### EDWARD J. CALABRESE, PH.D. CURRICULUM VITAE March, 2022

# I. SUMMARY:

- Professor of Toxicology at the University of Massachusetts, Amherst since 1976.
- Board Certified in general toxicology by the Academy of Toxicological Sciences since 1982.
- Over 1000 publications in peer-reviewed journals.
- Among the most highly cited papers in the entire history of several leading toxicology journals.
- Over 800 invited presentations at major conferences and University seminars.
- Author or Co-Author of 26 books.
- Editor or Co-Editor of over 40 monographs and/or conference proceedings.
- Consultant to most environmentally oriented federal agencies.
- Member of multiple national research council expert committees such as the Safe Drinking Water
- Committee, Air Cabin Safety Committee, and Food and Nutrition Committee.
- Consultant to numerous major U.S. corporations and trade associations.
- Extramural funding since 1976 from all sources exceeds 30 million dollars.
- Founding Editor-in-Chief Human and Ecological Risk Assessment.
- Founding Editor-in-Chief Dose-Response Journal.
- Recipient of the Springer Award for the body of work on hormesis, 2010.
- Honorary Doctor of Science Degree, McMaster University 2013.
- Awarded the Petr Beckmann Award from Doctors for Disaster Preparedness 2014.
- Advisory Board for the first graduate training program focused on hormetic mechanisms, Friedrich-Schiller-University, Jena, Germany 2011 to present.
- The Health Physics Society developed a 21 episode documentary about the historical foundations of the linear no-threshold dose response for cancer risk assessment based on the body of the Calabrese research.

Table 1. Number of Publications Per Year					
2022=35	2021=54	2020=28	2019 = 39	2018 = 29	2017 = 25
2016 = 13	2015 = 20	2014 = 22	2013 = 22	2012 = 19	2011 = 10
2010 = 27	2009 = 13	2008 = 28	2007 = 9	2006 = 13	2005 = 15
2004 = 10	2003 = 20	2002 = 15	2001 = 42	2000 = 22	1999 = 15
1998 = 22	1997 = 14	1996 = 17	1995 = 18	1994 = 21	1993 = 25
1992 = 17	1991 = 20	1990 = 25	1989 = 25	1988 = 26	1987 = 20
1986 = 29	1985 = 32	1984 = 12	1983 = 22	1982 = 20	1981 = 11
1980 = 23	1979 = 24	1978 = 13	1977 = 11	1976 = 5	1975 = 2
1974 = 10	1973 = 1	1972 = 1	1968 = 1		Total = 1,012

### **II. BIOGRAPHICAL SKETCH:**

Edward J. Calabrese is a Professor of Toxicology at the University of Massachusetts, School of Public Health and Health Sciences, Amherst. Dr. Calabrese has researched extensively in the area of host factors affecting susceptibility to pollutants, and is the author of over 800 papers in scholarly journals, as well as more than 10 books, including Principles of Animal Extrapolation; Nutrition and Environmental Health, Vols. I and II; Ecogenetics; Multiple Chemical Interaction; Air Toxics and Risk Assessment; and Biological Effects of Low Level Exposures to Chemical and Radiation. Along with Mark Mattson (NIH) he is a co-editor of the recently published book entitled Hormesis: A Revolution in Biology, Toxicology and Medicine. He has been a member of the U.S. National Academy of Sciences and NATO Countries Safe Drinking Water committees, and on the Board of Scientific Counselors for the Agency for Toxic Substances and Disease Registry (ATSDR). Dr. Calabrese also serves as Chairman of the Biological Effects of Low Level Exposures (BELLE) and as Director of the Northeast Regional Environmental Public Health Center at the University of Massachusetts. Dr. Calabrese was awarded the 2009 Marie Curie Prize for his body of work on hormesis. He was the recipient of the International Society for Cell Communication and Signaling-Springer award for 2010. He was awarded an Honorary Doctor of Science Degree from McMaster University in 2013. In 2014 he was awarded the Petr Beckmann Award from Doctors for Disaster Preparedness.

Over the past 20 years Professor Calabrese has redirected his research to understanding the nature of the dose response in the low dose zone and underlying adaptive explanatory mechanisms. Of particular note is that this research has led to important discoveries which indicate that the most fundamental dose response in toxicology and pharmacology is the hormetic-biphasic dose response relationship. These observations are leading to a major transformation in improving drug discovery, development, and in the efficiency of the clinical trial, as well as the scientific foundations for risk assessment and environmental regulation for radiation and chemicals.

University of Massachusetts,	1972-1974 – Education	Ed.D. 1974
Amherst, MA	Science Ed.	
University of Massachusetts,	1971-1973 -	Ph.D. 1973
Amherst, MA	Physiology/Toxicology,	
	Entomology Department	
State College of Bridgewater,	1969-1971 – Biology	MA 1972
Bridgewater, MA		
State College of Bridgewater,	1964-1968 – Biology	BA 1968
Bridgewater, MA		

### **III. ACADEMIC TRAINING**

#### **IV. WORK EXPERIENCE**

Graduate Program Director, Environmental Health Sciences Department, December 2003-2004.

Division Chair, Environmental Health Sciences Division, December 2003-2006.

Director - Northeast Regional Environmental Public Health Center, October 1985-Present.

Professor - Promoted from Associate Professor, June 1982-Present.

Associate Professor - Promoted from Assistant Professor, June 1980.

<u>Assistant Professor</u> - September 1976 - Environmental Health Sciences Program, Division of Public Health, University of Massachusetts, Amherst, MA. Duties include: teaching introductory and advanced courses in environmental toxicology, directing thesis research.

<u>Assistant Professor</u> - July 1974-August 1976 - Department of Occupational and Environmental Medicine, University of Illinois, School of Public Health, and <u>Assistant Director of the</u> <u>Environmental Health Resource Center</u>. Duties included: the identification and quantification of present and potential environmental health hazards within the state, the development and review of environmental health legislation, standards and regulations, testimony at regulatory and legislative hearings on standards of environmental quality and teaching courses in environmental health.

<u>Environmental Research Director</u> for the Massachusetts Public Interest Research Group - December 1973-June 1974. Duties included: determination of research and educational goals of the organization, direction of student research projects, direction of Water Quality Training Institutes throughout Massachusetts.

<u>Adjunct Professor</u> - Southwest Residence College - University of Massachusetts. January 1974. Taught environmental science courses to undergraduate and graduate students.

<u>Assistant Professor</u> - Fall 1973 - North Adams State College, North Adams, MA. Biology Department - taught Ecology, Evolution, and Introductory Biology.

## V. GRANTS AND RESEARCH FUNDING (Over 25 years Professor Calabrese has been awarded over 20 million dollars in grants. Below represents a limited sampling of the grants received.)

Principal Investigator. Air Force Office of Scientific Research. Enhancing Biological Performance: Occurrence, Mechanisms and Applications. 2019-2024 (\$922,464).

Principal Investigator. Coca-Cola Company. Environmental Health Sciences 2-22-2016 – present (\$25,000).

Principal Investigator. Air Force Office of Scientific Research. Enhancing Biological Performance: Occurrence, Mechanisms and Applications. 2013-2018. (\$1,197,558).

Principal Investigator. Exxon Mobil Foundation. Research and Education work on the topic area of hormesis. 2014-Present (\$125,000).

Principal Investigator. Samueli Institute. Conference on Dose-Response. 2013-2014 (\$15,000).

Principal Investigator. ExxonMobil. Hormesis Research. 2007-2013. (\$150,000 per year).

Director. Hormesis Conference general support. Multiple public and private organizations. 2010-2013. (Approximately \$50,000).

Principal Investigator. Air Force Office of Scientific Research. Conference on Adaptive Responses and their Biomedical Applications. 2012. (\$25,544).

Principal Investigator. Air Force Office of Scientific Research. Conference on Adaptive Responses and their Biomedical Applications. 2011. (\$25,580).

Principal Investigator. Lounsbery Foundation. Development of an Integrative Mechanistic Framework. 2010-2012. (\$25,000)

Principal Investigator. Air Force Office of Scientific Research. Chemical/Radiation Hormesis Database, Evaluation of Hormetic Mechanisms & Their Biomedical and Risk Assessment Implications. 2008-2010. (\$299,371).

Director. Hormesis Conference general support. Multiple public and private organizations. 2008-2009. (Approximately \$120,000).

Principal Investigator. Air Force Office of Scientific Research. Chemical/Radiation Hormesis Database, Evaluation of Hormetic Mechanisms & Their Biomedical and Risk Assessment Implications. 2007. (\$84,778).

Principal Investigator. Air Force Office of Scientific Research. Chemical/Radiation Hormesis Database, Evaluation of Hormetic Mechanisms & Their Biomedical and Risk Assessment Implications. 2007. (\$199,845).

Director. Hormesis Conference general support. Multiple public and private organizations. 2007. (Approximately \$150,000).

Director. Hormesis Conference general support. Multiple public and private organizations. 2006. (Approximately \$100,000).

Principal Investigator. Alfred P. Sloan Foundation. Hormesis Center. 2004-2007. (\$45,000).

Principal Investigator. Dow Chemical Co. Distributions for Monte-Carlo Soil Ingestion Risk Assessment. 2004-2007. (\$160,470).

Principal Investigator. Lounsbery Foundation. Workshop to Create a Hormesis Institute/Center. 2005-2007. (\$75,000).

Principal Investigator. ExxonMobil. Hormesis Research. 2006. (\$150,000).

Principal Investigator. Air Force Office of Scientific Research. Chemical/Radiation Hormesis Database, Evaluation of Hormetic Mechanisms & Their Biomedical and Risk Assessment Implications. 2006. (\$214,645).

Principal Investigator. ExxonMobil. BELLE - Chemical Hormesis Database. 2005. (\$150,000).

Principal Investigator. Air Force Office of Scientific Research. Chemical/Radiation Hormesis Database, Evaluation of Hormetic Mechanisms & Their Biomedical and Risk Assessment Implications. 2005. (\$211,026).

Principal Investigator. U.S. Department of Energy. International Conference – Hormesis Implications for Toxicology, Medicine, and Risk Assessment. 2005-2006. (\$5,000).

Principal Investigator. Dow Chemical Co. Distributions for Monte-Carlo Soil Ingestion Risk Assessment. 2004-2006. (\$160,470).

Principal Investigator. Alfred P. Sloan Foundation. Hormesis Center. 2004-2006. (\$45,000).

Principal Investigator. U.S. Department of Energy. Non-Linear Dose Response Relationship in Biology, Toxicology and Medicine. 2004-2005. (\$20,000).

Principal Investigator. General Electric Foundation. BELLE Initiative. 2004. (\$100,000).

Principal Investigator. ExxonMobil. BELLE – Chemical Hormesis Database. 2004. (\$75,000).

Principal Investigator. Air Force Office of Scientific Research. Chemical/Radiation Hormesis Database, Evaluation of Hormetic Mechanisms & Their Biomedical and Risk Assessment Implications. 2004. (\$174,302).

Principal Investigator. U.S. Department of Energy. Non-Linear Dose Response Relationship in Biology, Toxicology and Medicine. 2003-2004. (\$12,500).

Principal Investigator. Florida Power and Light. Assessment of Arsenic Bioavailability in Humans. 2002-2003. (~\$110,000).

Principal Investigator. Air Force. Toxicological Assessment of Hormesis. 2001-2003. (\$450,000).

Principal Investigator. US EPA/American Chemical Council. Soil Ingestion in Construction

Workers. 2001-2003. (\$750,000).

Co-Principal Investigator. Health Risks and Fish Consumption from the Pasiac River. 2001-2002. (\$125,000).

Principal Investigator. CA EPA. Single Exposure Carcinogen Database Update and Evaluation. 2002. (\$50,000).

Co-Director. 11th Annual Soil and Groundwater Conference. San Diego, CA. March 2002. (\$100,000).

Co-Director. 18th Annual Soil, Groundwater and Sediment Contamination Conference. University of Massachusetts. October 2001. (\$125,000).

Principal Investigator. Conference on Non-Linear Dose-Response. Multiple sponsors (EPA, NIEHS, AWWARF, Air Force, and other). June 2001. (\$150,000).

Co-Director. International Conference on Contaminated Soil, Sediment, and Groundwater. London. August 2000. (\$300,000).

Co-Principal Investigator. Soil ingestion workshop/assessment. U.S. EPA. June/July 2000. (\$50,000).

Principal Investigator. Soil ingestion in construction workers. U.S. EPA/CMA. October, 1999 (\$650,000).

Principal Investigator. Development of an ionizing radiation hormesis database. Nuclear Regulatory Commission. September 1997 - September 1999 (\$188,000).

Principal Investigator. Biological effects of low level exposures. Three year cooperative agreement. Reviewed once, 1999. Nuclear Regulatory Commission, 1996-1998, 1999-2001. (\$60,000 or \$20,000/year).

Principal Investigator. Assessment of soil ingestion in children. Health Canada. January 1999 (\$6,500).

Principal Investigator. Biological effects of low level exposures (BELLE). From multiple sponsors. 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004. (approx. \$120,000/year from multiple sources).

Co-Principal Investigator. Florida Power and Light. Biological effects of arsenic contaminated soil. January 1998 (\$100,000), March 1999 (\$50,000).

Principal Investigator. ARCO. Assessment of the role of particle size on soil ingestion estimates in children. June 1997 (\$150,000).

Principal Investigator. Health Research Foundation (Japan). Biological effects of low level exposures. September 1997 (\$15,000).

Principal Investigator. U.S. Air Force. Assessment of the societal and scientific implications of hormesis. October 1997 - October 2000 (\$345,000).

Principal Investigator. U.S. EPA. Single exposure carcinogen database. October 1997 – May 1999 (\$75,000).

Principal Investigator. GE Foundation. Biological effects of low level exposures (BELLE). October 1997 (\$15,000).

Co-Principal Investigator. EPA. Assessment of groundwater contamination by MTBE. September 1997 (\$43,000).

Principal Investigator. Exxon. Biological effects of low level exposures. 1996-1999 \$20,000/year. (\$80,000).

Principal Investigator. Dow-Corning. Biological effects of low level exposures. 1996-1999 \$10,000/year. (\$40,000).

Principal Investigator. Canadian Electric Utilities. Biological effects of low level exposures. 1996 (\$10,000).

Co-Director. Bitor-Venezuela. Evaluation of the endocrine disruption potential of surfactants. June 1996 (\$447,000).

Co-Principal Investigator. Massachusetts Department of Environmental Protection. Determination of heavy metal background levels. June 1996 (\$23,000).

Principal Investigator. ARCO. Assessment of the role of particle size on soil ingestion estimates in children. June 1996 (\$150,000).

Principal Investigator. Radiation, Science and Health, Inc. Critical assessment of selected literature on radiation hormesis. December 1996 (\$26,000).

Principal Investigator. Environmental effects of Orimulsion. December 1996 (\$836,000).

Principal Investigator to support BELLE related activities. January 1995. RJReynolds, Inc., \$25,000; Electric Power Research Institute, \$10,000; Dow Corning, \$10,000; and Canadian Electric Utilities, \$10,000.

Principal Investigator. RJReynolds, Inc. The effects of low levels of chemical agents on biological responses. February 1995 (\$25,000).

Principal Investigator to assess soil ingestion in children living in Northwest of the U.S. ARCO. September 1992 - June, 1996 (\$748,000).

Principal Investigator. Louisiana DEQ. Assessment of soil ingestion in children. June 1995 (\$50,000).

Principal Investigator. US EPA. An evaluation of gender differences in susceptibility to toxic substances. June 1995 (\$55,000).

Principal Investigator. US EPA. Single exposure carcinogen database. October 1995 (\$75,000).

Principal Investigator. Health Canada. Develop new methodologies to assess human high risks. November 1994 (\$60,000).

Principal Investigator to direct BELLE activities. EPRI, Dow Corning, Center for Indoor Research, and EPA. October 1994 (\$55,000).

Principal Investigator. Florida Power and Light. Development of a framework to conduct an ecological risk assessment on Tampa Bay. April 1994 (\$140,000).

Principal Investigator. Gillette, Inc. Support of BELLE-related activities. May 1994 (\$3,000).

Principal Investigator. Florida Power and Light. Assess the effects of several types of fuel oil on red blood cells. September 1994 (\$31,000).

Co-Director of a series of conferences on petroleum contaminated soil. Held at the University of Massachusetts, Amherst. 1985, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002. Approximately \$100,000/conference from external cosponsors.

Co-Director of a series of conferences on soil and groundwater contamination. Held in the greater Los Angeles area. 1989-2002. \$100,000/year.

Principal Investigator on a grant to assess interspecies differences in hepatic peroxisomes proliferation and its role in the development of fish tumors. Department of Defense, U.S.A. April 1988-1993 (\$749,000).

Florida Power and Light. Critical Evaluation of the PM<sub>10</sub> standard. November 1993 (\$20,000).

Principal Investigator to direct BELLE activities: EPRI, Dow Corning, Center for Indoor Research, and others. April 1993 (approx. \$50,000).

Principal Investigator to assess single exposure carcinogens. ATSDR/September 1993 (\$50,000).

Principal Investigator to assess the prevalence of soil pica in children and soil ingestion in children with soil pica. State of Colorado. July 1992 (\$151,000).

Principal Investigator to direct the development of a newsletter on the Biological Effects of Low Level Exposures (BELLE). U.S. EPA. September 1992 (\$60,000).

Director of the Council for Health and Environmental Safety of Soils Funded by EPA, ATSDR and other organizations. 1988 – 1992 (\$150,000/yr.)

Principal Investigator. U.S. EPA. Lead Training Center. March 1992 (\$320,000); October 1993 (\$220,000); October 1994 (\$290,000).

Co-Director of National Conference on Hydrocarbon Contaminated Soils. From multiple agencies/organizations. (\$70,000).

Co-principal Investigator - Development of risk assessment methods for human and ecological risks. Health and Welfare Canada. April 1 1992 (\$75,000).

Co-principal Investigator for Regional Lead Training Center. U.S. EPA. April 1992 (\$250,000).

Principal Investigator to conduct national conference on the Biological Effects of Low Level Exposures to Chemicals and Radiation. NIEHS. April 1992 (\$10,000).

Principal Investigator to support research activities concerning the biological effects of low level exposures (BELLE). Ontario Hydro. January-May 1992 (\$20,000); RJR-Nabisco (\$35,000); EPRI (\$10,000).

Principal Investigator to assess the effects of selected oxidant stressor contaminants on red blood cells. State of Colorado. May 1992 (\$44,000).

Principal Investigator to assess factors assessing the siting of waste sites in the U.S. Waste Management Inc. June 1992 (\$200,000).

Principal Investigator to assess environmental factors affecting stream health. Wyman-Gordon, Co. July 1992 (\$135,000).

Co-Director of the Hydrocarbon Contaminated Soil and Groundwater Conference. Newport Beach, California. 1991 - co-sponsorship \$100,000 (approx.).

Principal Investigator to unrestricted support on predictive toxicology. Proctor and Gamble. June 1991 (\$5,000).

Co-principal Investigator to develop a toxicological based risk communication program for lead in water. U.S. EPA. August 1991 (\$50,000).

Co-Director of the 6th Annual Hydrocarbon Conference. Sept. 1991 (combined sponsorship \$100,000. From multiple agencies, federal, state and private sector).

Principal Investigator of a project to differentiate soil and dust ingestion in children. U.S. EPA. Sept., 1991 (\$50,000).

Principal Investigator to support research activities concerning the biological effects of low level exposures (BELLE). Dow Chemical. November 1991 (\$5,000).

Principal Investigator to support research activities concerning the biological effects of low level exposures. RJR Nabisco, Inc. July 1990 (\$45,000).

Principal Investigator-Evaluation of the health basis for EPA's regulations of SOTs and IOCs in drinking water. American Water Works Association Research Foundation. July 1990 (\$100,000).

Principal Investigator on contract to assess the relative potency of methemoglobin forming agents. EPA. July 1990 (\$28,000).

Principal Investigator-Methemoglobin forming agents: Toxicologic and risk assessment. EPA. August 1990 (\$28,000).

Principal Investigator to support research activities concerning the biological effects of low level exposures. Dow Chemical. November 1990 (\$10,000).

Principal Investigator to support research activities concerning the biological effects of low level exposures. The Electric Power Research Institute. December 1990 (\$10,000).

Co-Director of the Hydrocarbon Contaminated Soil and Groundwater Conference. Newport Beach, California. 1990 - co-sponsorship \$100,000 (approx.).

Principal Investigator of a contract to assess the Public Health risks associated with medical waste. Funded by the Rockefeller Institute of Government, Albany, New York. January 1989 (\$15,000).

Co-Principal Investigator on a grant to assess factors affecting heavy metal tissue distribution in selected fish species. General Electric. July 1989 (\$112,500).

Co-Principal Investigator on a grant to assess public health aspects of soil contaminated with petroleum. U.S. EPA. July 1989 (\$43,000).

Principal Investigator to continue research on how to estimate how much soil children ingest. Gradient Corporation. August 1989 (\$35,000).

Director of a conference on drinking water and health. American Water Works Association Research Foundation. September 1989 (\$10,000).

Principal Investigator of a contract to assess the methodological approaches for establishing an Air Toxic Programs. Rohm and Haas, Inc. Part 1 - January 1987 (\$60,000). Part 2 - January 1988 (\$60,000).

Principal Investigator on a grant to develop an approach for assessing human risk for soil contamination. Hercules Corporation. January 1988 (\$10,000).

Principal Investigator of a contract to assess environmental exposure from the application of lawn care chemical treatment practices. Massachusetts Department of Food and Agriculture. January 1987 - June 1987 \$75,000; July 1987 - June 1988 (\$75,000).

Director on a grant from Proctor and Gamble in the general area of research in animal extrapolation. July 1988 (\$5,000).

Principal Investigator of a grant to assess the amount of soil children consume. Syntex, Corporation. August 1988 (\$25,000).

Principal Investigator of a study to assess the environmental and public health effects of soils contaminated with petroleum products including disposal options. Mass. Depart. of Environ. Engineering. July 1986 - June 1987 (\$108,000).

Director of workshop on risk assessment for aerial spraying of insecticides for control of gypsy moths. U.S.D.A. - Forest Service. January 1986 (\$12,000).

Co-principal Investigator of a grant to assess the effects of acid rain on selected freshwater fish species. Massachusetts Fish & Wildlife Service. May 1986 (\$7,000).

Co-principal Investigator of a contract to assess the environmental and public health implications of disposal options for petroleum contaminated soil. Edison Electric Institute. July 1986 (\$50,000).

Co-principal Investigator to establish an aquatic toxicology research program in the School of Public Health. Funded by the Mass. Department of Fisheries and Wildlife. July 1986 (\$100,000/year).

Principal Investigator of a study to assess the environmental and public health effects of soils contaminated with petroleum products including disposal options. Mass. Depart. of Environ. Engineering. September 1984 - June 1985 (\$71,000). July 1985 - June 1986 (\$76,000).

Director on a grant from Proctor and Gamble in the general area of research in animal extrapolation. August 1986 (\$5,000), an additional \$5,000.00 was received in July 1987.

Principal Investigator of a grant to assess the amount of soil children consume. Syntex, Corporation. August 1986 (\$344,000).

Co-principal Investigator of the 3-year grant to assess the aquatic toxicity of chlorination of waste water treatment plants. Mass. Water Pollution Control Assoc. September 1986 (\$90,000).

Director of EPA sponsored conference on the Environmental and Health effects of Ozone. U.S. EPA. October 1986 (\$10,000).

Principal Investigator of a grant from the University of Illinois - Effects of ozone on mice with low levels of glucose-6-phosphate dehydrogenase in red cells. January 1985 (\$5,000).

Principal Investigator of a study entitled "The Effect of Environmental pH and Modifying Factors on the Reproduction of Rainbow Smelt." Massachusetts Fish and Wildlife Service. January 1985 (\$9,873).

Director of a contract to provide toxicological and risk assessment consultation and research to the Connecticut State Health Department. February 1985 (\$90,000).

Principal Investigator of a study to assess possible reproductive hazards in the semi-conductor industry. Digital Corporation: Phase 1 - July 1984 (\$244,000); Phase 2 - March 1, 1985 (\$194,000).

Director of the Northeast Regional Environmental Health Center, sponsored by the six New England States. Starting October 1985 (goal of \$250,000/year).

Principal Investigator on the assessment of the occurrence of biological factors affecting interindividual variation in response to toxic substances. Hercules Corporation. October 1985 (\$11,000).

Director of a national conference on "Environmental and Public Health Effects of Soils Contaminated with Petroleum Products." Funded by the Massachusetts Department of Environmental Quality Engineering, EPRI, ARCO, Northeast Utilities and other companies. October 1985 (\$50,000).

Director of a contract to assess the public health hazards associated with leaking underground storage tanks. EPRI. October 1985 (\$20,000).

Co-Investigator of a study to assess the possibility of using surrogate parameters in monitoring for the presence of volatile organic contaminants in drinking water. American Water Works Association Research Foundation. October 1984 (\$60,000).

Principal Investigator of a study to assess the effects of elevated levels of sodium in drinking water on school children. Massachusetts Department of Environmental Quality Engineering. June 1983 (\$10,000).

Developed the concept and proposal for a state-supported Environmental R & D Center. It was funded by the Massachusetts Legislature in July 1983 for up to \$500,000 per year.

Director of a grant from the U.S. EPA to conduct an International Conference on Cardiovascular Disease and Inorganic Constituents in Drinking Water. August 1983 (\$65,000).

Director of a contract from the Massachusetts Department of Environmental Quality Engineering to assess the impact of several plastics manufacturing plants on ambient air quality. September 1982 (\$5,068).

Principal Investigator of a contract to assess government policy with respect to genetic screening in the workplace. U.S. Congress' Office of Technology Assessment. January 1982 (\$7,400).

Principal Investigator of a Biomedical Research Grant from the University of Massachusetts Graduate Research Council to study the development of an animal model to simulate human hereditary blood disorders (i.e., G-6-PD deficiency). April 1982 (\$5,000).

Director of a quarterly newsletter entitled "Health Effects Update" for members of the American Water Works Association. May 1982 (\$20,000/year).

Principal Investigator of a grant to investigate the efficacy of the guinea pig heterologous model to predict the effects of ozone on human erythrocytes with a G-6-PD deficiency. Hoffmann-LaRoche, Inc. June 1982 (\$10,000).

Principal Investigator of a grant to study the effects on blood pressure of a reduction in sodium in drinking water from 120 ppm to 25 ppm. American Water Works Research Foundation. June 1982 (\$29,000).

Principal Investigator on a study designed to evaluate the effect of ascorbic acid supplementation on the body burden of lead. Hoffmann-LaRoche, In. July 1982 (\$14,700).

Co-principal Investigator on an unrestricted grant from the State of Massachusetts Department of Environmental Quality Engineering to study the potential of organics in drinking water as pollutants in household air. November 1981 (\$600).

Principal Investigator of a grant to investigate the effects of variable dietary ascorbic acid intake on the toxicity of a proposed toxic ozone intermediate on human subjects (in vitro). Hoffmann-LaRoche, Inc., N.J. December 1981 (\$10,000).

Director of a \$41,000 grant from the U.S. EPA to conduct an International Conference on Cardiovascular Disease and Drinking Water during May 1979.

Principal Investigator on a contract from the U.S. EPA to provide a critical assessment of the epidemiological and toxicological studies concerning the health implications of widespread use of diesel fuel. June 1979 (\$9,500).

Co-principal Investigator on a contract from the U.S. EPA to evaluate the effects of chlorite on the kidney, blood pressure, and blood parameters in adult and neonate rats and mice. December

1979 (\$176,198).

Co-principal Investigator on a grant from the U.S. EPA to conduct a study on the effects of elevated levels of sodium in drinking water on cardiovascular function. March 1978 (\$950,000).

Director of a \$24,000 grant from the U.S. EPA to conduct an International Conference on the Effects of Pollutants on High Risk Groups during June 1978.

Principal Investigator on a grant from the U.S. EPA to conduct a study on the effects of ozone and nitrogen dioxide on mice with low levels of glucose-6-phosphate dehydrogenase in their red cells. June 1978 (\$211,000).

Co-principal Investigator on a grant from the U.S. EPA to conduct a study on the effects of chloramines, chlorite, and copper on pregnant female mice with red cells having low levels of glucose-6-phosphate dehydrogenase. July 1978 (\$95,000).

Co-principal Investigator on a U.S. EPA grant to evaluate the effect of chlorine dioxide disinfection on neonates born during 1946 in a community that temporarily adopted the use of chlorine dioxide for disinfection. 1978 (\$50,000).

Co-principal Investigator of a grant from the Water Research Resources Center at the University of Massachusetts to investigate the effects of elevated levels of sodium in drinking water on the health of community residents. January 1977 (\$4,500).

Co-Principal Investigator. Massachusetts Department of Environmental Protection. Determination of heavy metal background levels. June 1997 (\$30,000).

Co-principal Investigator on a contract from the Environmental Protection Agency to conduct: (1) a study of the incidence of death from circulatory system causes between two communities with markedly different sodium levels in drinking water and (2) an analysis of the difference in drinking water quality with respect to minerals and heavy metals between these two communities. July 1977 (\$10,000).

Co-principal Investigator on a grant from the U.S. EPA to conduct a study on the effects of chlorine dioxide on mice with low levels of glucose-6-phosphate dehydrogenase in their red cells. October 1977(\$50,000).

Principal Investigator of a grant from the University of Massachusetts Graduate Research Council - Biomedical Effects Section - to continue studies on the effects of ozone on mice with low levels of glucose-6-phosphate dehydrogenase in red cells. December 1976 (\$5,000).

### VI. CONSULTING ACTIVITY – Partial Listing

<u>Occupational Health and Safety Administration (OSHA)</u>. Advisor and expert witness on litigation proceedings on the area of establishing health risk to workers in different occupations

with particular emphasis on chemical coordinating exposure. Consultation has focused on carcinogenic risk from exposure to aromatic amines such as 3,3'-dichlorobenzidine and "MOCA."

Environmental Protection Agency (EPA). (1) Invited as a consultant to advise what EPA's research priorities should be for FY 1981. (2) Selected to critically review the development of several criteria documents for drinking water contaminants (i.e., antimony, copper, cyanide, dichlorobenzidine, nickel, and zinc). (3) Selected for a national committee to evaluate the methodology by which EPA develops health criteria from which national drinking water regulations are established. (4) Selected as a member of the solvent taskforce to assess risk to the general public from drinking water with variable levels of contamination from a variety of common solvents. (5) Invited member of a select committee to advise EPA on developing methodologies for dealing with epigenetic carcinogens. (6) Selected to chair the health effects committee on nationwide public hearings on volatile organic contaminants in drinking water. (7) Selected as a member of an advisory group to help establish methodologies for assessing risk from carcinogens in drinking water. (8) Selected by EPA to give the principal address on health effects of drinking water pollutants at four nationwide workshops concerning the re-evaluation of the Primary Drinking Water Standards. (9) Selected by EPA to Chair a congressionally mandated study on the comparative health risks of seven different drinking water treatment technologies, (10) consultant Scientific Advisory Board (SAB) on dioxin and environmental exposures.

<u>National Semi-Conductor Co. (Danbury, CT)</u>. Provide direction for the development of a new industrial hygiene program. Supervised the developments of risk assessment resulting from occupational exposure to arsenic, arsine, silver, gold, antimony, boron compounds, phophene, hydrofluoric acid, acetic acid, silane, and hydrazine.

North Atlantic Treaty Organization (NATO). Drinking Water and Human Health committee.

<u>Massachusetts State Pesticide Board</u>. Human health effects advisor to an advisory committee of the board. 1977-1981. In September 1981, invited to the State Pesticide Board by the Governor for a 4-year term, but declined invitation.

<u>Ecology and Environment, Inc. (Buffalo, NY)</u>. This is an international consulting firm concerned with toxic substance regulation, hazardous wastes, and occupational health. I served on a health advisory board, which provides direction for their industrial hygiene program.

<u>Department of Environmental Quality Engineering (DEQE) for the State of Massachusetts</u>. (1) On matters pertaining to ambient air quality standards and toxic substances in drinking water. (2) Helped to create a 25-hour course on toxicology and risk assessment for DEQE staff. I co-instructed the course. (3) Ad Hoc Committee on sodium in drinking water. (4) Member of a committee to develop a statewide air toxic program.

<u>State of California - Energy Resources Conservation and Development Commission</u>. Provided information on human high-risk groups in a power plant setting.

<u>U.S. Army - Division of Environmental Health and Safety (Fort Dietrick, MD)</u>. Provided guidance on the development of a program to establish permissible exposure limits to chemicals employed in various army occupations.

<u>National Sanitation Foundation</u>. Nominated and elected to the NSF Council of Public Health Consultants from 1980 to 1983, specializing in toxicology.

<u>Governor's Hazardous Waste Siting Council</u>. Advise the Massachusetts Legislature and the Governor on the public health considerations in dealing with the proper disposing of hazardous wastes in Massachusetts.

<u>Mitre Corporation</u>. Served on a selected committee to formulate and review methodology for establishing acceptable exposures to toxicants to U.S. Army personnel in combat and training operations.

<u>State of Massachusetts - Department of Public Health and Department of Environmental Quality</u> Engineering Joint Advisory Committee on Environmental Risk Assessment.

<u>National Academy of Sciences</u>. (1) Advised on the development of a possible national study of persons at increased risk to environmental pollutants and (2) Participated as a member of the Safe Drinking Water Committee.

<u>Praeger Scientific Publishers (NY)</u>. Reviewer of book proposals in the areas of environmental and occupational health and toxicology.

John Wiley and Sons, Publishers (NY). Reviewer of proposed books in the area of environmental and occupational health and toxicology.

<u>MacMillan Publishing Co. (NY)</u>. Reviewer of proposed books in the areas of environmental and occupational health and toxicology.

Sybron Corporation (Rochester, NY). To direct a human risk assessment of exposure to propylene dichloride.

<u>Perkins-Jordan, Co. (Portland, ME)</u>. Environmental/industrial engineering company advisor in the area of toxicity of hazardous substances.

<u>Office of Technology and Assessment for the U.S. Congress</u>. I am advising in the area of genetic susceptibility to pollutants.

<u>Pierce, Atwood et al. - a Portland, Maine Law Firm</u>. I am advising with regard to risk assessment for environmental agents.

Canal Electric Co. To advise on the possible health risks of switching from 2.2% sulfur oil to

2.8% sulfur oil for the generation of electricity.

<u>Research Foundation of the American Water Works Association</u>. To develop and conduct courses on toxicology and environmental risk assessment.

Northeast States for Coordinated Air Use Management (NESCAUM). I have been invited to present lectures for NESCAUM staff members on high-risk groups and standard setting during their Air Pollution Health Effects Course. January 1981 (Hartford, CT); March 1982 (Durham, NH).

<u>U.S. Consumer Product Safety Commission and their contractor, JRB Associates</u>. To advise and critically review their studies on consumer products and high risk groups especially children.

<u>Electric Power Research Institute</u>. I have been invited to participate in their nationwide study on the human health effects of inhalable particles from coal-fired power plants.

<u>Gordon A. Enk and Associates, Inc. (Medusa, NY)</u>. I was invited to advise in the area of development of toxicological assays to prevent potential human health effects for coal-fired power plants.

<u>Geomet. Inc. (Rockville, MD)</u>. I have advised on projects dealing with toxicological hazards in the utility industry.

<u>American Industrial Hygiene Association</u>. Non-Traditional Shiftwork Periods Ad Hoc Committee Membership. July 1982.

<u>Bioassays, Inc.</u> (Woburn, MA). I have advised in the area of developing animal models for predicting the response of humans to ozone and nitrogen dioxide.

<u>Arthur D. Little Company</u>. I have advised on projects dealing with the role of high-risk groups in establishing ambient air standards for mobile source pollutants.

<u>Dynamic Corporation</u>. I advise on a project dealing with assessing the toxicological health hazards associated with the generation of electricity.

<u>Waste Management of Wisconsin, Inc</u>. I advise on the health effects of groundwater contamination by organic substances.

Committee on Human Health Effects and Drinking Water for the American Water Works Association.

<u>Center for Environmental Health and Human Toxicology</u>. Advised on the health effects of formaldehyde.

Massachusetts Railroad Association. To advise on the potential human health risks associated

with herbicide spraying.

<u>Harvard University</u>. I advise on the carcinogenic potential of diesel emissions from power generating plants.

<u>State of Florida</u>. I advise the State's Department of Environment on development of a water reuse policy.

<u>City of Los Angeles, Department of Water and Power</u>. I advise concerning risk assessment of carcinogens in drinking water.

<u>State of Connecticut, Preventable Diseases Division</u>. I advise on several areas of health hazards assessment of a wide range of pollutants.

<u>National Institute of Environmental Health Sciences</u>. Selected for the Third Task Force for Research Planning on the Environmental Health Sciences - specialty: Role of host variations, 1984.

<u>American Industrial Health Council</u>. I have advised on the areas of risk assessment and in developing ways to improve scientific communication with the media.

Envirologic Data. I advise in the general area of toxicology and risk assessment.

<u>Academy of Toxicological Sciences</u>. Selected to peer-review the applications of those persons seeking to become board certified in toxicology.

<u>National Science Foundation (NSF)</u>. I advise on the area of long-term environmental health research goals with particular emphasis on human high-risk groups and risk assessment.

<u>Council for Environmental Quality (CEQ)</u>. I advise on the area of long range planning of EPA research goals as they pertain to pollutant effects on high-risk groups and research methodologies.

<u>U.S. Forestry Service</u>. I advise on the human health risk associated with the aerial spraying of selected pesticides.

<u>U.S. Consumer Product Safety Commission</u>. I was selected based on a national competition to serve as a member of the Consumer Product Safety Commission's Chronic Hazard Advisory Panel on the use of the plasticizer, di(2-ethylhexyl)phthalate (DEHP) in children's products, e.g., pacifer, rubber pants, etc.

Scientific Advisory Panel. Health and Human Services, State of Connecticut.

<u>Media Training</u>. I was one of three toxicologists who participated in an intensive media training program which focused on how to be interviewed by the media on environmental issues. This

was sponsored by Chemlawn Inc. February 1985; I had another media training session in November 1985 sponsored by Hoffman-LaRoche, Inc.

<u>Doctor's Data</u>. I was invited to be on the Scientific Board of Directors of this organization. February 1985.

<u>National Academy of Sciences</u>. I was appointed to a special study committee commissioned to assess the health effects of pollutants in commercial aircraft. 1985 to 1986.

World Health Organization. I was invited to participate in development of basic research needs associated with toxic oil syndrome on June 27-28, 1985, in Copenhagen.

<u>Associated Industries of Vermont</u>. I advised on the toxicological basis of the proposed State of Vermont air toxics program.

<u>Gulf and Western, Inc.</u> I advise on the toxicological effects of cadmium and lead contamination of water, air and soil.

<u>State of California - U.S. EPA</u>. I advise on the development of methodologies for establishing a health-based air toxics program.

<u>Rohm and Haas, Inc</u>. I was invited to provide a one-day program on animal extrapolation and risk assessment; also, I was invited to critique their approaches for deriving air quality standards for air toxics.

<u>Southern California Edison</u>. I advise on the environmental and public health implications of soils contaminated with petroleum products.

<u>Monsanto</u>. I was selected to be a member of an expert independent panel of scientists to review toxicology data of pesticide products.

Navy. I advise the Navy on the health effects of contaminants in drinking water.

<u>Syntex Corporation</u>. I advise on the health effects of soil contamination with various organic contaminants.

<u>Tambrands, Inc</u>. I have been invited to become a member of their Institutional Review Committee.

<u>Pacific Power and Light</u>. I have advised in the area of assessing public health implications of PCB contaminated soil.

<u>Digital Equipment Corporation</u>. Assess the health implication of ozone emissions from manufactured equipment.

<u>U.S. Justice Department</u>. Advise on health risk assessment associated with hazardous waste sites.

<u>Department of Defense, U.S. Army</u>. Advise on the extrapolative relevance of alternative animal models for predicting human responses to environmental toxins.

<u>Council for Agricultural Science and Technology</u>. Invited to serve on national committee to assess risk from 2-4D exposure.

<u>Alliance Technologies</u>. Advise in the area of risk assessment and toxicology on a variety of environmental issues.

Roy Weston, Inc. Advise in the area of risk assessment and toxicology.

<u>Colorado Department of Public Health</u>. Advised on the development of risk assessment methodologies to estimate human health risks from possible exposure from the Rocky Mountain Arsenal.

<u>NOITE Corporation</u>. Denver, Colorado. Advise on the potential public health risks associated with drinking water contaminants.

<u>Smith, Kline and Beckman</u>. Advise on the public health risks associated with incineration of medically related waste.

Gelman, Inc. Advise on the public health implications of organic contaminants in groundwater.

GZA Corporation. Advise on the public health risks of petroleum contamination.

<u>Gelman Sciences</u>. Advise on the public health risk of various issues relating to risk assessment procedures to estimate public health hazards for chemical contaminants such as 1,4 dioxane.

<u>State University at Albany - Center for Policy Research</u>. Advise on the issue of medical infectious waste and public health.

<u>World Health Organization (WHO)</u>. I advise on the role of genetic factors in affecting the occurrence of occupationally-induced disease.

<u>Woodward-Clyde Consultants, Inc</u>. Advise on the public health risks associated with exposure to toxics from multi-media.

Environ Corp. Advise on the issue of soil ingestion by children.

W.R. Grace. Advise on various risk assessment issues.

Committee on Urban Environmental Protection for the Division of Urban Affairs of the National

Association of State Universities and Land Grant Colleges.

<u>Member of the International Joint Commission</u>, Great Lakes Science Advisory Board's Health Committee, 1991-1992.

Florida Power and Light. Advise on various risk assessment areas.

<u>3M Corporation</u>. Advise on environmental and occupational health issues.

<u>National Academy of Sciences</u>. Invited to be a member of the committee assessing the human health effects of the fuel additive MTBE.

State of Colorado. Advised on risks associated with contamination at the Rocky Mountain Arsenal. 1988-present (2002).

Journal Reviewer (examples of):

### 2014-2015

**ACS** Central Science **BBA-Molecular Cell Research** Cancer Research **Chemico-Biological Interactions** Ecotoxicology and Environmental Safety **Environmental Research** Environmental Toxicology & Chemistry Environmental Toxicology & Pharmacology Human and Experimental Toxicology International Journal Plant Biology Neuro Toxicology Plant Disease **Plant Physiology** PLOS One Proteomics **RAD 2015 Proceedings Toxicological Sciences** 

#### Past Years

Ageing Research Reviews Archives of Environmental Contamination and Toxicology Biogerontology BioEssays BioMed Central Genomics Chemical Research in Toxicology Chemosphere Drug Safety Ecology Letters Ecotoxicology Ecotoxicology and Environmental Safety Environment International Environmental and Experimental Botany **Environmental Health Perspectives** Environmental Science and Technology **Experimental Gerontology** Free Radical Biology and Medicine Fresenius Environmental Bulletin Food and Chemical Toxicology Frontiers in Bioscience **GLIA** Hazarouds Materials HortScience Human and Experimental Toxicology International Journal of Obesity International Journal of Toxicology Italian Journal of Zoology Journal of Alzheimer's Disease Journal of Plant Growth Regulation Journal of Zhejiang University Biologia Plantarum Journal of Zoology Molecular Biology Reports Neuro Toxicology Pest Management Science **Plant Physiology Rejuvenation Research Risk Analysis** Science Science of the Total Environment **Toxicology Sciences** 

#### Journal Editorship:

Editor-in-Chief - Dose Response (formerly Non-linearity in Biology, Toxicology and medicine), 2005-present
Guest-Editor – Proceedings of the National Academy of Science
Advisory Board - Invited member of the Advisory Board of the ICCNS Journal of Cell
Communications and Signaling, 2012
Editor-in-Chief – Non-linearity in Biology, Toxicology, and Medicine, 2001-2005
Editor-in-Chief - Human and Ecological Risk Assessment - 1995-2009
Editorial Board - Inhalation Toxicology - 1990-1998 Editorial Board - Soil and Sediment Contamination: An International Journal – 1993-2000 Editorial Board - Human and Experimental Toxicology - 1995-present Editorial Board - Environmental Toxicology and Safety - 1994-1998 Editorial Board - Biomedical and Environmental Sciences - 1996-1998

#### Book Editorship:

Guest Editor, Distribution of Artificial Radionuclides in the Abandoned Cattle in the Evacuation Zone of the Fukushima Daiichi Nuclear Power Plant. Proceedings of the National Academy of Sciences. 2012.

Co-Editor, Hormesis: A Revolution in Biology, Toxicology and Medicine. Humana Press Inc., 2010, 213 pages.

Advisory Board, Toxicology Desk Reference, The Toxic Exposure and Medical Monitoring Index, 1996.

Co-Editor, Annual review of Ecotoxicology and Environmental Toxicology & Chemistry, 1996.

Co-Editor, Current Topics in Ecotoxicology and Environmental Chemistry, published by Taylor and Francis, 1995-present.

Editor of the series Environmental Health and Toxicology published by Lewis Publishers, 1990-1993.

Co-Editor of a Monograph Series on Remedial Technologies for Hydrocarbon Contaminated Soils published by Lewis Publishers, 1990-1992

Co-Editor, Soils Contaminated by Petroleum, Environmental and Public Health Effects, John Wiley & Sons, 1988

#### **VII. ACADEMIC AND OTHER HONORS**

- Invited member of the Advisory Committee of the Nuclear Safety & Security Commission (Project #1501007) in Korea
- Awarded the Petr Beckmann Award by Doctors for Disaster Preparedness for courage and achievement in defense of scientific truth and freedom.
- Honorary Degree, Doctor of Science. School of Nursing and Medical Radiation Sciences Program, McMaster University Canada
- Invited member of the Advisory Board of the ICCNS Journal of Cell Communications and Signaling, 2012

Honorary member of the International CCN Society, 2012

Awarded the second International Cell Communication and Signaling-Springer award, Belfast

Northern Ireland, 2010.

- Awarded the Marie Curie Prize from the World Council of Nuclear Workers at the 8<sup>th</sup> LOWRAD International Conference in Rio de Janeiro, Brazil, 2010.
- Selected to present the Third Annual Environmental Toxicology Lectureship at the Institute for Environmental Studies at the University of Illinois, 1991.

Nominated for Teacher of the Year Award - several times

Appointed to the Food and Nutrition Board of the National Research Council, 1988-1991.

Appointed by the Institute of Medicine to the Food and Nutritional Board, 1988-1990.

Adrian Rondileau Award for outstanding leadership and professional achievement, 1988.

- Appointed to the National Academy of Sciences Safe Drinking Water Committee, 1982-1984, 1986.
- Appointed to the NATO countries Safe Drinking Water Committee
- Appointed to the 11 member Scientific Counselors of the Agency for Toxic Substances and Disease Registry
- Phi Delta Phi a national academic fraternity
- Kappa Delta Pi a national education fraternity requiring the member to be in the upper 1/10 of the graduating class.
- William Vinal Zoological Award awarded to graduating senior biology major with the highest academic average in zoology.

Danforth Fellowship Nomination

Dean's List - 7 semesters

# VIII. SOCIETIES

International Dose-Response Society, 2003-present

Association for the Advancement of American Sciences (AAAS)

Society for Occupational and Environmental Health (SOEH) - Elected to the Governing Council, 1980-1982.

American College of Toxicology (ACT) - Elected to be a Councilor, 1981-1983

Society of Environmental Toxicology and Chemistry (SETAC)

Society of Risk Analysis (SRA)

Society of Toxicology (SOT)

New England Chapter of the Society of Toxicology - Councilor

International Society for the Regulatory Toxicology and Pharmacology

Council for Health and Environmental Safety of Soil (CHESS) – Selected to Chair, 1987-1997 BELLE, Chairman of the Advisory Committee, 1990-present.

# IX. UNIVERSITY ASSIGNMENTS

School of Health Sciences and Environmental Health Sciences - Personnel Committee, 2006-2009, 2011-2015.
Environmental Health Sciences Department – Personnel Committee, 2015
Animal Care
University-wide Environment Committee
Advisory Board of the Institute of Environmental Studies

Ph.D. Policy and Admissions Committee
Biohazards Regulation and Control Committee
Advisory Board of the Water Research Resource Center
Division of Public Health - Nutrition Department Joint Student Admission Committee
Search Committee for New Director of the Division of Public Health, 1983
Teaching Evaluation Committee, 1982
By-Laws Committee, 1978-1982
Curriculum Committee, 1978-1981
Academic Affairs Council, 1976-1979
Ph.D. Proposal Committee, 1977-1978

# **X. CERTIFICATION**

Elected to the Board of Directors of the Academy of Toxicological Sciences,1987-1989 Elected Vice President of the Board of Directors of the Academy of Toxicological Sciences, 1987-1989 Board Certified in General Toxicology by the Academy of Toxicological Sciences,1982, renewed 1987- 2007, 2012-2017

Elected to the Professional Evaluation Board

# XI. VISITING PROFESSORSHIP

Visiting Professor Lecture Program, September 2011. U.S. Food and Drug Administration, White Oaks Campus, Silver Spring, Maryland.

University of Illinois at Champagne-Urbana, April 1989. Toxicology scholar in residence. Invited to present seminar/lecture on toxicology and human risk assessment.

Harvard University, School of Public Health, September 1985, and 1986. Invited to be a guest faculty member in the course "Risk Analysis in Environmental Health." My topic is "Use of Animal and Other Data as Predictors of Human Risks."

University of North Carolina School of Public Health at Chapel Hill. February 12-16, 1984.

# **XII. PUBLICATIONS**

### <u>2022</u>

Calabrese EJ. (2022). Linear non-threshold (LNT) fails numerous toxicological stress tests: Implications for continued policy use. Env Res (to be submitted).

Macias-Verde D, Burgos-Burgos J, Lara PC, Calabrese EJ. (2022). Reduced ionizing inflammatory early effects on acute respiratory distress syndrome over the elderly population. (to be submitted).

