

Medical Microbiologist/Risk Analyst

MARGARET E. (Peg) COLEMAN

Phone: (315)729-3995

Email: peg@colemanscientific.org

Website: www.colemanscientific.org/

LinkedIn: [colemanscientificconsulting/](https://www.linkedin.com/company/colemanscientificconsulting/)

Address: 434 W. Groton Rd, Groton NY 13073

Career Summary

- Trans-disciplinary scientist and Fellow of the Society for Risk Analysis (SRA), recognized by my peers for significant accomplishments in microbial benefit-risk analyses and extensive professional service in leadership, education, mentoring in risk analysis, particularly considering:
 - infectious diseases transmitted in air, food, water, contact (anthrax, campylobacteriosis, cholera, COVID-19, pathogenic *E. coli* diseases, listeriosis, salmonellosis, tularemia)
 - opportunistic infections including *Clostridium difficile* and pseudomonads
 - beneficial microbes enhancing gut or immune system function
 - balance of food/water safety and security for more sustainable agri-food systems
- Invited expert on multiple projects with National Academy of Sciences committees and government agencies in the US and abroad to:
 - develop comprehensive, defensible risk assessments from ingestion and inhalation of microbial pathogens and non-pathogens
 - improve scientific support and risk analysis methodology and practice
 - provide peer-review for microbial risk reports and tools
- Educator in risk analysis (assessment, communication, management) and cycles of analysis and deliberation (analytic-deliberative process) to support transparent science-based decisions
- Leader in advancing development of coherent models for more robust analysis that accounts for system complexity, particularly for the gut microbiota in healthy and immunocompromised hosts

Areas of Expertise

- Expert testimony, conduct and peer-review of microbial benefit and risk analysis
- Microbial ecology, predictive microbiology, public health, epidemiology
- Peer review and education

Education

- MS in Medical Microbiology 1995 (University of Georgia)
- MS in Biology/Biochemistry 1988 (Utah State University)
- BS in Biology/Chemistry 1979 (SUNY Environmental Science Forestry/Syracuse University)

Summary of Qualifications

Microbial Risk Assessor

- As a scientist in the consulting industry, previously in US federal government, I lead and participate on trans-disciplinary teams that evaluate evidence and assess risks associated with airborne, foodborne, and waterborne pathogens from natural and intentional releases
- My publications in microbial benefits and risks include assessments on the following topics:
 - Epidemiologic Trends and Hazard Identification in *Journal of Epidemiology and Global Health*

- Benefit-Risk analysis for raw breastmilk microbiota, raw bovine microbiota, and enhancing human superorganism ecosystem resilience in *Applied Microbiology*
- Microbiome and Dose-Response in *Risk Analysis*; Microbiome and foodborne and respiratory risk assessment in *Applied Microbiology*
- Salmonellosis in *Foodborne Pathogens & Disease, Human & Ecological Risk Assessment, J Food Protection, Quantitative Microbiology, Risk Analysis, Veterinary Pathology*
- Growth of multiple pathogens including *Campylobacter*, *E. coli* O157:H7, *Listeria*, and *Salmonella* species in single and mixed populations in *Risk Analysis, J Food Protection*
- Empirical and mechanistic modeling for multiple pathogens including *Salmonella* and *Campylobacter* in *J Toxicology and Environmental Health, Quantitative Microbiology*
- Anthrax and tularemia in *Biothreat and Biosecurity and Risk Analysis*
- Kinetics of immunological interactions of complement in *Blood*
- Listeriosis in *J Food Protection*
- Microbial ecology of the respiratory and gastrointestinal tracts in *Applied and Environmental Microbiology, Human and Ecological Risk Assessment, Risk Analysis*
- Qualitative and quantitative risk assessment in *Food Control*
- Science and risk assessment in *Human and Ecological Risk Assessment and Risk Analysis*
- Variability in pathogen growth in *International J Food Microbiology*

