

**Terry C. Troxell, Ph.D.**  
**Senior Managing Scientist**

**Professional Profile**

Dr. Terry C. Troxell is a Senior Managing Scientist in Exponent's Health Sciences Center for Chemical Regulation and Food Safety. Dr. Troxell has extensive experience in food safety, with nearly 30 years at the Center for Food Safety and Applied Nutrition of the U.S. Food and Drug Administration, including more than 7 years as Director of the FDA's Office of Plant and Dairy Foods (1999–2006). Prior to that, he directed food safety policy and risk assessment work for that office as the Director of the Division of Programs and Enforcement Policy (1992–1999). He was a member of the Senior Executive Service from 1999 through 2003. He has extensive international food safety experience, particularly with the Codex Committee on Food Additives and Contaminants, for which he was head of the U.S. delegation 6 years.

Dr. Troxell's FDA career also included 9 years work on food additives and experience directing food standards work. Dr. Troxell has broad scientific training and experience in chemistry and biology and has applied that experience to provide leadership to solve complex scientific, regulatory, and public health policy issues and problems.

As Director of the Office of Plant and Dairy Foods, Dr. Troxell provided leadership and policy direction for a staff of more than 100, including 4 divisions responsible for key microbiology, chemistry, and food processing research to provide the scientific basis for FDA's food safety policies. He also provided leadership for the chemical contaminants risk assessment staff and 2 policy divisions that developed food safety and food defense policy for produce, juice, grains, dairy products, eggs, bottled water, allergens, filth, chemical contaminants, and pesticides. He is particularly known for his work on chemical contaminants, including mycotoxins, lead, dioxins, PCBs, perchlorate, acrylamide, and furan.

Dr. Troxell has extensive international food safety experience. He served on the U.S. delegation to the Codex Committee on Food Additives and Contaminants for 14 years, being head of delegation for 6 years and alternate head of delegation for 5 years. During this time, he used his creativity and negotiating skills to find pathways with other member countries to make this committee the most productive of all the Codex committees in developing science-based consumer protective and fair international standards for food. Dr. Troxell had numerous meetings and collaborations with colleagues from other governments such as Canada, Mexico, EC, UK, Australia, New Zealand, and Japan.

Dr. Troxell represented the FDA on numerous interagency committees, including the Office of Science and Technology Policy's Interagency Working Groups on Perchlorate and on Dioxins, and EPA's Pesticide Program Dialogue Advisory Committee, Committee to Advise on Reassessment and Transition and EPA's National Pollution Prevention and Toxics Advisory Committee.

Dr. Troxell conceived and was the primary developer of the FDA ground breaking constituents policy for carcinogenic impurities in food and color additives. His leadership and creativity was also instrumental in developing the unique food standard of identity that permitted the broad use of nutrition content claims as part of the statement of identity of standardized foods.

### **Academic Credentials and Professional Honors**

Postdoctoral Research Associate, University of Oregon, 1974  
Ph.D., Biophysical Chemistry, Cornell University, 1971  
B.S., Natural Science, Muhlenberg College, 1965

Selected Awards: FDA Distinguished Career Service Award (2006); CFSAN Distinguished Career Service Award (2006); HHS Secretary's Award for Distinguished Service (2006; shell egg proposal, group); HHS Secretary's Award for Distinguished Service (2003; Bioterrorism Preparedness, group); USDA Group Honor Award for Excellence (1999; EU Dairy Certification); FDA Award of Merit (1997); HHS Secretary's Award for Excellence in Public Service (1993; food (nutrition) labeling initiative, group); FDA Commendable Service Award (1984; carcinogenic impurities policy for food and color additives)

### **Publications**

Troxell TC and Buckner R. Food safety in the new millennium: The past is the prologue. *Cereal Foods World* 2000; 45:169–172.

Troxell TC. Emerging international contaminant issues. *Food Testing & Analysis* 2000; 6:8–16.

Henry SH, Bosch FX, Troxell TC, Bolger PM. Reducing liver cancer-global control of Aflatoxin. *Science* 1999; 286:2453–2454.

Bolger PM, 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.

Troxell T. Government, chemistry, and food. *Chemtech* 1994; 24:54–59.

Jensen HP, Schellman JA, Troxell TC. Modulation techniques in polarization spectroscopy. *Applied Spectroscopy* 1978; 32:192.

Richardson FS, Yeh CY, Troxell TC, Boyd DR. Studies on the circular dichroism of penam and penam sulfoxides. *Tetrahedron* 1977; 33:711.