Agathokleous E, Barcelo D, Aschner M, Azevedo RA, Bhattacharya P, Costantini D, Cutlers GC, Docea AO, De Marco A, Dorea JG, Duke SO, Fatta-Kassinos D, Efferth T, Guedes RNC, Fotopoulosi V, Hayes AW, Iavicoli I, Kalantzi O-I, Koike T, Kumar M, Rezaee R, Reiter RJ, Manautou JE, Moore MN, Paoletti E, Penuelas J, Pico Y, Rinklebe J, Rocha-Santos T, Sonne C, Teaf C, Tsatsakis A, Vardavas AI, Wang W, Zeng EY, Calabrese EJ. (2022). Rethinking sub-threshold effects in regulatory chemical risk assessments. Environ Health Perspec (Submitted)

Agathokleous E, Calabrese EJ. (2022). Hormesis: An important tool in cleaner production research. J Clean Prod (Submitted).

Dhawan G, Dhawan V, Kapoor R, Dhawan R, Welsh JS, Calabrese EJ. (2022). Low dose radiation therapy for genign disorder. In: Low Dose Radiation in Health and Disease (Pandey BN, Huilgol NG, editors), Narosa Publisher, New Delhi, India pp 200.

Agathokleous E, Calabrese EJ. (2022). Editorial Overview: Hormesis and dose-response. Curr Opin Toxicol DOI: 10.1016/j.coto.2022.03.004 (In Press).

Calabrese EJ, Giordano J. (2022). LNTgate: How LNT benefited from editorial actions. Nature (Submitted).

Scuto M, Modafferi S, Rampulla F, Zimbone V, Tomasello M, Spano S, Ontario ML, Palmeri A, Siracusa R, Di Paola R, Cuzzocrea S, Calabrese EJ, Wenzel U, Calabrese V. (2022). Redox modulation of stress resilience by Crocus Sativus L. for potential neuroprotective and antineuroinflammatory applications in brain disorders: From molecular basis to therapy. Mech Age Dev (Submitted)

Calabrese EJ, Vittorio Calabrese V. (2022). Enhancing health span: Muscle stem cells and hormesis. Biogerontology DOI: 10.1007/s10522-022-09949-y.

Agathokleous E, Moore MN, Calabrese EJ. (2022). Environmental Hormesis: A tribute to Anthony Stebbing. STOTEN (in press).

Ricci PF, Calabrese EJ. (2022). Resolving an open science-policy question: Should the LNT still be an omnibus regulatory assumption? Sci Tot Environ XX:153917.

Calabrese EJ, Agathokleous E. (2022). Hormesis is an evolutionary expectation: Implications for aging. Biogerontology (Submitted).

Calabrese EJ, Shamoun DY, Agathokleous E. (2022). Dose response and risk assessment: Evolutionary foundations. Environ Poll (Submitted).

Calabrese EJ, Evgenios Agathokleous E. (2022). Is LNT a non-evolutionary dose respose model? Dose-Response.

Calabrese EJ, Selby PB, Giordano J. (2022). Ethical challenges of the linear non-threshold

(LNT) cancer risk assessment revolution: History, insights, and lessons to be learned. STOTEN-D-22-05511 (Accepted).

Calabrese EJ. (2022). Stem cells and hormesis. Curr Opin Toxicol (Accepted).

Calabrese EJ. (2022). Key historical study findings questioned in debate over threshold versus linear non-threshold for cancer risk assessment. Chem-Biol Inter CHEMBIOINT-D-22-00267 (Accepted).

Calabrese EJ. (2022). Hormesis and dental apical papilla stem cells. Chem-Biol Inter (Accepted).

Agathokleous E, Calabrese EJ. (2022). Hormesis: A general biological principle. Chem Res Toxicol DOI:10.1020/acs.chemrestox.2c00032.

Agathokleous, E., Wang, Q., Iavicoli, I., and Calabrese, E.J. (2022). The relevance of hormesis at higher levels of biological organization: Hormesis in microorganisms. Curr Opin Toxicol 29:1-9 DOI: 10.1016/j.cotox.2021.11.001 [Invited Review paper]

Calabrese EJ. (2022). Cover up and cancer risk assessment: Prominent US scientists suppressed evidence to promote adoption of LNT. Env Res YERS\_112973.

Ricci PF, Calabrese EJ. (2022). Resolving an open science-policy question: Should the LNT still be an omnibus regulatory assumption? Sci Total Environ X:153917 https://doi.org/10.1016/j.scitotenv.2022.153917

Calabrese EJ. (2022). Induced pluripotent stem cells and hormesis. Dose Response 20(1):15593258221075504 DOI:10.1177/15593258221075504.

Calabrese EJ. (2022). Hormesis and endothelial progenitor cells. Dose-Resonse 20(1):15593258211068625 DOI:10.1177/15593258211068625.

Calabrese EJ. (2022). Hormesis: Transforming disciplines that rely on the dose response. IUBMB Life 74(1):8-23. doi:10.100s/iub.2529.

Ontario ML, Siracusa R, Modafferi S, Scuto M, Sciuto S, Greco V, Bertuccio MP, Trovato SA, Crea R, Calabrese EJ, Di Paola R, Calabrese V. (2022). Potential prevention and treatment of neurodegenerative disorders by olive polyphenols and hidrox. Mech Age Dev 203:11637 DOI:10.1016/j.mad.2022.111637

Calabrese EJ, Calabrese V, Giordano J. (2022). Brain health promotion: Tactics within a strategic approach based upon valid, yet evolving scientific evidence. Mech Age Dev 201:111605.

Bucciantini M, Leri M, Scuto M, Ontario M, Trovato SA, Calabrese EJ, Calabrese V, Stefani M. (2022). Xenohormesis underlies the anti-aging and health properites of olive polyphenol. Mech

Ageing Dev 202:111620 DOI: 10.1016/j.mad.2022.111620.

Calabrese EJ, Calabrese V, Dhawan G, Kapoor R, Giordani. (2022). Hormesis and neural stem cells. Free Rad Biol Med 178:314-329.

Scuto M, Ontario ML, Salinaro AT, Caligiuri I, Rampulla F, Zimbone V, Modafferi S, Rizzoio F, Canzoniere V, Calabrese EJ, Calabrese V. (2022). Redox modulation by plant polyphenols targeting vitagenes for chemoprevention and therapy: Relevance to novel anti-cancer interventions and mini-brain organoid technology. Free Rad Biol Med 179:59-75.

Salinaro AT, Calabrese V, Calabrese EJ. (2022). Potential prevention and treatmentof neurodegenerative disorders by olive polyphenols and hydrox. Mech age Dev. MAD-D-21-00262R2.

Agathokleous E, Barcelo D, Iavicoli I, Tsatsakis A, Calabrese EJ. (2022). Disinfectant-induced hormesis: An unknown environmental threat of the application of disinfectant to prevent SARS-CoV-2 infection during the COVID-19 pandemic? Environ Poll 292:118429.

Agathokleous, E., Barceló, D., Rinklebe, J., Sonne, C., Calabrese, E.J., and Koike, T. (2022). Hormesis induced by silver iodide, hydrocarbons, microplastics, pesticides, and pharmaceuticals: Implications for agroforestry ecosystems health. Sci Total Environ 820:153116 DOI:10.1016/j.scitotenv.2022.153116.

Calabrese EJ. (2022). Hormesis and bone marrow stem cells: Enhancing cell proliferation, differentiation and resilience to inflammatory stress. Chem-Biol Inter 351:109730.

Calabrese EJ (2022). Hormesis and embryonic stem cells. Chem-Bio Inter 352:109783.

### <u>2021</u>

Calabrese EJ, Agathokleous E, Kapoor R, Dhawan G, Kozumbo W, Calabrese V. (2021). Metformin-enhances resilience via hormesis. Age Res Rev 71:101418.

Cuttler J, Lamet M, Calabrese E. (2021). Treatment of early-stage Alzheimer's disease with CT scans of the brain: A case report. Dose Response 21-272-DR.

Agathokleous E, Barceló D, Fatta-Kassinos D, Moore MN, Calabrese EJ. (2021). Contaminants of emerging concern and aquatic organisms: The need to consider hormetic responses in effect evaluations. Water Emerg Contam Nanoplastics 1:2 DOI: 10.20517/wecn.2021.01.

Agathokleous E, Moore MN, Calabrese EJ. (2021). Estimating the no-observed-adverse-effectlevel (NOEL) of hormetic dose-response relationships in meta-data evaluations. Methods X 8:101568 DOI:10.1016/j.mex.2021.101568.

Beck BD, Seeley M, Calabrese, E.J. (2021). Use of toxicology in the regulatory process. In:

Principles and Methods of Toxicology, Seventh Edition (AW Hayes and CL Kruger, editors). CRC Press.

Calabrese EJ. (2021). The dose-response: A fundamental concept in toxicology. In: Principles and Methods of Toxicology, Seventh Edition (AW Hayes and CL Kruger, editors). CRC Press.

Calabrese EJ, Agathoeous E, Kapoor R., Dhawan G, Calabrese V. (2021). Hormesis and dental pulp stem cells. Age Res Rev Article 3:101540.

Calabrese EJ. (2021). Human periodontal ligament stem cells and hormesis: Enhancing cell renewal and cell differentiation. Pharm Res 173:105914 doi:10.1016/j.phrs.2021.105914.

Agathokleous E, Brown PH, Calabrese EJ. (2021). A gift from parent to offspring: Transgenerational hormesis. Trends Plant Sci 26:1098-1100.

Hanekamp JC, Calabrese EJ. (2021). Reflections on chemical risk assessment of how (not) to serve society with science. Sci Total Environ 792:148511.

Calabrese EJ. (2021). Hormesis and adult adipose-derived stem cells. Pharm Res 172:105803 doi:10.1016/j.phrs.221/105803.

Scuto M, Trovato SA, Caligiuri I, Ontario ML, Greco V, Sciuto N, Crea R, Calabrese EJ. Rizzolio F, Canzonieri V, Calabrese V. (2021). Redox modulation of vitagenes via plant polyphenols and vitamin D: Novel insights for chemoprevention and therapeutic interventions based on organoid technology. Mech Age Dev 199:111551.

Agathokleous E, Zhou B, Xu J, Ioannou A, Feng Z, Saitanis CJ, Frei M, Calabrese EJ, Fotopoulos V. (2021). Exogenous application of melatonin to plants, algae, and harvested products to sustain agricultural productivity and enhance nutritional and nutraceutical value: A meta-analysis. Environ Res 200:111746.

Iavicoli I, Fontana L, Agathokleous E, Santocono C, Russo F, Vetrani I, Fedele M, Calabrese EJ. Hormetic dose responses induced by antibiotics in bacteria: A phantom menace to be thoroughly evaluated to address the environmental risk and tackle the antibiotic resistance phenomenon. Sci Total Environ 798:149255.

Agathokleous E, Iavicoli I, Barcelo D, Calabrese EJ. (2021). Micro/nanoplastics effects on organisms: A review focusing on 'dose'. J Haz Mat 417:126084.

Hanekamp JC, Calabrese EJ. (2021). Tradeoffs of chemicals regulation – The science and tacit knowledge of decisions. Sci Total Environ 894:148566.

Agathokleous E, Barcelo D, Calabrese EJ. (2021). US EPA: Is there room to open a new window for evaluating potential sub-threshold effects and ecological risks? Environ Poll 284:117372.

Agathokleous E, Iavicoli I, Barcelo D, Calabrese EJ. (2021). Ecological risks in a 'plastic' world: A threat to biological diversity? J Haz Mat 417:126035.

Cuttler JM, Calabrese EJ. (2021). What would become of nuclear risk if governments changed their regulations to recognize the evidence of raidation's beneficial health effects for exposures that are below the thresholds for detrimental effects? Dose-Response 19(4):15593258211059317.

Kapoor R, Welsh JS, Dhawan V; Javadinia SA, Calabrese EJ, Dhawan G. (2021). Low-dose radiation therapy (LDRT) for COVID-19 and its deadlier variants" Arch Toxicol. 95:3425-3432.

Javadinia SA, Nazeminezhad N, Ghahramani-Asl R, Soroosh D, Fazilat-Panah D, PeyroShabany B, Saberhosseini N, Mehrabian A, Taghizadeh-Hesary F, Dhawan G, Welsh JS, Calabrese EJ, Kapoor R. Low-dose radiation therapy for osteoarthritis and enthesopathies: A review of current Data. Intern J Rad Biol 97(10:1352-1367.

Agathokleous E, Calabrese EJ. (2021). Formaldehyde commonly displays hormesis. Environ Res 199:111395. doi: 10.1016/j.envres.2021.111395.

Calabrese EJ. (2021). Dose Response. In: Encyclopedia. History of Environmental Science.

Calabrese EJ, Giordano J. (2021). Ultralow doses and biological amplification: Approaching Avogadro's Number. Pharm Res 170:105738.

Calabrese EJ, Agathokleous E, Calabrese V (2021). Ferulic acid and hormesis: Biomedical and environmental implications. Mech Aging Dev 198:111544. DOI 10.1016/j.mad.2021.111544

Calabrese EJ, Agathokleous E, Kapoor R, Dhawan G, Calabrese V. (2021). Luteolin and hormesis. Mech Aging Develop 199:111559.

Calabrese EJ, Giordano J, Kapoor R, Dhawan G, Kozumbo W. (2021). Hormesis and metformin. Age Res Rev 71:101418.

Iavocoli I, Agathokleous E, Calabrese EJ (2021). Hormesis related to antibiotics in bacteria. Sci Total Environ 798:149255.

Agathokleous E, Barcelo D, Calabrese EJ. (2021). US EPA: Opening a new window for evaluating potential sub-threshold effects and ecological risks. Environ Poll 2021:117372 (in press) doi.org/10.1016/j.envpol.2021.117372.

Hanekamp J, Calabrese EJ. (2021). Healthy ageing and longevity. In: Nutrition, Food and Diet in Health and Longevity (Rattan SIS, Kaur G, Eds.).

Calabrese EJ, Kozumbo WJ. (2021). The hormetic dose-response mechanism: Nrf2 Activation. Pharm Res 167:105526.

Calabrese V, Trovato A, Scuto M, Ontario ML, Rampulla F, Zimbone V, Rizzo C, Greco V, Sciuto S, Crea R, Calabrese EJ, Dionisio G. (2021). Food for brain health. In: Healthy Ageing and Longevity (S Rattan, Editor).

Agathokleous E, Zhou B, Xu J, Ioannou A, Feng ZZ, Saitanis CJ, Frei M, Calabrese EJ, Fotopoulos V. (2021). Melatonin: A versatile tool for sustaining agriculture productivity and improving food security. Environ Res 200:111746.

Agathokleous E, Calabrese EJ. (2021). The hormetic dose response: implications for risk assessment. In: Toxicological Risk Assessment and Multi-System Health Impacts from Exposure (Tsatsakis A, Ed). 1st Edition, Chapter 13 Academic Press doi.org/10.1016/B978-0-323-85215-9.00003-9.

Calabrese EJ, Calabrese V, Giordano J. (2021). Demonstrated hormetic mechanisms putatively subserve riluzole-induced effects in neuroprotection against amyotrophic lateral sclerosis (ALS): Implications for research and clinical practice. Age Res Rev 67:101273.

Agathokleous E, Iavicoli I, Barcelo D, Calabrese EJ. (2021). Microplastics effects on organisms: A review focusing on 'dose'. 2021. J Haz Mat 417:126084. DOI: 10.1016/j.jhazmat.2021.126084.

Calabrese EJ, Kozumbo WJ, Kapoor R, Dhawan G, Lara PC, Giordano J<sup>.</sup> (2021). Nrf2 activation putatively mediates clinical benefits of low-dose radiotherapy in Covid-19 pneumonia and acute respiratory distress syndrome (ARDS): Novel mechanistic considerations. Radiother Oncol 160:125-131. 10.1016/j.radonc.2021.04.015

Beck BD, Seeley M, Calabrese EJ. (2021). Use of toxicology in the regulatory process. In: Hayes' Principles and Methods of Toxicology, Chapter 2, 7<sup>th</sup> Edition.

Calabrese EJ. (2021). Dose-response: A fundamental concept in toxicology. In: Hayes' Principles and Methods of Toxicology, Chapter 3, 7<sup>th</sup> Edition.

Cuttler JM, Calabrese EJ. (2021). A novel therapy for influenza-induced pneumonia. J Rad Cancer Res DOI: 10.4103/jrcr.jrce 49 20.

Calabrese EJ, Priest ND, Kozumbo WJ. (2021). Thresholds for Carcinogens. Chemico-Biol Inter 341:109464.

Agathokleous E, Calabrese E. (2021). Fungicide-induced hormesis in phytopathogenic fungi: A critical determinant of successful agriculture and environmental sustainability. J Agr Food Chem. 69(16):4561-4563.

Smith CJ, Perfetti TA, Berry SC, Brash DE, Bus J, Calabrese E, Clemens RA, Fowle III JRJ, Greim H, MacGregor JT, Maronpot R, Pressman P, Zeiger E, Hayes AW. (2021). Bruce Nathan Ames – Paradigm shifts inside the cancer research revolution. Mut Res 787:108363.

Calabrese EJ, Agathokleous E. (2021). Accumulator plants and hormesis. Environ Poll 274:116526

Calabrese EJ. (2021). LNT and cancer risk assessment: Its flawed foundations, Part 1: Radiation and leukemia: Where LNT Began. Environ Res 197:111025.

Calabrese EJ. (2021). LNT and cancer risk assessment: Its flawed foundations Part 2: How unsound LNT science became accepted. Environ Res 197:111041.

Calabrese EJ. (2021). Ethical failings: The problematic history of cancer risk assessment. Environ Res 193: 110582.

Calabrese EJ, Hanekamp JC, Hanekamp YN, Kapoor T, Dhawan G, Agathokleous E. (2021) Chloroquine commonly induces hormetic dose response. Sci Total Environ 755(pt1):142436.

Calabrese EJ. (2021). Hormesis mediated acquired resilience: Using plant-derived chemicals to enhance health. Ann Rev Food Sci Tech 12:355-381.

Calabrese EJ, Calabrese V, Giordano J. (2021). Putative hormetic mechanisms and effects of atypical antipsychotic agents: Implications for study design and clinical psychopharmacotherapeutics. Chemico-Biol Inter 333:109327.

Calabrese EJ, Agathokleous E. (2021). Smoke-water commonly induces hormetic dose responses in plants. Sci Total Environ 765:142776.

Calabrese EJ, Agathokleous E. (2021). Pollen biology and hormesis: Pollen germination and pollen tube elongation. Sci Total Environ 762:143072.

Calabrese EJ, Kozumbo WJ. (2021). The phytoprotective agent sulforaphane prevents inflammatory degenerative diseases and age-related pathologies via Nrf2-mediated hormesis. Pharm Res 163:105283 doi:10.1016/j.phrs.2020.105283.

### <u>2020</u>

Calabrese EJ. (2020). The significance of the failed historical foundation of linear non-theshoold model for cancer risk assessment. Intern J Low Rad 11(3-4): 173-177.

Calabrese EJ. (2020). Dose-response revolution: How hormesis became significant. In: Encyclopedia of Biomedial Gerontology (S. Rattan, editor). pp 519-528.

Calabrese V, Scuto M, Calabrese E. (2020). Hormesis, Resilience and Mental Health: Enhancing Public Health and therapeutic option. In: Explaining Health Across the Sciences, Healthy Ageing and Longeviity (J. Sholl, S. Rattan, Eds). Springer Nature, Switzerland AG. Chapter 28, Volume 12, <u>https://doi.org/10.1007/978-3-030-52663-.4\_28</u>

Calabrese V, Scuto M, Salinaro AT, Dionisio G, Modafferi S, Ontario ML, Greco V, Sciuto S, Schmitt CP, Calabrese EJ, Peters V. (2020). Hydrogen sulfide and carnosine: Modulation of oxidative stress and inflammation in kidney and brain axis. Antioxidants. 18:1303.

Ghahramani-Asl R, Porouhan P, Mehrpouyan M, Welsh JS, Calabrese EJ, Kapoor R, Dhawan G, Javadinia SA. (2020). Feasibility of treatment planning system in localizing the COVID-19 pneumonia lesions and evaluation of volume indices of lung involvement. Dose Response 18(3):1559325820962600.

Nunn AVW, Guy GW, Brysch W, Botchway SW, Frasch W, Calabrese EJ, Bell JD. (2020). SARS-CoV-2 and mitochondrial health: Implications of lifestyle and ageing. Immun & Aging 17(1):33.

Hanekamp YN, Giordano J, Hanekamp JC, Khan MK, Limper M, Venema CS, Vergunst SD, Verhoeff JJC, Calabrese EJ. (2020). Immunomodulation through low-dose radiation for severe COVID-19: Lessons from the past and new developments. Dose-Response 18(3):1559325820956800.

Calabrese EJ. (2020). The Muller-Neel dispute and the fate of cancer risk assessment. Environ Res 190:109961.

Di Rosa G, Brunetti G, Scuto M, Salinaro AT, Calabrese EJ, Crea R, Schmitz-Linneweber C, Calabrese V, Saul N. (2020). Healthspan enhancement by olive polyphenols in *C. elegans* wild type and Parkinson's models. Inter J Mol Sci. 21(11):3893.

Calabrese EJ, Mattson MP, Dhawan G, Kapoor R, Calabrese V, Giordano J. (2020). Hormesis: A potential strategic approach to the treatment of neurodegenerative disease. In: Metabolic and Bioenergetic Drivers of Neurodegenerative Disease: Treating Neurodegenerative Diseases as Metabolic Diseases, (Soderbom G, Esterline R, Oscarsson J, Mattson MP, Editors). Intern Rev Neurobiol 155:271-301.

Calabrese EJ, Tsatsakis AM, Agathokleous E, Giordano J, Calabrese V. (2020). Does green tea induce hormesis? Dose Response 18(3):1559325820936170.

Sun H, Calabrese EJ, Lin Z, Lian B, Zhang X. (2020). Similarities between the Yin/Yang doctrine and hormesis in toxicology and pharmacology. Trends in Pharm. Sci 41(8):544-556.

Agathokleous E, Kitao M, Calabrese EJ. (2020). Hormesis: highly generalizable and beyond laboratory. Trends Plant Sci 25(11):1076-1086. doi.org/10.1016/j.tplants.2020.05.006.

Calabrese EJ, Paunio M. (2020). Precaution and assumption and the deceits of corrupted science. In: A-Bombs, BEARS and Corrupted Science. Reassessing radiation safety. The Global Warming Policy Foundation (GWPF), Essay 12, 11 pages. Agathokleous E, Barceló D, Tsatsakis A, Calabrese EJ. (2020). Hydrocarbon-induced hormesis: 101 years of evidence at the margin? Environ Poll 265:114846.

Calabrese EJ. (2020). Hormesis and Ginseng: Ginseng mixtures and individual constituents commonly display hormesis dose responses, especially for neuroprotective effects. Molecules (Special issue: Nutraceuticals in Immune Function) 25(11):2719.

Dhawan G, Kapoor R, Dhawan R, Singh R, Monga B, Giordano J, Calabrese EJ. (2020). Low dose radiation therapy as a potential life saving treatment for COVID-19-induced acute respiratory distress syndrome (ARDS). Radiotherap Oncol 147:212-216.

Calabrese EJ, Agathokleous E. (2020). Theodosius Dobzhanzky's view on biology and evolution v.2.0: "Nothing in biology makes sense except in light of evolution and evolution's dependence on hormesis-mediated acquired resilience that optimizes biological performance and numerous diverse short and longer term protective strategies". Environ Res 186:109559. DOI: 10.1016/j.envres.2020.109559.

Agathokleous E, Calabrese EJ. (2020). Chapter 21. An Environmental Perspective on Health. In: Rattan, S ed. Healthy Ageing and Longevity, Volume: Explaining Health across the Sciences, 1st edition (Sholl, J. and S. Rattan eds), 688p (ISBN-10: 3030526623). Springer-Nature. DOI: 10.1007/978-3-030-52663-4\_21

Agathokleous E, Calabrese EJ. (2020). Environmental Toxicology and Ecotoxicology: How clean is clean? Rethinking dose-response analysis. Sci Total Environ 746:138769. DOI: 10.1016/j.scitotenv.2020.138769.

Agathokleous E, Feng ZZ, Iavicoli I, Calabrese EJ. (2020). Nano-pesticides: A great challenge for biodiversity? The need for a broader perspective. NanoToday 30C: 100808.

Leri M, Scuto M, Ontario ML, Calabrese V, Calabrese EJ, Bucciantini M, Stefani M. (2020). Healthy effects of plant polyphenols: Molecular mechanisms. Int J Mol Sci 21(4):1250, doi: 10.3390/ijms21041250.

Zhang Y, Calabrese EJ, Zhang J, Gao D, Qin M, Lin Z. (2020). A trigger mechanism of herbicides to phytoplankton blooms: From the standpoint of hormesis involving cytochrome b559, reactive oxygen species andnitric oxide. Water Res 173:115584.

Calabrese EJ, Calabrese V, Tsatsakis A, Giordano JJ. (2020). Hormesis and ginkgo biloba (GB): Numerous biological effects of GB are mediated via hormesis. Ageing Res Rev 64:101019 doi: 10.1016/j.arr.2020.101019.

Calabrese EJ. (2020). Stimulating hair growth via hormesis: Experimental foundations and clinical implications. Pharm Res 152:104599.

Agathokleous E, Calabrese EJ. (2020). A global environmental health perspective and

optimization of stress. Sci Total Environ 704:135263.

Concetta Scuto M, Mancuso C, Tomaselo B, Laura Ontario M, Cavallaro A, Frasca F, Maiolino L, Trovato Salinaro A, Calabrese EJ, Calabrese V. (2020). Curcumin, hormesis and the nervous system. Nutrients 11(10):2417

Calabrese V, Scuto M, Salinaro AT, Dionisio G, Modafferi S, Ontario ML, Greco V, Sciuto S, Schmitt CP, Calabrese EJ, Peters V. (2020). Hydrogen sulfide and carnosine: Modulation of oxidative stress and inflammation in kidney and brain axis. Antioxidants (Basel) 9(12):1303.

## <u>2019</u>

Agathokleous E, Belz RG, Kitao M, Koike T, Calabrese EJ. (2019). Does the root to shoot ratio show a hormetic response to stress? An ecological and environmental perspective. J Forestry Res 30(5): 1569-1580.

Agathokleous E, Feng Z, Calabrese EJ. (2019). Systemic herbicide 2,4-dichlorophenoxyacetic acid is another hormetin: What does it mean for agriculture and the environment? J Agric Food Chem 67(35): 9695-9696.

Dhawan G, Kapoor R, Dhamija A, Singh R, Monga B, Calabrese EJ. (2019). Necrotizing fasciitis: Low-dose radiotherapy as a potential adjuct treatment. Dose-Response, July-Sept, 17(3):1559325819871757.

Calabrese EJ, Agathokleous E, Kapoor R, Kozumbo WJ, Rattan SIS. (2019). Re-analysis of herbal extracts data reveals that inflammatory processes are mediated by hermetic mechanisms. Chem Biol Interact 314:108844.

Rakotondravelo M, Smitley D, Calabrese E, Ladoni M. (2019). Traces of imidacloprid induce hormesis as a stimulatory conditioned response of sweetpotato whitefly (Hemiptera: aleyrodidae). Environ Entomol 48(6):1418-1424.

Ulsh B, Calabrese EJ. (2019). Time for radiation regulation to evolve. Regulation, Fall 2019.

Calabrese EJ, Dhawan G, Kapoor R, Mattson MP, Rattan SIS. (2019). Curcumin and hormesis with particular emphasis on neural cells. Food Chem Toxicol 129:399-404.

Calabrese EJ. (2019). A failed cancer paradigm: Implications for cancer risk assessment and patients. J Cell Comm Signal 13(3):271-272.

Agathokleous E, Calabrese EJ. (2019). Hormesis: The dose response for the 21<sup>st</sup> century: The future has arrived. Commentary. Toxicology 425:152249.

Scuto M, Mancuso C, Tomasello B, Frasca F, Salinaro AT, Calabrese E, Calabrese V. (2019). Curcumin, hormesis and neurodegenerative diseases. Nutrients 11(10):2417.

Dhawan G, Kapoor R, Kozumbo WJ, Dhamija A, Singh R, Calabrese EJ. (2019). Necrotizing fasciitis – Low dose radiotherapy as a potential adjunct treatment. Dose-Response 7(3):1559325819871757.

Agathokleous E, Araminiene V, Belz R, Calatayud V, De Marco A, Domingos M, Feng ZZ, Hoshika Y, Kitao M, Koike T, Paoletti E, Saitanis C, Sicard P, Calabrese EJ. (2019). A quantitative assessment of hormetic responses of plants to ozone. Environ Res 176:108527.

Calabrese EJ, Bhatia TN, Calabrese V, Giordano J, Dhawan G, Hanekamp TN, Kapoor R, Kozumbo WJ, Leak RK. (2019). Cytotoxicity model of Huntington's disease and relevance of hormetic mechanisms: An assessment of experimental approaches and strategies. Pharmacol Res 150: 104371.

Calabrese EJ. (2019). Dose response: Comparing hormesis with the threshold and linear nonthreshold models, Vignette 8.1. In: Fundamentals of Ecotoxicology: The Science of Pollution. 5th Edition (MC Newman, editor). CRC Press, Boca Raton, FL, pp 654.

Agathokleous E, Feng ZZ, Iavioli I, Calabrese EJ. (2019). The two faces of nanomaterials: A quantification of hormesis in algae and plants. Environ Intern 131:105044.

Calabrese EJ. (2019). EPA adopts LNT: New historical perspectives. ChemBio Inter 308:110-112.

DeFranco J, Calabrese EJ, Giordano J. (2019). Restoring cerebral circulation and function postmortem: A multi-dimensional analysis. Brain Circ J 5(2):94-96.

Calabrese EJ, Golden RJ. (2019). Why toxicologists resisted and radiation geneticists supported EPA's adoption of LNT for cance risk assessment. ChemBio Int 310:108736.

Calabrese EJ. (2019). Muller's Nobel Prize data: Getting the dose wrong and its significance. Environ Res 176:108528.

Docea AO, Goumenou M, Calina D, Arsene AL, Dragoi CM, Gofita E, Pisoschi CG, Zlatian O, Stivaktakis PD, Nikolouzakis TK, Kalogeraki A, Izotov BN, Galateanu B, Hudita A, Calabrese EJ, Tsatsakis A. (2019). Adverse and hormetic effects in rats exposed for 12 months to low dose mixture of 13 chemicals: RLRS part III. Toxicol Letters 310:70-91.

Cottrell MA, Mills WA, Stanek III EJ, Calabrese EJ. (2019). Funding trends in hormetic research. Hum Exper Toxicol 38(6):746-750.

Calabrese EJ. (2019). Hormesis using preconditioning to build biological shields – a novel approach for enhancing resilience to toxic agents, traumatic illness/injury and age-related degenerative disease. In: Chemical Warfare Agents. Biomedical and psychological effects, medical countermeasures, and emergency response, 3<sup>rd</sup> Edition (Lukey BJ, Romano Jr JA, Salem

H (Editors). CRC Press, Boca Raton FL.

Calabrese EJ, Dhawan G, Kapoor R, Kozumbo WJ. (2019). Radiotherapy treatment of human inflammatory diseases and conditions: Optimal dose. Hum Exper Toxicol 38(8):888-898.

Kozumbo WJ, Calabrese EJ. (2019). Two decades (1998-2018) of research progress on hormesis: Advancing biological understanding and enabling novel applications. J Cell Comm Signal 13(3):273-275.

Calabrese EJ. (2019). History of the dose response. In: Encyclopedia of Environmental Health, (J Nriagu, editor), 2<sup>nd</sup> Edition. Elsevier.

Calabrese EJ. (2019). EPA transparency proposal: Testimony of Edward J. Calabrese, Ph.D., October 3, 2018. J Cell Comm Signal 13(1):145-147.

Agathokleous E, Calabrese EJ. (2019). Hormesis can enhance agricultural sustainability in a changing world. Global Food Security 20C:150-155.

Agathokleous E, Anav A, Araminiene V, De Marco A, Domingos M, Kitao M, Koike T, Manning WJ, Paoletti E, Saitanis CJ, Sicard P, Vitale M, Wang WJ, Calabrese EJ. (2019). Commentary: EPA's proposed expansionof dose-response analysis is a positive step towards improving its ecological risk assessment. Environ Poll 246:566-570.

Calabrese EJ. (2019). The troubled history of cancer risk assessment. Regulation, Spring 16: 2-5.

Calabrese EJ, Agathokleous E. (2019). Building biological shields via hormesis. Trends in Pharmacolgoical Sicneces 40(1):8-10.

Agathokleous E, Kitao M, Calabrese EJ. (2019). Hormetic dose responses induced by lanthanum in plants. Environmental Pollution 244:332-341.

Agathokleous E, Belz RG, Calabrese EJ, Clatayud V, De Marco A, Hoshika Y, Kitao M, Saitanis CJ, Sicard P, Paoletti E. (2019). Predicting the effect of ozone on vegetation: A comparison of the linear non-threshold (LNT). STOTEN 649:61-74 DOI: 10.1016/j.scitotenv.2018.08.264.

Agathokleous E, Kitao M, Calabrese EJ. (2019). Temperature-induced hormesis in plants. J Forestry Res 30(1):13-20 DOI:10.1007/s11676-018-0790-7.

Calabrese EJ, Agathokleous E, Kozumbo WJ, Stanek EJ III, Leonard D. (2019). Estimating the range of the maximum hormetic stimulatory response. Environmental Research 170:337-343.

Agathokleous E, Kitao M, Calabrese EJ. (2019). Hormesis: A compelling platform for sophisticated plant science. TiPS 24(4):318-327.

Golden R, Bus J, Calabrese E, Costantini D et al. (2019). An examination of the linear no-

threshold hypothesis of cancer risk assessment: Introduction to a series of reviews documenting the lack of biological plausibility of LNT. Chemico-Biological Interactions 301:2-5.

Calabrese EJ. (2019). The linear no-threshold (LNT) dose response model: A comprehensive assessment of its historical and scientific foundations. Chemico-Biological Interactions 301(SI):6-25.

Agathokleous E, Kitao M, Calabrese EJ. (2019). New insights into the role of melatonin in plants and animals. Chemico-Biological Interactions 299:163-167.

Calabrese EJ. (2019). The dose-response revolution: How hormesis became significant. An Historical and Personal Reflection. In: The Science of hormesis in health and longevity, Chapter 1 (S Rattan and M Kyriazis, Editors). Academic Press, London UK, pp 3-24.

# <u>2018</u>

Calabrese EJ. (2018). Muller's Nobel Prize research and peer research. Phil Ethic Hum Med 13: Article #15.

Agathokleous E, Kitao M, Quingnan C, Saitanis CJ, Paoletti E, Manning WJ, Watanabe T, Koike T. (2018). Effects of ozone (O-3) and ethylenediurea (EDU) on the ecological stoichiometry of a willow grown in a free-air exposure system. Environmental Pollution238:663-676.

Calabrese EJ, Giordano JJ, Kozumbo WJ, Leak RK, Bhatia TN. (2018). Hormesis mediates dose-sensitive shifts in macrophage activation patterns. Pharm Res 137:236-249.

Agathokleous E, Kitao M, Calabrese EJ. (2018). Human and veterinary pharmaceuticals induce hormesis in plants: scientific and regulatory issues and an environmental perspective. Environ Intern 120:489-495. DOI: 10.1016/j.envint.2018.08.035.

Agathokleous E, Kitao M, Calabrese EJ. (2018). The concept of environmental hormesis can advance the current scientific base of global change biology. Ecotoxicology (submitted).

Calabrese EJ. (2018). Originator of the hormesis concept: Rudolf Virchow or Hugo Schulz. Human and Experimental Toxicology 7(9):889-890. DOI: 10.1177/0960327117751237.

Agathokleous E, Kitao M, Calabrese EJ. (2018). Biphasic effect of abscisic acid on plants: a hormetic viewpoint. Botany 96(10):637-642. doi: 10.1139/cjb-2018-0076.

Calabrese EJ. (2018). Regulation of carcinogens and chemicals: What went wrong. In: Science and Liberty (PJ Michaels, T Kealey, editors), Chapter 8 Cato Institute (in press).

Leak RK, Calabrese EJ, Kozumbo WJ, Gidday JM, Johnson TE, Mitchell JR, Ozaki CK, Wetzker R, Bast A, Belz RG, Botker HE, Koch S, Mattson MP, Simon RP, Jirtle RL, Andersen

ME. (2018). Enhancing and extending biological performance and resilience. Dose-Response 2018:1-24. DOI: 10.1177/1559325818784501.

Calabrese EJ. (2018). Using preconditioning to build biological shields: A novel approach for enhancing resilience to toxic agents, traumatic illness/injury and age-related degenerative diseases. In: Chemical Warfare Agents (H. Salem, B. Lukey, editors). CRC Press (in press).

Calabrese EJ. (2018). Was Muller's 1946 Nobel Prize research for radiation-induced gene mutations peer-reviewed? PEHM 13(1): 6 doi: 10.1186/s13010-018-0060-5.

Calabrese EJ. (2018). From Muller to mechanism: How LNT became the default model for cancer risk assessment. Environ Poll 241:289-302.

Calabrese EJ. (2018). The additive to background assumption in cancer risk assessment: A reappraisal. Environ Res 166:175-204.

Agathokleous E, Kitao M, Ristow M, Mattson MP, Calabrese EJ. (2018). Environmental hormesis and its fundamental biological base: rewriting the history of toxicology. Environmental Research 165:274-278.

Calabrese EJ, Ricci PF. (2018). How hormesis will change the risk assessment process. Encyclopedia of Environmental Health, 2<sup>nd</sup> edition. Elsevier Publishers.

Agathokleous E, Kitao M, Calabrese EJ. (2018). Emission of volatile organic compunds (VOCs) from plants shows a biphasic pattern within a hormetic context. Environ Poll 239:318-321.

Agathokleous E, Kitao M, Calabrese EJ. (2018). The rare earth element (REE) lanthanum (La) induced hormesis in plants. Environ Poll 238:1044-1047.

Calabrese EJ, Rubio-Casillas A. (2018). Biphasic effects of THC in memory and cognition. European Journal of Clinical Investigation 48(5):e12920.

Calabrese V, Santoro A, Salinaro AT, Modafferi S, Scuto M, Albouchi F, Monti D, Giordano J, Zappia M, Franceschi C, Calabrese EJ. (2018). Hormetic approaches to the treatment of Parkinson's Disease: Perspective and possibilities. Journal of Neuroscience Research 2018:1-22. DOI: 10.1002/jnr.24244.

Iavicoli I, Leso V, Fontana L, Calabrese, EJ. (2018). Nanoparticle exposure and hormetic doseresponses: An update. International Journal of Molecular Sciences 19(3):805 doi:10.3390/ijms19030805.

Calabrese EJ, Iavicoli I, Calabrese V, Cory-Slechta DA, Giordano J. (2018). Elemental mercury neurotoxicity and clinical recovery of function: A review of findings, and implications for occupational health. Environ Res 163:134-148.

Sun H, Calabrese E, Zheng M, Wang D, Pan Y, Lin Z, Liu Y. (2018). A swinging seesaw as a novel model mechanism for time-dependent hormesis under dose-dependent stimulatory and inhibitory effects: a case study on the toxicity of antibacterial chemicals to Aliivibrio fisheri. Chemosphere 205:15-23.

Calabrese EJ. (2018). Post-conditioning hormesis creates a "subtraction to background" disease process: Biological, aging, and environmental risk assessment implications. Journal of Cell Communication and Signaling 12:31-34.

Salinaro AT, Pennisi M, DiPaola R, Scuto M, Crupi R, Cambria M, Ontario ML, Tomasello M, Uva M, Maiolino L, Calabrese EJ, Cuzzocrea S, Calabrese V. (2018). Neuroinflammation and neurohormesis in the pathogenesis of Alzheimer's Disease and Alzhemimer-linked pathologies: Modulation by nutritional mushrooms. Immunity & Ageing 15:Article 8, 8 pages.

Calabrese V, Santoro A, Monti D, Crupi R, Di Paola R, Latteri S, Cuzzocrea S, Zappia M, Giordano J, Calabrese EJ, Franceschi C. (2018). Aging and Parkinsons's Disease: Inflammaging, neuroinflammation and biological remodeling as key factors in pathogenesis. Free Radical Biology and Medicine 115:80-91.

Wang D, Calabrese EJ, Lian B, Lin Z, Calabrese V. (2018). Hormesis as a mechanistic approach to understanding and describing herbal treatments of traditional Chinese medicine. Pharmacology and Therapeutics 184:42-50.

### <u>2017</u>

Calabrese EJ, Lehr J. (2017). The final demise of the linear no threshold (LNT) theory. Environ Clim News. Vol 20, Number 4.

Calabrese EJ. (2017). The mistaken birth and adoption of LNT: An abridged version. Dose-Response 2017:1-3.

Calabrese EJ, Mattson MP. (2017). How does hormesis impact biology, toxicology and medicine? Aging Mech Dis 3:13.

Calabrese EJ. (2017). Perspectives on hormesis and implications for pesticides. In: Pesticide Dose: Effects on the Environment and Target and Non-Target Organisms, Chapter 7 (SO Duke, P Kudsk, K Solomon, Editors). ACS Symposium Series, American Chemical Society 1249:83-100.

Calabrese EJ. (2017). Flaws in the LNT single-hit model for cancer risk: An historical assessment. Environ Res 158:773-788.

Calabrese V, Giordano J, Crupi R, Di Paola R, Ruggieri M, Bianchini R, Ontario ML, Cuzzocrea S, Calabrese EJ. (2017). Hormesis, cellular stress response and neuroinflammation in schizophrenia: Early onset versus late onset state. J Neurosci Res 95(5): 1182-1193.

Pennisi M, Crupi R, Di Paola R, Ontario ML, Bella R, Calabrese EJ, Crea R, Cuzocrea S, Calabrese V. (2017). Inflammasomes, hormesis, and antioxidants in neuroinflammation: Role of NRLP3 in Alzheimer disease. J Neurosci Res 95(7): 1360-1372.

Calabrese EJ. (2017). Hormesis commonly observed in the assessment of an euploidy in yeast. Environ Poll, 225:713-728.

Calabrese EJ. (2017). Obituary notice: LNT dead at 89 years, a life in the spotlight. Environ Res 155:176-178.

Calabrese EJ, Calabrese V, Giordano J. (2017). The role of hormesis in the functional performance and protection of neural systems. Brain Circul 3:1-13.

Calabrese EJ. (2017). LNTgate: The ideological history of cancer risk assessment. Toxicol Res Appl 1-3; DOI: 10.1177/2397847317694998.

Calabrese EJ. (2017). The threshold vs LNT showdown: Dose rate findings exposed flaws in the LNT model. Part I. The Russell-Muller debate. Environ Res 154:435-451.

Calabrese EJ. (2017). The threshold vs LNT showdown: Dose rate findings exposed flaws in the LNT model. Part 2. How a mistake led BEIR I to adopt LNT. Environ Res 154:452-458.

Giordano J, Bikson M, Kappenman ES, Clark VP, Coslett HB, Hamblin MR, Hamilton R, Jankord R, Kozumbo WJ, McKinley RA, Nitsche MA, Reilly JP, Richardson J, Wurzman R, Calabrese EJ. (2017). Mechanisms and effects of transcranial direct current stimulation (tDCS). Dose Response 1-22; DOI:10.1177/1559325816685467.

Nascarella MA, Calabrese EJ. (2017). Hazard assessment and the evaluation of rare earth element dose-response relationships. In: Rare Earth Elements in Human and Environmental Health: At Crossroads between Toxicity and Safety (Pagano G, Editor). Chapter 8, Pan Stanford Publishing Pte Ltd., pp 183-194.

Calabrese EJ, Dhawan G, Kapoor R. (2017). Radiotherapy for pertussis: An historical Assessment. Dose-Response 15(2): May 8.

Janiak MK, Wincenciak M, Cheda A, Nowosielska EM, Calabrese EJ. (2017). Cancer immunotherapy: How low-level ionizing radiation can play a key role. Cancer Immunology, Immunotherapy 66(7): 819-832.

Calabrese EJ. (2017). Societal threats from ideologically driven science. Acad Quest J 30(4):405-418.

Calabrese EJ. (2017). A glance into how the cold war and governmental loyalty investigations came to affect a leading US radiation geneticist: Lewis J. Stadler's nightmare. Philos Ethics

Human Med. 12:8.

Calabrese EJ. (2017). Hormesis and homeopathy: A step forward. Homeopathy 106:131-132.

Calabrese V, Calabrese EJ, Carare RO, Cedazo-Minguez A, Frenkel D, Korczyn A, Popescu BO. (2017). Major pathogenic mechanisms in vascular cognitive impairment. BMC Med Manus (In Press).

Calabrese EJ, Nascarella MA. (2017). Hormesis: accessing low dose exposure to chemical warfare agents. In: Chemical Warfare Agents (tentative title). Chapter 12. (submitted).

Shamoun DY, Calabrese EJ. (2017). On objective risk. Risk Research (submitted).

Calabrese EJ. (2017). Scientific foundations of LNT challenged. (In Prep).

Shamoun DY, Calabrese EJ. Williams R, Broughel. (2017). The case against LNT. Mercatus Center at George Mason University. Arlington VA. Risk Analysis (In Prep).

#### <u>2016</u>

Calabrese EJ, Dhawan G, Kapoor R, Iavicoli I, Calabrese V. (2016). Hormesis: A fundamental concept with widespread biological and biomedical applications. Gerontology 62(5):530-535.

Calabrese V, Giordano J, Ruggieri M, Berritta D, Trovato A, Ontario ML, Bianchini R, Calabrese EJ. (2016). Hormesis, cellular stress response, and redox homeostasis in autism spectrum disorders. J Neurosci Res 94:12(SI):1488-1498.

Calabrese V, Giordano J, Signorile A, Ontario ML, Castorina S, De Pasquale C, Eckert G, Calabrese EJ. (2016). Major pathogenic mechanisms in vascular dementia: Role of cellular stress response and hormesis in neuroprotection. J Neurosci Res 94(SI12):1588-1603.

Calabrese EJ. (2016). The emergence of the dose-response concept in biology and medicine. Intern J Mol Sci 17(12): Article Number UNSP 2034.

Calabrese EJ. (2016). LNTgate: How scientific misconduct by the US NAS led to governments adopting LNT for cancer risk assessment – Rebuttal to Letter of Beyea (2016). Environ Res 148:535-546.

Calabrese EJ. (2016). Pre- and post-conditioning hormesis in elderly mice, rats, and humans: Its loss and restoration. Biogerontology 17(4):681-702.

Mollereau B, Rzechorzek NM, Roussel Bd, Sedru M, Van denBrink D, Bailly-Maitre B, Palladino F, Medinas DB, Domingos PM, Hunot S, Chandran S, Birman S, Baron T, Vivien D, Duarte CB, Ryoo HD, Steller H, Urano F, Chevet E, Kroemer G, Ciechanover A, Calabrese EJ, Kaufman RJ, Hetz C. (2016). Adaptive preconditioning in neurological diseases - Therapeutic insights from proteostatic perturbations. Brain Res 1648(SI):603-616.

Calabrese EJ, Shamoun DY, Hanekamp JC. (2016). The integration of LNT and hormesis for cancer risk assessment optimizes public health protection. Health Physics 110(3):256-259.

Calabrese EJ. (2016). Preconditioning is Hormesis. Part I. Documentation, dose-response features and mechanistic foundations. *Pharm Res* 110:242-264.

Calabrese EJ. (2016). Preconditioning is Hormesis. Part II: How the conditioning dose mediates protection. Dose optimization within temporal and mechanistic frameworks. Pharm Res 110:265-275.

Calabrese EJ. (2016). Model uncertainty via the integration of hormesis and LNT as the default in cancer risk assessment. Dose-Response 2015:1-5. DOI: 10.1177/1559325815621764.

Jonas WB, Calabrese EJ. (2016). Learning from the history of integrative preventive medicine to address our current health care challenges. In: Textbook of Integrative Preventive Medicine (R Carmona, M Liponis, Editors). Oxford Press.

LNTgate: How scientific misconduct by the US NAS led to governments adopting LNT for cancer risk assessment. Environ Res 148:535-546.

## <u>2015</u>

Calabrese EJ. (2015). Hormesis: Principles and applications. Homeopathy 104(2):69-82.

Calabrese EJ. (2015). Historical foundations of hormesis. Homeopathy 104(2):83-89.

Calabrese EJ. (2015). Hormesis within a mechanistic context. Homeopathy 104(2):90-96.

Calabrese V, Scapagnini G, Davinelli S, Koverech G, Koverech A, De Pasquale C, Sallinaro AT, Scuto M, Calabrese EJ, Genazzani AR. (2015). Sex hormonal regulation and hormesis in aging and longevity: Role of vitagenes. J Cell Comm Sign 8:369-384.

Calabrese EJ. (2015) On the origins of the linear no-threshold (LNT) dogma by means of untruths, artful dodges and blind faith. Environ Res 142:432-442.

Calabrese EJ, Shamoun DY, Hanekamp JC. (2015). Cancer risk assessment: Optimizing human health through linear dose-response models. Fd Chem Toxic 81:137-140.

Calabrese EJ, Dhawan G, Kapoor R, Iavicoli I, Calabrese V. (2015). What is hormesis and its relevance to healthy ageing and longevity. Biogerontology 16:693-707.

Calabrese EJ, Dhawan G, Kapoor R. (2015). The use of X rays in the treatment of bronchial asthma: A historical Assessment. Rad Res 184:180-192.

Calabrese V, Datilo S, Petralia A, Parenti R, Pennisi M, Koverech G, Calabrese V, Graziano A, Monte I, Maiolino L, Ferreri T, Calabrese EJ. (2015) Analytical approaches to the diagnosis and treatment of aging and aging-related disease: Redox status and proteomics. Free Rad Res 49:511-524.