Subject Matter Expert for Medical Microbiology and Microbial Risk Analysis

- Provide expert advice, analysis, and peer review of microbial risk assessment reports and software for agency, inter-agency, national, and international clients, as well as expert testimony for science-based legal challenges
- Invited participant at workshops on risk assessment and risk management, including national and international work groups convened by the Codex Committee on Food Hygiene, the U.S. Interagency Risk Assessment Consortium, the International Life Sciences Institute (North America and Europe), and the U.S. National Academies of Sciences, Engineering, Medicine
- Contributor in *beta* testing Risk Analysis Quality Test tool and organizing a workshop and round table panel symposium on application of the tool for two historical quantitative microbial risk assessments (QMRAs) at the SRA annual meeting (2022)
- Invited reviewer for scientific journals and grants

Boards and Professional Affiliations

- Alliance for Risk Assessment (ARA; invited member of Science Panel, 2020)
- American Society for Microbiology (ASM; 1996 – present)
- Canadian Artisan Dairy Alliance (CADA), Advisory Board Member (2023 to present)
- Interagency Risk Assessment Consortium (iRAC), Founding Member (1998 – 2004)
- Raw Milk Institute (RAWMI), Advisory Board Member (July 2019 – present); Board of Directors Member (January – June, 2019)
- Society of Federal Health Professionals (AMSUS; 2014 – 2016)
- Society for Risk Analysis (SRA), member (1995 – present)
 - Elected Member of SRA Council (2022-2024)
 - Fellow of SRA (2020)

- Editorial Board member for SRA journal *Risk Analysis* (2006 – 2018)
- Past Secretary/Treasurer and Past President of Dose-Response Specialty Group
- Founding member and Past President of Microbial Risk Analysis Specialty Group
- SUNY College of Environmental Science and Forestry Alumni Board, Member (2010 – present)
- SUNY Upstate Medical University Master of Public Health Board, Member (2011 – 2016)
- Upstate NY SRA, founder, and current President (2005 – present)

Honors and Awards

- **2022 – 2024:** Councilor of the Society for Risk Analysis (SRA)
- **2020:** Fellow of the SRA
- **2011:** National Association of Professional Women award as woman of the year for professional excellence in scientific consulting
- **2007:** Syracuse Research Corporation leadership award, preparing/publishing multidisciplinary risk analysis
- **2003:** USDA/FSIS Spot Award, excellent work associated with cooperation between Risk Assessment Division and other Risk Assessment Consortium members
- **2001:** FDA Group Award as a member of the *Listeria monocytogenes* Risk Assessment Group for outstanding contributions to the FDA and USDA/FSIS public health protection through the development of the *Listeria monocytogenes* risk assessment
- **1998:** USDA/FSIS Spot Awards for: providing time and expertise to the FSIS CORE Business Process Project on Assess Risk; and special service act in support of project on risk analysis for pre-mature browning of hamburger
- **1998:** FDA Group Recognition Award for exceptional contributions towards improvements in the field of microbial risk assessment and for forging improved inter-agency collaborations
- **1997:** USDA/FSIS Certificate of Merit for outstanding performance in improving the capability of FSIS to use risk analysis to improve food safety and reduce foodborne disease
- **1996:** USDA/ORACBA Certificate of Appreciation, USDA Risk Assessment Workshop lecture

Expert Testimony for Court Cases and Petitions

- **2024.** Testimony on milkborne disease trends, including benefits and risks of pasteurized and raw milks (Lancaster, PA, 29 February 2024).
- **2024.** Testimony on milkborne disease trends, including benefits and risks of pasteurized and raw milks (Hawaii legislators, 12 and 27 February and 13 March, 2024).
- **2022.** Testimony on raw milk benefits and risks (Iowa legislators, 1 February 2023).
- **2021.** CSC Report: Improving the Credibility of the Food Standards Australia New Zealand Report Entitled Microbiological Risk Assessment of Raw Cow Milk (2009) Considering New Evidence (Australian Raw Milk Movement, Incorporated)
- **2019 – 2020:** Testimony for Carlow Farmhouse Cheese vs Department of Agriculture Food and Marine/Food Safety Authority of Ireland (High Court of Ireland)
- **2019:** Testimony for Lystn LLC/Answers Pet Food vs FDA/AAFCO/ Colorado Department Agriculture/et al. (US District Court for the District of Colorado, CIV. NO. 19-CV-1943)