Fleish JH, Calkins PJ, Troxell TC, Hooker CS. Inhibition of antigen-induced mediator release from guinea pig lung by alcohols. *American Review of Respiratory Diseases* 1976; 114:1107.

Troxell TC, Scheraga HA. Electric dichroism and polymer conformation. II. Theory of electric dichroism, and measurements of poly(n-butyl isocyanate). *Macromolecules* 1971; 4:528.

Troxell TC, Scheraga HA. Electric dichroism and polymer conformation. I. Theory of optical properties of anisotropic media, and methods of measurement. *Macromolecules* 1971; 4:519.

Troxell TC, Scheraga HA. Use of electric dichroism to study polymer conformation. *Biochem. Biophys. Res. Comm.* 1969; 35:913.

### **Book Chapters**

Park DL, Troxell TC. U.S. perspective on mycotoxin regulatory issues. pp. 277–285. In: *Advances in Experimental Medicine and Biology*, Vol. 504: *Mycotoxins and Food Safety*. DeVries JW, Trucksess MW, Jackson LS (eds), Kluwer Academic/Plenum Publishers, New York, NY, 2002.

Henry S, Bolger M, Troxell T. Toxicology and regulatory aspects of chlorine and chloro-organic compounds. pp. 263–271. In: *Chlorine and Chlorine Compounds in the Paper Industry*. Turoski V (ed), Ann Arbor Press, Chelsea, MI, 1998.

Humphreys S, Troxell T, Bolger M. Potential hazards of dietary aluminum. *Proceedings, 3<sup>rd</sup> International Conference on Aluminum and Health*, Miami, FL, February 6–10, 1994.

Troxell T. Regulatory aspects of fumonisins in the United States. pp. 355–361. In: *Fumonisins in Foods*. Jackson L, et al (eds), Plenum Press, NY, 1996.

Troxell T. Role of the FDA in regulating bottled water. *Proceedings, Bottled Water Workshop*, September 13–14, 1990, Committee Print 101-X for Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, U.S. House of Representatives, December 14, 1990.

Flamm WG, Lake LR, Lorentzen RJ, Rulis AM, Schwartz PS, Troxell TC. Carcinogenic potencies and the establishment of a threshold of regulation for food-contact substances. pp. 87–92. In: *Contemporary Issues in Risk Analysis, Vol.2, De Minimis Risk*. Whipple C (ed), Plenum Press, NY, 1987.

Troxell TC, Schwartz PS. Food applications. pp. 269–279. In: *Encyclopedia of Polymer Science & Engineering, Second Edition, Volume 7*. John Wiley & Son, 1986.

### **Project Experience**

Reorganized FDA's Office of Plant and Dairy Foods by expanding its policy and review science groups to accommodate the increased work load from the President's Food Safety Initiative. Recently planned the reorganization of the office before retirement to create an Office of Food Safety as part of a broad CFSAN reorganization.

Provided leadership and management for major initiatives and accomplishments of the Center as the Director of the Office of Plant and Dairy Foods and the Division of Programs and Enforcement Policy, including:

- Developed Guidance to Minimize Microbial Food Safety Hazards for Fresh Fruit and Vegetables
- Developed Guidance for Reducing Microbial Hazards for Sprouted Seeds
- Developed Juice HACCP proposal and final rules
- Provided leadership and direction on regulatory policy and enforcement on shell eggs to minimize *Salmonella enteritidis* egg-associated foodborne illness.
- Developed mycotoxin guidance levels, including urgent revision of deoxynivalenol advisory levels, fumonisins guidance levels and patulin action level
- Developed numerous guidance documents and regulations for lead in food and food contact materials
- Was the focal point, and spokesperson, for pesticides and chemical contaminants in food for CFSAN, including for programs and accomplishments for perchlorate, dioxins, PCBs, PBDEs
- Developed action plans and directed accomplishments on cooking contaminants, acrylamide and furan
- Developed guidance for Cry9C/StarLink contamination of the human corn supply

Created the regulatory policy and primary author of numerous major Federal Register notices, proposals, and final rules from 1982 to 1989 including carcinogenic impurities in food additives, retort pouches, methylene chloride in cosmetics, and lead.

### **Peer Reviewer**

- FDA Review Scientist Peer Review Committee, 1995–1999

### **Professional Affiliations**

- Institute for Food Technologists (member)
- American Association for Advancement of Science (member)
- American Chemical Society (member)
- United States Senior Executive Service (Appointed May 1999; served through December 2003)