Dattilo S, Mancuso C, Koverech G, Di Mauro P, Ontario ML, Petralla CC, Petralla A, Maiolino L, Serra A, Calabrese EJ, Calabrese V. (2015). Heat shock proteins and hormesis in the diagnosis and treatment of neurodegenerative disease. Immun Aging 12:20 DOI:10.1186/s12979-015-0046-8.

O'Connor MK, Calabrese EJ. (2015). Response to Comments on "Estimating Risks of Low Radiation Doses—A Critical Review of the BEIR VII Report and its Use of the Linear No-Threshold (LNT) Hypothesis" Rad Res 183:481-484.

Hanekamp JC, Bast A, Calabrese EJ. (2015). Nutrition and health – transforming research traditions. Crit Rev Food Sci Nutr, 55(8):1074-1080; doi: 10.1080/10408398.2012.680525.

Calabrese EJ. (2015). The dose response: Comparing hormesis and threshold models. In: Fundamentals of Ecotoxicology. The Science of Pollutions, 4th Edition (MC Newman, editor). CRC Press, Boca Raton, FL, pp 654.

Calabrese EJ. (2015). An abuse of risk assessment: how regulatory agencies improperly adopted LNT for cancer risk assessment. *Arch Toxicol*. 89:647-648. DOI 10.1007/s00204-015-1454-4. Supplemental Materials 204\_2015\_1454\_MOESM1\_ESM.pdf.

Calabrese EJ. (2015). LNT's Failed History: An abdicated responsibility – how the U.S. NAS BEAR I Committee Genetics Panel failed to assess LNT prior to recommending its use by U.S. regulatory agencies. Arch Toxicol DOI 10.1007/s00204-015-1454-4.

Calabrese EJ. (2015). Cancer risk assessment foundation unravelling: New historical evidence reveals that the U.S. NAS (National Academy of Sciences), BEAR (Biological Effects of Atomic Radiation) Committee Genetics Panel falsified the research record to promote acceptance of the LNT. Arch Toxicol DOI 10.1007/s00204-015-1455-3. Supplemental Materials 204 2015 1455 MOESM1 ESM.pdf

Calabrese EJ. (2015). Scientific misconduct the U.S. National Academy of Sciences in recommending LNT for risk assessment. Arch Toxicol DOI 10.1007/s00204-015-1455-3. Calabrese V, Davinelli S, Luca M, Zella D, Calabrese EJ, Scapagnini G. (2015). Inflammaging, oxidative stress and carnosine: Role of hormetic vitagenes, Chapter 12. In: Food and Nutritional Components in Focus No. 8 Imidazole Dipeptides: Chemistry, Analysis, Function and Effects (VR Preedy, Editor). Royal of Society of Chemistry.

Calabrese EJ. (2015). Scientific misconduct the U.S. National Academy of Sciences in recommending LNT for risk assessment. Arch Toxicol DOI 10.1007/s00204-015-1455-3.

### <u>2014</u>

Scapagnini G, Bracale R, Davinelli S, Kaneko T, Koverech G, Koverech A, Carruba MO, Nisoli E, Calabrese EJ, Calabrese V. (2014). Dose response biology of resveratrol in obesity. J Cell Comm Sign 8:385-391.

Calabrese V, Scapagnini G, Davinelli S, Koverech G, Koverech A, De Pasquale C, Scuto M, Calabrese EJ, Genazzani AR.. (2014). Sex hormonal regulation and hormesis in aging and longevity: Role of vitagenes. J Cell Comm Sign 8:369-384.

Calabrese EJ, O'Connor MK. (2014). Estimating risk of low radiation doses – A critical review of the BEIR VII report and its use of the linear-no-threshold (LNT) hypothesis. Rad Res 182:463-474.

Beck BD, Seeley M, Calabrese, E.J. (2014). Use of toxicology in the regulatory process. In: Principles and Methods of Toxicology, Sixth Edition (AW Hayes and CL Kruger, editors). CRC Press, 35-88.

Calabrese EJ. (2014). The dose-response: A fundamental concept in toxicology. In: Principles and Methods of Toxicology, Sixth Edition (AW Hayes and CL Kruger, editors). CRC Press, 89-140.

Calabrese V, Davinelli S, Luca M, Zella D, Calabrese EJ, Scapagnini G. (2014). Inflammaging, oxidative stress and carnosine: Role of hormetic vitagenes. Front Pharm 5(120) DOI: 10.3389/fphar.2014.00120.

Iavicoli I, Fontana L, Leso V, Calabrese E.J. (2014). Hormetic dose-response in nanotechnology studies. *Science for the Total Environment* 487:361-374.

Calabrese EJ, Dhawan G, Kapoor R. (2014). Use of X-rays to treat shoulder tendonitis/bursitis: a historical assessment. Arch Toxicol 88(8):1503-1517.

Calabrese EJ. (2014). The genetics panel of the NAS BEAR I Committee (1956): Epistolary evidence suggests self-interst may have prompted an exaggeration of radiation risks that led to the adoption fo the LNT cancer risk assessment model. Arch Toxicol 88(9):1631-1634.

Cornelius C, Graziano A, Perrotta R, DiPaola R, Cuzzocrea S, Calabrese EJ, Calabrese V. (2014). Cellular stress response, hormesis, and vitagens in aging and longevity: Role of mitochondrial "Chi", Chapter 26. In: Inflammation, Advancing Age and Nutrition, Academic Press/Elsevier pp. 309-321.

Calabrese EJ. (2014). Hormesis: A fundamental concept in biology. Microbial Cell 1(5):1-5.

Calabrese EJ. (2014). Dose-resonse relationship. In: Encyclopedia of Toxicology, Third Edition,

Volume 2 (P. Wexler, Editor). Academic Press pp. 224-226.

Calabrese EJ. (2014). We need a new earth day to correct the old one. Commentary. Investors.com.

Cornelius C, Koverech G, Crupi R, Lodato F, Scuto M, Salinaro AT, Cuzzocrea S, Calabrese EJ, Calabrese V. (2014). Osteoporosis and Alzheimer pathology: Role of cellular stress response and hormetic redox signaling in aging and bone remodeling. Front Pharm 5(120):1-13.

Calabrese EJ. (2014). Brief history of hormesis and its terminology. In: Hormesis in Health and Disease (Rattan S and LeBourg E, Editors). CRC Press, Boca Raton FL, pp.3-12.

Calabrese EJ. (2014). Hormesis and risk assessment. In: Hormesis in Health and Disease (Rattan S and LeBourg E, Editors). CRC Press, Boca Raton FL, pp.339-356.

Calabrese E.J. (2014). The hormetic dose response often describes drug therapies for stroke and traumatic brain injury. In: Brain Injury and Stroke: Spectrum Effects and Implications, Chapter 14 (J. Giordano and P. Water, Editors). Potomac Institute Press, Arlington VA.

Calabrese EJ. (2014). Response to Letter of Ralph J Cicerone and Kevin Crowley regarding "How the US National Academy of Sciences misled the world community on cancer risk assessment: new findings challenge historical foundations of the linear dose response". Arch Toxciol 88:173-177.

Cicerone RJ, Crowley KD. (2014). Letter from Ralph J Cicerone regarding Edward Calabrese's paper published online first on August 4th: "How the US National Academy of Sciences misled the world community on cancer risk assessment: new findings challenge historical foundations of the linear dose response". Arch Toxicol 88:171-172.

Iavicoli I, Leso V, Fontana L, Marinaccio A, Bergamaschi A, Calabrese EJ. (2014). The effects of Rhodium on the renal function of female Wistar rats. Chemosphere 104:120-125.

Calabrese EJ, Dhawan G. (2014). Historical use of X-Rays: Treatment of inner ear infections and prevention of deafness. Hum Exper Toxicol 33(5):542-553.

Calabrese EJ. (2014). Hormesis: from mainstream to therapy. J Cell Comm Sign 8:289-291.

# <u>2013</u>

Bast A, Briggs WM, Calabrese EJ, Fenech MF, Hanekamp JC, Heaney R, Rijkers G, Schwitters B. (2013). Scientism, legalism and precaution - Contending with regulating nutrition and health claims in Europe. Eur J Food Feed Law 401-409.

Calabrese EJ. (2013). Low-dose radiation therapy induces antiinflammatory phenotype: Biomedical implications. Environ Mol Mut 54(S1):S19-S19.

Calabrese EJ, Dhawan G. (2013). How radiotherapy was historically used to treat pneumonia: Could it be useful today? Yale J Biol Med 86:1-16.

Calabrese EJ. (2013). Biphasic dose responses in biology, toxicology and medicine: Accounting for their generalizability and quantitative features. Environ Poll 182:452-460.

Cornelius C, Zanghi A, Perrotta R, Graziano A, Calabrese EJ, Calabrese V. (2013). Stress responses, vitagenes and hormesis as critical determinants in aging and longevity: Mitochondria as a "Chi". Immun Aging 10(1):15.

Cornelius C, Crupi R, Calabrese V, Perotta R, D'Agata V, Graziano A, Pennisi G, Milone P, Zanghi A, Radak Z, Calabrese EJ, Cuzzocrea S. (2013). Traumatic brain injury (TBI): Oxidative stress and neuroprotection. Antiox Redox Sign 19(8):836-853.

Calabrese E.J. (2013). Hormetic mechanisms. Crit Rev Toxicol 43(7):580-606.

Calabrese E.J. (2013). Origin of the linearity-no threshold (LNT) dose response concept. Arch Toxicol 87(9):1621-1633.

Calabrese EJ. (2013). How the U.S. National Academy of Sciences mislead the world community on cancer risk assessment: New findings challenge historical foundations of the linear dose response. Arch Toxicol 87(12):2063-2081.

Calabrese EJ, Dhawan G. (2013). The historical use of radiotherapy in the treatment of sinus infections. Dose-Response, 11(4):469-479.

Calabrese EJ. (2013). Low doses of radiation can enhance insect lifespans. Biogerontology 14(4):365-381.

Calabrese EJ. (2013). X-ray treatment of carbuncles and furuncles (boils): An historical assessment. Hum Exper Toxicl 32(8):817-827.

Calabrese EJ. (2013). Hormesis and the biphasic adaptive stress response – Interview by Craig Gustafson, Amercian Association of Neturopathic Physicians 2013 Conference. Integr Med 12(3):18-22.

Calabrese EJ. (2013). Historical foundations of wound healing and its potential for acceleration: Dose-response consideration. Wound Rep Regen 21(2):180-193.

Calabrese EJ, Calabrese V. (2013). Reduction of arthritic symptoms by low dose radiation therapy (LD-RT) is associated with an anti-inflammatory phenotype. *Intern J Rad Biol* 89(4):278-286.

Calabrese EJ, Calabrese V. (2013). Low dose radiation therapy (LD-RT) is effective in the

treatment of arthritis: Animal model findings. Intern J Rad Biol, 89(4):287-294.

Calabrese EJ. (2013). Hormesis. In: *Encyclopedia of Environmetrics, Second Edition* (A.-H. El-Shaarawl and W. Piegorsch, Editors). John Wiley & Sons Ltd: Chichester, UK. DOI: 10.1002/9780470057339.vah014.pub2. Published online 1/15/2013.

Calabrese EJ. (2013). Food safety and security and the dose-response. Food Security, 5(1):95-102.

Calabrese EJ, Iavicoli I, Calabrese V. (2013). Hormesis: Its impact on medicine and health. Hum Exper Toxicol 32(2):120-152.

Calabrese EJ. (2013). Hormesis: Toxicological foundations and role in aging research. Exper Gerontol 48(1):99-102.

Calabrese EJ. (2013). Getting the dose-response wrong: A costly environmental problem. 21<sup>st</sup> Century Sci 26(1):57-65.

Cornelius C, Graziano A, Calabrese EJ, Calabrese V. (2013). Hormesis and vitagenes in aging and longevity: mitochondrial control and hormonal regulation. Horm Mol Biol Clin Invest 16(2):73-89.

# <u>2012</u>

Stanek EJIII, Bo X, Calabrese EJ. (2012). Equation reliability of soil ingestion estimates in massbalance soil ingestion studies. Risk Analysis 32(3):448-463.

Calabrese EJ. (2012). US Risk assessment policy: A history of deception. A response to Arden Rowell, *Allocating Pollution*, 79 *Univ. Chicago Law Rev* 79:17-24.

Calabrese EJ. (2012). The hormetic dose response. Mutagenesis 27(6):795-795.

Calabrese EJ, Cook RR, Hanekamp JC. (2012). Linear no threshold (LNT)-the new homeopathy. Environ Toxicol Chem 31(12):2723-2723.

Calabrese EJ. (2012). Hormesis: Improving predictions in the low-dose zone. Exper Suppl 101:551-564.

Calabrese EJ. (2012). NEPA, EPA and risk assessment: Has EPA lost its way? Reg Toxicol Pharm 64(2):267-268.

Calabrese EJ, Dhawan G. (2012). The role of x-rays in the treatment of gas gangrene: An historical assessment. Dose-Response 10(4):626-643.

Calabrese EJ, Ricci PF. (2011). How hormesis will change the risk assessment process. In:

Nriagu JO (Editor) Encyclopedia of Environmental Health, Volume 3, pp. 95-99. Burlington:Elsevier.

Iavicoli I, Sgambato A, Fontana L, Marinaccio A, Leso V, Corbi M, Bergamaschi A, Calabrese EJ. (2012). Effects of sub-acute exposure to Rhodium (as Rh (III) chloride hydrate) on cytokines in female Wistar rats. Bull Environ Contam Toxicol 89:686-692.

Calabrese EJ. (2012). Guest Editorial: Hormesis. Gradient Trends Newletter, page 6.

Nascarella MA, Calabrese EJ. (2012). A method to evaluate hormesis in nanoparticle dose-responses. Dose-Response 10(3):344-354.

Calabrese EJ. (2012). The United States Environmental Protection Agency's linearity-based risk assessment practices: The new homeopathy. Editorial. Environ Toxicol Chem 9999(12):1.

Calabrese EJ, Stanek III EJ, Nascarella MA. (2012). A detailed re-assessment supports the conclusion of the Calabrese et al. 2011 paper that hormesis is commonly observed in the Ames assay. Reply to Letter to the Editor. Mut Res 747:157.

Stanek III EJ, Calabrese EJ, Xu B. (2012). Meta analysis of mass balance studies of soil ingestion in children. Risk Analysis 32(3):433-447.

Calabrese V, Cornelius C, Dinkova-Kostova AT, Iavicoli I, Di Paola R, Cuzzocrea S, Rizzarelli E, Calabrese EJ. (2012). Cellular stress responses, hormetic phytochemicals and vitagenes in aging and longevity. Biochim Biophy Acta 1822(5)SI:753-783.

Calabrese EJ. (2012). Muller's Nobel Prize lecture: When ideology prevailed over science. Tox Sci 126(1):1-4.

Calabrese EJ. (2012). Hormesis and the Salk polio vaccine. Dose-Response 10(1):91-95.

Calabrese EJ, Iavicoli I, Calabrese V. (2012). Hormesis: why it is important to biogerontologists. Biogerontology 13(3):215-235.

Calabrese EJ, Ives JA, Giordano J. (2012). Neuroprotective agents commonly display hormesis: Implications for Nano-neuropharmacology. In: Neurotechnology: Premises, Potential and Problems (J. Giordano, Editor). CRC Press, Boca Raton, FL. Pp. 69-92.

#### <u>2011</u>

Calabrese E. (2011). Improving the scientific foundations for estimating health risks from the Fukushima incident. Proc Nat Acad Sci USA, 108(49):19447-19448.

Calabrese V, Cornelius C, Cuzzocrea S, Iavicoli I, Rizzarelli E, Calabrese EJ. (2011). Hormesis: cellular stress response and vitagenes as critical determinants in aging and longevity. Mol

Aspects Med 32:279-304.

Iavicoli I, Calabrese EJ. (2011). Redefining low lead levels. Environ Health Perspect 119(5):A202-A202.

Calabrese EJ. (2011). Key studies Used to support cancer risk assessment questioned. Environ Mol Mut 52(8):595-606.

Calabrese EJ, Stanek EJ, Nascarella M. (2011). Evidence for hormesis in mutagenicity dose-response relationships. Mut Res 726(2):91-97.

Calabrese EJ. (2011). Muller's Nobel lecture on dose-response for ionizing radiation: ideology or science? Arch Toxicol 85(12):1495-1498.

Calabrese EJ, Blain R. (2011). The hormesis database: The occurrence of hormetic dose response in the toxicological literature. Reg Toxicol Pharm 61:73-81.

Calabrese EJ. (2011). Toxicology rewrites its history and rethinks its future: Giving equal focus to both harmful and beneficial effects. Environ Toxicol Chem 30(12):2658-2673.

Iavicoli I, Calabrese EJ, Fontana L, Marinaccio A, Alimonti M, Pino A, Bergamaschi A. (2011). The effects of iridium on the renal function of female Wistar rats. Ecotoxicol Environ Safety 74:1795-1799.

Calabrese EJ, Mattson MP. (2011). Hormesis provides a generalized quantitative estimate of biological plasticity. J Cell Comm Signal 5(1):25-38.

# <u>2010</u>

Calabrese V, Cornelius C, Stella AMG, Calabrese EJ. (2010). Cellular stress responses, mitostress and carnitine insufficiencies as critical determinants in aging and neurodegenerative disorders: role of hormesis and vitagenes. Nuerochem Res 35(12-SI):1880-1915.

Calabrese V, Cornelius C, Dinkova-Kostova AT, Calabrese EJ. (2010). Vitagenes, cellular stress response, and acetylcarnitine: Relevance to hormesis. Biofactors 35(2):146-160.

Calabrese EJ. (2010). Hormesis: A brief reply to an advocate response. Environ Health Perspect 118:A153-A154.

Calabrese EJ, Jonas WB. (2010). Evaluating homeopathic drugs within a biomedical framework. Hum Exper Toxicol 29:545-549.

Stanek EJ, Calabrese EJ, Barnes RM, Danku JMC, Zhou Y, Kostecki PT, Zillioux E. (2010). Bioavailability of arsenic in soil: Pilot study results and design considerations. Hum Exper Toxicol 29(11):945-960. Ricci PF, Calabrese EJ. (2010). Hormesis and cancer risks: Issues and resolution. In: *Cancer Risk Assessment. Chemical Carcinogenesis, Hazard Evaluation, and Risk Quantification* (C-H. Hsu and T. Stedeford, Eds), (Chapter7). John Wiley and Sons, Hoboken, NJ pp. 785.

Nascarella MA, Calabrese EJ. (2010). A comparison of multiple methods to evaluate biphasic (hormetic) dose-responses in high-throughput in vitro toxicology screens. In: *Toxicity Pathway-Based Risk Assessment: Preparing for Paradigm Change: A Symposium Summary*. Standing Committee on Risk Analysis Issues and Reviews; National Research Council. The National Academy of Sciences, Washington, DC, p. 111-112 (ISBN: 0-309-15423-5).

Calabrese EJ. (2010). Resveratrol: An assessment of its dose response an introduction. Hum Exper Toxicol 29:977-979.

Calabrese EJ, Mattson MP, Calabrese V. (2010). Resveratrol commonly displays hormeis: Occurrence and biomedical significance. Hum Exper Toxicol 29(12):980-1015.

Calabrese V, Cornelius C, Dinkova-Kostova AT, Calabrese EJ, Mattson MP. (2010). Cellular stress responses, the hormesis paradigm, and vitagenes: Novel targets for therapeutic intervention in neurodegenerative disorders. Antiox Redox Signal 13(11):1763-1811.

Calabrese EJ, Mattson MP, Calabrese V. (2010). Dose response biology: The case of resveratrol. Hum Exper Toxicol 29(12):1034-1037.

Iavicoli I, Fontana L, Marinaccio A, Bergamaschi A, Calabrese EJ. (2010). Iridium alters immune balance between t helper 1 and t helper 2 responses. Hum Exper Toxicol 29:213-219.

Calabrese EJ. (2010). A brief reply to an advocate response – Letter to the Editor. Environ Health Perspect 118:A153-A154.

Calabrese EJ, Nascarella M. (2010). Tumor resistance explained by hormesis. Dose-Response 8:80-82

Stanek EJ III, Calabrese EJ. (2010). Predicting low dose effects for chemicals in high throughput studies. Dose-Response 8:301-316.

Iavicoli I, Calabrese EJ, Nascarella MA. (2010). Exposure to nanoparticles and hormesis. Dose-Response 8:501-517.

Calabrese V, Mancuso C, Tovato A, Cornelius C, Cavallaro M, Di Rienzo L, Condorelli D, De Lorenzo A, Calabrese EJ. (2010). The hormetic role of dietary antioxidants in free radical-related diseases. Curr Pharm Design 16(7):877-883.

Calabrese EJ. (2010). BELLE: An Evolving Legacy. A Brief History of BELLE: Introduction. Hum Exper Toxicol 29:247-248.

Calabrese EJ. (2010). Hormesis in central to toxicology, pharmacology and risk assessment. Hum Exper Toxicol 29:249-261.

Calabrese EJ, Jonas WB. (2010). Homeopathy. Clarifying its relationship to hormesis. Hum Exper Toxicol 29:531-536.

Calabrese EJ. (2010). Hormesis and Homeopathy: Introduction. Hum Exper Toxicol 29:527-529.

Calabrese EJ, Hoffmann GR, Stanek III EJ, Nascarella MA. (2010). Hormesis in high-throughput screening of antibacterial compounds in *E. coli*. Hum Exper Toxicol 29:667-677.

Mattson MP, Calabrese EJ. (Editors). (2010). Hormesis: A Revolution in Biology, Toxicology and Medicine. Humana Press Inc. pp. 213.

Mattson MP, Calabrese EJ. (2010). Hormesis: What it is and why it matters. In: Hormesis: A revolution in biology, toxicology and medicine. M.P. Mattson and E.J. Calabrese, Editors. Humana Press Inc. 1-13.

Calabrese EJ. (2010). Once marginalized, evidence now supports hormesis as the most fundamental dose response. In: Hormesis: A revolution in biology, toxicology and medicine. M.P. Mattson and E.J. Calabrese, Editors. Humana Press Inc. pp. 15-56.

Calabrese EJ. (2010). The hormetic pharmacy: The future of natural products and man-made drugs in disease prevention and treatment. In: Hormesis: A revolution in biology, toxicology and medicine. M.P. Mattson and E.J. Calabrese, Editors. Humana Press Inc. pp. 177-198.

Calabrese EJ. (2010). Toxicity Testing in the 21<sup>st</sup> Century – A view from BELLE. Hum Exper Toxicol 29:5-6.

# <u>2009</u>

Calabrese EJ, and Ricci PF. (2009). Hormesis and risk assessment. In: General and Applied Toxicology (B. Ballantyne, T.C. Marrs, T. Syversen, Editors). Volume 5, Part 10, pp. 2717-2724.

Calabrese EJ. (2009). Hormesis as a basic concept. In: Pharmacology -Principles and Practice, (K. Bachmann, M. Hacker, and W. Messer, Editors). Chapter 5. Elsevier Publishers, pp.75-102.

Calabrese EJ. (2009). Hormesis: A conversation with a critic. Commentary. Environ Health Persp 117:1339-1343.

Nascarella MA, Calabrese EJ, Beck BD. (2009). Quantifying hormetic (biphasic) dose-responses in the assessment of nanoparticle toxicology. In: Conference Proceedings: International Conference on the Environmental Implications and Applications of Nanotechnology. June 9-11, 2009, University of Massachusetts, Amherst. pp. 67-73. Edited by The Environmental Institute 2009. Available: <u>http://scholarworks.umass.edu/tei</u>.

Nascarella MA, and Calabrese EJ. (2009). The relationship between the IC50, toxic threshold, and the magnitude of stimulatory response in biphasic (hormetic) dose-responses. Reg Toxicol Pharm 54:229-233.

Calabrese EJ. (2009). Hormesis, non-linearity, and risk communication. Hum Exper Toxicol 28:5-6.

Calabrese EJ. (2009). Hormesis and ethics: Introduction. Hum Exper Toxicol 27:601-602.

Calabrese EJ. (2009). Getting the dose response wrong. Why hormesis became marginalized and the threshold model accepted. Arch Toxicol 83:227-247.

Calabrese EJ. (2009). The road to linearity: Why linearity at low doses became the basis for carcinogen risk assessment. Arch Toxicol 83:203-225.

Calabrese EJ, and Blain RB. (2009). Hormesis and plant biology. Environ Poll 157:42-48.

Calabrese V, Cornelius C, Dinkova-Kostova AT, Calabrese EJ. (2009). Vitagenes, cellular stress response and acetylcarnitine: Relevance to hormesis. BioFactors 35:146-160.

Nascarella MA, Stanek EJ, Hoffmann GR, Calabrese EJ. (2009). Quantification of hormesis in anticancer-agent dose-responses. Dose-Response 7:160-171.

Calabrese EJ. (2009). Hormetic Vignette – The dose response: Comparing hormesis and threshold models. In: Fundamentals of Ecotoxicology, Third Edition, Chapter 8, pp.274-281.

## <u>2008</u>

Maynard K, Calabrese EJ. Rodricks J, Ochoa R. (2008). Hormesis: Introduction. Amer J Pharm Toxicol 3:1-3.

Calabrese EJ. (2008). Hormesis: Principles and applications for pharmacology and toxicology. Amer J Pharm Toxicol 3:59-71.

Calabrese EJ, Stanek III EJ, Nascarella MA, Hoffmann GR. (2008). Hormesis predicts low-dose responses better than threshold models. Int J Toxicol 27:369-378.

Calabrese EJ. (2008). Hormesis and medicine. Brit J Clin Pharm 66:594-617.

Calabrese EJ. (2008). Hormesis. In: Encyclopedia of Quantitative Risk Assessment and Analysis (E. Melnick and B. Everitt, eds.), John Wiley & Sons Ltd, Chichester, UK, pp. 838-844.

Iavicoli I, Carelli G, Marinacio A, Fontana L, Calabrese EJ. (2008). Effects of sub-chronic exposure to palladium (as potassium hexachloro-palladate) on cytokines in male Wistar rats.

Hum Exper Toxicol 27:493-497.

Mattson MP, and Calabrese EJ. (2008). Best in Small Doses. The New Scientists 199:36-39.

Calabrese EJ. (2008). Pain and U-shaped dose responses: Occurrence, mechanisms and clinical implications. Crit Rev Toxicol 38(7):579-590.

Calabrese EJ. (2008). U-shaped dose response in behavioral pharmacology: Historical foundations. Crit Rev Toxicol 38(7):591-598.

Calabrese EJ. (2008). Addiction and dose response: The psychomotor stimulant theory of addiction reveals that hormetic dose responses are dominant. Crit Rev Toxicol 38(7): 599-618.

Calabrese EJ. (2008). An assessment of anxiolytic drug screening tests: Hormetic dose responses predominate. Crit Rev Toxicol 38(6):489-542.

Calabrese EJ. (2008). Modulation of the epileptic seizure threshold: Implications of biphasic dose responses. *Crit Rev Toxicol* 38(6):543-556.

Calabrese EJ. (2008). Drug therapies for stroke and traumatic brain injury often display U-shaped dose responses: Occurrence, mechanisms and clinical implications Crit Rev Toxicol 38(6):557-577.

Calabrese EJ. (2008). Alzheimer's disease drugs: An application of the hormetic dose response model. Crit Rev Toxicol 38(5):419-451

Calabrese,EJ. (2008). Stress biology and hormesis: The Yerkes-Dodson law in psychology: A special case of the hormesis dose-response. Crit Rev Toxicol 38(5):453-462.

Calabrese EJ. (2008). Astrocytes. Adaptive responses to low doses of neurotoxins. Crit Rev Toxicol 38(5):463-471.

Calabrese EJ. (2008). P-glycoprotein efflux transporter activity often displays biphasic dose response relationships. Crit Rev Toxicol 38(5):473-487.

Calabrese EJ. (2008). Neuroscience and hormesis. Overview and general findings. Crit Rev Toxicol 38(4):249-252.

Calabrese EJ. (2008). Dose-response features of neuroprotective agents: An integrative summary. Crit Rev Toxicol 38(4):253-348.

Calabrese EJ. (2008). Pharmacological enhancement of neuronal survival. Crit Rev Toxicol 38(4):349-389.

Calabrese EJ. (2008). Enhancing and regulating neurite otugrowth. Crit Rev Toxicol 38(4):391-

418.

Calabrese EJ. (2008). What is hormesis? In: Mild Stress and Healthy Aging: Applying Hormesis in Aging Research and Interventions (E. Le Bourg, S. Rattan, Editors) Springer publications, pp. 5-19.

Calabrese EJ, Ji LL, Kristense T, Le Bourg E, Loeschcke V, Morris B, Rattan S, Safwat A, Sarup P, Sorensen J, Vaiserman A. (2008). Conclusion. Mild stress and healthy aging: Perspective for human beings. In: Mild Stress and Healthy Aging: Applying Hormesis in Aging Research and Interventions.

Calabrese EJ. (2008). Another California Milestone: The first application of hormesis in litigation and regulation. Intl J Toxicol 27:31-33.

Calabrese EJ. (2008). Converging concepts: adaptive response, preconditioning, and the Yerkes-Dodson law are manifestations of hormesis. Aging Res Rev 7:8-20.

Calabrese EJ. (2008). Hormesis and mixtures. Toxicol Appl Pharm 229:262-263.

Calabrese EJ. (2008). Hormesis: Why it is important to toxicology and toxicologists. Environ Toxicol Chem 27:1451-1474.

Calabrese EJ. (2008). Hormesis and the law: introduction. Hum Exp Toxicol 27:95-96.

Calabrese EJ. (2008). Biomedical implications of hormesis: Part II. Hum Exper Toxicol 27:149.

Calabrese EJ. (2008). Biomedical implications of hormesis: Part I. Hum Exper Toxicol 27:121.

Gonzalez GJD, Calabrese EJ, Blain R. (2008). Aflatoxicosis in chickens (gallus gallus): An example of hormesis. Poul Sci 87:727-732.

## <u>2007</u>

Calzolai L, Ansorge W, Calabrese E, Denslow N, Part P, Lettieri T. (2007). DNA Microarray and Proteomics. Application to Ecotoxicology. Comp Biochem Physiol Part D2:245-249.

Calabrese EJ. (2007). Elliott's ethics of expertise proposal and application: A dangerous precedent. J Sci Eng Ethics 13:139-145.

Calabrese EJ, Staudenmayer JW, Stanek III EJ, Hoffmann GR. (2007). Hormesis and high throughput studies: Crump's analysis lacks credibility. Tox Sci 98:602-603.

Calabrese EJ. (2007). A dose of common sense. Good Clin Prac J, July:12-16.

Calabrese EJ. (2007). Threshold dose response model - RIP: 1911 to 2006. BioEssays 29:686-

688.

Beck B, Calabrese EJ, Slayton TM, Rudel T. (2007). The use of toxicology in the regulatory process. In: Principles and Methods of Toxicology, 5<sup>th</sup> Edition pp. 45-102.

Hanekamp JC, Calabrese E. (2007). Chloramphenicol, European legislation and hormesis. Dose-Response 5:91-93.

Calabrese EJ et al. – more than 50 authors. (2007). Biological stress terminology: Integrating the concepts of adaptive response and preconditioning stress within a hormetic dose-response framework. Tox Appl Pharmacol 222:122-128.

Johnson BL, Calabrese EJ. (2007). Announcement of HERA's Paper of the year 2006 – Debate & Commentary: Polycyic aromatic hydrocarbons in sediments: An overview of risk-related issues. Hum Ecolog Risk Assmnt 13:251-253.

# <u>2006</u>

Calabrese EJ. (2006). The failure of dose-response models to predict low dose effects: a major challenge for biomedical, toxicological and aging research. Biogerontology 7:119-122.

Calabrese EJ. (2006). Harzards and hormesis. Chem Indus 3:15.

Calabrese EJ. (2006). What is the purpose of a risk assessment? Hum Exper Toxicol 25:1.

Calabrese EJ, Staudenmayer JW, Stanek EJ. (2006). Drug development and hormesis: changing conceptual understanding of the dose response creates new challenges and opportunities for more effective drugs. Cur Opin Drug Disc Develop 9:117-123.

Iavicoli I, Carelli G, Stanek EJ, Castellino N, Calabrese EJ. (2006). Below background levels of blood lead impact cytokine levels in male and female mice. Toxicol Appl Pharmacol 210:94-99.

Iavicoli I, Carelli G, Stanek EJ, Castellino N, Li Z, Calabrese EJ. (2006). Low doses of dietary lead are associated with a profound reduction in the time to the onset of puberty in female mice. Reprod Toxicol 22:586-590.

Calabrese EJ. (2006). Hormesis: Scientific Foundations. Europ Journal .

Calabrese EJ. (2006). Hormesis: a key concept in toxicology. In: Biological Concepts and Techniques in Toxicology: An Integrated Approach. JE Riviere, Editor.

Calabrese EJ, Staudenmayer JW, Stanek EJ, Hoffmann GR. (2006). Hormesis outperforms threshold model in NCI anti-tumor drug screening data. Tox Sci 94:368-378.

Cook RR, and Calabrese E.J. (2006). The importance of hormesis to public health. Env Hlth

Perspect 114:1631-1635. Reprinted in: Cien Saude Colet, 2007; 12:955-963.

Cook RR, and Calabrese EJ. (2006). Hormesis is biology, not religion. Env Health Perspect 114:A688-A688.

Stanek E, and Calabrese E. (2006). Response. Risk Analysis 26:865-865.

Pagano G, Guida M, Calabrese EJ. (2006). Toxicity vs. hormesis in evaluating health effects: Applications to bioassays using marine organisms. Marine Sciences and Public Health – Some Major Issues, Geneva, September 27-30, 2006. CIESM Workshop Monographs n 31.

## <u>2005</u>

Calabrese EJ. (2005). Challenging dose-response dogma. Scientist, 19:2-23.

Calabrese EJ. (2005). Historical blunders: how toxicology got the dose-response relationship half right. Cell Mol Biol 51:643-654.

Calabrese EJ. (2005). Hormesis: Implications for risk assessment. In: Inhalation Toxicology, (H. Salem, Editor). Taylor & Francis, Philadelphia, PA., pp.335-348.

Calabrese EJ. (2005). Should hormesis be the default model in risk assessment? Hum Exper Toxicol 24(5):243.

Calabrese EJ. (2005). The emergence of hormesis as the dominant dose-response model. The Scientist 19:22-23.

Calabrese EJ. (2005). Factors affecting the historical rejection of hormesis as a fundamental dose response model in toxicology and the broader biomedical sciences. Toxicol Appl Pharmacol 206(3):365-366.

Calabrese EJ. (2005). An allegation of scientific misconduct in the Bucci et al. article concerning the effects of DIMP on mink. Repro Toxicol 19:443-446.

Calabrese EJ. (2005). Paradigm lost, paradigm found: The re-emergence of hormesis as a fundamental dose response model in the toxicological sciences. Env Poll 138:378-411.

Calabrese EJ. (2005). Hormesis – Basic, generalizable, central to toxicology and a method to improve the risk assessment process. Int J Occup Env Health 10:476-477.

Calabrese EJ. (2005). Toxicological awakenings: The rebirth of hormesis as a central pillar of toxicology. Toxicol Appl Pharmacol 204:1-8.

Calabrese EJ. (2005). Factors affecting the historical rejection of hormesis as a fundamental dose response model in toxicology and the broader biomedical sciences. Letter to the Editor.

Toxicol Appl Pharmacol 206:365-366.

Calabrese EJ, and Cook RR. (2005). Hormesis: how it could affect the risk assessment process. Hum Exper Toxicol 24:486-486.

Calabrese EJ. (2005). Cancer biology and hormesis: Human tumor cell lines commonly display hormetic (biphasic) dose responses. Crit Rev Toxicol 35:463-582.

Calabrese EJ. (2005). Hormetic dose-response relationships in immunology: Occurrence, quantitative features of the dose-response, mechanistic foundations and clinical implications. Crit Rev Toxicol 35:89-306.

Calabrese EJ, and Blain R. (2005). The occurrence of hormetic dose responses in the toxicological literature, the hormesis database: an overview. Toxicol Appl Pharmacol 202:289-301.

## <u>2004</u>

Calabrese EJ. (2004). Hormesis – Basic, generalizable, central to toxicology and a method to improve the risk-assessment process. Int Occup Env Health 10:466-467.

Calabrese EJ. (2004). Bystander effects and the dose response. Hum Exper Toxicol 23:59.

Calabrese EJ. (2004). Erratum to The effects of diisopropylmethylphosphonate, a by-product of the production of sarin and a contaminant in drinking water at the Rocky Mountain Arsenal, on female mink. Reg Toxicol Pharmacol 39:409.

Calabrese EJ. (2004). Economics and hormesis. Hum Exper Toxicol 23:265.

Calabrese EJ. (2004). Hormesis: implications for risk assessment. In: Inhalation Toxicology, 2nd Edition, (H. Salem and S. Katz, Editors). Marcel Dekker Inc.

Iavicoli I, Careli G, Stanek EJ, Castellino N, Calabrese EJ. (2004). Effects of low doses of dietary lead on puberty onset in female mice. Reprod Toxicol 19:35-41.

Calabrese EJ. (2004). Hormesis: A revolution in toxicology, risk assessment and medicine. Eur Mol Biol Org 5:S37-S40.

Calabrese EJ. (2004). Hormesis: A model for non-carcinogen and carcinogen risk assessment. World Health Organization.

Calabrese EJ. (2004). Hormesis: from marginalization to mainstream. A case for hormesis as the default dose-response model in risk assessment. Toxicol Appl Pharmacol 197:125-136.

Calabrese EJ, and Blain R. (2004). Metals and hormesis. J Env Monit 6:14N-19N.

## <u>2003</u>

Calabrese EJ. (2003). The LNT hypothesis: can it withstand recent developments in molecular radiobiology and in adaptive protection mechanisms? Hum Exp Toxicol 22:289-289.

Calabrese EJ. (2003). Toxicological diversity: making room for the U-shaped dose-response. Hum Exper Toxicol 22:465-466.

Calabrese EJ. (2003). The maturing of hormesis as a credible dose-response model. Nonlinearity Biol Toxicol Med 1:319-343.

Calabrese EJ. (2003). The effects of diisopropylmethylphosphonate on female mink: how medical intervention biased mortality data. Reg Toxicol Pharmacol 38:260-268.

Calabrese EJ. (2003). Editorial. Nonlinearity Biol Toxicol Med 1:1.

Calabrese EJ, and Baldwin LA. (2003). Hormesis at the National Toxicology Program (NTP): Evidence of hormetic dose responses in NTP dose-range studies. Nonlinearity Biol Toxicol Med 1:455-467.

Finley BL, Iannuzzi J, Wilson ND, Kimmell JL, Craven V, Lemeshow S, Teaf CM, Calabrese EJ, Kostecki PT. (2003). The Passiac River Creel/Angler Survey: Expert panel review, findings and recommendations. Hum Ecol Risk Assess 9(3):829-855.

Calabrese EJ. (2003). Risk communication and the challenge of hormesis. Hum Exp Toxicol 22(1):1-2.

Calabrese EJ, and Baldwin LA. (2003). Toxicology rethinks its central belief – Hormesis demands a reappraisal of the way risks are assessed. Nature 421(6924):691-692.

Iavicolli I, Carelli G, Castellino N, Stanek III EJ, Calabrese EJ. (2003). Effects of low doses of dietary lead on red blood cell production in male and female mice. Tox Letters 137(3):193-199.

Calabrese EJ. (2003). Special issue: Hormesis: Environmental and biomedical perspectives – Introduction. Crit Rev Toxicol 33(3-4):213-214.

Calabrese EJ, and Baldwin LA. (2003). Inorganics and hormesis. Crit Rev Toxicol 33(3-4):215-304.

Calabrese EJ, and Baldwin LA. (2003). Chemotherapeutic and hormesis. Crit Rev Toxicol 33(3-4):305-353.

Calabrese EJ, and Baldwin LA. (2003). Peptides and hormesis. Crit Rev Toxicol 33(3-4):355-

405.

Calabrese EJ, and Baldwin LA. (2003). Ethanol and hormesis. Crit Rev Toxicol 33(3-4):407-424.

Calabrese EJ, and Baldwin LA. (2003). The hormetic dose response model is more common than the threshold model in toxicology. Tox Sci 71(2):246-250.

Calabrese EJ. (2003). he effects of diiosopropylmethylphosphonate (DIMP), a by-product of the production of Sarin and a contaminant in drinking water at the Rocky Mountain Arsenal, on female mink. Reg Toxicol Pharm 37(2):191-201.]

Nascarella MA, Stoffolano Jr JG, Stanek III EJ, Kostecki PT, Calabrese EJ. (2003). Hormesis and stage specific toxicity induced by cadmium in an insect model, the black blowfly. *Environ*. *Poll.*, 124(2):257-262.

Calabrese EJ, and Baldwin LA. (2003). Hormesis: the dose-response revolution. *Ann Rev Pharm Toxicol* 43:175-197.

Nascarella MA, Stoffolano JG, Stanek III EJ, Kostecki PT, Calabrese EJ. (2003). Hormesis and stage specific toxicity induced by cadmium in an insect model, the queen blowfly, *Phormia regina* Meig. Env Poll 124:257-262.

# <u>2002</u>

Calabrese EJ. (2002). Introduction to BELLE newsletter: The role of hormesis in industrial hygiene/occupational health. Hum Exp Toxicol 21(7):383-383.

Calabrese EJ. (2002). Untitled. Tox Sci 69(1):286-287.

Calabrese EJ. (2002). Part 1. The role of ROS in health disease: Part 2. Proposing a definition of hormesis. Hum Exp Toxicol 21(2):59.

Calabrese EJ. (2002). Hormesis: Changing views of the dose response. Mut Res 511(3):181-189.

Johnson BL, and Calabrese EJ. (2002). Editorial. Hum Ecol Risk Assess 8(3):CP3-CP3.

Calabrese EJ, and Baldwin LA. (2002). Hormesis and high risk groups. Reg Tox Pharmacol 35:414-428.

Iavicoli I, Carelli G, Stanek III EJ, Castellino N, Calabrese EJ. (2002). Effects of *per os* lead acetate administration on mouse hepatocyte survival. Toxicol Letters 129(1-2):143-149.

Calabrese EJ, and Baldwin LA. (2002). Applications of hormesis in toxicology, risk assessment and chemotherapeutics. Trends Pharmacol Sci 23(7):331-337.

Calabrese EJ. (2002). Profound reduction in food ingestion in female mink and risk of mortality.

Calabrese EJ, and Baldwin LA. (2002). Radiation hormesis and cancer. Hum Ecolog Risk Assmnt 8:327-353.

Calabrese EJ, and Baldwin LA. (2002). Defining Hormesis. Hum Exper Toxicol 21:91-97.

Calabrese EJ, and Baldwin LA. (2002). Response to expert commentators. Hum Exper Toxicol 21:113-114.

Kostecki PT, Calabrese E, Nascarella M. (2002). Survey of states' 2001 soils cleanup standards for petroleum contamination. Soil Sed Contam 11(2):117-239.

Nascarella MA, Kostecki P, Calabrese E, Click D. (2002). AEHS's 2001 survey of states' soil and groundwater cleanup standards. Contam Soil Sed Water, January/February, pp. 15-68.

Calabrese EJ. (2002). The dose-response revolution. School of Public Health & Health Sciences (SPHHS) Alumni News, Spring, pp. 1-3.

## <u>2001</u>

Mundt KA, Calabrese EJ, Baldwin LA. (2001). The history of chemical hormesis and potential implications for modern risk assessment and epidemiology. Tox Lett Suppl:1/123.

Calabrese E. (2001). Hormesis and environmental regulation: views from the legal profession. Introduction. Hum Exp Toxicol 20(3):121-121.

Calabrese E.J. (2001). The role of hormesis in ecotoxicology and ecological risk assessment. Hum Exp Toxicol 20(10):497.

Calabrese EJ. (2001). Biological switching mechanisms and the biphasic dose responses of hormesis. Hum Ecol Risk Assess 7(6):1565-1567.

Calabrese EJ, and Marchant G. (2001). Recognizing and incorporating health benefits of pollutants in risk assessment. Hum Ecol Risk Assess 7(4):639-640.

Calabrese EJ. (2001). Low doses of toxic substances: impacts on the aging process. Hum Exp Toxicol 20(6):279. (see 2001 BELLE Newsletter 9(3):1)

Calabrese EJ. (2001). When the control group fails to control: A toxicological dilemma of risk assessment proportions. Hum Ecol Risk Assess 7(3):473-474.

Calabrese EJ. (2001). U-shaped dose responses in biology, toxicology, and public health. Ann Rev Publ Health 22:15-33.

Calabrese EJ. (2001). Young's old uncertainty factor formula for the young – Reply to Fitzgerald. Hum Ecol Risk Assess 7(2):471-472.

Ewald K., and Calabrese EJ. (2001). Induction of acute phase proteins protects rats from hepatotoxins. *Tox Sci* 48(2):215-218.

Calabrese, E.J., and Baldwin, L.A. (2001). Hormesis and harmonization. Letter to the Editor. *Toxicol. Sci.*, 63:149.

Calabrese, E.J., and Baldwin, L.A. (2001). The frequency of U-shaped dose-responses in the toxicological literature. *Tox. Sci.*, 62:330-338.

Stanek, III, E.J., Calabrese, E.J., and Zorn, M. (2001). Biasing factors for simple soil ingestion estimates in mass balance studies of soil ingestion. *Hum. Ecolog. Risk Assmnt.*, 7(2):329-355.

Stanek, III, E.J., Calabrese, E.J., and Zorn, M. (2001). Soil ingestion distributions for Monte Carlo risk assessment in children. *Hum. Ecolog. Risk Assmnt.*, 7(2):357-368.

Calabrese, E.J. (2001). Book Review: Permissible Dose. Endeavour, 25(2):89.

O'Hara, T.M., Calabrese, E.J., Borzelleca, J.F., and Rowles, T. (2001). Hormesis and the interpretation of cetacean tissue contaminants data for both impacts to cetaceans and consumers of whale products. *Intern'l. Whaling Commission*, Proceedings.

Calabrese, E.J. (2001). Hormesis. Encyclopedia Env. Metrics, Wiley, New York.

Calabrese, E.J., and Kostecki, P.T. (2001). Background and Biology. J. Env. Forensics, 2:113.

Calabrese, E.J., and Baldwin, L.A. (2001). Hormesis: U-shaped dose-response and their centrality in toxicology. *Trends in Pharmacol. Sciences*, 22(6):285-291.

Calabrese, E.J., and Baldwin, L.A. (Editors). (2001). Introduction: Scientific foundations of hormesis. *Crit. Rev. Toxicol.*, 31:351-352.

Calabrese, E.J., and Baldwin, L.A. (2001). Hormesis: A generalizable and unifying hypothesis. *Crit. Rev. Toxicol.*, 31:353-424.

Calabrese, E.J. (2001). Overcompensation stimulation: A mechanism for hormetic effects. *Crit. Rev. Toxicol.*, 31:425-470.

Calabrese, E.J., and Baldwin, L.A. (2001). Agonist concentration gradients as a generalizable regulatory implementation strategy. *Crit. Rev. Toxicol.*, 31:471-474.

Calabrese, E.J. (2001). Prostaglandins: Biphasic dose responses. Crit. Rev. Toxicol., 31:475-

488.

Calabrese, E.J. (2001). Nitric Oxide (NO): Biphasic dose responses. *Crit. Rev. Toxicol.*, 31:489-502.

Calabrese, E.J. (2001). Estrogen and related compounds: Biphasic dose responses. *Crit. Rev. Toxicol.*, 31:503-516.

Calabrese, E.J. (2001). Androgens: Biphasic dose responses. Crit. Rev. Toxicol., 31:517-522.

Calabrese, E.J. (2001). Adrenergic receptors: Biphasic dose responses. *Crit. Rev. Toxicol.*, 31:523-538.

Calabrese, E.J. (2001). Adenosine: Biphasic dose responses. Crit. Rev. Toxicol., 31:539-552.

Calabrese, E.J. (2001). 5-Hydoxytryptamine (5-HT) (serotonin): Biphasic dose responses. *Crit. Rev. Toxicol.*, 31:553-562.

Calabrese, E.J. (2001). Dopamine: Biphasic dose responses. Crit. Rev. Toxicol., 31:563-584.

Calabrese, E.J. (2001). Opiates: Biphasic dose responses. Crit. Rev. Toxicol., 31:585-604.

Calabrese, E.J. (2001). Amyloid  $\beta$ -peptide: Biphasic dose responses. *Crit. Rev. Toxicol.*, 31:605-606.

Calabrese, E.J. (2001). Apoptosis: Biphasic dose responses. Crit. Rev. Toxicol., 31:607-614.

Calabrese, E.J. (2001). Cell migration/chemotaxis: Biphasic dose responses. *Crit. Rev. Toxicol.*, 31:615-624.

Calabrese, E.J. (2001). The future of hormesis: Where do we go from here? *Crit. Rev. Toxicol.*, 31:637-648.

Ewald, K., and Calabrese, E.J. (2001). Lead reduces the nephrotoxicity of mercury chloride. *Ecotox. Environ. Safety.* 48:215-218.

Calabrese, E.J. (2001). Animal soil ingestion and animal rights. *Hum. Ecol. Risk Assess.*, 7(1):3-4.

Calabrese, E.J. (2001). Assessing the default assumption that children are always at risk. *Hum. Ecol. Risk Assess.*, 7(1):37-60.

Kostecki, P.T., Calabrese, E.J., and Simmons, K. (2001). Survey of states' 2000 soils cleanup standards for petroleum contamination. *Soil Sediment Contam.*, 117-196.

Simmons, K., Click, D., Kostecki, P., and Calabrese, E. (2001). AEHS's 2000 survey of states' soil and groundwater cleanup standards. *Contam. Soil Sed. Water*, February, pp. 22-77.

Calabrese, E.J. (2001). Letter to Editor – Reply to Fitzgerald. *Hum. Ecol. Risk Assmnt.*, 7(2):471-472.

