011: 685-782.

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Felter S, Conolly R, Bercu J, Bolger P, et al. A proposed framework for assessing risk from less-than-lifetime exposure to carcinogens. Critical Reviews in Toxicology 2011; 41:507-544.

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Tan C, Yang Y, Murray C, Egan S, Bolger M, Blount B, Clewell H. Using a physiologically based pharmacokinetic model to link urinary biomarker concentrations to dietary exposure of perchlorate. Chemosphere, in press, 2012.

#### Abstracts

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Bolger M, Henry S, Carrington C. Hazard and risk assessment of crude oil contaminants in subsistence seafood samples from the Prince William Sound. Exxon Valdez Oil Spill Symposium, Anchorage, AK, February 1993.

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Humphreys S, Bolger M. Hazards of domoic acid contamination of seafood. Annual Meeting of the Society of Toxicology, Dallas, TX, March 1993.

Tao S, Bolger M. Risk of oral germanium dietary supplements. Annual Meeting of the Society of Toxicology, Dallas, TX, March 1993.

Assimon S, Adams M, Jacobs, R., Bolger M. Assessment of potential health hazards associated with barium leached from glazed ceramicware. Annual Meeting of the Society of Toxicology, Baltimore, MD, March 1994.

Carrington C, Cramer G, Bolger P. A three-dimensional risk analysis for maternal consumption of methylmercury in tuna, International Conference on Mercury as a Global Pollutant, July 1994.

Bolger M, Carrington C. Mercury issues for federal regulatory Agencies, Society for Risk Assessment, 1996.

Henry S, Bolger M. Toxicology and regulatory aspects of chlorine and chloro-organics. Annual Meeting of

the American Chemical Society, June 1995.

Bolger M, Yess N, Carrington C and Gunderson E. Dietary exposure to lead in the United States. Annual Meeting of the Institute of Food Technologists, June 1995.

Humphreys S, Bolger M. Putative hazards of dietary aluminum, VII International Congress of Toxicology, July 1995.

Henry S, Page S, Bolger M. Hazard assessment of ackee fruit (Blighia sapida), International Congress of Toxicology, July 1995.

Bolger M, Humphreys S, Page S and Wagstaff J. Assessment of Risk of Dietary Phytoestrogens. Third International Phystoestrogen Meeting, December 1995.

Bolger M, Carrington C. Risk assessment of methylmercury in fish. Annual Meeting of the Society of Toxicology, March 1996.

Humphreys S, Carrington C, Bolger M. Risk assessment for fumonisin. Annual Meeting of the Society of Toxicology, March 1996.

Bolger M, Carrington C. Risk assessment-What is the question? Harmonization of State/ Federal Approaches to Assessing and Managing Environmental Risks, May 1996.

Bolger M, Carrington C. Variability and uncertainty of methylmercury risks, International Circumpolar Health Conference, June 1996.

Schwetz B, Bolger M and Gaylor D. FDA perspective of the inclusion of effects of low level exposures in safety/risk assessment, BELLE Conference, November 1996.

Bolger M, Carrington C. Quantitative risk analysis of methylmercury to the fetus and adult. Annual Meeting of the Society of Risk Analysis, December 1996.

Bolger M, Carrington C. Uncertainty, Contaminants and the Federal Food Act. Annual Meeting of the Society of Risk Analysis, December 1996.

Henry S, Dinovi M, Bowers, J., Bolger M. Risk assessment for aflatoxin in corn and peanuts in the United States. Annual Meeting of the Society of Toxicology, March 1997.

Humphreys S, Carrington C, Bolger M. Fumonisin risk scenarios. Annual Meeting of the Society of Toxicology, Cincinnati, OH, March 1997.

Bolger M, Carrington C. Dietary intake of manganese, Manganese. 15th International Neurotoxicology Conference, October 1997.

Bolger M, Carrington C. Dietary manganese - conflict between nutritional requirements and safety/risk assessment. Annual Meeting of the Society of Risk Analysis, Washington, D.C, December 1997.

Bolger M. Overview of synthetic endocrine-active substances in the human diet. Human Diet and Endocrine Modulation. Estrogenic and Androgenic Effects Conference, Fairfax, VA, November 1997.

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Bolger M, Carrington C. Risk assessment of crude oil contaminants in subsistence seafood from the Prince William Sound, SETAC meeting, Anchorage, AK, March 1999.

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Bolger M, Carrington C. Methylmercury - biomarker effect on dose reconstruction and dose-response. Annual meeting of the Society of Risk Analysis, December 1999.

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Society of Toxicology, Charlotte, NC, March 2007.