- **2018 – 2020:** Testimony and technical assistance for Glencolton Farm/Affleck et al. vs Attorney General of Ontario/Canada (Ontario Superior Court of Justice, Court File No.: CV-18-591774)
- **2017:** Scientific support for US FDA request for information on raw cheese
- **2016, 2020:** Scientific support for petition of US FDA to permit interstate sale of raw butter

Reviewer

- *CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition, Natural Resources*
- *Critical Reviews in Food Science and Nutrition*
- *Infectious Diseases: Research and Treatment*
- *Journal of Exposure Science and Environmental Epidemiology*
- *Journal of Food Protection*
- *Journal of Food Science*
- *Quantitative Microbiology*
- *Risk Analysis*

Professional Highlights

Coleman Scientific Consulting, Groton, NY (2010 – present)

- Operate woman-owned small business as sole proprietor, providing multidisciplinary decision support for practical solutions balancing benefits and risks for exposures to microbes
- Prepare and submit technical manuscripts on microbial benefits, risks, and predictive microbiology for peer-review in journals including *Applied Microbiology*, *Human and Ecological Risk Assessment*, *Journal of Epidemiology and Global Health*, *Risk Analysis*
- Provide expert testimony, technical advice and scientific support to clients, many of whom request multiple contract years of support. Scientific support for one client on derivation of ‘safe’ exposure guidelines for biological threats inhaled or ingested by humans was extended for more than 10 years, another on benefits and risks of natural microbiota of foods for more than 5 years
- Serve as peer reviewer for three journals (*CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition, and Natural Resources*; *Journal of Exposure Science and Environmental Epidemiology*; *Risk Analysis*) and served as consultant, peer reviewer, and committee member for US clients including the Army, EPA, FDA, the National Academies of Science, and USDA
- Deliver presentations, briefings, and lectures on benefits and risks of microbes, including interactions of microbes with innate immune systems, for organizations including: the American Association for the Advancement of Science; Weston A. Price Foundation (Wise Traditions Conference); SRA; federal Interagency Risk Assessment Consortium; SUNY ESF; University of Liverpool, UK; and QMRA Africa training workshop
- Provide teaching and leadership expertise to academic and professional organizations including SUNY ESF and Upstate NY SRA, past leadership to Upstate Medical University’s Master of Public Health program and the National Academies of Science
- Organize projects on microbial risks and benefits, including first crowdfunding campaign through Upstate NY SRA supporting preparation of three peer-reviewed manuscripts. Joint SRA project on Microbiota of Milks began with partnering regional organizations of SRA, Australia/New Zealand, New England, and Upstate NY

- Provided technical support to US federal government client for report and manuscript documenting time- and dose-dependent models for aerosolized bacterial spores administered in single and multiple doses to rabbits
- Provided medical microbiology services for international client with responsibility to conduct screening assessments for safety of micro-organisms including pseudomonads released into the environment prior to development of quantitative microbial risk assessment methodologies
- Prepared position papers on risk of human health effects from dermal exposure to bacterial spores and use of remote sensing and climate data for predicting adverse human health effects associated with environmental contamination
- Developed special collection of manuscripts on the influence of gut microbiota on human dose-response relationships for salmonellosis published in *Human and Ecological Risk Assessment*

ICF, International, Fairfax, VA (2010)

- Provided expert consulting in medical microbiology and risk assessment, including problem formulation for land-applied biosolids
- Supported Department of Homeland Security in planning/evaluation of regional and national table-top exercises for biothreat preparedness (FEMA Anthrax Response Exercise Series)

SRC, Inc., Environmental Science Center, North Syracuse, NY (2004 – 2009)

- Served as technical project manager for EPA contracts (homeland security; waterborne pathogens; genetically modified organisms) and grants (microbial risk assessment; real time polymerase chain reaction detection of waterborne pathogens)
- Under EPA Microbial Risk Assessment CoE grant, principal technical support on: 1) peer review; 2) microbial risk assessment methodology; 3) microbial risk assessment of geospatial links between water quality monitoring, human infectious diseases in upstate NY counties
- Published peer-reviewed studies in *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*; *Foodborne Pathogens and Disease*; *Human and Ecological Risk Assessment*; *International Journal of Food Microbiology*; *Journal of Food Protection*; *Journal of Toxicology and Environmental Health*; *Microbe*; *Risk Analysis*; *Veterinary Microbiology*