#### <u>2000</u>

Calabrese, E.J. (2000). Introduction to BELLE Newsletter: Special issue on chemical carcinogenesis epigenetic mechanisms and dose response. *Hum. Exp. Toxicol.*, 19(10):541-541.

Calabrese, E.J. (2000). Uncertainty factor for children: historical precedent. *Hum. Ecolog. Risk* Assmnt., 6(5):729-730.

Calabrese, E.J. (2000). Introduction to the BELLE Newsletter: Special issue on caloric restriction and hormesis. *Hum. Exp. Toxicol.*, 19(6):319-319.

Calabrese, E.J., and Baldwin, L.A. (2000). Radiation hormesis: the demise of a legitimate hypothesis. *Hum. Exp. Toxicol.*, 19(1):76-84.

Calabrese, E.J., and Baldwin, L.A. (2000). U-shaped dose-responses in biology, toxicology and public health. *Folia Med.*, 71(S1):7-19. (Reprinted from 2001 ARPH, citation #8).

Calabrese, E.J. (2000). A toxicological disconnect. Hum. Ecol. Risk Assess., 6(6):911-912.

Johnson, B.L., and Calabrese, E.J. (2000). Editorial changes and future directions for HERA. *Hum. Ecol. Risk Assess.*, 6(5):727-728.

Calabrese, E.J., and Baldwin, L.A. (2000). Hormesis and risk assessment: A risky proposal – Reply. *Bioscience*, 50(4):293-293.

Calabrese, E.J., and Baldwin, L.A. (2000). Reevaluation of the fundamental dose-response relationship. *Bioscience*, 50(1):6-6.

Calabrese, E.J. (2000). Guest Editor of dedicated issue on hormesis. J. Appl. Toxicol., 20(2):89-163.

Calabrese, E.J. (2000). Societal implications of hormesis. J. Appl. Toxicol., 20:91.

Calabrese, E.J., and Baldwin, L.A. (2000). The effects of gamma-rays on longevity. *Biogerontology*, 1:309-319.

Stanek III, E.J. and Calabrese, E.J. (2000). Daily soil ingestion estimates for children at a superfund site. *Risk Analysis*, 20:627-635. Hood, T.E., Calabrese, E.J., and Zuckerman, B.M. (2000). Detection of an estrogen receptor in two nematode species and inhibition of binding and development by environmental chemicals. *Ecotox. Env. Safety*, 47(1):74-81.

Calabrese, E.J., and Baldwin, L.A. (2000). Reproductive toxicity and hormetic responses. *Toxicology in Risk Assessment*, (H. Salem, ed.). Taylor & Francis, Publishers, Philadelphia. pp. 95-106.

Calabrese, E.J., and Baldwin, L.A. (2000). Chemical hormesis: its historical foundations as a biological hypothesis. *Hum. Exp. Toxicol.*, 19(1):2-31.

Calabrese, E.J., and Baldwin, L.A. (2000a). The marginalization of hormesis. *Hum. Exp. Toxicol.*, 19(1):32-40.

Calabrese, E.J. and Baldwin, L.A. (2000b). Radiation hormesis: Its historical foundations as a biological hypothesis. *Human Exp. Toxicol.*, 19:41-75.

Calabrese, E.J. and Baldwin, L.A. (2000c). Radiation hormesis: Part 2 – the demise of a legitimate hypothesis. *Human Exp. Toxicol.*, 19:76-84.

Calabrese, E.J. and Baldwin, L.A. (2000d). Tales of two similar hypotheses: the rise and fall of chemical and radiation hormesis. *Human Exp. Toxicol.*, 19:86-97.

Beck, B., Slayton, T.M., Calabrese, E.J., Baldwin, L.A., and Rudel, R. (2000). The use of toxicology in the regulatory process. In: *Principles and Methods of Toxicology*. 4th edition. A.W. Hayes (Editor). Raven Press, 23-76.

Simmons, K., Kostecki, P., and Calabrese, E. (2000). AEHS's 1999 survey of states' groundwater cleanup standards. *Soil Seiment & Groundwater*, April/May, pp. 30-52.

#### <u>1999</u>

Stanek, III, E.J., Calabrese, E.J., and Zorn, M. (1999). *Development of Exposure Distribution Parameters for Use in Monte Carlo Risk Assessment of Exposure Due to Soil Ingestion*. Final Report. Department of Biostatistics and Epidemiology/Department of Environmental Health. University of Massachusetts, Amherst, MA. Sponsored by the US EPA R8 Ecosystems Protection & Remediation. Contract: LOR056 1998 T 08L. pp. 1-145.

Calabrese, E.J., and Baldwin, L.A. (1999). Re-evaluation of the fundamental dose-response relationship – A new database suggests that the U-shaped, rather than the sigmoidal, curve predominates. *BioScience*, 49(9):725-732.

Calabrese, E.J., Baldwin, L.A., and Holland, C.D. (1999). Hormesis: A highly generalizable and reproducible phenomenon with important implications for risk assessment. *Risk Analysis*, 19(2):261-281.

Calabrese, E.J., and Baldwin, L.A. (1999). Implementing hormetic effects in the risk assessment process: Differentiating beneficial and adverse hormetic effects in the RfD derivation process. *Human Ecol. Risk Assmnt.*, 5(5):965-971.

Calabrese, E.J., and Baldwin, L.A. (1999). Application of chemical hormesis concept to risk assessment: reproductive toxicity as an example. In: *Toxicology in Risk Assessment*, (M.E. Eggerts, Editor). Taylor and Francis, pp. 95-106.

Stanek, E.J., III, Calabrese, E.J., and Barnes, R.M. (1999). Soil ingestion estimates for children in Anaconda using trace element concentrations in different particle size fractions. *Human and Ecologic. Risk Assmtn.*, 5(3):547-558.

Calabrese, E.J., and Blain, R.B. (1999). The single exposure carcinogen database: assessing the circumstances during which a single exposure to a carcinogen can cause cancer. *Toxicol. Sci.*, 50:169-185.

Blain, R., Reeves, R., Ewald, K.A., Leonard, D., and Calabrese, E.J. (1999). Susceptibility to chlordecone-carbon tetrachloride induced hepatotoxicity and lethality is both age and sex dependent. *Toxicol. Sci.*, 50:280-286.

Calabrese, E.J. (1999). Evidence that hormesis represents an "overcompensation" response to a disruption in homeostasis. *Ecotoxicol. & Environ. Safety*, 42:135-137.

Potter, T.L., Simmons, K., Wu, J., Sanchez-Olvera, M., Kostecki, P., and Calabrese, E. (1999). Static die-away of a nonylphenol ethoxylate surfactant in estuarine water samples. *Environ. Sci. Technol.*, 33:113-118.

Calabrese, E.J., and Baldwin, L.A. (1999). The marginalization of hormesis. *Toxicol. Pathol.*, 27(2):187-194. (Reprinted in Human and Experimental Toxicology, 19:2-31, 2000).

Calabrese, E.J., and Baldwin, L.A. (1999). Chemical hormesis: Its historical foundations as a biological hypothesis. *Toxicol. Pathol.*, 27(2):195-216. (Reprinted in Human and Experimental Toxicology, 19:31-40, 2000).

Simmons, K., Kostecki, P., and Calabrese, E. (1999). 9<sup>th</sup> Annual state by state groundwater cleanup standards. *Soil & Groundwater Cleanup*, April/May, pp. 10-41.

Simmons, K., Kostecki, P., and Calabrese, E. (1999/2000). State soil standards survey. *Soil & Groundwater*, December/January, pp. 24-51.

Kostecki, P.T., and Calabrese, E.J. (1999). National survey for cleanup standards for petroleum contaminated groundwater. *Soil and Groundwater Cleanup Magazine*. April/May, pp. 10-18.

# <u> 1998</u>

Calabrese, E.J., Baldwin L.A. (1998). Hormesis: Improving insights on the biological effects of low level exposures. Risk Policy Report 5(1):33-37.

Calabrese, E.J. (1998). Extrapolation from animal data. Chapter 11. In: *Principles of Risk* Assessment. (Title of book maybe incorrect). pp. 269-280.

Kostecki, P.T., and Calabrese, E.J. (1998). 9<sup>th</sup> Annual national survey for cleanup standards for petroleum contaminated soils. *Soil and Groundwater Cleanup Magazine*. November, pp. 12-40.

Calabrese, E.J. (1998). Soil ingestion estimation in children and adults: a dominant influence in site-specific risk assessment. *Environ. Law Reporter*, 28:10660-10671.

Calabrese, E.J. (1998). The cancer risk assessment paradigm: Rethinking the role of animal extrapolation and human data in human risk assessment. *Comments on Toxicol.*, <u>6</u>:289-294.

Davis, M., and Calabrese, E.J. (1998). Biological effects of low level exposures. *Comments on Toxicol.*, 6:241-246.

Calabrese, E.J. (1998). Guest editor of issue of BELLE. Comments on Toxicol., 6:235-336.

Stanek, E.J. III, Calabrese, E.J., Mundt, K., Pekow, P., and Yeatts, K.B. (1998). Prevalence of soil mouthing/ingestion among health children 1-6. *J. Soil Contam.*, 7:227-242.

Anderton, D.L., Anderson, A.B., Rossi, P.H., Oakes, J.M., Fraser, M.R., Weber, E.W., and Calabrese, E.J. (1998). Minority communities are not unfairly exposed to hazardous waste industries. *Evaluation Review*, 18(2):123-140.

Calabrese, E.J., and Baldwin, L.A. (1998). A general classification of U-shaped dose-response relationships. *Human and Exper. Toxicol.*, 17:353-364.

Cohen, J.T., Beck, B.D., Bowers, T.S., Bornschein, R.L., and Calabrese, E.J. (1998). An arsenic exposure model: Probablistic validation using empirical data. *Human Ecolog. Risk Assmnt.*, 4(2):341-377.

Stanek III, E.J., Calabrese, E.J., and Xu, L. (1998). A caution for Monte Carlo risk assessment long term exposures based on short term exposure study data. *Human Ecolog. Risk Assment*, 4(2):409-422.

Calabrese, E.J. (1998). Toxicological defense mechanisms and the shape of dose-response relationships -- Introduction. *Environ. Health Perspect.*, 106:275-276.

Calabrese, E.J. (1998). Toxicological defense mechanisms and the shape of dose-response relationships -- Hormesis as a biological hypothesis. *Environ. Health Perspect.*, 106:357-362.

Calabrese, E.J., and Blain, R. (1998). An assessment of whether single exposures to many carcinogens can cause cancer. *Environ. Law Reporter*, 28(5):10254-10262.

Moghaddam, A.P., Eggers, J., and Calabrese, E.J. (1998). Evaluation of sex difference in tissue repair following acute carbon tetrachloride toxicity in male and female Sprague-Dawley rats. *Toxicology*, 130:95-105.

Calabrese, E.J. (1998). The toxicological implications of hormesis: Introduction. *Human Exper. Toxicol.*, 17:246.

Calabrese, E.J., and Baldwin, L.A. (1998). Developing insights on the nature of the doseresponse relationship in the low dose zone: Hormesis as a biological hypothesis. *Biotherapy*, 16:235-240.

Calabrese, E.J., and Baldwin, L.A. (1998). Hormesis as a default parameter in RfD derivation. *BELLE Newsletter*, 7(1):1-35. Reprinted in *Human and Exper. Toxicol.*, Summer 1998, 17:444-447.

Calabrese, E.J., and Blain, R. (1998). A single exposure to many carcinogens can cause cancer. *ELR News & Analysis*, 28 ELR 10254/5-98.

Simmons, K., Kostecki, P., and Calabrese, E. (1998). 9<sup>th</sup> Annual state by state soil cleanup standards. *Soil & Groundwater Cleanup*, November, pp. 12-40.

Calabrese, E.J., and Baldwin, L.A. (1999). Can the concept of hormesis be generalized to carcinogenesis. *Reg. Toxicol. and Pharm.*, 28:230-241.

#### <u>1997</u>

Calabrese, E.J., and Baldwin, L.A. (1997). A quantitatively-based methodology for the evaluation of chemical hormesis. *Hum. Ecol. Risk Assess.*, 3(4):545-554.

Calabrese, E.J., Stanek, E.J., and Barnes, R. (1997). Soil ingestion rates in children identified by parental observations as likely high soil ingesters. *J. Soil Contam.*, 6(3):271-279.

Calabrese, E.J., Stanek, E.J., Pekow P., et al. (1997). Soil ingestion estimates for children residing on a superfund site. *Ecotox. Environ. Safe.*, 36(6):258-268.

Kostecki, P.T., and Calabrese, E.J. (1997). State-by-state survey of soil cleanup levels for petroleum constituents. *Soil and Groundwater Cleanup Magazine*. November, pp. 10-34.

Calabrese, E.J. (1997). Genetic predisposition to environmental induced diseases. *Environ. Toxicol. Pharm.*, 4:273-276.

Calabrese, E.J. (1997). Striking the balance between the role of animal model and human data in hazard assessment. *Human & Exp. Toxicol*., 16:86-187

Calabrese, E.J., and Baldwin, L. (1997). The dose determines the stimulation (and poison): Development of a chemical hormesis data base. *International J. Toxicol.*, 16:545-559.

Calabrese, E.J., and Baldwin, L. (1997). A toxicologically based weight-of-evidence methodology for the relative ranking of chemicals of endocrine disruption potential. *Reg. Toxicol. & Pharmacol.*, 26:36-40.

Calabrese, E.J., Stanek, E., and Barnes, R. (1997). Soil ingestion by children residing on a superfund site. *Ecotox. Environ. Safety*, 36:258-268.

Calabrese, E.J., Stanek, E., and Barnes. (1997). Soil ingestion in adults--Results of a second pilot study. *Ecotox. Environ. Safety*, 36:249-257.

Calabrese, E.J. (1997). Hormesis revisited: New insights concerning the biological effects of low dose exposures to toxins. *Environ. Law Reporter*, 27:526-232.

Calabrese, E.J., Stanek, E.J., James, R.C., and Roberts, S.M. (1997). Soil ingestion: A concern for acute toxicity in children. *Environ. Health Perspect.*, 105(12):1354-1358.

Calabrese, E.J. (1997). Development of a chemical hormesis data base: Strengths, limitations, and generalized ability. *The Toxicology Forum, Annual Summer Meeting*, July 7-11. Given Institute, Aspen, Colorado.

Judge, C., Kostecki, P., and Calabrese, E. (1997). State summaries of soil cleanup standards. *Soil & Groundwater Cleanup*, November, pp. 10-34.

## <u>1996</u>

Calabrese, E.J. (1996). Expanding the reference dose concept to incorporate and optimize beneficial effects while preventing toxic responses from nonessential toxicants. *Reg. Toxicol. Pharm.*, 24(1):S68-S75, Part 2.

Kostecki, P.T., Calabrese, E.J., and Oliver, T. (1996). A summary of state-by-state groundwater and soil cleanup levels. *J. Soil Contam.*, 5(4):400-425.

Blain, R.B., Moholkar, M., Lakshmanan, Leonard, D., Zhao, X., and Calabrese, E.J. (1996). Effects of repeat dosing and multiple blood drawing separately and together on carbon tetrachloride-induced hepatotoxicity. *J. Amer. College Toxicol.*, 15(5):381-393.

Calabrese, E.J. (1996). Expanding the RfD concept to incorporate and optimize beneficial effects while preventing toxic responses from non-essential toxicants. *Ecotox. Environ. Safety*, 34(1):94-101.

Calabrese, E.J. and Baldwin, L.A. (1996). Toxicological and biostatistical foundations for the derivation of a generic interspecies uncertainty factor for application in noncarcinogen risk assessment. In: *Interconnections*. Chapman & Hall. pp. 149-158.

Calabrese, E.J., Leonard, D.A., Zhao, X., and Lakshmanan, K. (1996). Role of tissue repair in carbon tetrachloride hepatotoxicity in male and female Sprague-Dawley and Wistar rats. *J. Am. Coll. Toxicol.*, 15(1):62-69.

Calabrese, E.J., and Mehendale, H.M. (1996). A review of the role of tissue repair as an adaptive strategy: Why low doses are often non-toxic and why high doses can be fatal. *Fd. Chem. Toxic.*, 34(3):301-311.

Calabrese, E.J. (1996). Letter to the editor. Toxicol. Appl. Pharm., 136:208-209.

Johnson, R., Leonard, D.A., and Calabrese, E.J. (1996). Enhanced CCl<sub>4</sub>-induced hepatotoxicity by repeated exposures to CCl<sub>4</sub> and by blood drawing. *J. Amer. College Toxicol.*, 15(5):381-393.

Calabrese, E.J., Stanek, E.J., and Barnes, R. (1996). Methodology to estimate the amount and particle size of soil ingested by children: Implications for exposure assessment at waste sites. *Reg. Toxicol. Pharm.*, 24:264-268.

Calabrese, E.J. (1996). Biochemical individuality: The next generation. *Reg. Toxicol. Pharmacol.*, 24:S58-S67.

Calabrese, E.J. (1996). A toxicological basis to derive generic interspecies uncertainty factors for application in human and ecological risk assessment. *Human & Ecolog. Risk Assessement*, 1(5):555-564.

Calabrese, E.J. (1996). Incorporating beneficial responses from non-essential toxicants in the RfD process. *BELLE Newsletter*, 5(11):1-15.

Davis, J.M., and Calabrese, E.J. (1996). The biological effects of low-level exposures. *Health and Environment Digest*.

Potter, T., Kostecki, P., Calabrese, E., and Stanek, E. (1996). Determination of background concentrations of selected metals in Massachusetts wetland soils: Phase II sampling and analysis. *Mass Dept. of Env. Protection.* 

Calabrese, E.J. (1996). Biological effects of low level exposures. *Human and Exp. Toxicol.*, 15:67-70.

Calabrese, E.J. (1996). Untitled. Toxicol. Appl. Pharm., 136(1):208-209.

<u> 1995</u>

Stanek, E.J., and Calabrese, E.J. (1995). Daily estimates of soil ingestion in children. *Env. Health Persp.*, 103(3):276-285.

Kostecki, P., Calabrese, E., and Oliver, T. (1995). A summary of state-by-state groundwater and soil cleanup levels. *Soils Magazine*, 5(8):12-58.

Stanek, E.J. and Calabrese, E.J. (1995). Improved soil ingestion estimates via the "best" tracer method. *Human and Ecolog. Risk Assmnt.*, 1(2):133-156.

Calabrese, E.J., Horton, H.M., and Gentile, T. (1995). Attempts to validate a possible predictive animal model for human erythrocyte G-6-PD deficiency. In: *World Congress on Alternatives and Animal Use in the Life Sciences*. A.M. Goldberg and L.M. vanZutphen. Mary Ann Liebert, Inc., NY. pp. 391-401.

Calabrese, E.J. (1995). Chemical interactions: An introduction. In: *Principles of Risk* Assessments, Marcel Dekker Publishers, NY. pp. 311-312.

Calabrese, E.J., Baldwin, L.A., and Leonard, D.A. (1995). Decrease in hepatotoxicity by lead exposure is not explained by its mitogenic response. *J. Applied Toxic.*, 15(2):129-132.

French, C., Baldwin, L., Leonard, D., and Calabrese E.J. (1995). Potency ranking of methemoglobin-forming agents. *J. Appl. Toxicol.*, 15(3):167-174.

Stewart, J., and Calabrese, E.J. (1995). The median effect equation: A useful mathematical model for assessing interaction of carcinogens and low dose cancer quantitative risk assessment. In: *Chemical Interactions*, Marcel Dekker Publisher, NY. pp. 353-365.

Stanek, E.J., and Calabrese, E.J. (1995). Daily soil ingestion estimates in children. *Env. Health Perspectives*, 103:276-285.

Calabrese, E.J. (1995). Dose-response studies of genotoxic rodent carcinogens: threshold, hockey sticks, hormesis or straight lines? *BELLE Newsletter*, 3(3):1-5.

Calabrese, E.J., and Stanek, E.J. (1995). A dog's tale: soil ingestion by a canine. *Ecotox. Environ. Safety*, 32(1):93-95.

Calabrese, E.J. (1995). Toxicological consequences of multiple chemical interactions: a primer. *Toxicology*, 105:121-135.

Calabrese, E.J. (1995). Predicting the toxicological consequences of multiple chemical interactions. In: *Chemical Interactions*. Marcel Dekker Publishers. pp. 313-328.

Calabrese, E.J. (1995). Incorporating beneficial responses into the RfD derivation process. *BELLE Newsletter*, 4(1):1-21.

Langlois, C.J., Garreffi, J.A., Baldwin, and Calabrese, E.J. (1995). The effect of combined exposures of chlorine, copper and nitrite on methemoglobin formation in red blood cells of Dorset sheep. In: *Chemical Interactions*, Marcel Dekker Publishers. pp. 401-410.

Calabrese, E.J., and Stanek, E.J. (1995). Resolving intertracer inconsistencies in soil ingestion estimation. *Env. Hlth. Perspectives*, 103(5):454-457.

Calabrese, E.J., Leonard, D.A., and Zhao, X. (1995). Susceptibility of mink to methemoglobin formation. *Bull. Env. Contam. & Toxic.*, 55:439-445.

Calabrese, E.J. and Baldwin, L. (1995). A toxicological and biostatistical basis for the interspecies UF with application to human and ecological risk assessment. *Human and Ecological Risk Assessment*, 1(5):555-564.

## <u>1994</u>

Sacco, C. and Calabrese, E.J. (1994). Selective inhibition of gastrointestinal B-glucuronidase by polyvinylbenzyl D-glucaro(1,4)lactonate. Part 2. Polyvinylbenzyl D-glucaro(1,4)lactonate in vitro inhibition studies. *Human and Experimental Toxicol.*, 13:759-763.

Stanek, E.J., and Calabrese, E.J. (1994). Bias and the detection limit model for soil ingestion. J. Soil Contam., 3(2):183-189.

Stanek, E.J., and Calabrese, E.J. (1994). Limits in soil ingestion estimation: The potential for imputing data when soil ingestion estimates are below the detection limits. *J. Soil Contam.*, 3(3):225-229.

Kenyon, E.M., and Calabrese, E.J. (1994). Comparison of three methods of expressing B-glucuronidase activity in intestinal contents. *J. Environ. Sci. Hlth.*, 29:1305-1316.

Kenyon, E.M., and Calabrese, E.J. (1994). Comparison of B-glucuronidase activity in the small intestine and cecum under aerobic versus anaerobic incubation conditions. *J. Environ. Sci. Hlth.*, 29:1317-1330.

Calabrese, E.J., and Baldwin, L. (1994). A toxicological basis to derive a generic interspecies uncertainty factor. *Environ. Health Perspect.*, 102(1):14-17.

Calabrese, E.J., and Baldwin, L. (1994). Improved method for selection of NOAEL. *Regulatory Tox. Pharm.*, 19:48-50.

Calabrese, E.J., and Stanek, E.J. (1994). Soil ingestion issues and recommendations. *Journal of Environmental Science and Health*, A29(3):517-530.

Anderton, D.L., Anderson, A.B., Rossi, P.H., Oakes, J.M., Fraser, M.R., Weber, E.W., and Calabrese, E.J. (1994). Hazardous waste facilities: "environmental equity" issues in metropolitan areas. *Evaluation Review*, 18(2):123-140.

Baldwin, L. and Calabrese, E. (1994). The effect of peroxisome proliferators on s-phase synthesis in primary cultures of high hepatocytes. *Ecotox. Environ. Safety*, 25(2):193-201.

Baldwin, L., and Calabrese, E. (1994). Gap junction-mediated intercellular communication in primary cultures of rainbow trout hepatocytes. *Ecotox. Environ. Safety*, 28(2):201-207.

Calabrese, E.J., and Stanek, E.J. (1994). Soil ingestion issues and recommendations. In: *Hydrocarbon Contaminated Soils*, Vol. 4. Amherst Scientific Publishers. pp. 239-253.

Calabrese, E.J. (1994). Tissue repair: A critical determinant in CCl<sub>4</sub> hepatotoxicity. *Ecotox. & Env. Safety*, 27(1):105-106.

Calabrese, E.J. (1994). High-risk population groups: Protecting those with genetic predisposition to adverse effects following exposure to chemicals. In: *Occupational Medicine*. Mosby-Year Book, Inc., St. Louis, Missouri. pp. 800-812.

Martin, D.G., Lagutchik, M.S., Guertler, A.T., Woodard, C.L., Leonard, D.A., Zhao, X., and Calabrese, E.J. (1994). Investigation of benzocaine-induced methemoglobinemia in sheep: Comparison of RBC glucose-6-phosphate dehydrogenase, glutathione or methemoglobin reductase activity in methemoglobin "responders" and "non-responders". *J. Amer. Vet. Med. Assoc.* 

Calabrese, E.J. (1994). Commentary. Biological effects of low level exposures. *AIHC Journal*, 2(1):7-11.

Scarano, L.J., Calabrese, E.J., Kostecki, P.T., Baldwin, L.A., and Leonard, D.A. (1994). Evaluation of a rodent peroxisome proliferator in two species of freshwater fish: rainbow trout (Onchorynchus mykiss) and japanese medaka (Oryzias latipes). *Ecotox & Env. Safety*, 29(1):13-19.

Calabrese, E.J. and Stanek, E.J. (1994). Soil ingestion issues and recommendations. In: *Hydrocarbon Contaminated Soils*. Vol. IV. E.J. Calabrese, P.T. Kostecki, M. Bonazountas (Editors). Amherst Scientific Publishers, pp.39.

Robens, J.F., Calabrese E.J., Peigorsch, W.W., Schueler, R.L., and Hayes, A.W. (1994). Principles of testing for carcinogenicity. In: *Principles and Methods of Toxicology*. 3rd edition. A.W. Hayes (Editor). Raven Press, pp. 697.

Beck, B.D., Rudel, R., and Calabrese, E.J. (1994). The use of toxicology in the regulatory process. In: *Principles and Methods of Toxicology*. 3rd edition. A.W. Hayes (Editor). Raven

Press, pp. 19.

Calabrese, E.J. (1994). Primer on BELLE. Conference proceedings on the biological effects of low level exposures. Lewis Publishers, Chelsea, MI. Pp. 27-42.

# <u> 1993</u>

Calabrese, E.J., and Stanek, E.J. (1993). High-levels of exposure to vanadium by children aged 1-4. *J. Environ. Sci. Health*, A28(10):2359-2371.

Sacco, C., Mc Ewan, W.E. and Calabrese, E.J. (1993). Selective inhibition of gastrointestinal B-glucuronidase by polyvinylbenzyl D-glucaro(1,4)lactonate. Part 1. Attachment of D-Glucaro(1,4) lactone to polyvinylbenzyl chloride. *Human and Experimental Toxicol.*, 12:181-184.

Donahue, M., Baldwin, L., Leonard, D., Kostecki, P., and Calabrese, E.J. (1993). Effect of hypolipidemic drugs gemfibrozil, ciprofibrate and clofibric acid on peroxisomal  $\beta$ -oxidation in primary cultures of rainbow trout hepatocytes. *Ecotox. Environ. Safety*, 26(2):127-132.

Calabrese, E.J., Baldwin, L.A., and Mehendale, H. (1993). G2 subpopulation in rat liver induced into mitosis by low level exposure to CCl4: An adaptive response. *Toxicol. And \_Appl. Pharm.*, 121(1):1-7.

Baldwin, L., and Calabrese, E.J. (1993). Mitogenicity in fish hepatocytes. *Environ. Toxic. and Safety*, 25(2):193-201.

Calabrese, E.J., Stanek, E.J., and Gilbert, C. (1993). Lead exposure in a soil pica child. J. Environ. Hlth. Sci., 28(2):353-362.

Calabrese, E.J., Leonard, D., Baldwin, L., and Kostecki, P. (1993). Elevated hepatic ODC in Medaka. *Ecotoxicol. and Environ. Safety*, 25(1):19-24.

Wysynski, A.M., Baldwin, L.A., Leonard, D.A., and Calabrese, E.J. (1993). Interactive potential of omega-3 fatty acids with clofibrate or DEHP on hepatic peroxisome proliferation in male wistar rats. *Human & Exper. Toxic.*, 12(4):337-340.

Kenyon, E.M., and Calabrese, E.J. (1993). The extent and implications of interspecies differences in the intestinal hydrolysis of certain glucuronide conjugates. *Xenobiotica*, 23(4):373-381.

Bell, C.E., Kostecki, T., Baldwin, L.A., and Calabrese, E.J. (1993). Comparative response of rainbow trout and rat to the liver mitogen, lead. *Ecotox. and Environ. Safety*, 26(3):280-284.

Calabrese, E.J., and Stanek, E.J. (1993). An improved method for estimating soil ingestion in children and adults. *J. Environ. Sci. Hlth.*, 28(2):363-371.

Calabrese E.J., and Stanek, E.J. (1993). Soil pica: Not a rare event. J. Environ. Sci. Hlth., A28(2):373-384.

Calabrese, E.J., and Baldwin, L.A. (1993). A possible example of chemical hormesis. *J.\_Appl. Tox.*, 13(3):169-172.

Calabrese, E.J., and Stanek, E.J. (1993). High levels of exposure to vanadium by children aged 1-4. *J. Environ. Sci. and Health*, A28(10):2359-2371.

Kostecki, P., Calabrese E.J., and Horton, H. (1993). Review of present risk assessment models for petroleum contaminated soils. In: *Principles and Practices of Soil\_Contamination*. Lewis Publishers. pp. 553-590.

Oliver, T., Kostecki, P., and Calabrese, E. (1993). State summary of soil and groundwater cleanup standards. *Soils*, December. pp. 12-30.

Calabrese, E.J., Kostecki, P.T., and Baldwin, L.A. (1993). Fish as a predictive model for epigenetic carcinogens. In: *Compendium of the FY1988 & 1989 Research Reviews for the Research Methods Branch*, U.S. Army Biomedical Research & Development Laboratory, Fort Detrick, MD. Technical Report 9306. pp. 34-39.

Calabrese, E.J., Kostecki, P., Yang, J-H, and Baldwin, L. (1993). Evaluation of epigenetic carcinogens in rainbow trout by assessing peroxisome proliferation potential. In: *Compendium of the FY1988 & 1989 Research Reviews for the Research Methods Branch*, U.S. Army Biomedical Research & Development Laboratory, Fort Detrick, MD. Technical Report 9306. pp. 120-138.

Calabrese, E.J., and Baldwin, L.A. (1993). The effect of peroxisome proliferation on s-phase synthesis in primary cultures of fish hepatocytes. *Ecotox. Env. Safety*, 25:193-201.

Martin, D.G., Guertler, A.T., Lagutchik, M.S., Woodard, C.L., Leonard, D.A., Zhao, X., and Calabrese, E.J. (1993). Marked differences in drug induced methemoglobinemia is not due to RBC glucose-6-phosphate dehydrogenase, glutathione or methemoglobin reductase activity. *Proceedings of the 1993 Medical Defense Bioscience Review*, 2:951-963.

Martin, D.G., Guertler, A.T., Lagutchik, M.S., and Calabrese, E.J. (1993). Relationship of susceptibility of benzocaine-induced methemoglobinemia to RBC enzyme activity in sheep. *Proc. of the AVMA Meetings, LP13.* 

Martin, D.G., Lagutchik, M.S., Guertler, A.T., Leonard, D.A., Zhao, X., and Calabrese, E.J. (1993). Benzocaine-induced methemoglobinemia in sheep in not due to RBC glucose-6-phosphate dehydrogenase, glutathione or methemoglobin reductase activity. *Contemp. Topics in Lab. Anim. Sci.*, 32(4):19.

Kostecki, P., Calabrese, E.J. et al. (1993). *Hydrocarbon Contaminated Soils: Current References 1991-1992*. Assoc. Environ. Health of Soils, Amherst, MA. pp. 267.

Calabrese, E.J., and Gilbert, C.E. (1993). Lack of total independence of uncertainty factors (Ufs)-implications for the size of the total uncertainty factor. *Regul. Toxicol. Pharm.*, 17(1):44-51.

Calabrese, E.J., Leonard, D.A., Baldwin, L.A., et al. (1993). Ornithine decarboxylase (ODC) activity in the liver of individual medaka (Oryzias-latipes) of both sexes. *Ecotox. Environ. Safe.*, 25(1):19-24.

# <u>1992</u>

Sacco, C. and Calabrese, E.J. (1992). *In vivo* inhibition of B-glucuronidase of mouse small intestinal contents by polyvinylbenzyl D-glucaro(1,4)lactonate. *J. Environ. Health Sci.*, A27(5):1249-1272.

Calabrese, E.J. and Stanek, E.J. (1992). Distinguishing outdoor soil ingestion from indoor dust ingestion in a soil pica child. *Reg. Toxicol. Pharm.*, 15:83-85.

Calabrese, E.J. and Stanek, E.J. (1992). A preliminary decision framework for deriving soil ingestion rate. In: *Principles and Practices of Soil Contamination*. Lewis Publishers. pp. 613-624.

Calabrese, E.J., and Stanek, E.J. (1992). What proportion of household dust is derived from outdoor dust? *J. Soil Contam.*, 1:1-28.

Ochs, J., Baldwin, L., Leonard, D., Kostecki, P. and Calabrese, E.J. (1992). Effects of joint exposures to selected peroxisome proliferators on Hepatic Acyl-CoA. *Human and Experimental Toxicology*, 11:83-88.

Langlois, C. and Calabrese, E.J. (1992). The interactive effect of chlorine, copper, and nitrite on methemoglobin formation in red blood cells of Dorset sheep. *Human and Experimental Toxicol.*, 11:223-228.

Calabrese, E.J., Aulerich, R., and Padget, G. (1992). Mink as a predictive model in toxicology. *Drug Metab. Rev.*, 24:559-578.

Stanek, E., and Calabrese, E.J. (1992). A guide to interpret soil ingestion studies. I. A model to estimate the soil ingestion detection level of soil ingestion studies. *Chem. Speciation and Bioavailability*, 3(3/4):43-54.

Calabrese, E.J. and Baldwin, L.A. (1992). Does exceeding the MTD increase or decrease the cancer incidence in rodent studies? A testable hypothesis. *Drug Metab. Rev.* 24(4):421-424.

Calabrese, E.J., Baldwin, L., Scarano, L., and Kostecki, P. (1992). Epigenetic carcinogenesis in fish. *CRC Review in Aquatic Sciences*, 6(2):89-96.

Calabrese, E.J. (1992). Pharmacodynamics/pharmacokinetics of malathion. A discussion of risk assessment models and animal data extrapolation including physiologically-based models in the evaluation of malathion human toxicity. In: Proceedings of APHIS Labat-Anderson Malathion Workshop, pp. 48-60.

Calabrese, E.J., Beck, B., and Chapell, W. (1992). Does the interspecies UF take into account allometric differences between species. *Reg. Toxic. Pharm.*, (15:172-179).

Calabrese, E.J., and Gilbert, G. (1992). Lack of independence of UF's: Implications for risk assessment. *Reg. Toxic. Pharm.*, 17:44-51.

Calabrese, E.J., and Gordon, D. (1992). The in vitro effect of acetaldehyde and tert-butanol on 1-napthol-induced oxidant stress in human sheep erythrocyte. *J. Environ. Sci. Health*, A27(2):301-316.

Kostecki, P., and Calabrese, E.J. et al. (1992). *Hydrocarbon Contaminated Soils: Current References 1990.* Assoc. Environ. Health of Soils, Amherst, MA. pp. 250.

Calabrese, E.J. and Baldwin, L. (1992). Lead-induced cell proliferation and organ-specific tumorigenicity. *Reviews in Drug Metabolism*, 24(3):409-416.

Calabrese, E.J., Garreffi, J.A., and Stanek, E.J. (1992). The effects of joint exposures to environmental oxidants on methemoglobin formation – copper nitrite and copper chlorite. *J. Environ. Sci. Heal.*, A27(3):629-642.

#### <u>1991</u>

Kostecki, P.T., and Calabrese, E.J. (1991). CHESS – How the military community can benefit from this national coalition on soil contamination. In: *Proceedings from USATHAMA's 14th Annual Army Environmental R & D symposium*. (Report No. – CETHA-TE-JR-90055). Williamsbury, VA.

Kostecki, P.T., and Calabrese, E.J. (1991). CHESS – A national coalition for soil cleanup in the U.S. In: *Hydrocarbon Contaminated Soil and Groundwater*. (Eds. P.T. Kostecki and E.J. Calabrese). Lewis Publishers, Chelsea, MI.

Calabrese, E.J., and Kostecki, P.T. (1991). A critical evaluation of soil ingestion estimates in children and adults. In: *Hydrocarbon Contaminated Soils and Groundwater*. (Eds. P.T. Kostecki and E.J. Calabrese). Lewis Publishers, Chelsea, MI.

Kostecki, P.T., and Calabrese, E.J. (1991). A report on CHESS activities. In: *Hydrocarbon Contaminated Soils*, Volume 1. (Eds. P.T. Kostecki and E.J. Calabrese). Lewis Publishers,

Chelsea, MI.

Bell, C.E., Kostecki, P.T., and Calabrese, E.J. (1991). Soil cleanup levels for western states. In: *Hydrocarbon Contaminated Soils and Groundwater*. (Eds. P.T. Kostecki and E.J. Calabrese). Lewis Publishers, Chelsea, MI.

Bell, C., Kostecki, P. and Calabrese, E.J. (1991). Petroleum contaminated soils survey: clean-up levels for western states. In: *Hydrocarbon Contaminated Soils and Groundwater*. Kostecki, P., Calabrese, E.J. and Bell, C. (eds). Lewis Publishers, Chelsea, MI. pp. 77-90.

Edmiston, G., Calabrese, E.J. and Harris, R. (1991). Health risks associated with the remediation of contaminated soils. In: *Hydrocarbon Contaminated Soils and Groundwater*. Kostecki, P., Calabrese, E.J. and Bell, C. (eds). Lewis Publishers, Chelsea, MI. pp. 293-301.

Kostecki, P.T. and Calabrese, E.J. (1991). Council for Health and Environmental Safety of Soils-CHESS. In: *Hydrocarbon Contaminated Soils and Groundwater*. Kostecki, P., Calabrese, E.J. and Bell, C. (eds). Lewis Publishers, Chelsea, MI. pp. 331-338.

Langlois, C. and Calabrese, E.J. (1991). The effects of joint exposures of copper, chlorite and nitrite on methemoglobin formation. Conference Proceedings. *Chemical Oxidation*. W.W. Eckenfelder, A.R. Bowers, and J.A. Roth, eds. Technomic Pub. Co. pp. 194-204.

Stanek, E. and Calabrese, E. (1991). A guide to interpreting soil ingestion studies. I. Development of a model to estimate the soil ingestion detection level of soil ingestion studies. *Reg. Toxic. and Pharm.*, 13:263-277.

Stanek, E., Calabrese, E.J. and Zheng, L. (1991). Soil ingestion estimates in children. Influence of sex and age. *Trace Substances in Env. Health*, 25:33-43.

Stanek, E. and Calabrese, E.J. (1991). Methodological considerations in assessing soil ingestion. *Chem. Speciation and Bioavailability*, 3(3/4):65-68.

Calabrese, E.J., Stanek, E.J. and Gilbert, C.E. (1991). Evidence of soil-pica behavior and quantification of soil ingested. *Hum. Exp. Toxicol.*, 10:245-249.

Calabrese, E.J. and Stanek, E. (1991). A guide to interpreting soil ingestion studies. II. Qualitative and quantitative estimates of soil ingestion. *Reg. Toxicol. Pharm.*, 13:278-292.

Gordon, D., and Calabrese, E.J. (1991). The effect of ethanol and tri-butyl alcohol on nitrite induced methemoglobin formation. *J. Environ. Sci. Health*, A27(2):301-316.

Calabrese, E.J. and Stanek, E.J. (1991). A guide to interpret soil ingestion studies. II. qualitative and quantitative evidence of soil ingestion. *Chem. Speciation and Bioavailability*, 3(3/4):55-64.

Calabrese, E.J. (1991). Risk communication and public skepticism. In: *Proceedings of APHIS Labat-Anderson Malathion Workshop*. pp. 188-194.

Calabrese, E.J. (1991). Lack of total independence of UFs. Implications for the size of the total UF for selected malathion toxic endpoints. In: *Proceedings of APHIS Labat-Anderson Malathione Workshop*, pp. 8.

Calabrese, E.J., and Stanek, E.J. (1991). Assessment of Heavy Metals in Soils. Vol. 2. Second report of the DECHEMA working group "Assessment of risk potentials in soil protection: and expert meeting on Pb, As, and Cd in urban soils.

Calabrese, E.J., Stanek, E. and Barnes, R. (1991). Soil ingestion estimates in children identified by parents as high soil ingesters. *J. Soil Contam*.

### <u>1990</u>

Calabrese, E.J., Kostecki, P.T., and Coler, R.A. (1990). Fish as a predictive model for epigenetic carcinogens. *Proc. of Workshop on Non-mammalian Toxicity Assessment*. Ft. Detrick, MD. 23-28 pp.

Bell, C.E., Kostecki, P.T., and Calabrese, E.J. (1990). National survey of states research: cleanup standards. In: *Petroleum Contaminated Soil-Volume III*. (Eds. P.T. Kostecki and E.J. Calabrese). Lewis Publishers, Chelsea, MI.

Young, J., Kenyon, E., and Calabrese, E.J. 1990. Inhibition of B-glucuronidase in human urine by ascorbic acid. *Human and Experimental Toxicology*, 9(3):165-170.

Nolan, K. and Calabrese, E.J. (1990). The effect of ascorbic acid on beta-glucuronidase activity in the gastrointestinal tract and urine of the rat. *J. Environ. Sci. and Health.*, 25(3):299-316.

Calabrese, E.J., Stanek, E.J., Gilbert, C., and Barnes, R. (1990). A clinical epidemiological study to assess how much soil adults ingest. *Reg. Tox. Pharm.*, 12:88-95.

Yang, J., Calabrese, E.J. et al. (1990). Induction of peroxisome proliferation in Rainbow trout exposed to cliprofibrate. *Toxicol. Appl. Pharm.*, 104:476-482.

Calabrese, E.J., Stanek, E., and Gilbert, C. (1990). Soil ingestion in adults. In: *Petroleum Contaminated Soils*. Vol. 3. P. Kostecki and E. Calabrese (eds.). Lewis Publishers, Chelsea, MI pp. 349-358.

Stanek, E., Calabrese, E.J. and Gilbert, C. (1990). Estimating soil ingestion in children. Best measures of central tendency. In: *Petroleum Contaminated Soils*. Vol. 3. P. Kostecki and E. Calabrese, (eds.). Lewis Publishers, Chelsea, MI. pp.341-348.

Gilbert, C. and Calabrese, E.J. (1990). Methods for selection of indicator compounds for

number 2 heating oil. In: *Petroleum Contaminated Soils*. Vol. 3. P. Kostecki and E. Calabrese (eds.). Lewis Publishers, Chelsea, MI. pp. 253-282.

Bell, C., Kostecki, P. and Calabrese, E.J. (1990). State survey of regulatory approaches for remediating soil contaminated with petroleum. In: *Petroleum Contaminated Soils*. Vol. 3. P. Kostecki and E. Calabrese (eds.). Lewis Publishers, Chelsea, MI. pp. 49-74.

Yang, J., Calabrese, E.J. and Kostecki, P. (1990). Peroxisome proliferation in aquatic models. ASTM. Series on Aquatic Toxicology. pp. 309-330.

Kostecki, P. and Calabrese, E.J. (1990). CHESS: Goals and applications. Proc. 14th Annual Conference USATHAMA.

Calabrese, E.J. (1990). How to address human interindividual variation in the process of animal extrapolation. *ICEM-5 Carcinogenesis*, Alan Liss Pub., NY. pp. 315-322.

Baldwin, L., Calabrese, E.J., Kostecki, P. and Yang J. (1990). Isolation of peroxisomal enoyl-CoA hydratase in rainbow trout and immunochemical identification with the bifunctional enzyme. *Fish Biochem. Physiol*., 8(4):347-351.

Calabrese, E.J. (1990). Protection of high risk groups with genetic predisposition to adverse effects following exposure to chemicals. In: *Occupational Safety and Health* (J. LaDou ed.) 2nd edition, Yearbook Medical Publications.

Calabrese, E.J. (1990). Genetic predisposition to occupationally related diseases: current status and future directions. In: *Factors Affecting Susceptibility to Occupationally-Induced Disease*. Chapman, London.

Canada, A.T. and Calabrese, E.J. (1990). Superoxide dismutase. *Encyclopedia of Pharmaceutics and Therapeutics*.

Calabrese, E.J. and Canada, A.T. (1990). Catalase. *Encyclopedia of Pharmaceutics and Therapeutics*.

Calabrese, E.J., Stanek, E., Gilbert, C., et al. (1990). Methodological approaches for estimating soil ingestion in humans. In: *Hydrocarbon Contaminated Soils and Groundwater*. Kostecki, P., Calabrese, E.J. and Bell, C. (eds). Lewis Publishers, Chelsea, MI. pp. 301-312.

Calabrese, E.J. and Baldwin, L. (1990). Review of methemoglobinemia as an adverse health endpoint for TSCA chemicals. Final report prepared for EPA, pp. 149.

Kostecki, P. and Calabrese, E.J. (1990). CHESS - Goals and progress in the clean-up of contaminated soils. *Proc. Conference on Environmental Public Health Officials*.

Calabrese, E.J., Kostecki, P.T. and Coler, R.A. (1990). Fish as a predictive model for epigenetic

carcinogens. Proc. of Workshop on Non-mammalian Toxicity Assessment. Ft. Detrick, MD. pp. 23-28.

Kostecki, P.T. and Calabrese, E.J. (1990). CHESS - How the military community can benefit from this national coalition on soil contamination. In: Proceedings from USATHAMA's 14th Annual Army Environmental R & D Symposium. Williamsburg, VA.

Calabrese, E.J., Stanek, E.J., Gilbert, C.E., and et al. (1990). Preliminary adult soil ingestion estimates – results of a pilot study. *Reg. Toxicol. Pharm.*, 12(1):88-95.

Bell, C., Kostecki, P., and Calabrese, E.J. (1990). State clean-up levels for contaminated soil. November-December issue SOILS. Group III Communications publishers, Independence, MO.

#### <u>1989</u>

Tuthill, R.W., and Calabrese, E.J. (1989). Reducing drinking water sodium concentrations did not influence adolescent blood pressure. *J. Environ. Sci. Health*, A24(7):711-729.

Calabrese, E.J., and Kenyon, E.M. (1989). The perils of state air toxics programs. 2. (1989). *Environ. Sci. Technol.*, 23(11):1323-1328.

Calabrese, E.J., Barnes, R., Stanek, E.J. and et al. (1989). How much soil do young children ingest – an epidemiologic study. *Reg. Toxicol. Pharm.*, 10(2):123-137.

Pastides, H., Hosmer, D.W., Calabrese, E.J., and Harris, D.R. (1989). Reproductive hazards of semiconductor industry – replies. *J. Occup. Env. Med.*, 31(3):281.

Pastides, H., Calabrese, E.J., Hosmer, D.W., and Harris, D.R. (1989). Spontaneous-abortions among semi-conductor manufacturers – reply. *J. Occup. Env. Med.*, 31(2):201.

Bell, C.E., Kostecki, P.T., and Calabrese, E.J. (1989). State of the states research and approaches on petroleum contaminated soils issues. In: *Petroleum Contaminated Soils: Volume II*. Lewis Publishers, Chelsea, MI.

Tuthill, R.W. and Calabrese, E.J. (1989). Effect of reducing sodium levels in community drinking water on blood pressure of children. *Jour. Env. Hlth. and Sci.*, A24(7):711-729.

Ken, R., Calabrese, E.J. and Tuthill, R.W. (1989). Sex differences in susceptibility to lead induced hematological changes? *Human Toxicology*, 8:105-109.

Canada, A., Calabrese, E.J. (1989). Catalase and its role in xenobiotic detoxification. *Pharmacology and Therapeutics*, 44:297-307.

Canada, A., Calabrese, E.J. (1989). Superoxide dismutase - its role in xenobiotic detoxification. *Pharmacology and Therapeautics*, 44:285-295.

Pastides, H., Calabrese, E.J., Hosmer, D., and Harris, R. (1989). Validation of work histories obtained interviews. *Amer. J. Epi.*, 129(3):640-641.

Pastides, H., Calabrese, E.J., et al. (1989). Methodological approaches to occupational reproduction studies. *Journal Occup. Med.*, (In Letter).

Calabrese, E.J. et al. (1989). An epidemiological study estimating the amount of soil ingested by children. *Reg. Tox. Pharm.*, 10(2):123-138.

Kostecki, P., Bell, C., and Calabrese, E.J. (1989). National survey of state regulatory approaches for dealing with petroleum contamination. In: *Environmental and Public Health Effects of Soils Contaminated with Petroleum*. Vol. 2. (E.J. Calabrese and P. Kostecki (eds). Lewis Pub., Chelsea, Michigan. pp. 73-96.

Calabrese, E.J. et al. (1989). Soil ingestion in children. In: *Environmental and Public Health Effects of Soils Contaminated with Petroleum*. Vol. 2. (E.J. Calabrese and P. Kostecki (eds). Lewis Pub., Chelsea, Michigan. pp. 363-398

Kostecki, P. and Calabrese, E.J. (1989). CHESS - Council for Health and Environmental Safety of Soils. In: *Environmental and Public Health Effects of Soils Contaminated with Petroleum*. Vol. 2. (E.J. Calabrese and P. Kostecki (eds). Lewis Pub., Chelsea, Michigan. pp. 485-496.

Stanek, E.J., Calabrese, E.J. et al. (1989). Ingestion of trace elements from food among preschool children: Al, Ba, Mn, Si, ti, V, Y, and Zr. *Jour. Trace Elements in Experimental Medicine*, 1:179-190.

Calabrese, E.J., and Gilbert, C. (1989). Drinking water quality and water treatment practices: Charting the future. In: *Safe Drinking Water Act*. Calabrese, E.J., Gilbert, C., and Pastides, H. (eds.). Lewis Publishers, Inc. pp. 113-142.