Henry S, Lorentzen R, Bolger M. A retrospective look at some key FDA risk assessments. Annual meeting of the Society of Risk Analysis, San Antonio, TX, 2007.

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Carrington CD., Bolger M. Methylmercury exposure assessment from the consumption of commercial seafood, International Society of Exposure Analysis, Pasadena, CA, 2008.

Carrington CD., Bolger M. Using epidemiological data for dose-response modeling. fish consumption and cardiovascular disease. Annual meeting of the Society of Risk Analysis, Boston, MA, December 2008.

Carrington C, Bolger PM. History of dietary safety and risk assessment at the US Food and Drug Administration. Annual meeting of the Society of Risk Analysis, Baltimore, MD, 2009.

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Murray C, Egan S, Bolger M. U.S. Food and Drug Administration's Updated Estimates of Dietary Exposure to Perchlorate. Annual meeting of the International Society of Exposure Sciences, Minneapolis, MN, November 2009.

Bolger M, Carrington C. Quantitative approaches to understanding the balance between risks and beneficial effects of fish consumption. new modeling approaches, annual meeting of the American Association of Public Health, New York, NY, November 2009.

Murray C, Egan K, Bolger PM.. US Food and Drug Administration (USFDA)'s updated estimates of dietary exposure to perchlorate. ISES annual meeting, Minneapolis, MN, October 2009.

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Assimon S, Bolger M. Health hazard assessment for gluten in celiac disease. Annual meeting of the Society of Toxicology, Salt Lake City, Utah, March 2010.

Carrington, CD, Bolger PM. Elemental contaminants and dietary exposure. Annual meeting of the American College of Toxicology, Baltimore, MD, November 2010.

Murray C, Egan S, South, P., Bolger PM. US Food and Drug Administration (USFDA) Updated estimates of dietary exposure to dioxin-like compounds (DLCs). International Dioxin meeting, San Antonio, TX, September 2010.

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Society of Toxicology, San Francisco, CA, March 2012.

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Bolger PM. Canine renal response to prostacyclin, Winter Prostaglandin Conference, Sarasota, Florida, January 1978.

Bolger M. Health significance of chemical toxicants in shellfish, Regional Shellfish Specialty Workshop, Washington, DC, June 1982.

Bolger M. Pathophysiological effects of environmental toxicants, Biophysical Concepts in Physiology Course, at The Georgetown University, Washington, DC, April 1983.

Bolger PM. Trends in the exposure of adults and children to lead in the US, Food Chemicals Codex Workshop on Lead, Mont St. Maria, Ontario, Canada, 1986.

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Carrington C, Bolger M. Multiple model risk analysis. Developmental effects from methylmercury exposure. Annual meeting of the Society of Society of Toxicology, Dallas, TX, February 1993.

Carrington C, Bolger. Two dimensional Monte-Carlo simulation. Use and implementation. Annual meeting of the Society of Risk Analysis, Savannah, GA, December 1993.

Bolger M, Humphreys S, Page S, Wagstaff J. Risks of dietary phytoestrogens. Third International Conference on Phytoestrogens, Little Rock, Arkansas, 1993.

Bolger M. General toxicity of polychlorinated biphenyls. EPA national technical workshop on PCBs in Fish Tissue, May 10-11, 1993.

Carrington C, Cramer G, Bolger P. A three-dimensional risk analysis for maternal consumption of methylmercury in tuna. Hot Springs, AR, November 1994.

Carrington C, Bolger M. Dietary manganese—Conflict between nutritional requirements and safety/risk assessment. Annual Neurotoxicology meeting, Hot Springs, AK, November 1995.

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Bolger M. Variability and uncertainty of methylmercury risks. International Circumpolar Health Conference, Anchorage, AK, June 1996.

Bolger M. Hazards and risks of methylmercury. Annual meeting of the Intersociety of Energy Conversion, Washington, D.C., August 1996.

Bolger M. FDA perspective of the inclusion of effects of low level exposures in safety/risk assessment. BELLE Conference, Research Triangle Park, NC, November 1996.

Bolger M. Food borne neurotoxins. Conference on Environmental Neurotoxins, Albany, NY, December 1996.

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Bolger M. Arsenic dietary hazards and risks, meeting of the National Academy of Sciences expert arsenic panel, August 1997.

Bolger M. Safety/risk Assessment of food additives, pesticides and environmental contaminants. Food Safety Initiative meeting, Food Safety Risk Assessment, Users and Needs, University of Maryland, August 1998.

Bolger M. The role of regulatory science in the Executive branch. AAAS fellowship program, September 2009.