Pastides, H., Calabrese, E.J. et al. (1989). Spontaneous abortion and general illness symptoms among semiconductor manufactures. In: *Hazard Assessment and Control Technology in Semiconductor Manufacturing*. American Conference of Governmental Industrial Hygienists Inc. Cincinnati, OH.

Calabrese, E.J. (1989). The public health implications of infectious waste disposal. Prepared for the Rockefeller Institute of Government, Albany, NY. In: *Perspectives on Medical Waste*, Chapter 2, 36 pp.

Calabrese, E.J. (1989). A single exposure to a carcinogen can cause cancer. Documentation, limitations and implication for risk assessment. *Proc. Chem. Defense Research Conference*, pp. 19-615.

Calabrese, E.J. (1989). Genetic factors affecting susceptibility to occupationally induced

illness. Final report to the U.S. Office of Technology Assessment. Washington, DC. approx. 80 pp.

Calabrese, E.J. (1989). Protection of high risk population groups with genetic predisposition to adverse effects following exposure to chemicals. Final Report to the World Health Organization, approx. 50 pp.

Calabrese, E.J. (1989). *Literature Review and National Survey of Health Based Siting Criteria for Waste Facilities*. Northeast Regional Environmental Public Health Center, University of Massachusetts, Amherst, MA. pp. 1-146.

Ken, R., Calabrese, E.J., and Tuthill, R.W. (1989). An evaluation of the hypothesis that females are more susceptible than males to lead-induced hematological alterations. *Hum. Toxicol.*, 8(2):105-109.

### <u>1988</u>

Pastides, H., Calabrese, E.J., Hosmer, D.W., and Harris, D.R. (1988). Spontaneous-abortion and general illness symptoms among semi-conductor manufacturers. *J. Occup. Env. Med.*, 30(7):543-551.

Kostecki, P.T., Calabrese, E.J., and Horton, H.M. (1988). Analysis and critique of present risk assessment models for petroleum contaminated soil. In: *Petroleum Contaminated Soils: Volume I.* (Eds. P.T. Kostecki and E.J. Calabrese). Lewis Publishers, Chelsea, MI.

Kostecki, P.T., Calabrese, E.J., and Fleischer, E.J. (1988). Potential asphalt batching as a viable remedial option for contaminated soils. In: *Petroleum Contaminated Soils: Volume I.* (Eds. P.T. Kostecki and E.J. Calabrese). Lewis Publishers, Chelsea, MI.

Calabrese, E.J., Kostecki, P.T., and Gilbert, C. (1988). Epidemiological study estimating the amount of soil ingested by children. In: *Petroleum Contaminated Soils: Volume I*. (Eds. P.T. Kostecki and E.J. Calabrese). Lewis Publishers, Chelsea, MI.

Fleischer, E.J., Kostecki, P.T. and Calabrese, E.J. (1988). Historical record of petroleum mobility and stability in contaminated soils. In: *Petroleum Contaminated Soils: An* Overview. The Environmental Institute. University of Massachusetts, Amherst. Pub. No. 88-4, pp. 82-83.

Calabrese, E.J. (1988). Principles of animal extrapolation. In: Principles of Health Hazard Evaluation (J. Rodicks and R. Tardiff, eds.). Plenum Press.

Calabrese, E.J., Kostecki, P.T., and Leonard, D.A. (1988). Public health implications of soils contaminated by petroleum products. In: *Environmental and Public Health Effects of Soils Contaminated with Petroleum Products*, E.J. Calabrese and P.T. Kostecki (eds.), John Wiley and Sons, New York.

Kostecki, P.T. and Calabrese, E.J. (1988). A national survey of state regulatory approaches to dealing with soil contaminated with petroleum contaminants. In: *Environmental and Public Health Effects of Soils Contaminated with Petroleum Products*, E.J. Calabrese and P.T. Kostecki (eds.). John Wiley and Sons, New York.

Calabrese, E.J. and Kostecki, P.T. (1988). Conference summary and conclusions. In: *Environmental and Public Health Effects of Soils Contaminated with Petroleum Products*, E.J. Calabrese and P.T. Kostecki (eds.). John Wiley and Sons, New York.

Calabrese, E.J. (1988). Animal extrapolation and the challenge of human interindividual variation. In: *Carcinogen Risk Analysis*. C.C. Travis (ed.). Plenum Press. pp. 115-122.

Calabrese, E.J. (1988). Are rats relevant? Bridgewater Review, 6(1):3-6.

Calabrese, E.J., Barrett, T.J., Leonard, D.A., Horton, H.M., and Kenyon, E.M. (1988). The effect of 3-methylcholanthrene induced increases in ascorbic acid levels on tissue B-glucuronidase activity in rats. *J. Environ. Sci. Health*, A23(1):23-33.

Bott, M. and Calabrese, E.J. (1988). The effect of BCNU on the responses of human erythrocytes to six oxidant stressors. *J. Environ. Sci. Health*, A23(3):219-230.

Calabrese, E.J. and Bott, M. (1988). The effect of ethanol on hematotoxic agents. *J. Environ. Sci. Health*, A23(3):231-250.

Calabrese, E.J. and Tilli, F. (1988). The effect of ethanol on the hematotoxic agents. Part 2. J. *Environ. Sci. Health*, A23:359-367.

Calabrese, E.J. and Yang, J. (1988). The effect of ethanol on nitrite and 1-naphthol induced oxidant stress in human and sheep erythrocytes. Part 3. *J. Environ. Sci. Health*, A23(3):273-292.

Dominguez, T., Calabrese, E.J., Kostecki, P. and Coler, R. (1988). The effects of trichloroacetic and dichloroacetic acids on the oxygen consumption of the dragon fly nymph Aeschna umbrosa. *J. Environ. Sci. Health*, A23(3):251-272.

Calabrese, E.J. and Kenyon, E. (1988). The development of a methodology for an Air Toxics Program. Rohm & Hass. 130 pp.

Calabrese, E.J. (1988). Comparative biology of test species *Environ. Health Perspect.*, 77:57-60.

Pastides, H., Calabrese, E.J. et al. (1988). Miscarriage risk amongst semi conductor employees. *Jour. Occup Med.*, 30(7):1-9.

Beck, B.D., Calabrese, E.J. and Anderson, P.D. (1988). The use of toxicology in the regulatory

process. Principles of Modern Toxicology - W.A. Hayes (ed.), Raven Press. p. 1-28.

Pastides, H., Calabrese, E.J., Hosmer, D., and Harris, R. (1988). Semi-conductor manufacture and miscarriage. *Journal Occup. Med.*, (In Letter).

Calabrese, E.J. and Kostecki, P.T. (eds.). (1988). Petroleum contaminated soils: an overview. The Environmental Institute. University of Massachusetts, Amherst. Pub. No. 88-4, pp. 84.

Kostecki, E.J. and Calabrese, E.J. (1988). Definition of petroleum. In: *Petroleum Contaminated Soils: An Overview*. The Environmental Institute. University of Massachusetts, Amherst. Pub. No. 89-4. pp. 1-16.

Leonard, D.A., Calabrese, E.J., and Kostecki, P.T. (1988). Overview: Health effects of petroleum products in relation to soil contamination. In: *Petroleum Contaminated Soils: An Overview. The Environmental Institute.* University of Massachusetts, Amherst. Pub. No. 88-4, pp. 41-51.

Fleischer, E.J., Kostecki, P.T. and Calabrese, E.J. (1988). Handling, reuse, and disposal options. In: *Petroleum Contaminated Soils: An Overview*. The Environmental Institute. University of Massachusetts, Amherst. Pub. No. 88-4, pp. 52-81.

#### <u>1987</u>

Calabrese, E.J., and Gilbert, C.E. (1987). *Risk Assessment of 4-nitro-3trifluoromethylphenol (TFM)*. Northeast Regional Environmental Public Health Center. University of Massachusetts, Amherst, MA. pp. 1-28.

Calabrese, E.J., McCarthy, M., and Kenyon, E. (1987). The occurrence of chemical hormesis. *Health Physics*, 57:531-542.

Horton, H. and Calabrese, E.J. (1987). A Model *in vitro* system for assessing the effects of oxidant stressor agents on red cells with chemically-induced superoxide dismutase deficiency. *J. Environ. Sci. Health*, A21:249-265.

Calabrese, E.J., Horton, H., and Leonard, D.A. (1987). The effects of four steroids on G-6-PD activity of human and C57L/J mouse erythrocytes. *J. Environ. Sci. Hlth.*, A22(6):563-574.

Calabrese, E.J., and McCarthy, M.E. (1987). The occurrence of trace metal induced hormesis. *Trace Substances in Environmental Health*, Vol. 20.

Calabrese, E.J., and Kostecki, P. (1987). Regulatory approaches for addressing soil contaminated with petroleum products. *Trace Substances in Environmental Health*, Vol. 20.

Calabrese, E.J. (Co-author) Air Cabin Health and Safety. National Academy of Sciences Committee. NAS Press, Washington, D.C.

Calabrese, E.J. (1987). (Co-author) Drinking Water Disinfectants. National Academy of Sciences Committee. NAS Press, Washington, D.C. pp. 207.

Calabrese, E.J. (1987). Limitations of the Amoroso et al. Study in assessing risk of G-6-PD deficient humans to ozone exposure. *Jour. of Occup. Med.*, 22:88,90.

Calabrese, E.J., Stoddard, A., Leonard, D.A., and DiNardi, S. (1987). The effects of vitamin C supplementation on blood and hair levels of cadmium, lead and mercury. *Ann. N.Y. Acad. Sci.*, 498:347-353.

Calabrese, E.J. and Gentile, T. (1987). Further a validation of an *in vitro* predictive animal model for human erythrocyte G-6-PD deficient responses to hemolytic agents. *J. Environ. Sci. Health*, 22A:321-336.

Calabrese, E.J., Kostecki, P., and Gilbert, C. (1987). How much dirt do children eat? an emerging environmental health question. *Comments on Toxicology*, 1(3-4):229-241.

Calabrese, E.J., Chamberlain, C.C., Coler, R. (1987). The effects of trichloroacetic acid, a widespread product of chlorine disinfection, on the dragonfly nymph respiration *J. Environ. Sci. and Health*, 22A:343-356.

Calabrese, E.J., and Gilbert, C.E. (1987). Uncertainties in predictive toxicology and risk assessment. Third National Water Conference. *Phil. Acad. of Natural Sciences*, Phil., PA. pp. 21-46.

Calabrese, E.J. (1987). Animal extrapolation: Looking inside the toxicologists' black box. *Environ. Sci. Tech.*, 21(7):618-623.

Gentile, T.J. and Calabrese, E.J. (1987). Screening for potential hemolytic responses to environmental agents using a bioactivation system, evaluation of six pesticides. *J. Environ. Sci. and Hlth*, A22(5):427-444.

Calabrese, E.J. (1987). Current issues in environmental risk assessment. Halogenated Solvents Indus. *Alliance Newsletter*. Winter Issue.

Canada, A.T., Chow, C.K., Airriess, G.R. and Calabrese, E.J. (1987). Lack of ozone effect on plasma concentrations of retinol, ascorbic acid, and tocopherol. *Nutrit. Res.*,

Calabrese, E.J. (1987). Assessing public health risks at hazardous waste sites: Selection of the most appropriate methodology. Prepared for the Colorado Department of Health. Denver, CO.

Calabrese, E.J. (1987). A comparison and analysis of the methodologies used by the EPA and the Army to identify indicator compounds at hazardous waste sites with particular relevance to the Rocky Mountain Arsenal. Prepared for the Colorado Department of Health. Denver, CO.

### <u>1986</u>

Calabrese, E.J. and Kostecki, P.T. (1986). Regulatory approaches for addressing soil contaminated with petroleum products. *Trace Substances in Environmental Heatlh, Vol. 20.* 

Calabrese, E.J., and Kostecki, P.T. (1986). Public health effects of contaminated soils. *Proceedings: Trace Substances in Environmental Health*. Society for Environmental Geochemistry and Health.

Calabrese, E.J. (1986). High risk groups. In: *Occupational Safety and Health* (J. LaDou, ed.). Yearbook Medical Pub.

Calabrese, E.J. (1986). Toxicokinetics and risk assessment. An overview. EPRI, 2:1-5.

Canada, A.T., Wilson, J., and Calabrese, E.J. (1986). Theoplylline elimination kinetics in the rabbit: Effects of age and sex. *Drug Metabolism and Disposition*, 14:71-72.

Canada, A.T., Calabrese, E.J., and Leonard, D. (1986). Age-dependent inhibition of pentobarbital sleeping time by ozone in mice and rats. *J. Gerontol.*, 41(5):587-589.

Calabrese, E.J. and Geiger, C.P. (1986). Low erythrocyte G-6-PD activity and susceptibility to carbaryl-induced methemoglobin formation and glutathione depletion. *Bull. Environ. Contam. and Toxicol.*, 36:506-509.

Calabrese, E.J. and Canada, A. (1986). Toxicological foundations for assessing carcinogens in drinking water. In: *Organic Carcinogens in Drinking Water*. N. Ram, E.J. Calabrese, and R. Christman (eds.). John Wiley and Sons, New York. pp. 293-316.

Calabrese, E.J. and Gilbert, C.E. (1986). Unresolved issues in cancer risk assessment with particular emphasis on VOCs in drinking water. In: *Organic Carcinogens in Drinking Water*. N. Ram, E.J. Calabrese and R. Christman (eds.). John Wiley and Sons, New York. pp. 437-460.

Calabrese, E.J. (1986). Inorganics and cardiovascular disease -- a conference summary. *Water Research Quarterly*, 3(3):12-14.

Calabrese, E.J. (1986). Validation attempts of a generic approach for regulating air toxics. *Reg. Toxicol. Pharmacol.*, 6:55-59.

Horton, H. and Calabrese, E.J. (1986). Use of a bioactivation system for assessing the hemolytic potential of chemical agents in normal and G-6-PD deficient blood. *J. Environ. Sci. and Health*, A21:215-233.

Horton, H. and Calabrese, E.J. (1986). Validation of an animal model for G-6-PD deficiency. *J. Environ. Sci. and Health*, A21(3):235-248.

Chronic Hazard Advisory Board (member). (1986). Chronic hazard advisory panel on Di(2-ethylhexyl)phthalate (DEHP). U.S. CPSC. Washington, D.C.

Horton, H. and Calabrese, E.J. (1986). The effects of chlorite on human erythrocytes with a chemically-induced deficiency of superoxide dismutase deficiency. *J. Environ. Sci. Health*, 21(6):513-522.

Calabrese, E.J. (1986). Recent scientific and technological developments. In: *Managing High-Risk Workers: Scientific, Ethical and Policy Problems*, R. Kasperson et al. (eds.).

Kostecki, P.T., Byrne, K., and Calabrese, E.J. (1986). Reproductive failure due to environmental pH and toxic factors in landlocked rainbow smelt (*Osmerus mordax*). *Water Research Resource Center*.

Horton, H., and Calabrese, E.J. (1986). Predictive models for human glucose-6-phosphatedehydrogenase deficiency. *Drug Metab. Rev.*, 17:261-281.

Calabrese, E.J. (1986). The biology of test species. *Proceedings of the FDA Conference on Animal Extrapolation*.

Calabrese, E.J. (1986). Differences between men and women in response to industrial toxic agents. *Brit. J. Indus. Med.*, 43(9):577.

Calabrese, E.J. (1986). A critique of the arsenic RMCL. U.S. Navy Project Report.

Calabrese, E.J. (1986). Animal extrapolation and the challenge of human heterogeneity. J. *Pharm. Science*, 75(11):1041-1045.

Calabrese, E.J., Horton, H., and Leonard, D.A. (1986). The effects of dehydroepiandrosterone and ethanol on acetylphenylhydrazine-stressed human erythrocytes. *J. Environ. Sci. Hlth.*, 21(6):499-511.

Calabrese, E.J. and McCarthy, M. (1986). Hormesis: A new challenge for estimating low dose cancer risks. *Water Research Quarterly*, 4(3):12-15.

Stanek, E.J., Stoddard, A.M., Wilke, D., Edzwald, J., Kenyon, E., and Calabrese, E.J. (1986). Evaluation of surrogate parameters as an indicator of water quality. *AWWARF\_Final Report*.

Calabrese, E.J. (1986). Public health risks of soils contaminated with PCBs. Report for Pacific Power and Light. Portland, Oregon, 22 pp.

Calabrese, E.J. (1986). Chemical interactions and their implications for primary drinking water standards. *Water Research Quarterly*, 5(1):9-12.

Calabrese, E.J. (1986). The Woburn case: the public health implications. U.S. Water News, 3(5):7.

Calabrese, E.J. (1986). Ecogenetics: Historical foundations and current status. J. Occup. Med., 28(10):1096-1102.

### <u>1985</u>

Calabrese, E.J. (1985). Does exposure to ubiquitous environmental pollutants increase our need for vitamin C. In: *Advances in Nutrition*, Pathotox Publishers.

Connor, P., Moore, G.S., Calabrese, E.J., and Howe, G.R. (1985). "The renal effects of sodium chlorite in the drinking water of C57L/J male mice. "*J. Environ. Pathol. Toxicol. Oncol.*, 6(2):253-260.

Calabrese, E.J., Moore, G.S., and Grinberg-Funes, R. (1985). Ozone induced hematological changes in mouse strains with differential levels of erythrocyte G-6-PD activity and vitamin E status. *J. Environ. Toxicol. and Pathol. Oncol.*, 6(2):283-291. (Nov. - Dec.).

Calabrese, E.J. (1985). Groups vulnerable to pollutant exposure. In: *An Introduction to Environmental Medicine* (Alyce Tarcher, ed.).

Calabrese, E.J., Victor, J., and Stoddard A. (1985). Effects of vitamin E supplementation in humans on the toxicity of a possible toxic ozone intermediate, hydrogen peroxide. *Bull. Environ. Toxicol. Contam.*, 34:417-422.

Birden, H., Calabrese, E.J., and Stoddard, M.A. (1985). The contribution of the type of solder to the lead levels in drinking water. *AWWAJ*, 77(11):66-70.

Calabrese, E.J. and Tuthill, R.W. (1985). The Massachusetts blood pressure studies - I. *Advances in Modern Environ. Toxicol*, 9:1-10. Concurrently published in *Toxicology and Industrial Health*, 1(1):1-10, 1985.

Tuthill, R.W. and Calabrese, E.J. (1985). The Massachusetts blood pressure studies - II. *Advances in Modern Environ. Toxicol.*, 9:11-18. Concurrently published in *Toxicology and Industrial Health*, 1(1):11-19, 1985.

Calabrese, E.J. and Tuthill, R.W. (1985). The Massachusetts blood pressure studies - III. *Advances in Modern Environ. Toxicol.*, 9:19-34. Concurrently published in *Toxicology and Industrial Health*, 1(1):19-34, 1985.

Tuthill, R.W. and Calabrese, E.J. (1985). The Massachusetts blood pressure studies - IV. *Advances in Modern Environ. Toxicol.*, 9:35-44. Concurrently published in *Toxicology and Industrial Health*, 1(1):35-44, 1985.

Wilkins, J. and Calabrese, E.J. (1985). The health implications of a 3-5 month increase in blood pressure in a community. *Advances in Modern Environ. Toxicol.*, 9:85-100.

Rowan, C. and Calabrese, E.J. (1985). The uptake of sodium into food cooked in water with high sodium levels. *Advances in Modern Environ. Toxicol.*, 9:251-258.

Calabrese, E.J. (1985). Inorganics in drinking water and cardiovascular disease - A conference summary. *Advances in Modern Environ. Toxicol.*, 9:313-316.

Calabrese, E.J. and Kemp, J. (1985). The effects of ascorbic acid supplementation on copper-induced oxidative changes in human erythrocytes. *J. Environ. Sci. Hlth.*, A20(2):239-250.

Calabrese, E.J., Victor, J., and Stoddard M.A. (1985). The effects of dietary vitamin C and E supplementation on the toxicity of methyl oleate hydroperoxide, a proposed ozone intermediate. *J. Environ. Sci. Hlth.*, A20(3):251-267.

Calabrese, E.J. and Horton, H.M. (1985). The effects of vitamin E on ozone and nitrogen dioxide toxicity. *World Review of Nutrition and Dietetics*, 46:124-147.

Calabrese, E.J., Canada, A.T., and Sacco, C. (1985). Trace elements and public health. *Ann. Rev. Pub. Health*, 6:131-146.

Canada, A.T. and Calabrese, E.J. (1985). Ozone-induced inhibition of theophylline elimination in rabbits: Effect of age and sex. *Toxicolo. App Pharmacol.*, 81(1):43-49.

Calabrese, E.J. (as part of NATO Countries Safe Drinking Water Committee). (1985). Nato Countries' Report on the Safety of Drinking Water -- Present and Future. (co-author).

Calabrese, E.J. (1985). Uncertainty factors and interindividual variation. *Regul. Toxicol., Pharmacol.,* 5:190-196.

Geiger, C.P. and Calabrese, E.J. (1985). The effects of five widely used pesticides on erythrocytes of the Dorset sheep, an animal model with low G-6-PD activity. *J. Environ*. *Sci. Hlth.*, A20(5):521-528.

Calabrese, E.J. (1985). The risks of cancer from consumption of drinking water. *Water Research Quarterly*, 3(2):8-10.

Calabrese, E.J. and Dorsey, M.W. January, (1985). How to insure your health in a dangerous world. *Redbook*, 94-95, 146-147.

CEQ Interagency Subcabinet Committee (Member). March (1985). Report on long-term environmental research and development. CEQ, Executive office of the President.

Correa, M., Calabrese, E.J., and Coler, R.A. (1985). Effect of TCA, a new contaminant found from chlorinating water with organic materials, on dragonfly nymph. *Bull. Environ. Contamin. Toxicol.*, 34:271-274.

Kostecki, P.T., and Calabrese, E.J. (1985). The regulation of petroleum contaminated soils – a question of environmental and public health effects. *J. Am. Coll. Toxicol.*, 4(6):373-373.

Connor, P.M., Moore, G.S., Calabrese, E.J., et al. (1985). The renal effects of sodium chlorite in the drinking water of C57L/J male mice. *J. Enviorn. Pathol. Tox.*, 6(2):253-260.

Birden, H.H., Calabrese, E.J., and Stoddard, A. (1985). Lead dissolution from soldered joints. *J. Am. Water Works Ass.*, 77(11):66-70.

Calabrese, E.J. (1985). Does exposure to environmental pollutants increase the need for vitamin C. *J. Environ. Pathol. Tox.*, 5(6):81-90.

Stoddard, A.M., and Calabrese, E.J. (1985). The use of hair lead level as a predictor for blood lead level. *Biometrics*, 41(2):584-585.

Canada, A.T., Calabrese, E.J., and Leonard, D. (1985). Age related difference in pentobarbital sleeping time following oxidant stress. *Age*, 8(3):96.

Canada, A.T., and Calabrese, E.J. (1985). Age related sensitivity to ozone-induced inhibition of P450 metabolism. *J. Am. Coll. Toxicol.*, 4(2):218-218.

### <u>1984</u>

Calabrese, E.J. and Furst, E. (1984). Guinea pig heterologous model: Its application to environmental pathology. Cold Springs Harbor Conference on Chemical Sensitivities (New York), pp. 213-216.

Calabrese, E.J. (1984). Suitability of animal models for predictive toxicity: Theoretical and practical considerations. *Drug Metabolism Reviews*, 15:505-523.

Calabrese, E.J. (1984). Gastrointestinal and dermal absorption: Interspecies differences. *Drug Metabolism Reviews*, 15:1013-1032.

Moore, G.S., Calabrese, E.J., and Forti, A. (1984). The lack of nephrotoxicity in the rat, a possible by-product of chlorine dioxide disinfection in drinking water. *J. Environ. Sci. Hlth.*, A19(6):643-661.

Calabrese, E.J. (1984). Environmental validation of the homocystine theory of atherosclerosis. *Medical Hypotheses*, 15:361-371.

Mediros, C., Coler, R.A., and Calabrese, E.J. (1984). A laboratory assessment of the toxicity of

urban run off on the fathead minnow (Pimphales promelas). J. Environ. Sci. and Hlth., A19(7):847-861.

Decker, D.D., DiNardi, S.R., and Calabrese, E.J. (1984). Does chloroform exposure while showering pose a serious public health concern? *Medical Hypotheses*. 15(2):119-123.

Calabrese, E.J. (1984). The environmental gender gap: Sex differences in susceptibility to pollutant toxicity. University of North Carolina at Chapel Hill Institute for Environmental Studies - The Carolina Essay.

Calabrese, E.J. and Leonard, D.A. (1984). The effect of tri- and dichloroacetic acid on G-6-PD deficient erythrocytes. *Reg. Toxicol. and Pharm.*, 4:261-264.

Kemp, J. and Calabrese, E.J. (1984). The effects of ascorbic acid on copper-induced oxidative changes in human erythrocytes: Example of a biphasic dose response relationship. *J. Environ. Science and Health*, A20(1):21-35.

Moore, G.S., Calabrese, E.J., and Molteni, K.H. (1984). Plasmodium berghei infection in mice: Effect of low-level ozone exposure. *Bull. Environ. Contam. Toxicol.*, 33:99-105.

Moore, G.S., Calabrese, E.J., and Schultz, E. (1984). The effect of *in vivo* ozone exposure to Dorset sheep, an animal model with low levels of erythrocyte G-6-PD activity. *J. Environ. Pathol. Toxicol. and Oncol.*, 5(4-5):71-78.

### <u>1983</u>

Calabrese, E.J. (as part of the NAS Drinking Water Committee). (1983). *Drinking Water\_and Health*, Vol. 5. National Academy of Sciences, Washington, D.C.

Calabrese, E.J. (1983). The role of epidemiological studies in deriving drinking water standards for metals. *Environ. Health Perspect.*, 52.

Calabrese, E.J. (1983). High risk groups in industry. WHO Encyclopedia on Occupational Health,

Calabrese, E.J. (1983). An expanded operational concept of high risk groups and its role in standard setting. *Environ. Health Persp.*, 52:257-260.

Williams, P.S., Calabrese, E.J., and Moore, G.S. (1983). The effect of methyloleate hydroperoxide, a possible toxic ozone intermediate, on the red blood cells of normal and G-6-PD deficient persons. *Ecotoxicol. and Environ. Safety*, 7:242-248.

Williams, P.S., Calabrese, E.J., and Moore, G.S. (1983). The effect of methyllinoleate hydroperoxide (MLHP), a possible toxic intermediate of ozone, on normal and glucose-6-phosphate dehydrogenase (G-6-PD) deficient erythrocytes. *J. Environ. Sci. Health,* 

A18:37-49.

Calabrese, E.J. and Tuthill, R.W. (1983). The school lunch program as a contributor to elevated blood pressure in elementary school children. *Clinical Ecology*, 1:145-149.

Calabrese, E.J., Moore G.S., and McCarthy, M.S. (1983). Effect of ascorbic acid on copper-induced oxidative changes in erythrocytes of individuals with glucose-6-phosphate dehydrogenase deficiency. *Bull. Environ. Contam. Toxicol.*, 30:323-330.

Calabrese, E.J., Moore, G.S., and McCarthy, M.S. (1983). The effect of ascorbic acid on sodium nitrite induced methemoglobin formation in G-6-PD deficient erythrocytes. *Ecotox. and Environ. Safety*, 7:410-416.

Calabrese, E.J., Williams, P.S., and Moore, G.S. (1983). An evaluation of the dorset sheep as a predictive animal model for the response of G-6-PD deficient human erythrocytes to a proposed systemic toxic ozone intermediate, methyl oleate ozonide. *Ecotox. and\_Environ. Safety*, 7:416-420.

Calabrese, E.J., Moore, G.S., and McCarthy, M.S. (1983). The effect of ascorbic acid on copper-induced oxidative changes in the erythrocytes of rats, sheep, and normal humans. *Pharmacology and Regulatory Toxicology*, 3:179-183.

Calabrese, E.J., Moore, G.S., and McCarthy, M.S. (1983). The effect of ascorbic acid on nitrite-induced methemoglobin formation in rats, sheep, and normal human erythrocytes. *Pharmacology and Regulatory Toxicology*, 3:184-188.

Calabrese, E.J., Moore, G.S., and Williams, P.S. (1983). An evaluation of the Dorset sheep as a predictive animal model for the response of G-6-PD deficient human erythrocytes to a proposed systemic toxic ozone intermediate, methyl oleate hydroperoxide. *Vet.* and Human Toxicol., 25:241-246.

Calabrese, E.J. (1983). Combating environmental hysteria - an ACS responsibility. *Environ. Sci. and Technol.*, 17:63A.

Ballew, M., Calabrese, E.J., and Moore, G.S. (1983). The effect of dietary vitamin C on ozone-induced oxidative changes in guinea pig erythrocytes. *J. Environ. Sci. Hlth.*, A18(4):597-610.

Calabrese, E.J. (1983). Tetrachloroethylene in community drinking water associated with vinyl toluene lined asbestos cement pipes: Risk assessment. *AWWAJ*, 75(4):190.

Calabrese, E.J. (1983). Risk assessment: How it is done and how valid is it? *Water Research Quarterly*, 1(2):10-14.

Calabrese, E.J. (1983). The health basis of the primary drinking water standards in the U.S. Part

1. Water Research Quarterly, 1(6):5-7, 10-13.

Calabrese, E.J. (1983). The health basis of the primary drinking water standards in the U.S. Part 2. *Water Research Quarterly*, 1(4).

Calabrese, E.J. (1983). Comparison between U.S. and Canadian approaches to deriving drinking water standards. *Pharmacology and Regulatory Toxicol.*, 3:417-427.

Calabrese, E.J. (1983). Future directions for research on animal extrapolation. Conference Proceedings: *Animal Models for Inhalation Toxicology,* 

Calabrese, E.J. (1983). The role of toxicokinetics in safety evaluation of chemicals. EPRI. Conference on Animal Extrapolation and Risk Assessment.

## <u>1982</u>

Calabrese, E.J. (1982). The role of exposure data in setting environmental health standards. *Toxic Substances Journal*, 4(1):12-22.

Rowan, C.A., Zajicek, O.T., and Calabrese, E.J. (1982). Measurements of sodium and potassium in vegetables by dry ashing. *Analytical Chem.*, 54:149-151.

Calabrese, E.J. and Tuthill, R.W. (1982). The role of elevated levels of sodium in drinking water in human hypertension. *Proceedings of the Conference on Salt and Hypertension*. 33-48. Monell Chemical Senses Center. Academic Press, NY.

Kane, G.A. and Calabrese, E.J. (1982). Seasonal changes of dissolved sodium in the Connecticut River near Northfield, MA. *New England Water Works Assoc. J.*, 96(2):127-134.

Moore, G.S. and Calabrese, E.J. (1982). Toxicological effects of chlorite in the mouse. *Environ. Health Perspectives*, 46:31-37.

Calabrese, E.J. (1982). The relevance of occupational health for high school students. *Amer. Biology Teacher*, 44:111.

Calabrese, E.J. (1982). Does consumption of oral contraceptives enhance the gastrointestinal tract absorption of lead? *Medical Hypotheses*, 8(1):11-15.

Calabrese, E.J. (1982). Evolutionary lose of ascorbic acid synthesis: Did this enhance human survival interests? *Medical Hypotheses*, 8:173-175.

Calabrese, E.J. (1982). Human breast milk contamination in the U.S. and Canada by chlorinated hydrocarbon insecticide and industrial pollutants: Current status. *J. American College of Toxicology*, 1(3):91-98.

Calabrese, E.J., Moore, G.S., and Grunwald, E.L. (1982). The effect of ozone on rabbit erythrocytes. In: *Proceedings of an International Conference on Ozone Toxicity. Advances in Modern Environmental Toxicology*, 5:103-117.

Calabrese, E.J. (1982). High neonatal plasma ascorbic acid levels as a contributing cause of Hyperbilirubinemia amongst G-6-PD deficient infants. *Medical Hypotheses*, 9(3):311-312.

Calabrese, E.J. (1982). The use of genetic markers to predict susceptibility to occupational diseases. U.S. Congress' Office of Technology Assessment. Peer Review Report accepted.

Calabrese, E.J., Moore, G.S., and Grunwald, E.L. (1982). Protection by ascorbate against acetylphenylhydrazine induced heinz body formation in normal human and sheep erythrocytes. *J. Environ. Sci. and Health*, 17(6):897-902.

Calabrese, E.J. (1982). Does consumption of mega-doses of ascorbic acid pose a hemolytic risk to persons with sickle cell trait/disease? *Medical Hypotheses*, 9(6):647-649.

Calabrese, E.J., Moore, G.S., and Williams, P.S. (1982). Effect of methyl oleate ozonide, a possible ozone intermediate, on normal and G-6-PD deficient erythrocytes. *Bull. Environ. Contam. Toxicol.*, 29:498-504.

Calabrese, E.J. (1982). Problems and pitfalls in the derivation of drinking water standards for carcinogens. *Proceedings of the Conference on Drinking Water Quality*. 84-85. Sponsored by the Academy of Engineers.

Calabrese, E.J., Moore, G.S., Weeks, B.L., and Stoddard, A. (1982). The effect of ozone exposure upon hepatic and serum ascorbic acid levels in male Sprague-Dawley rats. *J. Environ. Sci. Health*, A18:79-93.

Calabrese, E.J., Moore, G.S., and McCarthy, M.S. (1982). Ascorbic acid enhances the occurrence of copper-induced methemoglobin formation in normal human erythrocytes *in vitro*. *Bull. Environ. Contam. Toxicol.*, 29:704-710.

Williams, P.S., Calabrese, E.J., and Moore, G.S. (1982). An evaluation of the dorset sheep as a predictive animal model for the response of G-6-PD deficient human erythrocytes to a proposed systemic toxic ozone intermediate, methyl linoleate hydroperoxide. *J. Environ. Sci. Health*, A18(1):1-17.

Calabrese, E.J. (1982). Using animal studies to predict human cancer risk. *Water Research Quarterly*, 1(1):9-12.

### <u>1981</u>

Moore, G.S., and Calabrese, E.J. (March 1981). Effect of chlorine dioxide, chlorite and nitrite on mice with low and high levels of G-6-PD in their erythrocytes. EPA-600/SJ-81-014.

Rowan, C. and Calabrese, E.J. (1981). The effect of cooking with water having elevated sodium levels upon the concentration of sodium and potassium in vegetables. *J. Environ. Sci. Hlth.*, A16(2):125-137.

Tuthill, R.W. and Calabrese, E.J. (1981). The influence of elevated levels of sodium in community drinking water on elementary school children. *Amer. J. Pub. Health*, 71:722-729.

Moore, G.S., Calabrese, E.J., Schultz, E.N. (1981). The effect of an *in vivo* ozone exposure to dorset sheep, an animal model with low levels of erythrocyte glucose-6-phosphate dehydrogenase activity. *Bull. Environ. Contam. Toxicol.*, 26:273-280.

Calabrese, E.J. and Moore G.S. (1981). Does exposure to cadmium reduce the metabolism of ethanol? *Medical Hypotheses*, 7(6):703-706.

Moore, G.S., Calabrese, E.J., and Labato, F. (1981). The effects of ozone on erythrocyte survival of the sheep. *Bull. Environ. Contam. Toxicol.*, 27:126-138.

Tuthill, R.W., Moore, G.S., Calabrese, E.J., and Guisti, R. (1981). The effects of chlorine dioxide treatment of community drinking water on newborns An historical cohort study. *Environ. Hlth. Perspect.*, 46:39-46.

Davis, J.M., Svendsgaard, D.J., and Calabrese, E.J. (1981). U-Shaped dose-response relationships in toxicology. *Medichem Congress Proceedings*.

Calabrese, E.J., Moore, G.S., Guisti, R.A., Rowan, C.A., and Schultz, E.N. (1981). The health effects of diesel fuel on human populations. Proceedings of the International Symposium on Diesel Fuel. *Environment International*, 5:473-477.

Calabrese, E.J. (1981). Genetic screening of hypersusceptibles in industry. *Medical Hypotheses*, 7:393-400.

Calabrese, E.J. and Tuthill, R.W. (1981). The influence of elevated levels of sodium in drinking water on elementary and high school students in Massachusetts. *Proceedings of the International Conference on Water Supply (Amsterdam). Science for Total Environment*, 18:117-133.

### <u>1980</u>

Moore, G.S., Calabrese, E.J., and McGee, M. (1980). Health-effects of monochloramines in drinking water. *J. Env. Sci. Hlth, Part A*, 15(3):239-258.

Calabrese, E.J. (1980). Does use of oral-contraceptives enhance the toxicity of carbon-disulfide through interactions with pyridoxine and tryptophan metabolism. *Med. Hypoth.*, 6:21-33.

Calabrese, E.J., and Moore, G.S. (1980). Does the rodent model adequately predict the effects of ozone induced changes to human erythrocytes. *Med. Hypoth.*, 6:505-507.

Calabrese, E.J. (1980). Does nutritional status affect benzene induced toxicity and or leukemia. *Med. Hypoth.*, 6:535-544.

Calabrese, E.J., Moore, G.S., and Ho, S.C. (1980). Low glucose-6-phosphate-dehydrogenase (G-6-PD) activity in red blood cells and susceptibility to copper induced oxidative damage. *Env. Res.*, 21:366-372.

Calabrese, E.J., Moore, G.S., and Ho, S.C. (1980). Low glucose-6-phosphate-dehydrogenase activity and increased sensitivity to paraquat toxicity. *Bull. Env. Contam. Toxicol.*, 24:369-373.

Calabrese, E.J., Tuthill, R.W., Klar, J.M., et al. (1980). Elevated levels of sodium in community drinking water. *JAWWA*, 72:645-649.

Calabrese, E.J., Tuthill, R.W., Sieger, T.L., et al. (1980). The role of elevated levels of sodium in diet and drinking water on the development of hypertension in animal models and humans. *J. Env. Pathol. Toxicol.*, 4:143-150.

Calabrese, E.J., and Tuthill, R.W. (1980). The influence of elevated levels of sodium in drinking water on elementary and high school students in Massachusetts. *J. Env. Pathol. Toxicol.*, 4:151-165.

Calabrese, E.J., Cech, I., Datri, D., et al. (1980). Panel discussion – the influence of elevated levels of sodium in drinking water on human health. *J. Env. Pathol. Toxicol.*, 4:187-193.

Moore, G.S., and Calabrese, E.J. (1980). G6PD deficiency – a potential high risk group to copper and chlorite ingestion. *J. Env. Pathol. Toxicol.*, 4:271-279.

Calabrese, E.J., and Moore, G.S. (1980). Conference on cardiovascular disease and drinking water factors – principal findings and future research needs. *J. Env. Pathol. Toxicol.*, 4:323-326.

Moore, G.S., Calabrese, E.J., and Ho, S.C. (1980). Groups at potentially high risk from chlorine dioxide treated water. *J. Env. Pathol. Toxicol.*, 4:465-470.

Moore, G.S., and Calabrese, E.J. (1980). The effects of chlorine dioxide and sodium chlorite on erythrocytes of A-J and C57L-J mice. *J. Env. Pathol. Toxicol.*, 4:513-524.

Calabrese, E.J., Moore, G.S., and Ho, S.C. (1980). Low erythrocyte glucose-6-phosphatedehydrogenase (G-6-PD) activity and susceptibility to nitrite induced methemoglobin formation. *Bull. Env. Contam. Toxicol.*, 25:837-840.

Moore, G.S., Calabrese, E.J., and Leonard, D.A. (1980). Effects of chlorite exposure on conception rate and litters of A-J strain mice. *Bull. Env. Contam. Toxicol.*, 25:689-696.

Moore, G.S., and Calabrese, E.J. (1980). The health effects of chloramines in potable water supplies – A literature review. *J. Env. Pathol. Toxicol.*, 4:257-263.

Moore, G.S., Calabrese, E.J., and Grinbergfunes, R.A. (1980). The C57L-J mouse strain as a model for extra pulmonary effects of ozone exposure. *Bull. Env. Contam. Toxicol.*, 25:578-585.

Tuthill, R.W., and Calabrese, E.J. (1980). Experimental reduction of H2O NA intake in normotensive children. *Amer. J. Epid.*, 112:428-428.

Calabrese, E.J., and Moore, G.S. (1980). Erythrocyte glucose-6-phosphate-dehydrogenase (G-6-PD) deficiency and enhanced susceptibility to environmental oxidant stressors – an animal model. *Toxicol. Let.*, 1:98-98.

Moore, G.S., and Calabrese, E.J. (1980). The effect of in vivo ozone exposure to Dorset sheep, an animal model with low levels of erythrocyte glucose-6-phosphate-dehydrogenase activity. *Toxicol. Let.*, 1:99-99.

Moore, G.S., and Calabrese, E.J. (1980). Epidemiologic and laboratory animal studies on chlorite toxicity. *Toxicol. Let.*, 1:112-112.

Obom, K., Calabrese, E.J., Peters, H., and Hayward, G. (1980). Automobile inspection and maintenance programs: their role in reducing air pollution. *Rev. Environ. Health*, 3:149-168.

### <u>1979</u>

Calabrese, E.J., Moore, G.S., and Ho, Soon-Ching. (1979). Low glucose-6-phosphate dehydrogenase (G-6-PD) activity in human and sheep red blood cells and susceptibility to copper induced oxidative damage. *Environ. Res.*, 21:366-372.

Moore, G.S., Calabrese, E.J., and Ho, Soon-Ching. (1979). The effects of chlorite on sheep and human (normal and G-6-PD deficient) red blood cells. *J. Environ. Pathol. and\_Toxicol.*, 4:465-470.

Moore, G.S. and Calabrese, E.J. (1979). The effects of chlorine dioxide and sodium chlorite on erythrocytes of A/J and C57L/J mice. *J. of Environ. Pathol. and Toxicol.*, 4:513-524.

Calabrese, E.J. (1979). The role of high risk groups in the derivation of environmental health standards. *Reviews of Environmental Health*, 3(2):131-147.

Moore, G.S. and Calabrese, E.J. (1979). Differential susceptibility to oxidant stress (sodium chlorite) in mice with different levels of erythrocyte G-6-PD activity. *J. of Env. Science and Health*, A14(7):593-608.

Calabrese, E.J. and Tuthill, R.W. (1979). Community water and elevated blood pressure in

children and adolescents. *Proceedings of National Conference of the American Water Works Association*. Pp. 661-670.

Moore, G.S., Calabrese, E.J., and Lafond, M. (1979). A sequential sampling system for multiple exposure chambers. *Journal of the Air Pollution Control Association*, 29(11):1165-1166.

Calabrese, E.J. (1979). Should the concept of the RDA be altered to incorporate interactive effects of ubiquitous pollutants? *Medical Hypotheses*, 5:1273-1289.

Lafond, M. and Calabrese, E.J. (1979). Is the selenium drinking water standard justified? *Medical Hypotheses*, 5(8):977.

Calabrese, E.J., Tuthill, R.W., Sieger, T., and Klar, J. (1979). Lead and cadmium contamination of drinking water during the acidification process. *Bulletin of Environ. Contam. and Toxicol.*, 23(1-2):107.

Gilbert, C., Tuthill, R.W., Calabrese, E.J., and Peters, H.A. (1979). A comparison of lead hazards in housing environment of lead poisoned children versus non poisoned controls. *J. Environ. Science and Health*, A14(3):145-168.

Calabrese, E.J. (1979). Conjoint use of laetrile and megadoses of ascorbic acid in cancer treatment: Possible side effects. *Medical Hypotheses*, 5:995.

Calabrese, E.J. (1979). the influence of lead on sodium induced hypertension. *Medical Hypotheses*, 5(7):817.

Calabrese, E.J. (1979). Feline porphyria: A possible animal model for studying lead toxicity on the hematopoietic system. *Medical Hypotheses*, 5:649-652.

Moore, G.S. and Calabrese, E.J. (1979). The possible role of hypertension in aggravating hemolytic episodes in G-6-PD deficient persons. *Medical Hypotheses*, 5(4):453-457.

Calabrese, E.J. (1979). Pollutants and high risk groups: A conference summary. *Proceedings of the XIX International Congress on Occupational Health*. World Health Organization.

Tuthill, R.W. and Calabrese, E.J. (1979). Age as a function in the development of sodium related hypertension. *Environmental Health Perspectives*, 29:35-44.

Calabrese, E.J., Moore, G.S., and Brown, Regina. (1979). The effects of environmental oxidant stressors on individuals with a G-6-PD deficiency with particular reference to an animal model. *Environmental Health Perspectives*, 29:49-56.

Calabrese, E.J. (1979). Introduction to conference on pollutants and high risk groups. *Environmental Health Perspectives*, 29:1.

Calabrese, E.J. (1979). The influence of ambient ozone on the incidence of bone fractures especially among the elderly. *Medical Hypotheses*, 5(2):201-209.

Calabrese, E.J. (1979). Is the role of environment overestimated in carcinogenesis? *Medical Hypotheses*, 5:5-12.

Calabrese, E.J. (1979). Can drinking water standards be reliably derived from industrial TLVs? *Medical Hypotheses*, 6:653-660.

Tuthill, R.W. and Calabrese, E.J. (1979). Elevated levels of sodium in drinking water and community blood pressure patterns. *Arch. of Environ. Health*, Sept-Oct. 35(5):197-203.

Calabrese, E.J. (1979). Possible adverse side effects from treatment with laetrile. *Medical Hypotheses*, 5:1045.

# <u>1978</u>

Calabrese, E.J. and Tuthill, R.W. (1978). Elevated blood pressure levels and community drinking water characteristics. *J. Environ. Health Science*, A13(10):781-802.

Calabrese, E.J. and Moore G.S. (1978). Can elevated levels of copper in drinking water precipitate acute hemolysis in G-6-PD deficient individuals? *Medical Hypotheses*, 5(4):493-499.

Reichman, F. and Calabrese, E.J. (1978). Animal extrapolation in environmental health: Its theoretical basis and application. *Reviews on Environmental Health*, 3(1):59-78.

Calabrese, E.J., Moore, G.S., and Tuthill, R.W. (1978). The health effects of chlorine dioxide as a disinfectant in potable water: A literature survey. *J. of Env. Hlth.*, July-August 41(1):26-31.

Calabrese, E.J. and Tuthill, R.W. (1978). Sources of elevated sodium levels in drinking water and recommendation for reduction. *Jour. of Environ. Health*, 41(3):151-155.

Calabrese, E.J. and Tuthill, R.W. (1978). The effects of elevated levels of sodium in community drinking water on blood pressure distribution patterns. *Water Resources Research Center*, 94:1-28.

Calabrese, E.J. and Tuthill, R.W. (1978). Water treatment processes as a contributor to elevated levels of sodium in drinking water. *J. Environ.l Sci. Health*, A13(3):253-260.

Moore, G.S., Calabrese, E.J., DiNardi, S.R., and Tuthill, R.W. (1978). Potential health effects of chlorine dioxide as a disinfectant in potable water supplies. *Medical Hypotheses*, 4(5):481-496.

Calabrese, E.J. (1978). Will elevated levels of lead exposure precipitate clinical symptoms of porphyria in individuals with the latent condition. *Medical Hypotheses*, 4(3):282-289.

Calabrese, E.J. and Sorenson, A.J. (1978). Dispersal and recolonization by *Myzus persicae* following aphid alarm pheromone exposure. *Annals of the Entomological Society*, 71(2):181-182.

Yao, J., Calabrese, E.J., and DiNardi, S.R. (1978). Does ambient ozone pose a serious public health concern as a widespread environmental mutagen? *Medical Hypotheses*, 4(2):165-172.

Calabrese, E.J. (1978). Mice with low levels of G-6-PD: A model to study a human high risk group to ozone. *The Amer. Jour. of Pathol.*, 91(20):409-411.

Calabrese, E.J. (1978). Gunn rats: Animal model to simulate exposure of human high risk groups to polychlorinated biphenyls. *The American Jour. of Pathol.*, 91(2):405-407.

## <u>1977</u>

Calabrese, E.J. (1977). Further comments on novel work schedule TLVs. *Amer.\_Indus. Hyg. Assoc. Jour.*, 38:443-446.

Calabrese, E.J. and Tuthill, R.W. (1977). The toxicological and epidemiologic basis for a sodium drinking water standard. *Jour. Environ. Health.*, 40(2):80-83.

Calabrese, E.J. and Tuthill, R.W. (1977). The effects of elevated levels of sodium in community drinking water on the blood pressure distribution patterns of high school sophomores. *Arch. Environ. Health*, 32(5):200-202.

Calabrese, E.J. (1977). Environmental quality indices predicted by evolutionary theory. *Medical Hypotheses*, 3(6):241-244.

Calabrese, E.J. and DiNardi, S.R. (1977). APCA Special Conference - Toxic substances in the air environment. *Proceedings of the Conference. Air Poll. Control Assoc.* 

Calabrese, E.J., Riddiough, D., and Musselman, R. (1977). Is EPA's radium-226 drinking water standard justified? *Medical Hypotheses*, 3(5):171-174.

Calabrese, E.J. (1977). Insufficient conjugate glucuronidation: A possible factor in PCB toxicity. *Medical Hypotheses*, 3(4):162-165.

Calabrese, E.J. and Sorenson, A.J. (1977). The health effects of PCB's with particular emphasis on high risk groups. *Reviews on Environmental Health*, 2(4):285-304.

Friedman, L. and Calabrese, E.J. (1977). The carcinogenic potential of open leaf burning. *Reviews of Environmental Health*, 2(4):257-283.

Calabrese, E.J. (1977). Excessive levels of barium and radium-226 in Illinois drinking water. J.

Environ. Health, 39(5):366-369.

Calabrese, E.J., Kojola, W., and Carnow, B.W. (1977). Ozone: A possible cause of hemolytic anemia in glucose-6-phosphate dehydrogenase deficient individuals. *J. Toxicol. Environ. Health*, 2:709-712.

# <u>1976</u>

Calabrese, E.J. and Edwards, L.J. (1976). Of light and gravity in leaf-side selection by *Myzus Persicae*, the green peach aphid. *Annals of the Entomological Society*, 698(2):1145-1146.

Calabrese, E.J., Jensen, S.J. and Sorenson, A.J. (1976). A model useful in deriving standards for environmental pollutants. *Jour. Biol. Educ.*, 10(5):249-257.

Calabrese, E.J. (1976). The evolutionary basis of environmental indices. *J. Environ. Education*, Spring Issue, 7(3):20-27.

Calabrese, E.J. and Howe, K.J. (1976). The effects of phosfon on the growth of peppermint (*Mentha piperita* L.) *Physiologica Plantarum*, 37:163-165.

Calabrese, E.J. (1976). Student involvement in governmental decision-making. *Science Activities*. March/April. pp. 33-35.

## <u>1975</u>

Calabrese, E.J. and Sorenson, A.J. (1975). Potential public health problems from the catalytic activity of atmospheric manganese. J. Air. Poll. Cont. Assoc., 25:81-82.

Calabrese, E.J. (co-author). (1975). The health implications of the catalytic converter. IIEQ Document Number 13.

## <u>1974</u>

Calabrese, E.J. (co-author). (1974). Development of an ambient standard for mercury. IIEQ Document Number 18.

Calabrese, E.J. (co-author). (1974). Advisory report on the health effects of polychlorinated biphenyls. IIEQ Document Number 17.

Calabrese, E.J. (co-author). (1974). The health effects and recommended air standard for chlorine. IIEQ Document Number 16.

Calabrese, E.J. (co-author). (1974). The health effects and recommended air standard for manganese. IIEQ Document Number 15.

Calabrese, E.J. (co-author). (1974). The health effects and recommended air standard for ozone. IIEQ Document Number 14.

Calabrese, E.J. (co-author). (1974). The health effects of vanadium and recommended air standard. Illinois Institute for Environmental Quality (IIEQ) Document Number 12.

Calabrese, E.J. and Stoffolano, J.G. (1974). The effects of diapause on respiration of the adult black blowfly, *Phormia regina* (Meigen). *Ann. Ent. Soc. Amer.*, 67(4):715-717.

Stoffolano, J.G., Calabrese, E.J., and Greenberg, S. (1974). Diapause induction in the blowfly, *Phormia regina* (Meigen). *Ann. Ent. Soc. Amer.*, 67(2):430-432.

Calabrese, E.J. and Stoffolano, J.G. (1974). The effects of diet and age on the respiratory rate of adult male and female black blowflies, *Phormia regina* (Meigen). *J. Insect. Physiol.*, 20:383-393.

Calabrese, E.J. (1974). The evolutionary basis of logotherapy. Ed.D. Dissertation, University of Massachusetts at Amherst, Massachusetts.

# <u>1973</u>

Calabrese, E.J. (1973). The effects of diet, age and diapause on the respiratory rates of adult male and female black blowflies, *Phormia regina* (Meigen). Ph.D. Dissertation, University of Massachusetts at Amherst, Massachusetts.

# <u>1972</u>

Calabrese, E.J. (1972). The effects of phosfon on the growth of *Mentha piperita* L. Master's thesis at State College at Bridgewater, Massachusetts.

## <u>1968</u>

Calabrese, E.J. (1968). The effects of a phosphon on *Mentha piperita* L. in different growth media. Eastern College Science Conference. Yale University, New London, CT. April 20<sup>th</sup>.

## XIII. PRESENTATIONS AT MAJOR CONFERENCES/INVITED SEMINARS

## <u>2021</u>

Calabrese EJ. The Scientific Foundations of LNT and its Ethical Implications. Yale University. February 8, 2021.

Calabrese EJ. Hormesis: Evolution Foundations. The Guy Foundation, London, UK. March 15, 2021.

Calabrese EJ. How Low Dose Radiation May Treatment Covid-19. Mass General Hospital, Physics Department. July 15, 2021.

Calabrese EJ. The use of low dose radiation in the treatment of covid-19. Medical Physics International Conference, Madrid. September 15, 2021.

Calabrese EJ. LNT: Its History and Controversies. Italian Society of Occupational Medicine, Naples. October 15, 2021.

Calabrese EJ. The Historical Foundations of Hormesis. University of Mexico, Mexico City. November 10, 2021.

Calabrese EJ. Hormesis-Biological and Public Health Applications. University of Mexico City. November 17, 2021.

# <u>2020</u>

Calabrese EJ. Hormesis: Occurrence, Mechanisms and Significance. Dept. Nuclear Engineerging, MIT. December 9, 2020

Calabrese EJ. Hormesis: Biological Foundations, Mechanisms and Public Health Implications. Dept. Pharmacology and Toxicology, University of Connecticut, Storrs, CT. November 30, 2020

Calabrese EJ. The Historical Foundations of the Linear Non-Threshold Dose Response Model for Cancer Risk Assessment. Bhabha Atomic Research Centre. Mumbai, India. September 9, 2020

Calabrese EJ. Hormesis: Biological Foundations, Medical, and Public Health Implications. Bhabha Atomic Research Centre. Mumbai, India. September 9, 2020..

Calabrese EJ. Hormesis. UK Patents Office, Cerena. Hormesis. September 2, 2020.

Calabrese EJ. Historical foundations of the LNT dose response model for cancer risk assessment. Physics Seminar Series. Massachusetts General Hospital & Harvard Medical School. August 11, 2020.

Calabrese EJ. Hormesis and preconditioning: Their role in establishing acquired resilience. Guy Foundation, London England. April 23, 2020.

Calabrese EJ. Hormesis: Scientific foundations and medical implications. Annual Society Meeting for Acquired Resilience. Sydney Australia. March 15, 2020

Hormesis: Its biological foundations and biomedical implications. US Army, Aberdeen Proving Grounds, Maryland. February 4, 2020.

Hormesis: The histrocial and scientific foundations of LNT. US Army, Aberdeen Proving Grounds, Maryland. February 4, 2020.

Calabrese EJ. The historical foundations of LNT. Southern California Industrial Hygiene Society, San Diego CA. January 23, 2020.

## <u>2019</u>

Calabrese EJ. The historical foundations of the linear non-threshold dose response model for cancer risk assessment. 32<sup>nd</sup> Annual Meeting of the Japanese Society for Radiation Oncology. Nagoya Congress Center, Nagoya, Japan. November 21-23, 2019.

Calabrese EJ. The historical foundations of the linear non-threshold dose response model for cancer risk assessment. Food Packaging Summitt, Savannah, GA. November, 2019.

Calabrese EJ. The historical foundations of the linear non-threshold dose response model for cancer risk assessment. University of Notre Dame, Department of Physics. October 2, 2019.

Calabrese EJ. Hormesis: Biological foundations, medical and public health implications. XVIII PTBR National Meeting Satellite Symposium. Applications of low radiation doses in medical diagnosis and therapy. Jan Kochanowski University, Institute of Chemistry, Kielce, Poland. September 17, 2019.

Calabrese EJ. The historical foundations of the linear non-threshold dose response model for cancer risk assessment. XVIII PTBR Natioanl Meeting Satellite Symposium. Applications of low radiation doses in medical diagnosis and therapy. Jan Kochanowski University, Institute of Chemistry, Kielce, Poland. September 17, 2019.

Calabrese EJ. What is the future of cancer risk assessment? Is LNT dead? Is hormesis ready for prime time? IADMFR Julian Gibbs Oration, American Academy of Oral and Maxillofacial Radiology. Philadelphia, PA. August 24, 2019.

Leak RK, Calabrese EJ, Kozumbo W. Extending biological resilienve by modifying both the temporal and spatial dimensions of hormesis/conditioning. Session III: Enhancing Resillence. The 18<sup>th</sup> Annual International Dose-Response Conference. Preconditioning: in Biology and Medicine. Adaptive Responses/Preconditioning. University of Massachusetts, Amherst MA. April 17, 2019.

Calabrese EJ, Dhawan G, Kapoor R. Hormetic dose responses are commonly induced by perflouroalkyl acids (PFAAS). The 18<sup>th</sup> Annual International Dose-Response Conference. Preconditioning: in Biology and Medicine. Adaptive Responses/Preconditioning. University of Massachusetts, Amherst MA. April 16, 2019.

Calabrese EJ, Dhawan G, Kapoor R. Hormesis findings affect perflouroalkyl (PFA) Agents Risk

Assessment. 18<sup>h</sup> Annual International Dose-Response Conference. Preconditioning: in Biology and Medicine. Adaptive Responses/Preconditioning. University of Massachusetts, Amherst MA. April 16, 2019.

Cottrell MA, Calabrese EJ, Leonard DA. Re-evaluation of a low dose radiogenic cancer database. The 18<sup>th</sup> Annual International Dose-Response Conference. Preconditioning: in Biology and Medicine. Adaptive Responses/Preconditioning. University of Massachusetts, Amherst MA. April 16, 2019.

Calabrese EJ. Introductory Talk. Hormetic dose-responses in broad biological medical perspectives. The 18<sup>th</sup> Annual International Dose-Response Conference. Preconditioning: in Biology and Medicine. Adaptive Responses/Preconditioning. University of Massachusetts, Amherst MA. April 16, 2019.

Calabrese EJ. What is the future of cancer risk assessment? Is LNT Dead? Is hormesis ready for prime time? Tufts CEE Graduate Seminar, Tufts University. April 5, 2019.

Calabrese EJ. Hormesis and homeopathy: A step forward. VIII National Congress SIOMI 2019, Homeopathy Changes Towards...The approach to chronic diseases, beyond the evidence. Florence, Italy. March 12-13, 2019.

### <u>2018</u>

Calabrese EJ. Historical foundations of the LNT cancer risk assessment model. Society for Risk Analysis New England Chapter, Gradient. Boston, MA. November 7, 2018.

Calabrese EJ. What is the future of cancer risk assessment? Is LNT dead? Is hormesis ready for prime time? Michigan State University, MI. October 12, 2018.

Calabrese EJ. US Senate Testimony. Washington DC, October 3, 2018.

Cottrell M, Mills W, StanekCalabrese EJ. Funding trends in hormetic research. Climate Leaderhsip Summit. University of Massachusetts, Amherst MA. April 8, 2018.

Kozumbo WJ, Leak RK, Calabrese EJ, and 13 other co-authors. Enhancing the amplitude and duration of hormesis-induced resilience: Workshop summary October 2017. The 17<sup>th</sup> Annual International Dose-Response Conference. Preconditioning: in Biology and Medicine. Mechanisms and Translational Research. University of Massachusetts, Amherst MA. April 17-18, 2018.

Agathokleous E, Kitao M, Calabrese EJ. Lanthanum induces hormesis in plants: A perspective for agronomy. The 17<sup>th</sup> Annual International Dose-Response Conference. Preconditioning: in Biology and Medicine. Mechanisms and Translational Research. University of Massachusetts, Amherst MA. April 17-18, 2018.

Agathakleous E, Calabrese EJ, and 8 other co-authors. Hormesis for predicting the effect of ozone on vegetation. The 17<sup>th</sup> Annual International Dose-Response Conference. Preconditioning: in Biology and Medicine. Mechanisms and Translational Research. University of Massachusetts, Amherst MA. April 17-18, 2018.

Cottrell M, Mills W, Calabrese EJ. Funding trends in hormetic research. The 17<sup>th</sup> Annual International Dose-Response Conference. Preconditioning: in Biology and Medicine. Mechanisms and Translational Research. University of Massachusetts, Amherst MA. April 17-18, 2018.

Calabrese EJ. Linear no-threshold (LNT) dose-response and what it means to you. University of Rhode Island, Kingston RI. April 6, 2018.

Calabrese EJ. Hormesis: How it can improve public health and medicine. Bridgewater State University, Bridgewater MA. April 5, 2018.

Calabrese EJ. Linear no-threshold (LNT) dose-response and what it means to you. Bridgewater State University, Bridgewater MA. April 5, 2018

Calabrese EJ. Hormesis: How it can improve public health and Medicince. International Academy of Oral Medicine & Toxicology. Fundamentals of Biological Dentistry. Denver, CO, March 23-24, 2018.

Calabrese EJ. Hormesis: The linear dose response for cancer risk assessment: New findings challenge its scientific foundations and use by regulatory and public health agencies. International Academy of Oral Medicine & Toxicology. Fundamentals of Biological Dentistry. Denver, CO, March 23-24, 2018.

## <u>2017</u>

Calabrese EJ. Hormesis: enhancing performance and building biological shields. Defense Advanced Research Projects Agencys (DARPA), Washington, DC. December 20, 2017.

Calabrese EJ. Homeopathy Conference. Hormesis in biology and medicine: Why it needs to be taught in medical school. University of Massachusetts, Amherst, MA. November 11, 2017.

Calabrese EJ. Hormesis in biology and medicine: Why it needs to be taught in medical school. School of Medicine. Georgetown University, Washington DC. November 7, 2017.

Calabrese EJ. Linear no-threshold (LNT) dose-response and what it means to you. MICB 702 Course, Georgetown University, Washington DC. November 6, 2017.

Calabrese EJ. LNT and its history Mount Holyoke College. October 24, 2017.

Calabrese EJ. Conference Moderator. AF Hormesis Conf. October 21 & 22, 2017.

Calabrese EJ. Overview to Air Force Hormesis Workshop. UMass October 21, 2017.

Calabrese EJ. Hormesis: Adaptive responses in biology and medicine. EHSC Seminar Series, University of Rochester, Rochester NY. September 21, 2017.

Calabrese EJ. The search for truth in regulatory science; How LNT was born and sustained – a story of mistakes, deceptions, and failed public policy. CATO Institute, Washington DC. July 21, 2017.

Calabrese EJ. Hormesis overview. Annual International Conference on Dose-Response: Preconditioning in biology and medicine. Mechanisms and translational research. April 18, 2017.

Dhawan G, Calabrese EJ. Radiotherapy for pertussis: An historical assessment. Annual International Conference on Dose-Response: Preconditioning in biology and medicine. Mechanisms and translational research. April 18, 2017.

Calabrese EJ. Hormesis: what it means for toxicology and risk assessment. Scientific Session, Low-dose non-monotonic responses. Society of Toxicology 56<sup>th</sup> Annual Meeting and ToxExpo, Baltimore, MD. March 14, 2017.

Calabrese EJ. How LNT was born and sustained - A Story of Mistakes, Deceptions, and Failed Public Policy. MA Department of Public Health. Boston, MA. January 9, 2017

## <u>2016</u>

Calabrese EJ. How LNT was born and sustained. A story of mistakes, deceptions, and failed public policy. Toxicology School of Pharmacy - University of Connecticut, Storrs, CT. November 28, 2016.

Calabrese EJ. Dose-response models, hormesis and implications for regulations. Podcast Intervew. Center for Industrial Progress. November 16, 2016.

Calabrese EJ. Hormesis: Its biological foundation and implications for pharmacology, medicine and public health. American Course on Drug Development and Regualtory Sciences Session 3. Washington DC. November 9, 2016.

Calabrese EJ. Seminar series. Hormesis: Role in biology, medicine, and public health. Environmental Health Sciences, University of Massachusetts, Amherst, MA. November 7, 2016.

Kozumbo WJ, Calabrese EJ. Enhancing biological performance: occurrence, mechanisms and applications. Wright Patterson Air Force Base, Ohio. November 7, 2016.

Calabrese EJ. Hormesis: Role in Biology, Medicine, and Public Health. Institut fur Molekular Zellbiologie, CMB. Jenna, Germany. October 27, 2016.

Calabrese EJ. Hormesis: Role in biology, medicine, and public health. Arnold School of Public Health, University of South Carolina, Columbia, SC. October 21, 2016.

Calabrese EJ. Hormesis: Role in Biology, Medicine, and Public HealthBridgewater State University, Bridgewater, MA. October 14, 2016.

Calabrese EJ. Hormesis: Role in Biology, Medicine, and Public HealthCollege of Nursing, University of Massachusetts, Amherst, MA. October 11, 2016.

Calabrese EJ. How LNT was born and sustained. A story of mistakes, deceptions, and failed public policy. Health Canada, Canada. September 29, 2016.

Calabrese EJ. Hormesis: Role in biology, medicine, and public health. University of Ottawa, Ottawa, ON. September 28, 2016.

Calabrese EJ. Hormesis: Role in biology, medicine, and public health. Canadian Nuclear Laboratories, Petawawa, ON. September 27, 2016.

Calabrese EJ. The road to linearity. Canadian Nuclear Laboratories, Petawawa, ON. September 27, 2016.

Calabrese EJ. Hormesis: Adaptive Responses in Biology and MedicineSociety for Cancer Research and Communication, Department of Radiation Oncology, Dr Balabhai Nanavati Hospital, Vile Parle, Mumbai, India. August 6, 2016.

Calabrese EJ. Linear No Threshold Model. Wall Street Journal Interview. June 28, 2016

Calabrese EJ. Atomic Insights. Interview. June 6, 2016.

Calabrese EJ. Interview. City Univerity, London UK. May 19, 2016.

Calabrese EJ, Dhawan G, Kapoor R. Preconditioning is hormesis Part I: documentation, doseresponse features and mechanistic foundations. Presented at the Annual Conference of the International Dose Response Society. University of Massachusetts. Amherst MA. April 20, 2016.

Calabrese EJ, Dhawan G, Kapoor R. How the conditioning dose mediate protection: dose optimization within temporal and mechanistic frameworks. Presented at the Annual Conference of the International Dose Response Society. University of Massachusetts. Amherst MA. April 20, 2016.

Calabrese EJ. How the US NAS misled the world community on cancer risk assessment. Hartford University. Hartford CT. April 26, 2016.

Calabrese EJ. Hormesis: Adaptive responses in biology and medicine. Dalhousie University,

Faculty of Agriculture. Truro NS, Canada. April 1, 2016.

Calabrese EJ. Preconditioning is hormesis. Dalhousie University, Special Seminar, Community Health & Epidemiology. Halifax NS, Canada. March 31, 2016.

Calabrese EJ. International Life Sciences Institute (North America). Conundrum: How do we define the continuum - from perturbation to adverse effects? Lessons Learned: Hormesis. St. Petersburg, FL. Jan 25-26, 2016.

# <u>2015</u>

Shamoun DY, Calabrese EJ. On objective risk. Society for Risk Analysis. Arlington, VA. December 9, 2015

Calabrese EJ. Hormesis: Adaptive responses in biology and medicine. Boston College Biology Seminar. Chestnut Hill, MA. November 3, 2015.

Calabrese EJ. The integration of LNT and hormesis for cancer risk assessment optimizes public health protection. Risk Assessment Speciality Section. Reston, VA. October 14, 2015.

Calabrese EJ. Hormesis: Adaptive responses in biology and medicine. University of Massachusetts, Food Science Department. Amherst, MA. September 23, 2015.

Shamoun DY, Calabrese EJ. On objective risk. The Science, Policy and Risk Forums. ORACBA and National Capital Area Chper of the Society of Risk Analysis at the USDA. Washinton DC. September 15, 2015.

Calabrese EJ. Hormesis: Adaptive responses in biology and medicine. American Chemical Society AGRO Session. Boston, MA. August 16-20, 2015.

Calabrese EJ. How the US NAS misled the wold community on cancer risk assessment. Doctors for Disaster. July 31-August 1, 2015.

Calabrese EJ. Hormesis: Its scientific foundations and biochemical regulatory applications. Doctors for Disaster. July 31-August 1, 2015.

Calabrese EJ. Introduction to hormesis: Adaptive responses in biology and medicine. Air Force Planning Meeting: Dosimetry and mechanisms mediating response to tDCS. University of Massachusetts. Amherst MA. July 8 & 9, 2015.

Calabrese EJ. How the US NAS misled the world community on cancer risk assessment. Polymer Science, University of Massachusetts. Amherst MA. 2015.

Calabrese EJ. How the linear dose response became the default model for cncer risk assessment. New England Chapter of the American Association of Physicists in Medicine. Sturbridge, MA. May 29, 2015.

Calabrese EJ. History of LNT. New England Chapter of the Health Physics Society. Westford, MA. May 27, 2015.

Calabrese EJ. How the linear dose response became the default model for cancer risk assessment. Eastern Research Group-Health Effects Institute. Boston MA. May 20, 2015. Calabrese EJ, Blain R. . Hormetic Mechanism-Receptor/Cell Signaling Pathways. Society of Toxicology. Phoenix, AZ. March, 2015.

# <u>2014</u>

Calabrese EJ, Shamoun DY. The case against LNT. Part I: History, origin, and competing evidence. Soceity of Risk Analysis, Denver CO. December, 2014.

Shamoun DY, Calabrese EJ. Guidelines for objective risk assessment practices. Society for Risk Analysis. Denver, CO. December 10, 2014.

Calabrese EJ. Australasian Radiation Protection Society Conference. How the US NAS misled the world community on cancer risk assessment, Hobart Tasmania Australia. October 28, 2014.

Calabrese EJ. Duke University, Integrated Toxicology and Enviornmental Health Program Symposium. Biphasic dose responses in biology, toxicology and medicine. October 24, 2014.

Calabrese EJ. Michigan State University, Department of Pharmacology and Toxicology. How the US NAS misled the world community on cancer risk assessment. September 19, 2014.

Calabrese EJ. Michigan State University, Entomology Department. Hormesis: Adaptive responses in biology and medicine. September 18, 2014.

Calabrese EJ. Hormesis and homeopathy. Lecture 3. Hormetic mechanisms. 4<sup>th</sup> Australian Conference of Bioregulatory Medicine, Adelaide, Australia. September 12-15, 2014.

Calabrese EJ. Hormesis and homeopathy. Lecture 4. Hormetic applications. 4<sup>th</sup> Australian Conference of Bioregulatory Medicine, Adelaide, Australia. September 12-15, 2014.

Calabrese EJ. Thematic Session 3: Hormesis: Adaptive Response in Biology and Medicine. NAALT/WALT Joint Session Conference, Arlington VA. September 12, 2014.

Calabrese EJ. Enhancing Biological Performance: Occurrence, Mechanisms and Applications. Human Performance Program Review, Basic Research Innovation Collaboration Center, Arlington VA. September 11, 2014.

Calabrese EJ. Hormesis: Its scientific foundations and biochemical regulatory applications. Physicians for Civil Defense, Oregon Institute of Science and Medicine, Knoxville, TN. July 26, 2014.

Calabrese EJ. LNT theory: How the NAS misled the world on cancer risk assessment. Physcians for Civil Defense, Oregon Institute of Science and Medicine, Knoxville, TN. July 26, 2014.

Calabrese EJ. Optimizing pre- and post-conditioning clinical outcomes: A dose response perspective. 13<sup>th</sup> Annual International Conference on Dose-Response. Preconditioning Adaptive Responses in Biology and Medicine. Building Biological Shields Against Disease and Injury. April 22, 2014.

Shamoun DY, Calabrese EJ. Risk assessment report card. 13<sup>th</sup> Annual International Conference on Dose-Response. Preconditioning Adaptive Responses in Biology and Medicine. Building Biological Shields Against Disease and Injury. April 22, 2014.

Shamoun DY, Calabrese EJ. Model uncertainty in cancer risk assessment. 13<sup>th</sup> Annual International Conference on Dose-Response. Preconditioning Adaptive Responses in Biology and Medicine. Building Biological Shields Against Disease and Injury. April 22, 2014.

Calabrese EJ. Hormesis: A looming scientific revolution in environmental regulation? Clark University, Worcester, MA. April 10, 2014.

Calabrese EJ. Hormesis and homeopathy. Lecture 1. Hormesis: biological foundations. Brauer Professional Conference, Adelaid, Australia. March, 2014.

Calabrese EJ. Hormesis and homeopathy. Lecture 2. Historical foundations of hormesis. Brauer Professional Conference, Adelaide, Australia. March, 2014.

Calabrese EJ. Hormesis: Adaptive responses in biology and medicine. Office of Food Additives, CFSAN, FDA, College Park MD. March 19, 2014.

Calabrese EJ. Hormesis: Adaptive responses in biology and medicine. Bridgewater State University, Bridgewater MA. February 21, 2014.

Calabrese EJ. Problems in the analysis used in launching the linear extrapolation approach for cancer risk assessment. American Chemical Council. February 20, 2014.

Calabrese EJ. Hormesis: Adaptive responses in biology and medicine. Duquesne University, Pittsburgh PA. February 13, 2014.

Calabrese EJ. How the US NAS misled the world community on cancer risk assessment. Bettis Atomic Power Lab, Pittsburgh, PA. February 12, 2014.

Calabrese EJ. Overthrowing the regulatory paradigm for carcinogens. Cato Institute, Capital Hill Briefing, Washington, DC. January 28, 2014

Calabrese EJ. Hormesis and the development of biological shields. TNO/Samueli Institute, The Netherlands. January 13, 2014.

# <u>2013</u>

Calabrese EJ, Yazigi D. (2013). New methods in cancer risk assessment. Society of Risk Analysis, Baltimore MD. December 10, 2013.

Calabrese EJ. (2013). Comment at the Convocation for the Faculties of Engineering, Health Sciences, and Science of an honorary doctrate. Hormesis: How i got started. McMaster University, Hamilton, ON. November 22, 2013.

Calabrese EJ. (2013). Origins of the LNT: Department of Radiological Science, McMaster University, Hamilton ON. November 21, 2013.

Calabrese EJ. (2013). Hormesis: A basic biological concept. University of Michigan. November 15, 2013.

Calabrese EJ. (2013). Hormesis: Its role in toxicology and radiological health. University of Michigan. November 15, 2013.

Calabrese EJ. (2013). How the US NAS misled the world community on cancer risk assessment. MI American Nuclear Society. Ann Arbor, MI. November 14, 2013.

Calabrese EJ. (2013). Hormesis: Toxicological foundations, mechanisms and biomedical/clinical applications. Air Force Office of Scientific Research Human Performance and Biosystems Program. Basic Research Innovation Collaboration Center. Arlington, VA. October 30, 2013.

Calabrese EJ. (2013). Soil ingestion rates in children and adults: Implications for human health risk assessment. International Conference on Soils, Sediments, Water and Energy. University of Massachusetts, Amherst, MA. October 22, 2013.

Calabrese EJ. (2013). Soil, sediment, and dust ingestion pathway in human health and ecological risk assessment. International Conference on Soils, Sediments, Water and Energy. University of Masachusetts, Amherst, MA. October 22, 2013.

Calabrese EJ. (2013). Hormesis: Its toxicological foundations and therapeutic implications. School of Pharmacy, University of Connecticut, Storrs, CT. October 9, 2013.

Calabrese EJ. (2013). Low dose radiation therapy induces and anti-inflammatory phenotype: Biomedical implications. Environmental Mutagen Society Inflammation Symposium. September 23, 2013.

Calabrese EJ. (2013). Evolution of the linear no threshold model of radiation injury. American Association of Physicists in Medicine, 54<sup>th</sup> Annual Meeting. Indianapolis. August 5, 2013.

Calabrese EJ. (2013). Hormesis: Its biomedical foundations and therapeutic implications. American Association of Naturopathic Physicans. Keystone, Colorado. July 10-13, 2013.

Calabrese EJ. (2013). Hormesis theory. The revolution of diet: stay hungry, stay healthy. SBS TV Network (S. Korea). June 14, 2013.

Calabrese EJ. (2013). A method to evaluate hormesis in nanoparticle dose-response. 5<sup>th</sup> International Symposium - Nutrition, Oxygen Biology and Medicine. Paris France. June 5-7, 2013.

Calabrese EJ. (2013). Does it or doesn't it? Evidence for the existence of non-monotonic dose resonse. Webinar. Society of Toxicology Risk Assessment Specialty Section. San Antonio, TX. May 8, 2013.

Calabrese EJ. (2013). Origin of the linearity-no threshold (LNT) dose response concept. Dose-Response 2013: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts, Amherst. April 23, 2013.

Calabrese EJ, Calabrese V. (2013). Low dose radiation therapy (LD-RT) is effective in the treatment of arthritis: Animal model findings. Dose-Response 2013: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts, Amherst. April 23, 2013.

Calabrese EJ, Dhawan G. (2013). The historical use of radiotherapy in the treatment of sinus infections. Dose-Response 2013: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts, Amherst. April 23, 2013

Calabrese EJ. (2013). History of the dose response. Web interview and presentation. Atoms for Peace, Italy. April 11, 2013

Calabrese EJ. (2013). Hormesis: Scientific revolution in environmental regulations. Department of International Development, Community and Environment. Clark University, Worcester, MA. April 2, 2013.

Calabrese EJ. (2013). A looming scientific rebolutionin environmental regulations? Cato Institute. Washington DC. March 21, 2013.

Calabrese EJ. (2013). Hormesis. Research Training Group Annual Meeting. Jena, Germany. January, 2013.

# <u>2012</u>

Calabrese, E.J. (2012). Chemical and radiation hormesis: Toxicological foundations and biomedical applications. Uniformed Services University, Armed Forces Radiobiology Research

Institute. Bethesda, MD. November 30, 2012.

Calabrese, E.J. (2012). Hormesis: Toxicological and Risk Assessment Implications. University of Massachusetts, School of Public Health and Health Sciences. Presented to medical students and faculty from Russia, Novgorod State University. Amherst, MA. October 26, 2012.

Calabrese, E.J. (2012). The hormesis dose response. University of Louisville, Louisville. KY. October 24, 2012.

Calabrese, E.J. (2012). Hormesis: Its biological foundations and therapeutic implications. European Society of Integrative Medicine. Florence, Italy. September 20-21, 2012.

Calabrese, E.J. (2012). Hormesis: Its significance for toxicology, risk assessment and medicine. Plymouth Marine Laboratory. Plymouth, UK. July 18, 2012.

Calabrese, E.J. (2012). The hormetic dose response. United Kingdom Environmental Mutagen Society, Taliesin Arts Centre, Swansea University. Swansea Wales. July 15-18,2012.

Calabrese, E.J. (2012). How the LNT myth was launched. American Nuclar Society Annual Meeting. Hyatt Regency Hotel. Chicago, IL. June 25, 2012.

Calabrese, E.J. (2012). The hometic dose response. European Food Safety Authority Scientific Colloquium XVII on Low Dose Response in Toxicology and Risk Assessment. Parma, Italy. June 14, 2012 (video presentation).

Calabrese, E.J. (2012). Muller's deceptive Nobel Prize lecture and its risk assessment implications. New England Health Physics Society Symposium, Westford, MA. May 24, 2012.

Golden, R., and Calabrese, E.J. (2012). Re-evaluation of the LNT. Society of Toxicology Annual Meeting, San Francisco, CA. March 11-15, 2012.

Calabrese, E.J. (2012). Hormesis and the Salk polio vaccine. International Conference on Dose-Response 2012, University of Massachusetts. Amherst, MA. April 24-25, 2012.

Calabrese, E.J. (2012). Key historical studies serving as the basis for the linear dose response challenged. International Conference on Dose-Response 2012, University of Massachusetts. Amherst, MA. April 24-25, 2012.

Calabrese, E.J., and Dhawan, G. (2012). The role of x-rays in the treatment of gas gangrene: A historical assessment. International Conference on Dose-Response 2012, University of Massachusetts. Amherst, MA. April 24-25, 2012.

Golden, R., and Calabrese, E.J. (2012). Revisiting assumptions of linearity for radiation-induced cancer: Implications for chemical cancer risk assessment. International Conference on Dose-Response 2012, University of Massachusetts. Amherst, MA. April 24-25, 2012.

Sarill, M.A., and Calabrese, E.J. (2012). Biphasic dose responses to phytoestrogens: An evaluation of mechanisms. International Conference on Dose-Response 2012, University of Massachusetts. Amherst, MA. April 24-25, 2012.

Calabrese, E.J. (2012). Hormesis: Its significant for toxicology, pharmacology and drug development. Tufts University, Medford/Somerville, MA. April 17, 2012.

Calabrese, E.J. (2012). The hormetic dose response. Hormesis Research Training Group at the Friedrich-Schiller-University, Jena, Germany. Opening Ceremonies February 14, 2012.

Calabrese, E.J. (2012). Hormesis: Its significance for toxicology, pharmacology and drug development. Computer Science Department, University of Massachusetts. Amherst, MA. April 10, 2012.

Calabrese, E.J. (2012). School of Marine Sciences, University of Massachusetts, Amherst, MA. February 1, 2012.

Calabrese, E.J. (2012). Hormesis: a dose response revolution. IMMAG, Georgia Health Sciences University. Augusta, GA, January 23, 2012.

### <u>2011</u>

Calabrese, E.J. (2011). Hormesis: Its significance for toxicology, pharmacology, and risk assessment. 43<sup>rd</sup> Society of Toxicology of Canada. Montreal, Canada, December 4-6, 2011.

Calabrese, E.J. (2011). When science fails society: Toxicology's 20<sup>th</sup> century legacy. Joint Meeting of the New England Sections of American Physical Society, American Association of Physics Teachers and the Soceity of Physics Student, Physics Department, University of Massachusetts, Amherst MA. November 19, 2011.

Calabrese, E.J. (2011). How toxicology got the dose response half right. FISH/BSU seminar. Bridgewater State University, Bridgewater, MA. November 18, 2011.

Calabrese, E.J. (2011). Hormesis: enhancing biological performance. Department of the Air Force – Photo-Electric-Magnetic-Bio-Stimulation (PEMB) Workshop. San Antonio, TX. October 31-November 1, 2011.

Calabrese, E.J. (2011). Harvard School of Public Health, Harvard University, JBL Symposium. Boston, MA. October 29, 2011.

Calabrese, E.J. (2011). Hormesis: Its significance for risk assessment and regulatory agencies. Mary Kay O'Connor Process Safety Center. Texas A&M University, College Station, Texas. October 25-26, 2011.

Calabrese, E.J. (2011). Hormesis: Its significance for toxicology, pharmacology and risk assessment. University of Connecticut, Advanced Toxicology Seminar. Connecticut. October 12, 2011

Calabrese, E.J. (2011). Hormesis: Its significance for food safety. Food Safety versus Food Secutiry – A Global Challenge. Wageningen, The Netherlands. October 4, 2011.

Calabrese, E.J. (2011). U-Shaped dose response curves. RIKILT, Wageningen, The Netherlands. October 3, 2011.

Calabrese, E.J. (2011). Hormesis: Its significance for toxicology, pharmacology and risk assessment. Prevention and Intervention: From Molecular Biology to Clinical Perspectives, Halle, Germany. September 16-18, 2011.

Calabrese, E.J. (2011). Hormesis; Its significance for toxicology, pharmacology and drug development. FDA Center for Drug Evaluation and Research (CDER), Rockville, MD. September 12, 2011.

Calabrese, E.J. (2011). Hormesis: Its significance for toxicology, pharmacology and risk assessment. Colloque ARET, Museaum National d'Histoire Naturelle, Paris, France. June 20-21, 2011.

Calabrese, E.J. (2011). Hormesis: Its significance for toxicology, pharmacology and riak assessment. Mary Kay O'Connor Process Safety Center, Texas A & M University, College Station, TX. May 5, 2011.

Nascarella, M.A., and Calabrese, E.J. (2011). Characterization of the biphasic antioxidant response of human cells to multi-walled carbon nanotubes. The 10<sup>th</sup> Annual International Conference on Dose-Response 2011: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts, Amherst, MA. April 26-27, 2011.

Calabrese, E.J., and Stanek III, E.J. (2011). Hormesis demonstrated for mutagenicity. The 10<sup>th</sup> Annual International Conference on Dose-Response 2011: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts, Amherst, MA. April 26, 2011.

Nascarella, M.A., and Calabrese, E.J. (2011). Case study: Quantitative assessment of the biphasic dose-response of polyN-isoproplacrylamide (PNIPAM) nanoparticles. The 10<sup>th</sup> Annual International Conference on Dose-Response 2011: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts, Amherst, MA. April 26, 2011.

Stanek III, E.J., and Calabrese, E.J. (2011). Simulation studies to complement observational data: what can we learn? How should they be used? The 10<sup>th</sup> Annual International Conference on Dose-Response 2011: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts, Amherst, MA. April 27, 2011.

Calabrese, E.J. (2011). Hormesis: Changing how we think about toxicology, medicine and risk assessment. Endocrine Disruptive Effects of Pesticides from Low Dose Exposure: Evidence for Non-Monotonic Dose Response Curves? The SAFE Consortium. Brussels, Belgium, March 12-17.

Calabrese, E.J. (2011). When Science Fails Society: Toxicology's 20<sup>th</sup> Century Legacy. Howard University, Washington, DC. March 30, 2011.

# <u>2010</u>

Calabrese, E.J. (2010). Hormesis: Its scientific foundations and biomedical implications. L'Oreal, Clichy, France. November 3, 2010.

Calabrese, E.J. (2010). Hormesis: A revolution in toxicology, medicine, and risk assessment. Clark University, November 18, 2010.

Calabrese, E.J. (2010). 6<sup>th</sup> International Workshop on the CCN Family of Genes. International CCN Society. Belfast, Northern Ireland. October 20, 2010.

Calabrese, E.J. (2010). Hormesis: Its scientific foundations and biomedical implications. State University of New York, Albany, New York. October 8, 2010.

Calabrese, E.J. (2010). Hormesis: A revolution in toxicology, medicine, and risk assessment. Skidmore College, Skidmore, New York. October 7, 2010.

Calabrese, E.J. (2010). Historical blunders: How EPA got the dose response half right. Iona College, New Rochells, New York. September 30, 2010.

Calabrese, E.J. (2010). Historical blunders: The road to linearity. McMaster University, International Scientific Symposium, Ontario, Canada. August 26, 2010.

Calabrese, E.J. (2010). Hormesis: Scientific foundations and public health implications. Fermented Beverages and Health: Enhancement of Biological Responses Relevant for Human Health. Madrid, Spain. July 14, 2010.

Calabrese, E.J. (2010). Hormesis applications for neurodegenerative diseases. Drug Development for Neurodegenerative Diseases, Boston, MA. May 18, 2010.

Calabrese, E.J., Baldwin, L.A., and Leonard, D.A. (2010). The history of chemical hormesis. Presented at the 9<sup>th</sup> Annual International Conference: Dose-Response: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts-Amherst, MA. April 27-28, 2010.

Calabrese, E.J., Baldwin, L.A., and Leonard, D.A. (2010). The history of radiation hormesis. Presented at the 9<sup>th</sup> Annual International Conference: Dose-Response: Implications for

Toxicology, Medicine, and Risk Assessment. University of Massachusetts-Amherst, MA. April 27-28, 2010.

Calabrese, E.J. (2010). Hormesis Update 2010. Presented at the 9<sup>th</sup> Annual International Conference: Dose-Response: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts-Amherst, MA. April 27-28, 2010.

Calabrese, E.J., and Nascarella, M.A. (2010). The frequency of hormetic responses in the Ames Assay. Presented at the 9<sup>th</sup> Annual International Conference: Dose-Response: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts-Amherst, MA. April 27-28, 2010.

Mosakowski, T., and Calabrese, E.J. (2010). Hormesis research in the People's Republic of China: Past trends in the academic literature and future directions. Presented at the 9<sup>th</sup> Annual International Conference: Dose-Response: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts-Amherst, MA. April 27-28, 2010.

Iavicoli, I., Calabrese, E.J., and Nascarella, M.A. (2010). Exposure to nanoparticles and hormesis. Presented at the 9<sup>th</sup> Annual International Conference: Dose-Response: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts-Amherst, MA. April 27-28, 2010.

Nascarella, M.A., and Calabrese, E.J. (2010). A Case Study: the risk of a hormetic response chemotherapy treatment. Society of Risk Analysis – New England Meeting. Camp, Dresser, Mckee, Cambridge, MA. April 1, 2010.

Calabrese, E.J. (2010). Hormesis in Toxicology and Pharmacology. Maastricht University. The Netherlands, March 26, 2010.

Calabrese, E.J. (2010). The limits of legislation. Koopman International European Commission and Parliament and joint Centre for European Policy Studies. Brussels, March 25, 2010.

Calabrese, E.J., and Nascarella, M.A. (2010). Estimating the frequency of hormesis in the Ames assay. Presented at the Society of Toxicology Annual Meeting, Salt Lake City, UT. March 10, 2010.

Calabrese, E.J. (2010). Estimating the frequency of hormesis in the Ames Assay. To be presented at the 49<sup>th</sup> Annual Meeting of the Society of Toxicology. Salt Lake City, UT. March 7-11, 2010.

Calabrese, E.J. (2010). Hormesis: Why it Transforms Toxicology, Molecular Biology and Clinical Medicine. Brown University, Providence, RI. March 3, 2010.

Calabrese, E.J. (2010). Hormesis: Why it transforms toxicology and risk assessment. Presented at Worcester Polytechnic Institute-REACH. February 5, 2010.

Calabrese, E.J. (2010). Hormesis is central to pharmacology and toxicology. Northeastern University, Boston MA. January 21, 2010.

# <u>2009</u>

Calabrese, E.J. (2009). Hormesis: State of the science. Presented at the Society for Risk Analysis Annual Meeting, Baltimore, MD. December 9, 2009.

Calabrese, E.J., and Nascarella, M.A. (2009). Hormesis: Scientific foundations and risk assessment implications. Presented at the Society for Risk Analysis Annual Meeting, Baltimore, MD. December 9, 2009.

Lewis, S.C., and Calabrese, E.J. (2009). Hormesis: Barriers for regulatory risk assessment. Presented at the Society for Risk Analysis Annual Meeting, Baltimore, MD. December 6-9, 2009.

Jones, A.C., Anderton, D.L., Stanek, E.J., and Calabrese, E.J. (2009). Survey Results for the hormesis knowledge and opinion survey administered to risk assessment and toxicology professionals. Presented at the Society for Risk Analysis Annual Meeting, Baltimore, MD. December 6-9, 2009.

Calabrese,E.J. (2009). Hormesis Enhances Environmental Toxicology Research and its Applications. Presented at William & Mary, Virginia Institute of Marine Science. Gloucester Point, VA. November 6, 2009.

Calabrese, E.J. (2009). Hormesis: Why it should transform toxicology and pharmacology. Northeast Chapter of the Society of Toxicology, Cambridge, MA. October 16, 2009.

Calabrese, E.J. (2009). Hormesis is central to biology and medicine. University of Rhode Island, Kingston, RI. October 13, 2009.

Calabrese, E.J. (2009). Hormesis is central to biology and medicine. 8<sup>th</sup> LOWRAD International Conference, Rio de Janeiro, Brazil. September 28-30, 2009.

Calabrese, E.J. (2009). Hormesis: Scientific foundations and risk assessment implications. ExxonMobil Biomedical Sciences, Inc., Iselin, NJ. September 15, 2009.

Calabrese, E.J. (2009). Hormesis: A central concept in biology and carcinogenesis. The University of Vermont, Department of Pathology, Burlington, VT. September 14, 2009.

Calabrese, E.J. (2009). Hormesis and Medicine. Boiron. Lyon, France. June 22-23, 2009

Nascarella, M., Beck, B., and Calabrese, E.J. (2009). Quantifying Hormetic (Biphasic) Dose-Responses in the Assessment of Nanoparticle Toxicology. International Conference on the

Environmental Implications and Applications of Nanotechnology, June 9-11, 2009

Calabrese, E.J. (2009). Hormesis: A dose response revolution. New England Chapter of the Health Physics Society annual meeting, Westford, MA. June 4, 2009.

Nascarella, M.A., and Calabrese, E.J. (2009). A Comparison of Multiple Methods to Evaluate Biphasic (Hormetic) Dose Responses in High-Throughput In Vitro Toxicology Screens. NRC Symposium on Toxicity Pathway-Based Risk Assessment: Preparing for Paradigm Change. May 11-13, 2009.

Calabrese, E.J. (2009). Hormesis: A dose response revolution. Binghamton University, State University of New York. April 17, 2009.

Calabrese, E.J. (2009). Challenging the assumptions about toxicological dose response: Scientific, ethical and policy implications of hormesis. Clark University. March 20, 2009.

Stanek, E.J. III and Calabrese, E.J. (2009). Meta Analysis of Soil Ingestion Intake for Childhood Risk Assessment, Eastern North American Region Biometrics Meetings, March 16, 2009, San Antonio, Texas.

Nascarella, M.A., and Calabrese, E.J. (2009). The relationship between IC50, toxic threshold, and the magnitude of stimulatory response in biphasic (hormetic) dose-responses. Society of Toxicology Annual Meeting, Baltimore, MD. March 15-19, 2009.

Jones, A.C., Anderton, D.L., Stanek, E.J., and Calabrese, E.J. (2009). Hormesis knowledge and opinion survey results. Presented at the Society of Toxicology Annual Meeting, Baltimore, MD. March 15-19, 2009.

Calabrese, E.J. (2009). Hormesis: What it means for toxicology, the environment and public health. FISH Spring 2009, Biology Department Seminar Hour. Bridgewater State University. Februaru 27, 2009.

Calabrese, E.J. (2009). Hormesis: What it means for toxicology, the environment and public health. Plant and Soil Science, University of Massachusetts, Amherst, MA. February 3, 2009.

# <u>2008</u>

Stanek, E.J. III and Calabrese, E.J. (2008). Exposure Assessment for Children: Soil Ingestion, Indian Statistical Institute Seminar, Oct 31, 2008, ISI Kolkata, India.

Nascarella, M.A., and Calabrese, E.J. (2008). Characterizing the quantitative features of hormetic dose-responses in a single high-throughput assay evaluating anticancer agents. To be presented at the Society for Risk Analysis Annual Meeting, Boston, MA. December 8, 2008.

Stanek, E., and Calabrese, E.J. (2008). Exposure assessment in children: Soil ingestion. Indian

Statistical Institute, Kolkata, India. October 31, 2008.

Jones, A.C., Anderton, D.L., Stanek, E.J., and Calabrese, E.J. (2008). Hormesis knowledge and opinion survey results. Presented at the Society of Toxicology Northeast Regional Chapter Fall Meeting, Shrewsbury, MA. October 24, 2008.

Nascarella, M.A., and Calabrese, E.J. (2008). Toxic potency and hormesis in dose-response assessment. Presented at the Society of Toxicology Northeast Regional Chapter Fall Meeting, Shrewsbury, MA. October 24, 2008.

Calabrese, E.J. (2008). Hormesis: a central concept in biology, the biomedical sciences and toxicology. University of Connecticut, Storrs, CT. October 22, 2008.

Waters, D.J., and Calabrese, E.J. (2008). The U-shaped curve: when more is not better. Environmental Mutagen Society. Puerto Rico. October 21, 2008.

Calabrese, E.J. (2008). Hormesis: What it means for pharmacology and toxicology. The Boston Area Pharmaceutical Toxicology Group (BAPTG). Novartis Institutes of Biomedical Research, Inc., Cambridge, MA. September 18, 2008.

Calabrese, E.J. (2008). Why I think hormesis is the most fundamental dose response relationship in biology. McMasters University, Hamilton, Canada. September 15, 2008.

Calabrese, E.J. (2008). Hormesis: Its significant to toxicology, risk assessment and Medicine. North American Congress of Clinical Toxicology, Toronto, Canada. September 14, 2008.

Calabrese, E.J. (2008). Hormesis and the pharmaceutical industry. Millennium Pharmaceuticals, Inc, Cambridge, MA. June 16, 2008.

Calabrese, E.J. (2008). Separating stimulant and impairing function in hormetic profiles with independent component analysis (ICA). The 7<sup>th</sup> Annual International Conference – Session II: Biomedical. Dose-Response 2008: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts, Amherst, MA. April 29, 2008.

Calabrese, E.J. (2008). Hormesis – 2008 – Current Status. The 7<sup>th</sup> Annual International Conference – Session I: Plenary. Dose-Response 2008: Implications for Toxicology, Medicine, and Risk Assessment. University of Massachusetts, Amherst, MA. April 29, 2008.

Nascarella, M.A., Stanek, E.J., and Calabrese, E.J. (2008). Evaluating stimulatory cell proliferation in anticancter drug dose-responses. University of Massachusetts School of Public Health and Health Sciences, 11<sup>th</sup> Annual Poster Session. University of Massachusetts, Amherst, MA. March 27, 2008

Nascarella, M.A., Stanek, E.J., and Calabrese, E.J. (2008). The quantitative evaluation of hormesis in anticancer drug dose-response. Society of Toxicology Annual Meeting. Seattle,

WA. March 19, 2008.

Calabrese, E.J. (2008). Hormesis: The most fundamental dose response model. University of Ottawa Seminar, Ottawa, Canada. February 1, 2008.

Calabrese, E.J. (2008). Hormesis: Improving health reducing costs. Health Canada Seminar, Ottawa, Canada. January 31, 2008.

# <u>2007</u>

Nascarella, M.A., and Calabrese, E.J. (2007). The quantitative characterization of the doseresponse relationship of a panel of yeast (*Saccharomyces cerevisiae*) strains to prospective anticancer agents. Society for Risk Analysis Annual Meeting. San Antonio, TX. December 12, 2007.

Calabrese, E.J. (2007). Hormesis: The most fundamental dose response model. Department of Kinesiology, University of Massachusetts, Amherst, MA. October 29, 2007.

Nascarella, M.A., Stanek, E.J., and Calabrese, E.J. (2007). The quantitative characterization of hormesis in the National Cancer Institute's Yeast Anticancer Drug Screen Data. Society of Toxicology Northeast Regional Chapter, Fall Meeting. Groton, CT. October 26, 2007.

Calabrese, E.J. (2007). Hormesis and its relevance for clinical psychology. Harvard Medical School, Newton, MA. March 12, 2007.

# <u>2006</u>

Calabrese, E.J. (2006). Hormesis: How it may affect toxicology and pharmacology. Sanofi-Aventis U.S. Inc. Bridgewater, NJ. November 15, 2006.

Calabrese, E.J., and Stanek, E.J. (2006). Arsenic bioavailability in humans. The Gradient Corporation. Cambridge, MA. October 5, 2006.

Calabrese, E.J. (2006). Historical foundations of hormesis. University of Kansas Medical Center, Kansas City, KS. October 3, 2006.

Calabrese, E.J. (2006). Hormesis scientific foundations. University of Kansas Medical Center, Kansas City, KS. October 3, 2006.