Bolger M, Carrington C. Hazard and risk assessment of crude oil contaminants in subsistence seafood from the Prince William Sound. 10th anniversary meeting on the Exxon Valdez oil spill, Anchorage, AK, May 1999.

Carrington C, Bolger M. Assimilating data from multiple studies in health risk assessment—Methylmercury. International Mercury meeting, Rio de Janeiro, Brazil, 1999.

Bolger M. Toxicology and safety assessment of patulin. FDA Food Advisory Panel, June 1999.

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Bolger M. Methylmercury—Hazard and risk issues. NIH symposium on mercury in thimerasol, September 1999.

Carrington C, Bolger M. Dietary contaminants—Risk assessment and management issues. International Risk Assessment meeting , Soul, Korea, November 1999.

Carrington C, Humphreys S, Bolger M. A risk assessment for exposure to fumonisin in corn. International Fumonisin workshop, University of Maryland, February 2000.

Bolger M. Dietary supplements—Standards of evidence, symposium on dietary supplements. Annual meeting of the American College of Toxicology, March 2000.

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Bolger M. Risk assessment of dietary supplements. Ssession chair, annual meeting of the American College of Toxicology, McLean, VA, November 1999.

Bolger M. Food-borne dietary contaminants—Risk assessment issues. EPA-DOD Risk assessment meeting, Kings Island, OH, April 2000.

Bolger M. Mycotoxins—Risk assessment and regulatory issues. Meeting of the Groceries Manufacturing Association, Washington, D.C., May 2000.

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Bolger M. Methylmercury in seafood - risks and attendant uncertainties. AOAC March meeting, Sacramento, CA, 2002.

Bolger M. FDA methylmercury fish advisory overview. FDA Food Advisory Committee meeting, July 2002.

Bolger M. Food safety risk assessment. Harvard Center for Risk Analysis, Boston, MA, September 2002.

Bolger M. FDA market basket study of dioxin-like contaminants. Meeting of NRC/NAS Committee on EPA's Exposure and Human Health Reassessment of TCDD and Related Compounds, March Washington, DC, 2005.

Bolger M. Contemporary concepts of toxicology. Probabilistic Risk Assessment, SOT meeting, Washington, DC, 2005.

Bolger M. Food borne contaminants. Annual meeting of the Association of Food and Drug Officials, Pittsburg, PA, 2005.

Bolger M. Risk assessment of food borne contaminants, public health and the benefits and risks of seafood consumption. Ceres Roundtable, College Park, MD, September 2005.

Bolger M. Historical overview of MeHg and PCB regulatory standards. EPA's Annual Fish Advisory meeting, Baltimore, MD, September 2005.

Bolger M. Overview of JACFA MOE assessment on acrylamide, risk assessment of carcinogens that are both genotoxic and carcinogenic. New Approaches, Brussels, Belgium, November 2005.

Bolger M. Risks of food borne industrial contaminants. Annual meeting to the International Association of Food Protection, Orlando, FL, August 2007.

Bolger M. Investigating the risk of food contaminants—Toxicological Considerations. New Orleans, LA, April 2008.

Bolger M. The food safety/risk assessment paradigm and elemental hazards International Workshop on the US Pharmacopie"s Heavy Metals Testing Methodologies, Institute of Medicine, National Academy of Sciences, Washington, DC, August 2008.

Bolger M. Safety/risk assessment of dietary elemental contaminants. ODS Dietary Supplements Element Methodology Workshop, Office of Dietary Supplements, National Institutes of Health, Bethesda, MD, March 2009.

Bolger M. Anthropogenic and natural chemical contaminants in food - Detection and control. Food and Nutrition Board, Institute of Medicine, National Research Council/ National Academy of Sciences, Washington, D.C., May 2009.

Carrington C, Bolger M. Quantitative approaches to understanding the balance of risks and beneficial effects from fish consumption. New modeling approaches. Annual meeting of the American Public Health Association, New York City, NY, November 2009.

Carrington C, Bolger PM. History of dietary safety and risk assessment. US Food and Drug Administration. Annual meeting of the Society of Risk Analysis, Baltimore, MD, December 2009.

Bolger PM. Hazards of food borne elemental contaminants. Metal impurities in pharmaceuticals, White Oak, MD, April 2010.

Murray, CW, Egan, SK, South, PK, Bolger PM. The United States Food and Drug Administration. Dioxin Monitoring Program, International Dioxin meeting, Belgium, October 2011.

Carrington, CD, Bolger PM. Risk assessment and management options for chemical contaminants in a global food supply. Annual meeting of the Society of Toxicology, March 2012.

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