Calabrese, E.J. (2006). Hormesis as a vehicle for therapeutic agents. Therapeutic Discovery Conference. Rensillierville, NY. September 10, 2006.

Staudenmayer, J. and Calabrese, E.J. (2006). Hormesis is more common than the threshold model in large NCI yeast database study. International Hormesis Society Conference. University of Massachusetts, Amherst, MA. June 7, 2006.

Calabrese, E.J. (2006). Hormesis: scientific foundations. Florence, Italy. April 7, 2006.

Calabrese, E.J. (2006). Hormesis: A challenge to the linear dose-response model, and its implications in risk assessment, regulatory policy, and biomedical research. Society of Toxicology 2006 45<sup>th</sup> Annual Meeting & ToxExpo. San Diego, CA. March 8, 2006.

Calabrese, E.J. (2006). Hormesis: Toxicological update and potential applications to the air force. Air Force Office of Scientific Research, Arlington, VA. January 31, 2006.

Calabrese, E.J. (2006). Experimental data relevant to single dose cancer assessment. 31<sup>st</sup> Annual Winter Toxicology Forum, Washington, DC. January 31, 2006.

Calabrese, E.J. (2006). Hormesis: Scientific development and implications for risk assessment. 31<sup>st</sup> Annual Winter Toxicology Forum, Washington, DC. January 31, 2006.

Calabrese, E.J. (2006). Hormesis: Common, generalizable and significant. Eli Lilly Research Laboratories, Greenfield, IN. January 11, 2006.

## <u>2005</u>

Calabrese, E.J. (2005). Hormones is Important for Toxicologists and Risk Assessors: The Case for Hormesis as the Most Fundamental Dose Response Relations. Michigan State University, MI. December 8, 2005.

Calabrese, E.J. (2005). Historical Foundations of the Dose Response. Michigan State University, MI. December 8, 2005.

Calabrese, E.J. (2005). Soil Ingestion in Children and Adults. RIVM, Utrecht, The Netherlands. November 7, 2005.

Calabrese, E.J. (2005). Introduction of the Concept of Hormesis: Implications for Risk Assessment.. Utrecht University, Utrecht, The Netherlands. November 8, 2005.

Calabrese, E.J. (2005). Hormesis: Historical Perspectives, and Recent Advances. Health Council of the Netherlands, The Hague, The Netherlands. November 9, 2005.

Calabrese, E.J. (2005). Hormesis: Societal Implications. International Policy Network & the Institute of Economic Affairs. London, United Kingdom. November 10, 2005.

Calabrese, E.J. (2005). Hormesis and Its Impact on Future Toxicity Testing Strategies. National Research Council, Committee on Toxicity Testing and Assessment of Environmental Agents, Washington, DC. October 20-21, 2005.

Calabrese, E.J. (2005). Hormesis Its Impact on Toxicology and Risk Assessment. Yale

University, New Haven, CT. October 6, 2005.

Calabrese, E.J. (2005). Is There Non-Random Biological Activity Below the NOAEL? Center for Risk Science and Communications. University of Michigan, Ann Arbor, MI. September 16, 2005.

Calabrese, E.J. (2005). Hormesis: Challenging the EPA Dose Response Paradigm. Environmental Management Association. Annual Sound Science Seminar, Michigan. September 15, 2005.

Calabrese, E.J. (2005). The Emergence of Hormesis in Biology, Toxicology and Medicine. 4<sup>th</sup> International BELLE Conference, University of Massachusetts, Amherst, MA. June 6, 2005.

Calabrese, E.J. (2005). Scientific underpinnings of hormesis. European Union. Video Presentation. Italy, May 19, 2005.

Calabrese, E.J. (2005). Costing the Earth. BBC Radio interview. April 5, 2005.

Calabrese, E.J. (2005). Biomedical and Clinical Implications of Hormesis (Guest Speaker). Annual Meeting Franklin and Hampshire Districts of Massachusetts Medical Society. Sunderland, MA. April 20, 2005

Calabrese, E.J. (2005). Hormesis Seminar. US EPA. Research Triangle Park, NC. April 26-27, 2005.

Calabrese, E.J. (2005). Soil Ingestion Estimation in Children and Adults: A Dominant Influence in Site-Specific Assessment. Health Canada Environmental and Occupational Toxicology Seminar Series. March 23, 2005.

Calabrese, E.J. (2005). Hormesis: The Dose-Response Revolution. Health Canada Environmental and Occupational Toxicology Seminar Series. March 24, 2005.

# <u>2004</u>

Calabrese, E.J. (2004). Hormesis as a biological concept. Amherst College. October 25, 2004.

Calabrese, E.J. (2004). Hormesis as a concept in Toxicology. Holy Cross College. Worcester, MA. October 20, 2004.

Calabrese, E.J. (2004). Hormesis Roundtable. American Industrial Hygiene Conference and Exposition. Atlanta, GA. May 13, 2004.

Calabrese, E.J. (2004). Hormesis and the LNT. MIT. Cambridge, MA. April 1, 2004.

Stanek III, E.J., and Calabrese, E.J. (2004). Arsenic bioavailability in humans. Environmental Institute, University of Massachusetts. March 26, 2004.

Blain, R.R., and Calabrese, E.J. (2004). Hormesis database. Society of Toxicology 43<sup>rd</sup> Annual Meeting. Baltimore, MD. March 24, 2004.

Calabrese, E.J. (2004). Hormesis: Its implications for hazard and risk assessment. Society of Toxicology 43<sup>rd</sup> Annual Meeting. Baltimore, MD. March 22, 2004.

Ewald, K.A., and Calabrese, E.J. (2004). Protection against mechanistically distinct hepatotoxicants is associated with acute phase response. Society of Toxicology 43<sup>rd</sup> Annual Meeting. Baltimore, MD. March 22, 2004.

Calabrese, E.J. (2004). Hormesis and its implications for State health departments (Video Conference). Marin County Health Department. California. February 27, 2004.

Calabrese, E.J. (2004). Hormesis and its implications for aging. National Institute of Aging. Baltimore, MD. February 26, 2004.

Calabrese, E.J. (2004). Hormesis and new developments in assessing the dose-response. Johns Hopkins University. Baltimore, MD. February 25, 2004.

Calabrese, E.J. (2004). Hormesis and public health. Environmental Media Services. Washington, DC. February 25, 2004.

### <u>2003</u>

Nascarella, M.A., and Calabrese, E.J. (2003). Stage specific toxicity and the hormetic dose response relationship in the black blowfly. 3<sup>rd</sup> Annual Institute of Environmental and Human Health Toxicology Exposition. Lubbock, TX. April 4, 2003.

Calabrese, E.J. (2003). Toxicological Foundations of Hormesis. Canadian Society of Toxicology. Plenary Address. Montreal, Canada. December 2003.

Calabrese, E.J. (2003). Hormesis and its role in Toxicology. Society of Toxicology of Canada. Plenary Session. Montreal, Canada. December 8, 2003.

Calabrese, E.J. (2003). The dose-response relationship: A new paradigm with broad biomedical implications. University of Massachusetts School of Public Health. Amherst, MA. November 25, 2003.

Calabrese, E.J. (2003). Hormesis. Hazard and risk assessment. Texas Tech University (Video Conference). November 7, 2003.

Calabrese, E.J. (2003). Hormesis. College of the Holy Cross. Worcester, MA. October 14,

2003.

Calabrese, E.J. (2003). Hormesis and risk assessment. The Dow Foundation. Midland, MI. September 17, 2003.

Calabrese, E.J., and Baldwin, L.A. (2003). Hormesis at the NTP. Second Non-Linearity Dose Response Relationships in Biology, Toxicology and Medicine Conference. Amherst, MA. June 8, 2003.

Calabrese, E.J. (2003). Biomedical implications of hormesis. Second Non-Linearity Dose Response Relationships in Biology, Toxicology and Medicine Conference. Amherst, MA. June 8, 2003.

Calabrese, E.J. (2003). Non-Linearity Dose-Response Relationships in Biology, Toxicology and Medicine, International Conference. Amherst, MA. May 28, 2003.

Calabrese, E.J. (2003). Bowdoin College, Department of Chemistry. Hormesis: New Concepts in our Understanding of the Dose Response. Brunswick, ME. May 2, 2003.

Calabrese, E.J. (2003). Tufts University, Department of Environmental Engineering. Hormesis: Occurrence and Mechanistic Foundations. Medford, MA. April 17, 2003.

Calabrese, E.J. (2003). Tufts University Medical School. Medical Implications of Hormesis. Boston, MA. April 17, 2003.

Calabrese, E.J. (2003). Society of Environmental Toxicology and Chemistry (SETAC) North Atlantic Chapter, Annual Meeting. Hormesis: Occurrence, Generalizability and Applications to Toxicology and Risk Assessment. Mystic, CT. April 24, 2003.

Calabrese, E.J. (2003). Columbia University, School of Education. Hormesis: Conceptual Framework and Application to Environmental Science Curriculum. New York. February 17, 2003.

Calabrese, E.J. (2003). Boston University School of Public Health. Biphasic Dose Response Relationships in Biology, Toxicology and Medicine. February 21, 2003.

Calabrese, E.J. (2003). Are Human Exposure Limits Too Conservative? Non-Linear Dose Response Relationships and "Hormesis". Aberdeen Proving Grounds. January 14, 2003.

# <u>2002</u>

Nascarella, M.A., and Calabrese, E.J. (2002). A model system to explore the hormesis dose response relationship. Society for Risk Analysis Annual Meeting. New Orleans, LA. December 9, 2002.

Nascarella, M.A., Stoffolano, J.G., and Calabrese, E.J. (2002). Hormesis and stage specific toxicity induced by cadmium in an insect model, the queen blowfly, *Phormia regina* Meig. Society for Environmental Toxicology and Chemistry Annual North American Meeting. Salt Lake City, UT. November 19, 2002.

Calabrese, E.J. (2002). International Conference on Chemical Mixtures (ICCM). Atlanta, GA. September 11, 2002.

Calabrese, E.J. (2002). Toxicological Risk Assessment of DIMP. Colorado Water Quality Control Commission. Denver, CO. December 10, 2002.

Calabrese, E.J. (2002). Hormesis and High Risk Groups. UMDNJ – New Jersey Medical School. November 14, 2002.

Calabrese, E.J. (2002). The Hormetic or Threshold Model: Which is the Most Common Phenomenon in Toxicology. Cornell University. November 7, 2002.

Calabrese, E.J. (2002). Federal-State and Risk Analysis Committee (FSTRAC). (2002). U-Shaped Dose Responses in Toxicology and their Risk Assessment Implications. October 23, 2002.

Calabrese, E.J. (2002). ATSDR. The Hormetic Dose-Response Model is More Common Than the Threshold Model in Toxicology. Atlanta, GA. September 11, 2002.

Calabrese, E.J. (2002). NCAC-SOT. U-shaped Dose Responses Curves – What, Why and How?. May 16, 2002.

Calabrese, E.J. (2002). Toxicological Foundation of Hormesis. Bates College. February 14, 2002.

Calabrese, E.J. (2002). Applications of Hormesis in Environmental Science. Bates College. February 15, 2002.

Calabrese, E.J. (2002). AMEC Corp. Risk Assessment and Hormesis. February 14, 2002.

Calabrese, E.J. (2002). Hormesis as Generalizable Hypothesis. General Electric. February 2, 2002.

Calabrese, E.J. (2002). Applications of Hormesis in Toxicology, Risk Assessment and Chemotherapeutics. University of Rhode Island. January 30, (2002).

#### <u>2001</u>

Nascarella, M.A., and Calabrese, E.J. (2001). The development of toxicological bioassay using

black blow fly *Phromia regina* (Diptera: Calliphordae) larvae to evaluate physiological response to low level environmental stress. University of Massachusetts, School of Public Health and Health Sciences 4<sup>th</sup> Annual Poster Session. Amherst, MA. March, 2001.

Nascarella, M.A., Stoffolano, J.G., and Calabrese, E.J. (2001). Stage specific and hormetic effects induced by cadmium in the black blowfly. American Public Health Association 129<sup>th</sup> Annual Meeting. Atlanta, GA. October, 2001.

Calabrese, E.J. (2001). Hormesis: Current Status. Medical College of New York, Department of Animal Science. November 28, 2002. November , 14 2001, GE S

Calabrese, E.J. (2001). U-shaped dose responses in biology, toxicology and medicine: frequency, quantitative features and possible significance. Yale University. October 3, 2001.

Calabrese, E.J. (2001). The history of the dose-response relationship: reassessing the foundation of toxicology. Yale University. October 3, 2001.

Nascarella, M.A., Stoffolano, J.G., and Calabrese, E.J. (2001). Stage specific toxicity and hormetic effects induced by cadmium in the black blowfly phormia regina. *Academic Public Health Caucus*, Poster Presentation. Abstract#:31416.

Calabrese, E.J. (2001). Harvard University. Hormesis. September 21, 2001.

Calabrese, E.J. (2001). Hormesis: Pharmacological and Toxicological Foundations. University of Rhode Island. June 31, 2001.

### <u>2000</u>

Calabrese, E.J. (2000). Scientific data on low dose radiation and cancer. Health Benefits of Low Dose Radiation. Radiation, Science, and Health, Inc. Washington, DC. November 15, 2000.

Calabrese, E.J. (2000). Radiation Hormesis. BEIR VII Committee meeting. National Academy of Sciences, Washington, DC. September 20, 2000.

Calabrese, E.J. (2000). When adults are at greater risk than children. Conference on 10X factors. Hoffman-LaRoche, Nutley, NJ. May 3, 2000.

Calabrese, E.J. (2000). Hormesis as a biological phenomenon. Dept. of Entomology, University of Massachusetts, Amherst, MA. March 22.

Calabrese, E.J. (2000). The historical foundations of chemical hormesis. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J. (2000). The historical foundations of radiation hormesis. Chemical and

Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J. (2000). Factors contributing to the marginalization of both hypotheses. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J. (2000). Establishment of quantitative evaluative criteria for assessing hormesis. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J. (2000). Description of the chemical and radiation hormesis database. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J. (2000). Why is hormesis not always seen? Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Apoptosis and biphasic response. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Cancer and U-shaped curves. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Alcohol and U-shaped curves. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). The history of chemical hormesis. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). The history of radiation hormesis. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Quantitative evaluation method for hormesis. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Reproductive toxicity & U-shaped curves. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Adenosine: Biphasic receptor binding via allosteric enhancement. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Adenosine: Adenosine induces biphasic responses in

renal vasculature. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Adenosine: Apomorphine induced biphasic penile erection: Occurrence and mechanistic basis. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic response of estrogens: Angiogenesis, bone formation, and immunostimulation. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic response of estrogens: Human breast cell proliferation, and DNA synthesis in human vascular cells. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic response of estrogens: Phytoestrogen and clot formation. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Cadmium induced biphasic responses. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of amyloid  $\beta$ -peptide. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic dose-response relationship between peripheral corticosterone and memory. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of nitric oxide: Osteoclast differentiation, macrophase synthesis of vitamin D3, and vasodilation in the human forearm. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of nitric oxide: Myocardial contraction, and calcium current in the heart. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of nitric oxide: Methylene blue and behavior, excitatory amino acids, and neutrophil migration. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of nitric oxide: Carbon monoxide

induces a biphasic release of NO, biphasic effects of neuroleptic drugs on NOS, and NO and sperm function. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of testosterone: Chondrocytes, and sertoli cell function. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of testosterone: Prolactin, and prostate cancer cells (LNCaP). Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of prostaglandins:  $PGE_2$  and verapamil, a calcium channel blocker, and bone formation. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of nonsteroidal anti-inflammatory drugs (NSAIDS): Prostaglandin production and transport. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of prostaglandins: neutrophil migration, corticosteroids, and transforming growth factor  $\beta$ . Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of opiates: Cardiovascular and respiratory effects. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of opiates: Cardiovascular and respiratory effects fetal breathing movements (FBM) in the lamb, neutrophil migration, peripheral blood lymphocyte (PBL) natural killer-activity, and corticosterone production. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of opiates: hCG secretion, HIV growth, and behavioral responses pain/euphoria. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of opiates: binding to brain receptors. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic chemotaxis effects of alcohol, alpha-1 proteinase inhibitor (API), FMLP, and mouse nerve growth factor. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic chemotaxis effects on neutrophils, tumor cells, and fibroblasts. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of dopamine: Background and biomedical significance, and prolactin secretion. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of dopamine: artery relaxation. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of dopamine: Apomorphine on pain, and locomotion. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Biphasic effects of dopamine agonists on memory. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

Calabrese, E.J., and Baldwin, L.A. (2000). Apoptosis and biphasic response. Poster presentation. Chemical and Radiation Hormesis Scientific Foundations. Amherst, MA. January 19-20.

### <u> 1999</u>

Calabrese, E.J. (1999). Toxicology of DIMP. National Academy of Sciences. Washington, DC. November 22.

Calabrese, E.J. (1999). Radiation hormesis: current status. U.S. Nuclear Regulatory Commission. Rockville, MD. March 29.

Calabrese, E.J. (1999). Hormesis and adaptation. NIH. Bethesda, MD. April 26.

Calabrese, E.J. (1999). Single exposure carcinogen database. U.S. EPA. Washington, DC. June 12.

Stanek, E.J., and Calabrese, E.J. (1999). Soil ingestion in children. U.S. EPA. Research Triangle Park, NC. June 14.

Calabrese, E.J. (1999). Health effects of DIMP. U.S. National Academy of Science. Washington, DC. November 4.

Calabrese, E.J. (1999). Radiation hormesis. NE Radiology Society. Boston, MA. June 18.

## <u>1998</u>

Calabrese, E.J. (1998). New developments on hormesis. AIHC. Washington, DC. January 13.

Calabrese, E.J. (1998). Scientific foundations of hormesis. North Carolina Chapter of the Society of Risk Analysis. Carey, NC. April 27.

Calabrese, E.J. (1998). Chair – conference on societal implications of hormesis. Research Triangle Park, NC. October 5-6.

Calabrese, E.J. (1998). Historical foundations of chemical hormesis. Conference on societal implications of hormesis. Research Triangle Park, NC. October 5-6.

Calabrese, E.J. (1998). Implications of hormesis for risk assessment. 10X uncertainty factor conference. Medical College of New Jersey. Newark, NJ. November 11.

Calabrese, E.J. (1998). Non-monotonic dose-response relationships and their risk assessment implications. EPA National Symposium. Carey, NC. April 28.

Calabrese, E.J. (1998). Single exposure carcinogens and its implications for state public health risk assessors. National Teleconference Presentations for the ATHO Foundation. May 7.

Calabrese, E.J. (1998). U-shaped dose-response relationship. EPA Drinking Water Office-FASTAC. Boston, MA. May 8.

Calabrese, E.J. (1998). Hormesis and its risk assessment implications. Pfizer. Groton, CT. May 21.

Calabrese, E.J. (1998). Low dose responses to chemical stressor agents. General Electric. Schenectady, NY. July 30.

Calabrese, E.J. (1998). Hormesis and the biological effects of low level exposures. Occupational Safety and Health Group. Washington, DC. August 4-5.

# <u> 1997</u>

Calabrese, E.J. (1997). Dose-response relationships and endocrine disruption. Conference on Endocrine Disruption. Research Triangle Park, NC. January 13.

Calabrese, E.J. (1997). Single exposure carcinogen data base. NIOSH. Cincinnati, OH. January 23.

Calabrese, E.J., Blain, R.B., Leonard, D., and Ewald, K. (1997). Role of neutrophils and acute phase proteins in the hepatotoxic interaction between kepone and carbon tetrachloride. SOT Annual Meeting. Cincinnati, OH. March 10.

Calabrese, E.J., and Stanek, E.J. (1997). The amount of particle size of soil ingested by children. SOT Annual Meeting. Cincinnati, OH. March 12.

Calabrese, E.J., and Blain, R.B. (1997). Stress effects on carbon tetrachloride toxicity. SOT Annual Meeting. Cincinnati, OH. March.

Calabrese, E.J. (1997). Role of hormesis in risk management. DOD conference at NIH, Bethesda, MD. May 15.

Calabrese, E.J. (1997). Development of a chemical hormesis database: strengths, limitations, and generalized ability. Toxicology Forum. Aspen, CO. July 7-11.

Calabrese, E.J. (1997). Hormesis: Database and underlying mechanisms. Toxicology\_Forum, Aspen, CO. July 13.

Calabrese, E.J. (1997). Development of a chemical hormesis data base: Strengths, limitations, and generalized ability. Toxicology Forum. Aspen, CO. July 11.

Calabrese, E.J. (1997). Acute episodes of soil ingestion. Society of Risk Analysis. Washington, DC. December 7.

Calabrese, E.J. (1997). Single exposure carcinogens. Society of Risk Analysis. Washington, DC. December 7.

### <u>1996</u>

Calabrese, E.J. (1996). Adaptive mechanisms and dose-response relationships. Texas\_A&M University. Texas. February, 19.

Calabrese, E.J. (1996). Acute exposures to genotoxic carcinogens. University of Montreal. Canada. April 10.

Calabrese, E.J. (1996). Current issues in risk assessment. Harvard University. Boston, MA. August 5.

Calabrese, E.J. (1996). Acute exposures to chemical carcinogens. National Academy of Sciences. Washington, DC. September 17.

Calabrese, E.J. (1996). Chemical hormesis. Texas Chemical Industry Association. Houston, TX. September 23.

Calabrese, E.J. (1996). Chaired session on genetic factors and environmental exposures. EPA Conference. Durham, NC. September 25.

Calabrese, E.J. (1996). Ecogenetics: genetic predisposition to toxic substances. EPA conference on interindividual differences in susceptibility. Durham, NC.

Calabrese, E.J. (1996). Single exposure carcinogens. New England Society for Occupational and Environmental Medicine. Boston, MA. December 5.

Calabrese, E.J. (1996). Chemical Hormesis. Safety factors in risk assessment. Nutley, NJ. December 6.

## <u>1995</u>

Calabrese, E.J. (1995). Single exposure carcinogens. Society of Toxicology. Baltimore, MD. March 5-9.

Calabrese, E.J. (1995). Retrieval database on single exposure carcinogens. Society of Toxicology. Baltimore, MD. March 5-9.

Calabrese, E.J. (1995). Development of annual soil ingestion distributional estimates of 64 children based on daily soil ingestion values. Society of Toxicology. Baltimore, MD. March 5-9.

Schmidt, C.W., Leonard, D.A., Baldwin, L.A., Zhao, X.Q., and Calabrese, E.J. (1995). Administration of G2 activating agents modulates carbon tetrachloride induced hepatotoxicity. Society of Toxicology. Baltimore, MD. March 5-9.

Johnson, R.B., and Calabrese, E.J. (1995). The effects of repeat dosing and repeat blood withdrawal on carbon tetrachloride toxicity. Society of Toxicology. Baltimore, MD. March 5-9.

Calabrese, E.J. (1995). Uncertainty factors: their toxicological bases. Conference on Uncertainty Factors in Risk Assessment. NJ Medical School. Nutley, NJ. April 7.

Calabrese, E.J. (1995). Carcinogens that cause cancer with an single dose. Clark\_University. Worcester, MA. April 16.

Calabrese, E.J. (1995). Single exposure carcinogens. Risk Science Institute/Brookings\_Institute. 1 Washington, DC. April 23.

Calabrese, E.J. (1995). Soil ingestion in children and adults. Louisiana Department of Environmental Quality. Baton Rouge, LA. June 28.

Calabrese, E.J. (1995). Soil ingestion estimates. 10th Annual Soil Contamination Conference. University of Massachusetts. Amherst, MA. October 23.

Calabrese, E.J. (1995). Variability in response to toxic substances. Conference on Multiple Chemical Sensitivity. Baltimore, MD. October 30.

Calabrese, E.J. (1995). BELLE-An overview and a long-term view. Texas Chemical\_Industry Institute. Houston, TX. November 7.

Calabrese, E.J. (1995). Tissue repair as a toxicological principle. American College of Toxicology. Vienna, VA. November 12.

## <u>1994</u>

Calabrese, E.J. (1994). Biological effects of low level exposures to chemicals and radiation. Society of Risk Analysis. Baltimore, MD. December 7.

Calabrese, E.J. (1994). Chemical mixtures - a primer. US EPA. Raleigh, NC. November 7.

Calabrese, E.J. (1994). Current soil ingestion estimates. Louisiana State University. New Orleans, LA. November 2.

Calabrese, E.J. (1994). Children and adult soil ingestion. 9th Conference on Hydrocarbon Contaminated Soils. Amherst, MA. October 20.

Calabrese, E.J. (1994). BELLE as a concept. American College of Toxicology. Williamsburg, VA. October 26.

Calabrese, E.J. (1994). How to derive daily estimates of soil ingestion. U.S. EPA\_Exposure Assessment Group. Washington, DC. June 1.

Calabrese, E.J. (1994). Recent developments in soil ingestion. International Association\_for Lead and Zinc Industries. Chapel Hill, NC. May 26.

Calabrese, E.J. (1994). Biological effects of low level exposures (BELLE). American Occupational Health Conference. Chicago, IL. April 21.

Calabrese, E.J. (1994). Discussion of the key risk assessment issues. Symposium on Synthetic Vitreous Fibers: Scientific and Public Policy Issues. ISRTP. Arlington, VA. March 2-3.

Calabrese, E.J., and Mehendale, H.M. (1994). Cellular repair processes-the role of tissue repair as an adaptive strategy: why low doses are often non-toxic and why high doses can be fatal. Society of Toxicology 33rd Annual Meeting. Dallas, TX. March 1994.

Calabrese, E.J. (1994). Discussion of the key public policy issues and discussion of issues identified and recommendations made. Symposium on Synthetic Vitreous Fibers: Scientific and Public Policy Issues. ISRTP. Arlington, VA. March 2-3.

Calabrese, E.J. (1994). Chair session on unusual dose-response curves and implications for risk

assessment. Society of Toxicology. Dallas, TX. March 17.

Calabrese, E.J. (1994). Cellular repair processes--the role of tissue repair as an adaptive strategy: why low doses are often non-toxic and why high doses can be fatal. Society of Toxicology Annual Meeting, Poster Discussion Session: Unusual Dose-Response Relationships: Mechanisms and Implications for Risk Assessment. Dallas, TX. March 17.

Calabrese, E.J. (1994). Session Chair. Unusual shaped dose-response curves. Society of Toxicology Annual Meeting, Poster Discussion Session: Unusual Dose-Response Relationships: Mechanisms and Implications for Risk Assessment. Dallas, TX. March 17.

Calabrese, E.J. (1994). A single exposure to certain chemical carcinogens can cause cancer: documentation, limitations and implications for risk assessment. US EPA\_Environmental Criteria and Assessment Office Seminar. Cincinnati, OH. March 30.

Calabrese, E.J. (1994). Single exposure carcinogens. Massachusetts Attorney's General. Boston, MA. January 13.

### <u> 1993</u>

Calabrese, E.J. (1993). The use of in vitro studies in the pursuit of improved animal extrapolation. World Congress on Alternative and Animal Use in the Life Sciences. Baltimore, MD. November, 14-19.

Calabrese, E.J. (1993). Soil ingestion estimates. ERM Corporation. Cambridge, MA. September 27.

Calabrese, E.J. (1993). How valid are EPA's soil ingestion estimates. 8th Annual Soil Contamination Conference. Amherst, MA. September 23.

Calabrese, E.J. (1993). Soil ingestion studies reviewed. Amer. Indust. Health Council. Amherst, MA. September 22.

Calabrese, E.J. (1993). G2 hepatocytes in CCl<sub>4</sub> toxicity. Annual Society of Toxicology. New Orleans, LA.

Calabrese, E.J. (1993). Hepatic ODC activity in fish models. Annual Society <u>of</u> Toxicology. New Orleans, LA.

Calabrese, E.J. (1993). Supercarcinogens. National Center for Toxicological Research (NCTR). Jefferson, Arkansas. September 16.

Calabrese, E.J. (1993). Lead as a mitogen: Effects on CCl<sub>4</sub> hepatotoxicity. NCTR. Jefferson, Arkansas. September 16.

Calabrese, E.J. (1993). G<sub>2</sub> hepatocytes: A new hepatic cellular triage system in response to toxic agents. NCTR. Jefferson, Arkansas. September 16.

Calabrese, E.J. Single exposure carcinogens. (1993). New Jersey Medical School. Newark, NJ. March 3.

Calabrese, E.J. (1993). Toxicological Risk Assessment of DIMP. Colorado Water Quality Control Commission. Denver, CO. March, 1993.

### <u>1992</u>

Calabrese, E.J., Leonard, D.A., Baldwin, L.A., Kostecki, P.T. (1992). Ornithine decarboxylase (ODC) activity in the liver of individual medaka (*Oryzias Latipes*). SETAC 13th Annual Meeting. Cincinnati, OH. November 8-12.

Calabrese, E.J., Leonard, D.A., and Baldwin, L.A., (1992). Activated G-2 hepatocytes: A cellular triage system effective against hepatotoxins. SETAC 13th Annual Meeting. Cincinnati, OH. November 8-12.

Bell, C.E., Baldwin, L.A., Kostecki, P.T., and Calabrese, E.J. (1992). Comparative response of rainbow trout and rat to the liver mitogen, lead. SETAC 13th Annual\_Meeting. Cincinnati, OH. November 8-12.

Calabrese, E.J., Leonard, D.A., and Baldwin, L.A. (1992). Potentiation of CCl4-induced hepatotoxicity by blood drawing. Presented at the SETAC 13th Annual Meeting, November 8-12, Cincinnati, OH.

Calabrese, E.J., Leonard, D.A. and Baldwin, L.A. (1992). Hepatic ornithine decarboxylase (ODC) activity in individual medaka (Oryzias latipes). Annual meeting of the American College of Toxicology, San Francisco, CA. October, 1992.

Calabrese, E.J., Leonard, D.A. and Baldwin, L.A. (1992). Reduction in CCl<sub>4</sub>-induced hepatotoxicity by prior treatment with diatomaceous earth. Annual meeting of the American College of Toxicology, San Francisco, CA. October, 1992.

Calabrese, E.J., Leonard, D.A. and Baldwin, L.A. (1992). Reduction in hepatotoxicity by repeated injections of DMN at doses exceeding the MTD. Annual meeting of the American College of Toxicology, San Francisco, CA. October, 1992.

Calabrese, Leonard, D.A. and Baldwin, L.A. (1992). Activated G2 hepatocytes: A cellular triage system effective against hepatotoxins. Annual meeting of the American College of Toxicology, San Francisco, CA. October, 1992.

Calabrese, E.J. (1992). Animal Extrapolation: Future issues. Pfizer, Inc. Groton, CT. September 3, 1992.

Calabrese, E.J. (1992). Chairperson and introductory comments to session on ecological risk assessment. Seventh Annual Hydrocarbon Contaminated Soil Conference, University of Massachusetts, Amherst, MA.

Calabrese, E.J. (1992). Uncertainty factors in ecological risk assessment. Seventh Annual Hydrocarbon Contaminated Soil Conference, University of Massachusetts, Amherst, MA.

Calabrese, E.J. (1992). Effects of peroxisome proliferators on trout and Medaka. U.S. Army Research and Development Lab Annual Research Symposium. Frederick, MD. April 23, 1992.

Calabrese, E.J. (1992). Single exposure carcinogens. Joint EPA, NIEHS Seminar, Research Triangle Park, NC. April 14, 1992.

Calabrese, E.J. (1992). The interdependence of some uncertainty factors: Implications for risk assessment. Conference on New Issues in Occupational Health, Duke University. April 13, 1992.

Calabrese, E.J. (1992). Soil ingestion. Health and Welfare Canada. Toronto, Canada. March 24, 1992.

Calabrese, E.J. (1992). Differentiating soil vs dust ingestion. Third Annual Hydrocarbon Conference. Long Beach, CA. March 12, 1992.

Calabrese, E.J. (1992). Can a single exposure to a chemical carcinogen cause cancer. 3M Corporation, Minneapolis, MN. January 20, 1992.

Calabrese, E.J. (1992). Soil Ingestion in Children. 3M Corporation. Minneapolis, MN. January 20, 1992.

Calabrese, E.J. (1992). Multiple chemical sensitivities. 3M Corporation. Minneapolis, MN. January 20, 1992.

Calabrese, E.J. (1992). Current lead ingestion estimates. Presented at ENSOR Corp., Boston, MA. January 15, 1992.

Calabrese, E.J. (1992). What do we know about soil ingestion? Ensor Corp., Cambridge, MA. January 10, 1992.

#### <u>1991</u>

Calabrese, E.J. and Kostecki, P. (1991). Soil contaminant research priorities for the 1990's. Department of Engineering, University of Massachusetts. November 23, 1991.

Stewart, J.H., Hosmer, D.W., and Calabrese, E.J. (1991). Estimation and use of the TD50 with

the median effect equation in cancer quantitative risk assessment. Society for Risk Analysis. McLean VA. November 16, 1991.

Stewart, J.H., Hosmer, D.W., and Calabrese, E.J. (1991). The median effect equation; its biological plausibility as a model for cancer quantitative risk assessment. Society for Risk Analysis. McLean VA. November 16, 1991.

Calabrese, E.J. (1991). A single dose carcinogens. Health Effects Institute. Cambridge, MA. Oct., 30, 1991.

Calabrese, E.J. (1991). Single doses of carcinogens and cancer risk. Presented at U.S. EPA. Duluth, MN. October 24, 1991.

Calabrese, E.J. (1991). The effects of peroxisome proliferators and mitogens on fish. U.S. EPA. Duluth, MN. October 23, 1991.

Calabrese, E.J., and Stanek, E.J. (1991). Workshop on estimating how much soil children ingest. Presented at the 6th Annual Hydrocarbon Conference. Amherst, MA. September 24, 1991.

Calabrese, E.J. (1991). Soil ingestion estimates: An update presented to the International Lead and Zinc Research Institute. Research Triangle Park, NC. September 9, 1991.

Calabrese, E.J. (1991). A large number of carcinogens can cause cancer with a single dose. ATSDR Guest Seminar. September 6, 1991.

Calabrese, E.J. (1991). How reliable are soil ingestion estimates? ATSDR Guest Seminar. September 6, 1991.

Calabrese, E.J., and Kostecki, P.T. (1991). An update on activities of the council for health and environmental safety of soil (CHESS). ATSDR Guest Seminar. September 6, 1991.

Calabrese, E.J. (1991). Risk communication and public skepticism. U.S. Forest Service, sponsored Malathion Workshop. Arlington, VA. August 27, 1991.

Calabrese, E.J. (1991). Pharmacodynamics/pharmacokinetics of malathion: A discussion of risk assessment models and animal data extrapolation including physiologically-based models in evaluation of malathion human toxicity. U.S. Forest Service sponsored Malathion Workshop. Arlington, VA. August 26, 1991.

Bell, C.E., Kostecki, P.T., and Calabrese, E.J. (1991). Role of risk assessment in state regulatory programs for contaminated soils. Risk-based standards workshop. U.S. Department of Energy. Baltimore, MD. July 9-10, 1991.

Calabrese, E.J. and Stanek, E.J. (1991). Qualitative and quantitative evidence of soil ingestion.

Presented at the 15th annual army environmental R & D Symposium. Williamsbury, VA. June 25, 1991.

Calabrese, E.J. (1991). The role pharmacokinetics in facilitating interspecies extrapolation. 7th International Symposium on Radiopharmaceutics. Boston, MA. June 6, 1991.

Calabrese, E.J. (1991). Current issues in risk assessment. Presented at the WHO sponsored course on Toxicology and Risk Assessment. Ottawa, Canada. May 22, 1991.

Calabrese, E.J. (1991). Single exposure carcinogens. Guest seminar for Health and Welfare Canada. Ottawa, Canada. May 22, 1991.

Donohue, M., Baldwin, L., Kostecki, P. and Calabrese, E.J. (1991). The effects of peroxisome proliferators on primary trout hepatocytes. Conference of the American Association on Cancer Research, Houston, Texas. May, 1991.

Scarano, L., Baldwin, L., Kostecki, P., and Calabrese, E.J. (1991). Interactions of peroxisome proliferators in rat. American Association on Cancer Research. Houston, Texas. May, 1991.

Calabrese, E.J. (1991). Short term exposures to potent carcinogens. Invited presentation to the Committee on Toxicology, National Academy of Sciences, Washington, DC. May 15, 1991.

Donahue, M. and Calabrese, E.J. (1991). Peroxisome proliferation in trout. Proceedings of the conference on Regulating Drinking Water in the 1990's. University of Massachusetts, Amherst. April 4, 1990.

Calabrese, E.J. (1991). Uncertainty factors in risk assessment. Presented at Conference on Regulating Drinking Water in the 1990's. University of Massachusetts, Amherst. April 3, 1991.

Gilbert, C.E. and Calabrese, E.J. (1991). Public health risks from SOCs in drinking water. Presented at the Conference on Drinking Water in the 1990's. University of Massachusetts, Amherst. April 3, 1991.

Wysynski, A. and Calabrese, E.J. (1991). Peroxisome proliferators and public health concerns. Presented at the Conference on Regulating Drinking Water in the 1990's. University of Massachusetts. April 3, 1991.

Witko, J. and Calabrese, E.J. (1991). Regulating compliances and SOCs. Proceedings of the conference on Regulating Drinking Water in the 1990's. University of Massachusetts, Amherst. April 3, 1991.

Wysynski, A., Baldwin, L. Kostecki, P. and Calabrese, E.J. (1991). Peroxisomal proliferators: Omega-3 fatty acids, clofibrate and DEHP: the interactive potential. Society of Toxicology. Dallas, February 27, 1991.

Calabrese, E.J. (1991). Chemical carcinogens causing cancer with a single exposure. Implications for risk assessment. University of Oklahoma, School of Public Health. Oklahoma City, Oklahoma. February 27, 1991.

Gilbert, C. and Calabrese, E.J. (1991). Hyperbilirubinemia. A new animal model. Society of Toxicology. Dallas, TX. February, 26, 1991.

Kenyon, E. and Calabrese, E.J. (1991). Interspecies differences in enterohepatic circulation. Society of Toxicology. Dallas, TX. February, 26.

Langlois, C. and Calabrese, E.J. (1991). The interaction of copper, nitrite and chlorite on red blood cells. Presented at the Chemical Oxidation: Technology for the 1990's Conference. Nashville, TN. February 23, 1991.

Calabrese, E.J. (1991). New challenges for risk assessment: What to do about carcinogens causing cancer with a single dose. University of Michigan, School of Public Health. Ann Arbor, MI. February 21, 1991.

#### <u>1990</u>

Wysynski, A., Baldwin, L., Leonard, D., and Calabrese, E. (1990). The interaction of omega-3 fatty acids with peroxisome proliferators in the rat model. Presented at the New England SOT Regional meeting. Boston, MA. December, 1990.

Kostecki, P. and Calabrese, E.J. (1990). The relevance of CHESS to the oil industry. Presented at an API sponsored meeting in Cleveland, OH. November 20, 1990.

Bell, C.E., P.T. Kostecki and E.J. Calabrese. (1990). UST Cleanup: Concepts, Problems and Alternatives. Paul Smiths College. Paul Smiths, NY. November 13, 1990.

Scarano, L., Baldwin, L., Calabrese, E.J. and Kostecki, P. (1990). Lack of peroxisomal proliferation in Japanese Medaka exposed to DEHP on 2,4-D. Presented at the Society for Environmental Toxicology and Chemistry. Washington, DC. November, 12, 1990.

Yang, J., Calabrese, E.J., Kostecki, P. and Baldwin, L. (1990). Effect of rodent hepatic peroxisomal proliferation on Rainbow Trout. Presented at the Society for Environmental Toxicology and Chemistry. Washington, DC. November 12, 1990.

Calabrese, E.J. (1990). Estimating soil ingestion in children: methodological issues. National Conference on Minority Issues in Environmental Health. Atlanta, GA.

Gilbert, C. and Calabrese, E.J. (1990). Development of a neonatal hyperbilirubinemia rat model for toxicity studies. Presented at the Conference Similarities and Differences Between Children and Adults: Implications for Risk Assessment. Hunt Valley, MN. November 7, 1990.

Gilbert, C. and Calabrese, E.J. (1990). The development of methemoglobin reductase in the neonatal rat. Presented at the Conference on Similarities and Differences Between Children and Adults: Implications for Risk Assessment. Hunt Valley, MN. November 7, 1990.

Kostecki, P., and Calabrese, E.J. (1990). CHESS: An Review of Program. Presented at the 5th Annual Hydrocarbon Contaminated Soil Conference. University of Massachusetts, Amherst. September 26, 1990.

Bell, C., Kostecki, P., and Calabrese, E.J. (1990). Survey of State Approaches for Soil Cleanup Levels. Presented at the 5th Annual Hydrocarbon Contaminated Soil Conference. University of Massachusetts, Amherst. September 26, 1990.

Calabrese, E.J., and Stanek, E.J. (1990). Methodological Advances in Estimating Soil Ingestion. EPA sponsored conference on Lead Exposures to Children. Research Triangle Park, NC. September 24, 1990.

Gilbert, C.E., and Calabrese, E.J., (1990). Educating Youth on the Dangers of Childhood Lead Poisoning. Environmental Health Risk Education for Youth: Curricula Concepts, Strategies and Resources. Interagency Task Force on Environmental Cancer and Lung Disease. September 12-14, 1990. Arlington, VA.

Gilbert, C.E., Jones, T., Calabrese, E.J., and Winder, A. (1990). Environmental Curricula Concerning Waste Management. Environmental Health Risk Education for Youth: Curricula Concepts, Strategies and Resources. Interagency Task Force on Environmental Cancer and Lung Disease. September 12-14, 1990. Arlington, VA.

Langlois, C., Leonard, D., and Calabrese, E.J. (1990). Interactions of multiple methemoglobin-forming agents. New England SOT Regional Meeting, Boston. June 1, 1990.

Gilbert, C., and Calabrese, E.J. (1990). Development of a neonatal hyperbilirubinemia model. Maine Biological Symposium, Mt. Dessert Island. May 30, 1990.

Stewart, J., and Calabrese. (1990). The median effect principle in toxicology and risk assessment. Maine Biological Symposium, Mt. Dessert Island. May 30, 1990.

Calabrese, E.J. (1990). A toxicological appraisal drinking water disinfectants and implications for risk assessment. National Conference on Drinking Water and Health, Amherst, MA. April 30, 1990-May 2, 1990.

Gilbert, C., and Calabrese, E.J. (1990). MTBE-a critical evaluation of its toxicological data base. National Conference on Drinking Water and Health, Amherst, MA. April 30, 1990-May 2, 1990.

Langlois, C., Leonard, D., and Calabrese, E.J. (1990). The effects of multiple exposure of the drinking water oxidants, chlorite, nitrite and copper on red blood cells. National Conference on

Drinking Water and Health, Amherst, MA. April 30, 1990-May 2, 1990.

Stewart, J., and Calabrese, E.J. (1990). The application of the median effect principle for assessing risk to drinking water contaminants. National Conference on Drinking Water and Health, Amherst, MA. April 30, 1990-May 2, 1990.

Calabrese, E.J. (1990). Acute toxicities and cancer risks: the problem of single exposures. Presented at the U.S. Environmental Protection Agency, Washington, DC. April 11, 1990.

Calabrese, E.J. (1990). A single exposure to a carcinogen can cause cancer. Presented at the Center for Environmental Toxicology, Michigan State University, East Lansing, MI. April 3, 1990.

Calabrese, E.J. (1990). Single exposures and cancer risks. Presented to the participants of the EPA sponsored workshop on Acute Toxicities. Washington, DC. March 12, 1990.

Bell, C., Kostecki, P. and Calabrese, E.J. (1990). Petroleum contaminated soils survey: clean-up levels for western states. Presented at conference on Hydrocarbon Contaminated Soils and Groundwater. Newport Beach, CA. February 19-22, 1990.

Kostecki, P. and Calabrese, E.J. (1990). Council for Health and Environmental Safety of Soils-CHESS. Presented at conference on Hydrocarbon Contaminated Soils and Groundwater. Newport Beach, CA. February 19-22, 1990.

Edmisten, G., Calabrese, E.J. and Harris, P. (1990). Health risks associated with the remediation of contaminated soils. Presented at conference on Hydrocarbon Contaminated Soils and Groundwater. Newport Beach, CA. February 19-22, 1990.

Calabrese, E. (1990). Methodological approaches for assessing soil ingestion. Presented at conference on Hydrocarbon Contaminated Soils and Groundwater. Newport Beach, CA. February 19-22, 1990.

Calabrese, E.J. (1990). Methodological approaches to assessing chemical interactions of toxicological significance. Presented at the Aberdeen Proving Ground, Maryland, Department of Defense. June 24, 1990.

Calabrese, E.J. (1990). Soil ingestion in children. Environ Corp., Princeton, NJ. January 26, 1990.

### <u>1989</u>

Calabrese, E.J. (1989). Interspecies variations in enterohepatic recirculation of PCBs and the implications for cancer risk. General Electric Sponsored Research Seminar. Arlington, VA. November 29, 1989.

Kostecki, E.J. (1989). CHESS: Its role in assessing soil cleanup levels. Dept. of Defense Environ. Conference. Williamsburg, VA. (November 16, 1989.

Calabrese, E.J. (1989). Can a single exposure to a carcinogen cause cancer. Presented at the Chemical Defense Research Conference. Auberdeen, MD. November 14, 1989.

Bell, C., Kostecki, P. and Calabrese, E.J. (1989). Survey of state regulatory programs for soil clean-up. EPA sponsored conference on state regulatory programs for underground storage tanks. Alberque, New Mexico. November 11, 1989.

Calabrese, E.J. (1989). The health effects of DIMP. Colorado Department of Health. Denver, CO. November 8, 1989.

Calabrese, E.J. (1989). One exposure study and chemical carcinogenesis. Seminar, Department of Environmental Engineering, University of Massachusetts, Amherst, MA. October 13, 1989.

Ochs, J., Calabrese, E.J. et al. (1989). The joint exposure of two peroxisome proliferation agents on hepatic fatty acid oxidase activity in mice. Presented at New England Regional Chapter of the Society of toxicology. Sturbridge, MA. October 20, 1989.

Scarano, G., Calabrese, E.J. et al. (1989). The capacity of Rainbow Trout to display hepatic peroxisome proliferation. Presented at New England Regional Chapter of the Society of toxicology. Sturbridge, MA. October 20, 1989.

Nolan, K. and Calabrese, E.J. (1989). The effect of vitamin C on intestinal, cecal, and urinary B-glucuronidase activity in the rodent. Presented at New England Regional Chapter of the Society of toxicology. Sturbridge, MA. October 20, 1989.

Calabrese, E.J. and Sonich-Mullin C. (1989). Genetic factors and susceptibility to occupational illness. Presented at WHO Conference, Drefeld Federal Republic of Germany. October 17-20, 1989.

Calabrese, E.J. et al. (1989). Results of a pilot study to estimate soil ingestion in adults. In: National Conference on Petroleum Contaminated Soils Conference. University of Massachusetts, Amherst, MA. September 25-29, 1989.

Stanek, E.J., Calabrese, E.J. et al. (1989). Improved estimates of soil ingestion in children. In: National Conference on Petroleum Contaminated Soils Conference. University of Massachusetts, Amherst, MA. September 25-29, 1989.

Bell, C., Kostecki, P. and Calabrese, E.J. (1989). National survey of regulatory approaches to remediation of petroleum contaminated soils. In: National Conference on Petroleum Contaminated Soils Conference. University of Massachusetts, Amherst, MA. September 25-29, 1989.

Gilbert, C. and Calabrese, E.J. (1989). Methodological approaches for selecting indicator compounds for home heat fuel number 2. In: National Conference on Petroleum Contaminated Soils Conference. University of Massachusetts, Amherst, MA. September 25-29, 1989.

Calabrese, E.J. (1989). Toxicological Risk Assessment of DIMP. Colorado Water Quality Control Commission. Denver, CO. September, 1989.

Calabrese, E.J. (1989). Peroxisome proliferation in fish. Annual Aquatic Toxicology Research meeting. Department of Defense. Ft. Detrick, Maryland. August, 9, 1989.

Calabrese, E.J. (1989). Toxicological Risk Assessment of DIMP. Colorado Water Quality Control Commission. Denver, CO. July,1989.

Calabrese, E.J. (1989). The role of toxicology in assessing risks for naturally occurring toxins in the food supply. Food and Nutrition Board of the National Academy of Sciences. Falmouth, MA. July, 23, 1989.

Bell, C., Kostecki, P. and Calabrese, E.J. (1989). State approaches for the clean-up of petroleum contaminated soil. Maine Biological Science Conference, Portland, Maine. June 3, 1987.

Calabrese, E.J., and Kostecki, P. (1989). Biomarkers for toxicology studies in fish. Procter and Gamble, Cincinnati. June 12, 1989.

Kostecki, P., and Calabrese, P. (1989). International approaches for assessing health risks from contaminated soils. National Public Health Association Conference, San Antonio, Texas. June 21, 1989.

Calabrese, E.J. (1989). Peroxisomes proliferation, carcinogenesis, and implications for risk assessment. Annual Conference on Aquatic Toxicology, ASTM, Atlanta, Georgia. April 18, 1989.

Calabrese, E.J. (1989). Single exposures to chemical carcinogens can cause cancer. Agency for Toxic Substances and Disease Registry, Atlanta, Georgia. April, 1989.

Calabrese, E.J. (1989). Assessing cancer risk when a single exposure to a carcinogen causes cancer. Amer-Indus. Health Council, Washington, DC. April, 1989.

Calabrese, E.J. (1989). Predicting toxicological responses from multiple chemical exposures. University of Illinois, Champaigne/Urbana, Illinois. April 5, 1989.

Calabrese, E.J. (1989). Less than lifetime exposure to carcinogens and risk assessment methodologies. Dartmouth Medical School, Hanover, NH.

Calabrese, E.J. (1989). Public health concerns of medical waste disposal. Sponsored by the Rockefeller Institute of Government. New York, NY. March 9, 1989.

Calabrese, E.J. (1989). Genetic susceptibility to occupationally-induced disease. Regional chapter of the American Industrial Hygiene Association (Conn. and NY). Stanford, CT. February 14, 1989.

Kostecki, E.J., and Calabrese, E.J. (1989). Leaking underground storage tanks and public health concerns. Annual New England Water Pollution Control Assoc., Boston, MA. (Jan. 23, 1989).

Calabrese, E.J. (1989). The role of genetic screening in the prevention of occupationally-induced disease. Johns Hopkins University, Baltimore, Maryland. January 9, 1989.

### <u>1988</u>

Bell, C.E., Calabrese, E.J., Kostecki, P.T. (1988). State of research and regulatory approach of state agencies for cleanup of petroleum contaminated soils. Presented at the First Annual Real Estate Site Assessment Conference, Resource Education Institute. Sturbridge, Massachusetts. December 1988.

Kenyon, E., and Calabrese, E.J. (1988). Inter-species differences in gastrointestinal B-glucuronidase activity. New England Mutagen Society, Kingston, Rhode Island. October 1988.

Kostecki, P., and Calabrese, E.J. (1988). Peroxisome proliferation in fish. New England Mutagen Society. Kingston, Rhode Island. October 1988.

Yang, J., Calabrese, E.J., and Kostecki, P. (1988). Peroxisome proliferation in the rainbow trout. New England Chapter of the Society of Toxicology. Boston, Massachusetts. October 1988.

Bell, C.E., Kostecki, P. and Calabrese, E.J. (1988). National survey of state approaches for regulating petroleum contaminated soil. Third Conference on Environmental and Public Health Effects of Soils Contaminated with Petroleum. Amherst, MA. September 19-21, 1988.

Calabrese, E.J. (1988). Determining the health hazard associated with complex mixtures such a petroleum products. Third Conference on Environmental and Public Health Effects of Soils Contaminated with Petroleum. Amherst, MA. September 19-21, 1988.

Calabrese, E.J. et al. (1988). Soil ingestion in children. Third Conference on Environmental and Public Health Effects of Soils Contaminated with Petroleum. Amherst, MA. September 19-21, 1988.

Kostecki, P. and Calabrese, E.J. (1988). Council for the Health and Environmental Safety of Soils (CHESS). Third Conference on Environmental and Public Health Effects of Soils Contaminated with Petroleum. Amherst, MA. September 19-21, 1988.

Calabrese, E.J. (1988). Soil ingestion and implications for risk assessment. Annual Risk Assessment Conference sponsored by the Center for Energy and Environmental Management. Alexandria, Virginia.

Calabrese, E.J. (1988). Peroxisome proliferation in fish. U.S. Army Biomedical Corp. Annual Meeting. Fort Detrick, MD. August 23, 1988.

Calabrese, E.J. (1988). Air toxic - a new methodology. Chemical Manufacturers Association sponsored conference on Community Exposures. Boston, MA. August 17, 1988.

Calabrese, E.J. (1988). The problem of soil ingestion by children. Annual EPA Risk Assessment Conference. Philadelphia, PA. June 27, 1988.

Calabrese, E.J. (1988). Exposure quantification: soil ingestion. Future Technologies Conference. Clark Univ./WPI. Worcester, MA. June 15, 1988.

Calabrese, E.J. (1988). Recent epidemiological evidence of soil ingestion by children. Univ. Michigan, Ann Arbor, MI. June 13, 1988.

Calabrese, E.J. (1988). Soil ingestion by children. American Industrial Health Assoc. Washington, DC. June 9, 1988.

Calabrese, E.J. (1988). Principles of animal extrapolation and their application. Amer. Chem. Society. Short Course on Toxicology. Clearwater, Florida. June 3, 1988.

Calabrese, E.J. (1988). Estimating Soil Ingestion in Children. Agency for Toxic Substances and Disease Prevention. Atlanta, Georgia. June 2, 1988.

Coler, R., Kostecki, P. and Calabrese, E.J. (1988). Assessment of the effect of chlorination practices on selected aquatic communities. Northeast Regional Environ. Conference. Amherst, MA. May 28, 1988.

Kostecki, P., Calabrese, E.J. and Coler, R. (1988). The aquatic toxicology program of the Massachusetts Fisheries and Wildlife Department. Regional Environ. Conference. Amherst, MA. May 28, 1988.

Calabrese, E.J. (1988). Municipal solid waste disposal - Introductory Remarks. Conference sponsored by the Northeast Regional Environmental Public Health Center. April 19, 1988. Amherst, MA.

Calabrese, E.J. (1988). Estimating soil ingestion in children. EPA Special Colliquium.

Washington, DC. March 23, 1988.

Calabrese, E.J. (1988). Sodium: A Changing Public Health Perspective? Annual Meeting of the American R. Water Association. Reno, NV. March 19, 1988.

Kostecki, P.K. and Calabrese, E.J. (1988). Developing a consistent approach for assessing public health risks from contaminated soil. American Conference of Governmental Industrial Hygienist sponsored conference, at Arlington, VA. March 1, 1988.

Gilbert, C.E. and Calabrese, E.J. (1988). Regional approaches for risk management. National Conference of the Mosquito Control Association. Denver, CO. February 23, 1988.

Calabrese, E.J. (1988). Soil ingestion in children: Methodological approaches. Mobil Oil Company. Princeton, NJ. January 7, 1988.

## <u>1987</u>

Calabrese, E.J. (1987). Recent advances in animal extrapolation. Presented at the Agency for Toxic Substances and Disease Registry. Atlanta, GA. December 4, 1987.

Calabrese, E.J. (1987). Estimates of soil ingestion in children: A proposed methodology. U.S. Public Health Service Conference. Hyannis, MA. December 1, 1987.

Calabrese, E.J. et al. (1987). Reproductive health outcome study at a DEC facility. National Conference on Semi-Conductor Health. Cincinnati, OH. Oct. 21, 1987.

Calabrese, E.J. (1987). A model air toxins program. Rohm & Haas, Inc. Phil. Oct. 15, 1987.

Calabrese, E.J. (1987). Introductory and chairman remarks on session on inhalation toxicology at conference on Animal Extrapolation. Duke University, N.C. Oct. 9, 1987.

Calabrese, E.J. (1987). Report on the health assessment of drinking treatment technologies. Environmental Scientific Advisory Board (SAB), Washington, D.C. Oct. 8, 1987.

Calabrese, E.J. (1987). Reproductive hazards in the semi-conductor industry. National Safety Council Annual Meeting, Chicago. (Oct. 5, 1987).

Kostecki, P., Horton, H.M. and Calabrese, E.J. (1987). Comparison of models to protect health effects from soil contamination. Second Conference on Environmental and Public Health Effects of Petroleum Contaminated Soils. Amherst, MA. September 30, 1987.

Calabrese, E.J. (1987). Epidemiologic study to estimate soil ingestion in children. Second Conference on Environmental and Public Health Effects of Petroleum Contaminated Soils. Amherst, MA. September 29, 1987.

Calabrese, E.J. (1987). Predictive Toxicology. American Chemical Society Meeting. Cincinnati. June 18.

Calabrese, E.J. (1987). The toxicologist and risk communication. Conference on Environmental Risk Communication. Amherst, Massachusetts. June 9.

Yang, J. and Calabrese, E.J. (1987). Studies on the in vitro capacity of ethanol to enhance sodium nitrite and l-naphthol-induced oxidant stress in human and sheep erythrocytes. Biomedical Science Conference, Bowdoin College, Maine. June 4.

Tilli, F. and Calabrese, E.J. (1987). The effect of ethanol on the response of normal human erythrocytes to 12 oxidant stressors. Biomedical Science Conference. Bowdoin College, Maine. June 4.

Kenyon, E.M., Young, J., and Calabrese, E.J. (1987). Inhibition of B-glucuronidase in human urine by ascorbic acid. Biomedical Science Conference. Bowdoin College, Maine. June 3.

Kenyon, E.M. and Calabrese, E.J. (1987). B-glucuronidation activity in the small intestine of mice, rats and rabbits. Biomedical Science Conference. Bowdoin College, Maine. June 3.

Calabrese, E.J. (1987). Public health concerns and high technology. Conference on Technology and Public Health, Worcester, Massachusetts. May 28.

Calabrese, E.J. (1987). Conference Summary on Ozone Toxicology. Ozone Risk Communication Conference. Amherst, Massachusetts. April 22.

Fleischer, E. and Calabrese, E.J. (1987). Soil Venting and Public Health Risks. Soil Remediation/Technology Conference. Sturbridge, Massachusetts. April 6.

Kostecki, P.T. and Calabrese, E.J. (1987). Petroleum Contamination of Soils - State of the art for environmental and public health assessment. Soil Remediation/Technology Conference. Sturbridge, Massachusetts. April 6.

Calabrese, E.J. (1987). Toxicology and Drinking Water Regulations. N.E. AWWA Meeting. Windsor Locks, Connecticut. March 19.

Calabrese, E.J. (1987). Principles of Animal Extrapolation U.S.D.A. Toxicology and Risk Assessment Conference. Atlanta Georgia. February 11.

Calabrese, E.J. (1987). Asbestos in Play Sand? Introductory remarks to conference. Conference on Asbestos in Play Sand. Northeast Regional Environmental Public Health Center, University of Massachusetts, Amherst. February 10.

Calabrese, E.J., Pastides, H. and Hosmer, D. (1987). Health surveillance assessment in the semi conductor industry. Windsor Locks, Connecticut. January 23.

Calabrese, E.J. (1987). Health concerns from groundwater contaminants. Third National Drinking Water Conference. Philadelphia, Pennsylvania. January 13, 1987.

### <u>1986</u>

Calabrese, E.J. (1986). Predictive Toxicology. U.S. Army, Fort Detrick, Maryland. December 14, 1986.

Calabrese, E.J. (1986). Advances in animal extrapolation. Regional Meeting of the Halogenated Solvents Industry Alliance Atlanta, Georgia. December 10, 1986.

Kostecki, P. and Calabrese, E.J. (1986). A review of formal and informal soil standards within the U.S. Amer. Soc. of Agronomy. 78th Annual Meeting, New Orleans, Louisiana. December 4, 1986.

Calabrese, E.J. (1986). Regional approaches for addressing environmental health concerns. U.S. Public Health Service Region 1, Annual Conference. Hyannis, Massachusetts. December 3, 1986.

Calabrese, E.J. (1986). Chemical interactions in environmental health. American College of Toxicology Annual Meeting. November 17, 1986. Philadelphia, Pennsylvania.

Calabrese, E.J. (1986). Chairman - Session on Drug/Chemical Interactions. American College of Toxicology Annual Meeting. November, 17, 1986.

Calabrese, E.J. (1986). Predictive toxicology; principles and applications. Amer. Chem. Soc. Ann. Meeting. November 14, 1986, Florida.

Kostecki, P.T., Calabrese, E.J. and Garnick, E. (1986). A national census of how petroleum contamination is being assessed. Soc. Environ. Chem. and Tox. November 5, 1986. Washington, D.C.

Calabrese, E.J. (1986). Principles of animal extrapolation and their application for pesticide risk assessment. Soc. Environ. Chem. and Tox. November 5, 1986, Washington, DC.

Kostecki, P.T. and Calabrese, E.J. (1986). The importance of environmental factors on the reproductive success of smelt (Osmerus mordax). Soc. Environ. Chem. Tox. November 4, 1986, Washington, D.C.

Calabrese, E.J. (1986). The effect of vitamin C supplementation of the body burden of heavy metals. Third International Conference on Vitamin C. October 6, 1986. New York.

Calabrese, E.J. (1986). Inhibitor of urinary B-glucuronidase activity in human subjects by vitamin C supplementation. Third International Conference on Vitamin C. October 6, 1986.

New York.

Calabrese, E.J. (1986). The toxicological basis for establishing National Primary Drinking Water Standards. Conference on the Safe Drinking Water Act. September, 23, 1986. Amherst, Massachusetts.

Calabrese, E.J. (1986). Regional approaches for environmental public health policy. Annual meeting of the New England Interstate Water Commission, Kennebunkport, Maine. September 9, 1986.

Calabrese, E.J. (1986). Assessing the effects of toxic substances. The Samuel Johnson Memorial Lecture. Connecticut Agricultural Research Station. August 6, 1986. New Haven, Connecticut.

Calabrese, E.J. (1986). Inhibition of B-glucuronidase activity and susceptibility to cancer. Proctor and Gamble. June 30, 1986. Cincinnati, Ohio.

Calabrese, E.J. (1986). Role of academia in reducing exposure to toxic substances. National Environmental Health Association. June 16, 1986. Hartford, Connecticut.

Calabrese, E.J. (1986). Regional approaches for assessing environmental contamination. New England Laboratory Directors Quarterly Meeting. June 3, 1986. Oqunquit, Maine.

Calabrese, E.J., and McCarthy, M.E. (1986). The occurrence of trace-metal induced hormesis. 20th Annual Conference on Trace Substances in Environmental Health June 2-5, 1986. University of Missouri, Columbia.

Calabrese, E.J., and Kostecki, P. (1986). Approaches for assessing the public health significance of soil contaminated with toxic agent. 20th Annual Conference on Trace Substances in Environmental Health. June 2-5, 1986. University of Missouri, Columbia.

Calabrese, E.J. and McCarthy, M.E. (1986). The occurrence of trace-metal induced hormesis. Presented at the Maine Biological and Medical Sciences Symposium. May 29, 1986, Portland, Maine.

Byrne, K., Kostecki, P.T., and Calabrese, E.J. (1986). The importance of environmental factors on reproductive success of smelt. Presented at the Maine Biological and Medical Sciences Symposium. May 29, 1986, Portland, Maine.

Kostecki, P., Calabrese, E.J., and Garnick, E. (1986). A national survey of regulatory approaches for addressing soil contaminated with petroleum products. Presented at the Maine Biological and Medical Science Symposium. May 28, 1986. Portland, Maine.

Calabrese, E.J. (1986). Animal extrapolation and the problem of human interindividual variation. Presented to the New England Mutagenesis Society. May 16, 1986. Amherst,

Massachusetts.

Calabrese, E.J. (1986). Age and susceptibility to pollutant induced toxicity. National Academy of Science. May 15, 1986. Washington, D.C.

Calabrese, E.J. (1986). Predicting human health risks from exposure to contaminated soil. Presented at the EPA-sponsored Conference. May 8, 1986, Andover, Massachusetts.

Calabrese, E.J. (1986). Animal extrapolation and its regulatory implications. Presented to the Air Pollution Control Association. April 22, 1986, Providence, Rhode Island.

Calabrese, E.J. (1986). Principles of inter-, intra-species extrapolation. Presented to the Society of Risk Analysis. April 9, 1986, Washington, D.C.

Calabrese, E.J. (1986). The effects of toxic substances on males and females. Annual Digital Equipment Corporation Conference. April, 1986. Merrimack, New Hampshire.

Calabrese, E.J. (1986). Risk assessment methodologies: Strengths and limitations. Annual Digital Equipment Corporation Conference. April, 1986. Merrimack, New Hampshire.

Canada, A.T., Chow, C.K., and Calabrese, E.J. (1986). Effect of O3 on serum concentrations of vitamins A, C and E in mature female rabbits. Presented to the Annual Meeting of the Society of Toxicology. March 1986, New Orleans, Louisiana.

Calabrese, E.J. (1986). How relevant is the rat? presented to the American Industrial Hygiene Association. Meridan, Connecticut.

Calabrese, E.J. (1986). Interspecies differences in xenobiotic metabolism. Presented to the American Pharmaceutical Association. March 18, 1986, San Francisco, California.

Calabrese, E.J. (1986). New approaches for animal extrapolation. Presented to the Electric Power Research Institute. March 17, 1986, Palo Alto, California.

Calabrese, E.J. (1986). Regional strategies for assessing risk from environmental toxins. Presented to the State of Connecticut's Department of Environmental Analysis. January 11, 1986, New Haven, Connecticut.

Calabrese, E.J. (1986). Animal extrapolation and the challenge of human heterogeneity. Presented to an FDA-sponsored conference. January 6, 1986, Bethesda, Maryland.

## <u>1985</u>

Calabrese, E.J. (1985). Regional approaches for addressing environmental problems. Presented to the CDC Annual Region 1 Conference. December 1985, Hyannis, Massachusetts.

Kostecki, P.T. and Calabrese, E.J. (1985). Environmental and public health effects of petroleum contaminated soils. Presented at the Annual Meeting of the American College of Toxicology. November 1985, Amherst, Massachusetts.

Kostecki, P.T. and Calabrese, E.J. (1985). Problems associated with petroleum contaminated soils. Presented at the Annual Meeting of the Society of Environmental Toxicology and Chemistry. November 1985, St. Louis, Missouri.

Kostecki, P.T. and Calabrese, E.J. (1985). Environmental and public health effects of petroleum contaminated soils: Towards a better understanding. Presented at the Annual Meeting of the American Public Health Association. November 1985, Washington, D.C.

Calabrese, E.J. (1985). New approaches to risk assessment and risk communication. Presented at Dow Chemical Company. November 1985, Midland, Michigan.

Calabrese, E.J. (1985). Issues in animal extrapolation: How relevant is the rat? Presented to the Regional Council. November 1985, Philadelphia, Pennsylvania.

Calabrese, E.J. (1985). Uncertainty factors and interindividual variation. Presented to the Society of Environmental Toxicology and Chemistry. October 5, 1985, Alexandria, Virginia.

Calabrese, E.J., Kostecki, P.T., and Leonard, D.A. (1985). Public health implications of soils contaminated with petroleum products. Presented at the Conference on Environmental and Public Health Effects of Petroleum Contaminated Soils. October 1985, Amherst, Massachusetts.

Kostecki, P.T. and Calabrese, E.J. (1985). Regulatory policies for petroleum contaminated soils -- how states have traditionally dealt with the problem. Presented at the Conference on Environmental and Public Health Effects of Petroleum Contaminated Soils. October 1985, Amherst, Massachusetts.

Calabrese, E.J., McCarthy, M., and Kenyon, E. (1985). The occurrence of chemical hormesis. Presented at a national conference on Radiation Hormesis. August 14, 1985, Oakland, California.

Kostecki, P.T. and Calabrese, E.J. (1985). Emerging environmental problems -- contaminating soils. Presented to the Edison Electric Institute's Utilities Solid Waste Action Group. August 1985, Boston, Massachusetts.

Canada, A.T., Calabrese, E.J. and Leonard, D.A. (1985). Age-related differences in pentobarbital sleeping time following oxidant stress. Presented at the First International Congress of Biomedical Gerontology, American Aging Association. July 10-11, 1985.

Calabrese, E.J. (1985). New approaches for animal extrapolation. Presented at Proctor and Gamble. June 12, 1985, Cincinnati, Ohio.

Gilbert, C. and Calabrese, E.J. (1985). The health effects of insecticides with particular emphasis on animal extrapolation. Presented at Northeast Regional Meeting of Commissioners of Agriculture. June 12, 1985, Portland, Maine.

Calabrese, E.J. (1985). Health effects and risk assessment. Presented at the Northeastern States Agent Training on Groundwater Protection. June 10, 1985, Chicopee, Massachusetts.

Gilbert, C.E. and Calabrese, E.J. (1985). Animal extrapolation: Principles and problems. Presented at the AAAS Annual Conference. May 30, 1985, Los Angeles, California.

Calabrese, E.J. and Gilbert C.E. (1985). The effect of pollutants in drinking water on human health. Presented at the University of Connecticut May 15, 1985, Storrs, Connecticut.

Calabrese, E.J. (1985). Approaches to risk assessment in environmental health. Presented at the State of Connecticut Science Advisory Board. May 13, 1985, Wallingford, Connecticut.

Calabrese, E.J. (1985). The removal of chloroform from the water to air during the showering process. Presented at the Specialty Conference on Drinking Water and Indoor Air Contamination. April 25, 1985, University of Pittsburgh, Pittsburgh, Pennsylvania.

Calabrese, E.J. (1985). The application of risk assessment analysis to water pollution and groundwater contamination problems. Presented at the 8th Annual Technical Program of the Water Pollution Control Association of Pennsylvania. March 25, 1985, Philadelphia, Pennsylvania.

Gilbert, C.E. and Calabrese, E.J. (1985). Impacts of toxic pollutants on human receptors. Presented at the 8th Annual Technical Program of the Water Pollution Control Association of Pennsylvania. March 24, 1985, Philadelphia, Pennsylvania.

Calabrese, E.J. (1985). The effects of ozone on human high risk groups. Presented at the Conference on Ozone Toxicity. March 7, 1985, Department of Environmental Protection, State of Maine.

Canada, A.T. and Calabrese, E.J. (1985). Ozone-induced inhibition of theophylline metabolism: Effect of age and sex. Presented at the Society of Toxicology Annual Meeting. March 1985, San Diego, California.

Stoddard, A.M. and Calabrese, E.J. (1985). The use of hair lead level as a predictor for blood lead level. Presented to the Biostatistical Society. March 1985, Raleigh, North Carolina.

Calabrese, E.J. (1985). Principles of animal extrapolation. Lecture in a Toxicology Course for the USDA. February 12, 1985, Albuquerque, New Mexico.

<u>1984</u>

Calabrese, E.J. (1984). Vitamin E and air pollution. Presented at Hoffmann-LaRoche. December 1984, Nutley, New Jersey.

Calabrese, E.J. (1984). Inorganic constituents in drinking water and CVD. Presented at the 5th Annual Meeting of the American College of Toxicology. November 29, 1984, Washington, D.C.

Calabrese, E.J. (1984). Approaches to animal extrapolation with particular emphasis on differential susceptibility and sex differences. Presented to the National Academy of Sciences Board on Toxicology. November 28, 1984, Washington, D.C.

Calabrese, E.J. (1984). Allometry -- a useful technique in interspecies extrapolation of animal data. Presented at the 5th Annual Meeting of the American College of Toxicology. November 27, 1984, Washington, D.C.

Sorensen, A.A. and Calabrese, E.J. (1984). The use of schools of public health in solving state health problems: A case study of EDB standards in New England. Presented at the Annual Meeting of the American Public Health Association. November 13, 1984, Anaheim, California.

Calabrese, E.J. (1984). The effects of nutritional supplementation on pollutant toxicity. Presented at Hoffmann-LaRoche. October 17, 1984, New Jersey.

Calabrese, E.J. (1984). Pharmacology and Toxicology: Approaches to Animal Extrapolation. Presented at the University of Connecticut Seminar Series. September 28, 1984.

Gilbert, C. and Calabrese, E.J. (1984). Predictive toxicology. Lecture in American Chemical Society's Course. August 30, 1984, Philadelphia, Pennsylvania.

Calabrese, E.J. (1984). Environmental and occupational toxicology -- General principles. Presented at the Conference <u>Understanding Toxicology and Chemical Risk Assessment</u>. July 26, 1984, Portland, Maine.

Calabrese, E.J. (1984). Establishing of human risk using animal studies. Presented at the Conference <u>Understanding Toxicology and Chemical Risk Assessment</u>. July 26, 1984, Portland, Maine.

Calabrese, E.J. (1984). The influence of genetic status on susceptibility to environmental pollutants -- An overview. Published in abstract booklet of the Conference on Medical Screening and Biological Monitoring for the Effects of Exposure in the Workplace. July 11, 1984, Cincinnati, Ohio.

DiNardi, S.R. and Calabrese, E.J. (1984). Monitoring for chloroform in a highly humid atmosphere. Presented at the Annual Industrial Hygiene Association Conference. May 19, 1984, Detroit, Michigan.

Calabrese, E.J. (1984). Are rats relevant? Address to the Plenary Session of the Annual Industrial Hygiene Association Conference. May 16, 1984, Detroit, Michigan.

Calabrese, E.J. and Tuthill, R.W. (1984). The effects of elevated levels of sodium in drinking water on blood pressure in children - Part 1. Presented at the International Conference on Inorganics on Drinking Water and Cardiovascular Disease. May 1-3, 1984, Amherst, Massachusetts.

Tuthill, R.W. and Calabrese, E.J. (1984). The effects of elevated levels of sodium in drinking water on blood pressure in children - Part 2. Presented at the International Conference on inorganics in Drinking Water and Cardiovascular Disease. May 1-3, 1984, Amherst, Massachusetts.

Calabrese, E.J. (1984). Making quantitative risk assessments for carcinogens more biologically relevant. Presented at Exxon, Inc. April 1984, New Jersey.

Calabrese, E.J. (1984). The environmental gender gap: Sex-related differences in response to pollutants. March 1984, University of North Carolina, Chapel Hill, North Carolina.

DiNardi, S.R. and Calabrese, E.J. (1984). The stripping of chloroform from shower water into air during the showering process. Presented at the International Conference on Health and Environment. February 1984, Dallas, Texas.

#### <u>1983</u>

Calabrese, E.J. 1983. Gastrointestinal and dermal absorption: Interspecies differences. Presented at the EPA Conference on Safer Chemicals Through Molecular Design. September, Washington, D.C.

Burden, H.H., Calabrese, E.J., and Stoddard, M.A. 1983. Lead in drinking water: Contribution for solder joints in residential plumbing systems. Presented at the American Public Health Association. October, Dallas, Texas.

Calabrese, E.J. 1983. Suitability of animal models for predictive toxicology: Theoretical and practical considerations. Presented at the EPA Conference on Safer Chemicals Through Molecular Design. September, Washington, D.C.

Calabrese, E.J. 1983. Genetic monitoring in the workplace. Presented at the 5th Annual New England Occupational Health Conference. Boston, Massachusetts.

Calabrese, E.J. 1983. Toxicokinetics and risk assessment. Presented at the Electric Power Research Institute Conference on Toxicokinetics.

### <u>1982</u>

Calabrese, E.J., Moore, G.S., and McCarthy, M. 1982. The effect of ascorbic acid on copper acetate and sodium nitrite induced red cell oxidative stress. Presented at the Annual Conference of Clinical Ecologists. October 1982, Baniff, Canada.

Calabrese, E.J., Moore, G.S., and Williams, P. 1982. The effect of proposed ozone intermediates (in vitro) on normal and G-6-PD deficient erythrocytes in humans and in sheep. Presented at the 1982 Annual Meeting of the Society of Toxicology. Boston, Massachusetts.

Calabrese, E.J., Moore, G.S., and McCarthy, M. 1982. The effect of ascorbic acid on copper and nitrite-induced oxidative changes in erythrocytes: Interspecies differences. Presented at the 1982 Annual Meeting of the Society of Toxicology. Boston, Massachusetts.

Moore, G.S. and Calabrese, E.J. 1982. The effects of low-level ozone exposure upon the course of P. berghei infection in female A/J strain mice. Presented at the 1982 Annual Meeting of the Society of Toxicology. Boston, Massachusetts.

Calabrese, E.J. and Tuthill, R.W. 1982. The effect of an experimental reduction of sodium in drinking water on blood pressure distribution patterns of elementary students. Presented at the Annual Meeting of the Society of Toxicology. Boston, Massachusetts.

Calabrese, E.J., Moore, G.S., and Grunwald, E. 1982. The effect of ozone on rabbit erythrocytes (in vitro). Presented at the International Ozone Symposium. March 15, Pinehurst, North Carolina.

Calabrese, E.J. 1982. The biomedical basis for the present EPA primary drinking water standards. Presented at the American Water Works Association. May 16, 1982, Miami, Florida.

Calabrese, E.J. 1982. The effect of elevated levels of sodium in drinking water on sensitive populations. Presented at an Invited "Brainstorming" Session of the Environmental Health Center. April 24, 1982, Dallas, Texas.

Calabrese, E.J. 1982. The effects of ozone on sensitive population subgroups. Presented at an Invited "Brainstorming" Session of the Environmental Health Center. April 24, 1982, Dallas, Texas.

Calabrese, E.J. 1982. The effects of ozone on red blood cells. Presented at an Invited Seminar of the Department of Pharmacology, University of Massachusetts Medical Center. Worcester, Massachusetts.

Calabrese, E.J. and Canada, A.T. 1982. The role of high risk groups in the development of novel work schedule TLVs. Presented at the Annual Conference of the American Industrial Hygiene Association. Cincinnati, Ohio.

Calabrese, E.J., Moore, G.S., Grunwald, E., and Labato, F. 1982. The effect of ozone on red blood cell survival. Presented at the Annual Conference of Clinical Ecologists. October 1982, Baniff, Canada.

## <u>1981</u>

Calabrese, E.J. and Tuthill, R.W. 1981. The influence of elevated levels of sodium on blood pressure to young children and adolescents. Presented at the Salt and Hypertension Conference. Monell Chemical Senses Center. Philadelphia, Pennsylvania.

Calabrese, E.J., Moore, G.S., and Tuthill, R.W. 1981. The effects of chlorine dioxide and chloramines on rodent models. Presented at the EPA-sponsored Conference on Alternatives to Chlorination. Cincinnati, Ohio.

Tuthill, R.W., Moore, G.S., Calabrese, E.J., and Guisti, R. 1981. Epidemiological investigations on the effects of chlorine dioxide on birth outcomes. Presented at the EPA-sponsored Conference on Alternatives to Chlorination, Cincinnati, Ohio.

Calabrese, E.J. 1981. The role of epidemiological studies on the derivation of drinking water standards for metals. Presented at the Second Annual Conference on Environmental Epidemiology. University of Pittsburgh.

Calabrese, E.J. 1981. An expanded operational concept of high risk groups and its role in standard setting. Presented at the West Coast Chapter of AAAS Annual Meeting. June 15, 1981, Eugene, Oregon.

Calabrese, E.J. 1981. The influence of nutritional status on pollutant toxicology and carcinogenicity. Presented at the Invited Seminar of Hoffmann-LaRoche, Inc. November 2, Nutley, New Jersey.

Brown, H., Rowan, C., and Calabrese, E.J. 1981. The health effects of trichloroeythlene. Presented at the Water Quality Conference, National Academy of Engineers. Washington, D.C.

Calabrese, E.J. and Tuthill, R.W. 1981. Human health issues regarding elevated levels of sodium in drinking water. Presented at the Specialty Conference on Road Salt and Water Supply. Sponsored by the Massachusetts Department of Environmental Quality Engineering and the Audubon Society. Holyoke, Massachusetts.

### <u>1980</u>

Calabrese, E.J., Tuthill, R.W., Sieger, T., and Klar, J. 1980. Community drinking water - A contribution to increased blood pressure. Presented at the AAAS Annual Conference. San Francisco, California.

Calabrese, E.J. and Tuthill, R.W. 1980. Effects of sodium in drinking water on blood pressure. Presented at the National Academy of Sciences Summer Residence in Falmouth, Massachusetts to the NATO Countries' Safe Drinking Water Committee.

Calabrese, E.J. and Tuthill, R.W., Sieger, T., and Klar, J. 1980. Comparison of drinking water constituents in geographically adjacent communities with markedly different blood pressure levels. Presented at the AAAS Annual Conference. San Francisco, California.

Calabrese, E.J. 1980. Special sensitivities of the young to pollutant toxicity. Presented at the 10th World Assembly of the World Organization for Preschool Education. July 29, Quebec, Canada.

Calabrese, E.J. 1980. Diesel exhaust and human health effects. Presented at the International Association of Machinists Symposium for Railroad Workers. July 30, Toronto, Canada.

Moore, G.S. and Calabrese, E.J. 1980. Epidemiologic and laboratory animal studies on chlorite toxicity. Presented at the Second International Congress on Toxicology. July 1980, Brussels.

Calabrese, E.J. and Moore, G.S. 1980. Erythrocyte G-6-PD deficiency and enhanced susceptibility to environmental oxidant stressors: An animal model. Presented at the Second International Congress on Toxicology. July 1980, Brussels.

Moore, G.S. and Calabrese, E.J. 1980. The effect of in vivo ozone exposure to Dorset sheep, an animal model with low levels of erythrocyte G-6-PD activity. Presented at the Second International Congress on Toxicology. July 1980, Brussels.

Rowan, C. and Calabrese, E.J. 1980. The effects of elevated levels of sodium in drinking water on the retention of sodium by products cooked in such water. Presented at Trace substances in the Environment. June 1980, Columbia, Missouri.

Tuthill, R.W. and Calabrese, E.J. 1980. Experimental reduction in sodium levels in drinking water and blood pressure changes in children. Presented at the Annual Meeting of the Society for Epidemiologic Research. June 1980, Minneapolis, Minnesota.

Calabrese, E.J. 1980. The role of high risk groups in the development of human health criteria for drinking water standards. Presented at an International Conference sponsored by the U.S. EPA on the Use, Development, and Value of Water Quality criteria and Standards. June 23-25, Washington, D.C.

Kane, G. and Calabrese, E.J. 1980. The influence of highway de-icing operations on the sodium levels of the Connecticut River. Presented at the Specialty Symposium entitled, The Connecticut River: Stewardship. March 7, 1980.

<u>1979</u>

Calabrese, E.J. and Moore, G.S. 1979. The health effects of diesel fuel exhaust on human populations. Presented at the International Symposium on Diesel Fuel Exhaust. Cincinnati, Ohio.

Gilbert, C., Tuthill, R.W., Calabrese, E.J., and Peters, H.A. 1979. The relationship of house hold lead characteristics and childhood lead intoxication. Presented at the Annual American Public Health Association Meeting. Los Angeles, California.

Calabrese, E.J. 1979. The relationship of sodium in the diet and drinking water to development of hypertension in animal models and humans. Presented at the EPA-sponsored International Conference on Drinking Water Factors and Cardiovascular Disease. October 1979, Amherst, MA.

Calabrese, E.J. 1979. The influence of drinking water factors on blood pressure in children. Presented at the EPA-sponsored International Conference on Drinking water factors and Cardiovascular Disease. October 1979, Amherst, MA.

Moore, G.S. and Calabrese, E.J. 1979. The effects of copper and chlorite on normal and G-6-PD deficient human erythrocytes. Presented at the EPA-sponsored International Conference on Drinking Water Factors and Cardiovascular Disease. October 1979, Amherst, MA.

Calabrese, E.J. and Tuthill, R.W. 1979. Drinking water as a factor in increased blood pressure among elementary and high school students. Presented at the American Water Works Association Conference. June 1979, San Francisco, California.

Tuthill, R.W. and Calabrese, E.J. 1979. Research methodology for determining the influence of drinking water factors on blood pressure distribution patterns in human population studies. Presented at the Society of Epidemiology Research-Annual Meeting. June 1979, New Haven, Connecticut.

Calabrese, E.J. 1979. High risk groups in occupational medicine. Presented at the Annual Conference of the Occupational Safety and Health Administration - Region I. June 1979, Hyannis, Massachusetts.

DiNardi, S.R. and Calabrese, E.J. 1979. The university campus as an occupational health field training site. Presented at the American Industrial Hygiene Association Conference. May 1979, Chicago, Illinois.

Tuthill, R.W. and Calabrese, E.J. 1979. The effects of elevated levels of sodium in drinking water on elementary school children. Presented at the AAAS Conference. January 1979, Houston, Texas.

Gilbert, C., Peters, H.A., Calabrese, E.J., and Tuthill, R.W. 1979. Estimating health risks from lead toxicity according to source of exposure: A case-control study. Presented at the AAAS

Conference. January 1979, Houston, Texas.

# <u>1978</u>

Calabrese, E.J., Moore, G.S., and Brown, R. 1978. The effects of environmental oxidant stressors on individuals with a G-6-PD deficiency with particular reference to an animal model. Presented at the Conference on Pollutants and High Risk groups. June 5 and 6, 1978, Amherst, MA.

Tuthill, R.W. and Calabrese, E.J. 1978. Age as a function in the development of sodium related hypertension. Presented at the Conference on Pollutants and High Risk Groups. June 5 and 6, 1978, Amherst, MA.

Calabrese, E.J. 1978. Pollutants and high risk groups. Presented at the XIX International Congress on Occupational Health. September 27, 1978, Dubrovnik, Yugoslavia

Calabrese, E.J. 1978. The effects of nutritional status on pesticide toxicity. Presented at the Annual Conference of the Society of Occupational and Environmental health. December, Washington, D.C.

## <u>1977</u>

Riddiough, C., Musselman, R., and Calabrese, E.J. 1977. EPA's radium-226 drinking water standard: A re-evaluation. Presented at the AAAS Conference. February 1977, Denver, Colorado.

Calabrese, E.J. and Tuthill, R.W. 1977. Elevated blood pressure levels and community drinking water characteristics. Presented at the AAAS Conference. February 1978, Washington, DC.

Calabrese, E.J. and Tuthill, R.W. 1977. Elevated sodium levels in community drinking water and increased blood pressure in high school students. Presented at the American Public Health Association Conference. November 1977, Washington, DC.

## <u>1968</u>

Calabrese, E.J. 1968. The effects of phosfon on the growth of <u>Mentha</u> <u>Piperita</u> L. in different growth media. Presented at the Eastern States Science Conference. Yale University.

## **XIV. BOOKS**

Beck BD, Seeley M, Calabrese EJ. (2021). Use of toxicology in the regulatory process. In: Hayes' Principles and Methods of Toxicology, Chapter 2, 7<sup>th</sup> Edition. (Submitted)

Calabrese EJ. (2021). Dose-response: A fundamental concept in toxicology. In: Hayes'

Principles and Methods of Toxicology, Chapter 3, 7th Edition. (Submitted)

Agathokleous, E., and Calabrese, E.J. (2020). Chapter 21. An Environmental Perspective on Health. In: Rattan, S ed. Healthy Ageing and Longevity, Volume: Explaining Health across the Sciences, 1st edition (Sholl, J. and S. Rattan eds), 688p (ISBN-10: 3030526623). Springer-Nature. DOI: 10.1007/978-3-030-52663-4\_21

Ricci, P.F., and Calabrese, E.J. (2010). *Cancer Risk Assessment. Chemical Carcinogenesis, Hazard Evaluation, and Risk Quantification* (C-H. Hsu and T. Stedeford, Eds). John Wiley and Sons, Hoboken, NJ pp. 785.

Mattson, M.P., and Calabrese, E.J. (2010). *A Revolution in Biology, Toxicology and Medicine*. Humana Press. Pp. 213 (in press).

Calabrese, E.J., and Baldwin, L.A. (1998). *Chemical Hormesis: Concept, Scientific Foundation and Risk Assessment Implications*. Texas Institute for Advanced Chemical Technology (TIACT). Texas A&M University. College Station, TX. pp. 700.

Bonazountas, M., Hendrick, R., Calabrese, E., and Kostecki P. (eds.). (1997). *SESOIL: Theoretical Basis and Application to Risk Assessment*. Amherst Sci. Publ. Amherst, MA. pp. 620.

Calabrese, E.J. (1996). *Gender Differences in Susceptibility to Toxic Substances*. US EPA. Washington, DC.

Calabrese, E.J., and Baldwin, L.A. (1993). *How to Conduct an Ecological Risk Assessment*. Lewis Publishers.

Calabrese, E.J., and Kostecki, P.T. (editors). (1992). *Principles of Assessing and Remediating Hydrocarbon Contaminated Soils*. pp. 700.

Kostecki, P. and Calabrese, E.J. (1992). Contaminated Soils Remediation: Current references for 1990. Assoc. Environ. Health of Soils. pp.1-113.

Calabrese, E.J., and Kostecki, P.T. (1992). *Risk Assessment and Environmental Fate Methodologies*. Lewis Publishers, Chelsea, MI. pp. 150.

Calabrese, E.J. (1991). Principles of Animal Extrapolation: Predicting Human Responses from Animal Studies. Lewis Publishers, Inc., Chelsea, MI.

Calabrese, E.J. and Kenyon, E. (1991). *Air Toxics and Risk Assessment*. Lewis Publishers pp. 650.

Calabrese, E.J. (1991). *Multiple Chemical Interactions*. Lewis Publishers. Chelsea, MI. pp. 704.

Calabrese, E.J., and Kostecki, P.T. (editors). (1991). A Critical Evaluation of Environmental Fate and Risk Assessment Model/Approaches for Petroleum Contaminated Soils. Lewis Publishers, Chelsea, MI. pp. 250.

Calabrese, E.J. (1991). Interaction of Alcohols with Chemicals and Drugs. Lewis Publishers, Chelsea, MI. pp. 85.

Calabrese, E.J. (co-author). (1990). *Comparative Health Effects Assessment of Drinking Water Treatment Technologies*. Government Printing Office, Washington, D.C. approx. 600 pages. (Lewis Publishers).

Jones, T., Calabrese, E.J., Gilbert, C. and Winder, A. (1990). *Environmental Curricula Concerning Waste Management*. Lewis Publishers.

Fleischer, E., Kostecki, P.T., and Calabrse, E.J. et al. (1988). *Remedial Technologies for Leaking Underground Storage Tanks*. Lewis Publishers, Chelsea, MI. pp. 216.

Fleischer, E., Kostecki, P., Calabrese, E.J. et al. (1987). *Remedial Activities and Public Health Risks for Soil Contamination*. Lewis Publishers.

Ram, N., Calabrese, E.J., and Christman, R., editors. (1986). *Organic Carcinogens in Drinking Water*. John Wiley and Sons, New York. pp. 465.

Calabrese, E.J. (1986). *Age and Susceptibility to Toxic Substances*. John Wiley and Sons, Inc., New York. 370 pp.

Calabrese, E.J. (1985). *Toxic Susceptibilities: Male and Female Differences*. John Wiley and Sons, Inc., New York. 350 pp.

Calabrese, E.J. and Dorsey, M. (1984). *Healthy Living in an Unhealthy World*. Simon and Schuster, New York. (Paperback, 1985). (Translated into Spanish in 1987.)

Calabrese, E.J. February (1984). Ecogenetics. John Wiley and Sons, Inc., New York. 300 pp.

Calabrese, E.J. (1983). *Principles of Animal Extrapolation*. John Wiley and Sons, Inc., New York. pp. 603.

Calabrese, E.J. (1981). Nutrition and Environmental Health: The Influence of Nutritional Status on Pollutant Toxicity. Volume II. The Mineral and Maconutrients. John Wiley and Sons, Inc., New York. 500 pp.

Calabrese, E.J. (1980). *Nutrition and Environmental Health: The Influence of Nutritional Status on Pollutant Toxicity.* Volume I. The Vitamins. John Wiley and Sons, Inc., New York. pp. 600.

Calabrese, E.J. (1978). *Methodological Approaches to the Development of Environmental and Occupational Health Standards*. John Wiley and Sons, Inc., New York. 402 pp. (Also translated into Chinese in 1984 for use in the People's Republic of China.).

Calabrese, E.J. (1978). *Pollutants and High Risk Groups*. John Wiley and Sons, Inc., New York. 200 pp.

### **XV. CONFERENCE PROCEEDINGS - EDITORSHIP**

Calabrese, E.J. (Editor-in-Chief). (2005-Present). Dose-Response Journal. An International Journal of the Dose-Response Society formerly the Non-Linearity in Biology, Toxicology and Medicine. www.dose-response.org.

Calabrese, E.J. (Editor-in-Chief). (2003-2004). An International Journal - Non-Linearity in Biology, Toxicology and Medicine. Taylor & Francis.

Kostecki, P.T., Calabrese, E.J., and Dragun, J. (2003). Contaminated Soils, Sediments and Water, Vol. VIII. Amherst Scientific Publishers. Amherst, MA. 471 pp.

Kostecki, P.T., Calabrese, E.J., and Dragun, J. (2002). Contaminated Soils, Vol. VII. Amherst Scientific Publishers. Amherst, MA. 545 pp.

Calabrese, E.J., and Baldwin, L.A. (2001). Scientific Foundations of Hormesis. In: *Critical Reviews in Toxicology*, 31:351-695.

Kostecki, P.T., Calabrese, E.J., and Dragun, J. (2001). Contaminated Soils, Vol VI. Amherst Scientific Publishers. Amherst, MA.

Kostecki, P.T., Calabrese, E.J., and Dragun, J. (2000). Contaminated Soils, Vol V. Amherst Scientific Publishers. Amherst, MA.

Kostecki, P.T., Calabrese, E.J., and Bonazountas, M. (1999). Contaminated Soils, Vol. IV. Amherst Scientific Publishers. Amherst, MA. pp. 479.

Kostecki, P.T., Calabrese, E.J., and Bonazountas. (1998). Contaminated Soils, Vol III. Amherst Scientific Publishers. Amherst, MA. 654 pp. Barkan, C., Kostecki, P.T., and Calabrese, E.J. (1998). Principles and Practices for Diesel Contaminated Soils, Vol. 7. Amherst Scientific Publishers. Amherst, MA. pp. 164.

Calabrese, E.J., and Kostecki, P.T., and Bonazountas, M. (1997). Contaminated Soils, Vol. 2. Amherst Scientific Publishers. Amherst, MA pp. 760.

Barkan, C., Calabrese, E.J., and Kostecki, P.T. (1997). Principles and Practices for Diesel

Contaminated Soils, Vol. VI. Amherst Scientific Publishers, Amherst, MA. pp. 201.

Calabrese, E.J., and Kostecki, P.T., and Bonazountas, M. (1996). Contaminated Soils, Vol. I. Amherst Scientific Publishers. Amherst, MA pp. 734.

Barkan, C., Calabrese, E.J., and Kostecki, P.T. (1996). Principles and Practices for Diesel Contaminated Soils, Vol. V. Amherst Scientific Publishers, Amherst, MA. pp. 204.

Kostecki, P.T., and Calabrese, E.J., and Bonazountas, M. (1995). Hydrocarbon Contaminated Soils, Vol. V. Amherst Scientific Publishers. Amherst, MA. pp. 593.

Barkan, C., Calabrese, E.J., and Kostecki, P.T. (1995). Principles and Practices for Diesel Contaminated Soils, Vol. IV. Amherst Scientific Publishers, Amherst, MA. pp. 210.

Calabrese, E.J. (1994). Biological Effects of Low Level Exposures. Lewis Publishers, Chelsea, MI. pp. 325.

Kostecki, P.T, Calabrese, E.J., and Barkan, C. (1994). Principles and Practices for Diesel Contaminated Soils, Vol. III. Amherst Scientific Publishers, Amherst, MA. pp. 241.

Calabrese, E.J., and Kostecki, P.T. (1994). Hydrocarbon Contamination of Soil and Groundwater. AEHS Publications. Amherst, MA.

Calabrese, E.J., Kostecki, P. and Bonazountas, M. (1994). Hydrocarbon Contaminated Soils, Vol. IV. Amherst Scientific Publishers. Amherst, MA. pp. 488.

Calabrese, E.J., and Kostecki, P.T. (1993). Hydrocarbon contaminated soils, Vol. III. Lewis Publishers, Chelsea, MI.

Kostecki, P.T., Calabrese, E.J., and Barkan, C. (1993). Principles and Practices for Diesel Contaminated Soils, Vol. 2. Amherst Scientific Publishers, Amherst, MA. pp. 137.

Calabrese, E.J. (1992). (ed.). Toxicological Implications of biological Adaptations. Lewis Publishers, Inc. pp. 300.

Calabrese, E.J. and Kostecki, P.T. (1992). Hydrocarbon Contaminated soils and Groundwater. Analysis, Fate, Environmental and Public Health Effects and Remediation. Lewis Publishers, Chelsea, MI. pp. 500.

Kostecki, P., and Calabrese, E.J. (1992). Contaminated Soils: Diesel Fuel Contamination, Volume 1. Lewis Publishers, Chelsea, MI. pp. 224.

Calabrese, E.J. (1991). Environmental and Public Health Risks of Hydrocarbon Contaminated Soils. Lewis Publishers, Chelsea, MI.

Kostecki, P.T., and Calabrese, E.J. (eds.) (1991). Hydrocarbon Contaminated Soils and

Groundwater. Analysis, Fate, Environmental and Public Health Effects and Remediation. Lewis Publishers, Chelsea, MI. pp. 354.

Kostecki, P. and Calabrese, E.J. (1990). Environmental and Public Health Risks of Petroleum Contaminated Soils. Lewis Publishers, Chelsea, MI.

Calabrese, E.J. (co-editor). Ozone Risk Communication. Lewis Publishers. 1990.

Calabrese, E.J., and Kostecki, P. (1989). Environmental and Public Health Risks of Petroleum Contaminated Soils. Lewis Publishers, Chelsea, MI.

Kostecki, P. and Calabrese (ed.) (1988). Environmental and Public Health Risks of Petroleum Contaminated Soils. Lewis Publishers, Chelsea, MI.

Calabrese, E.J. and Kostecki, P.T. (editors). 1987. Environmental Public Risks of Petroleum Contaminated Soil. John Wiley and Sons, Inc. 1000 pp.

Calabrese, E.J., Cotruvo, J., Pastides, H. and Gilbert, C. (editors). 1987. Safe Drinking Water Act: Amendments, Regulations. Lewis Publishers, Ann Arbor, Michigan. pp. 300.

An EPA-sponsored international conference on Inorganics in Drinking Water and Cardiovascular Disease. Published within Advances in Modern Environmental Toxicology, 1985.

Advances in Nutrition. Volume 2. 1985. Pathotox Publishers.

An EPA-sponsored international conference on The Influence of Drinking Water on the Occurrence of Cardiovascular Disease. Published within the Journal of Environmental Pathology and Toxicology. 4:1-326, 1981.

An EPA-sponsored international conference on The Effects of Pollutants on Human High Risk Groups. Published within Environmental Health Perspectives. 29:1-77, 1979.

### XVI. NEWSPAPER COLUMNIST

I wrote a bimonthly column for the *Amherst Record* on general topics in environmental health from May 1982-1985. On occasion, I write a guest column for other newspapers including the *Hartford Courant*.

### XVII. NEWSLETTER

Health Effects Section Writer - for the 4500 members of the American Water Works Association, 1982/1983.

Biological Effects of Low Level Exposures (BELLE) Newsletter. A publication of the Northeast Regional Environmental Public Health Center, University of Massachusetts, School of Public

Health. 11,000 circulation; 1992 - 2010.

Council for Health and Environmental Safety of Soils – CHESS Newsletter. Published by the International Society of Regulatory Toxicology and Pharmacology. 1989-1993.

# **XVIII. CONTACT**

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