United States Department of Agriculture, Washington, DC, and other sites (1988 – 2004)

- Supported risk assessments for microbial hazards in foods. Led *Campylobacter* risk assessment team, participated on teams for *Salmonella* and *E. coli* O157:H7 risk assessment projects, and provided peer review for listeriosis and *Clostridium perfringens* assessments
- Authored or co-authored 15 peer-reviewed studies on microbial risk in the following journals: *Applied and Environmental Microbiology*; *Food Control*; *Foodborne Pathogens and Disease*; *Human and Ecological Risk Assessment*; *International Journal of Food Microbiology*; *Journal of Association of Official Analytical Chemists*; *Journal of Food Protection*; *Journal of Toxicology and Environmental Health*; *Quantitative Microbiology*; *Risk Analysis*
- Served as expert reviewer for grants and projects of the Risk Assessment Consortium and Codex Committee on Food Hygiene
- Designed and conducted bridging experiments in predictive microbiology and modeling at Agricultural Research Service at Wyndmoor, PA and University of Maryland Eastern Shore
- Completed competitive Advanced Study in Microbial Risk Assessment at University of Georgia College of Veterinary Medicine, joined newly forming staff charged with developing, applying microbial risk assessment theory, methods, principles for regulatory support, decision-making

- Served as managing editor of a special collection of manuscripts on predictive microbiology and risk assessment published in *Risk Analysis*
- Served as US representative contributing to principles and guidelines document for microbial risk assessment approved by the international Codex Committee on Food Hygiene (1999)
- Conducted pilot studies for application of new technologies for detection and monitoring of pathogens in meat and poultry processing plants to support technology transfer

Dynamac, International, Rockville, MD (1986 – 1988)

- Assessed data for compliance with EPA guidance on pesticide re-registration in: product & residue chemistry, residue in animals/plants, environmental fate, occupational exposure

Selected Publications and Reports

- **2024.** Stephenson, M.M., Coleman, M.E., Azzolina, N.A. Trends in Burdens of Disease by Transmission Source (USA, 2005-2020) and Hazard Identification for Foods: Focus on Milkborne Disease. *Journal of Epidemiology and Global Health*. <https://doi.org/10.1007/s44197-024-00216-6>.
- **2024.** Waller, R., Coleman, M., Denard, S., Soane, E. Lessons identified from applications of the Risk Analysis Quality Test (RAQT) Release 1.0. Accepted in *Risk Analysis*.
- **2023.** Coleman, M.E., Oscar, T.P., Negley, T.L., Stephenson, M.M. Suppression of Pathogens in Properly Refrigerated Raw Milk. *PLOS ONE* 18(12): e0289249.
- **2023.** Coleman, M.E. Perspectives on Foodborne Risks. Article available at: <https://www.realmilk.com/health/perspectives-on-foodborne-risks/>.
- **2023.** Coleman, M.E. and North, D.W. Revisioning Small Family Dairy Farms that Apply One Health Approaches. *Concepts of Dairy Science* 5(4):553-557. Free Open Access. DOI: 10.32474/CDVS.2023.05.000216.
- **2022.** North, D.W., Coleman, M.E., Hull, R. Need for international workshops to deliberate evidence of benefits and risks of raw milks. Invited opinion article for *Corpus Journal Veterinary Dairy and Veterinary Science* 3(1)1031
- **2022.** Coleman, M.E. Raw Milk Risks from a Microbiologist's Perspective. *Wise Traditions* 23(1):101-105. Article available at: <https://www.westonaprice.org/wp-content/uploads/Spring2022.pdf>.
- **2022.** Dietert, R.R., Coleman, M.E., North, D.W., Stephenson, M.M. Nourishing the human holobiont to reduce the risk of non communicable diseases: A cow's milk evidence map example. Invited manuscript in Special Issue (Human Microbiota Influence on Human Health Status) for *Applied Microbiology* 2(1):25-52
- **2021.** Coleman, M.E., Dietert, R.R., North, D.W., Stephenson, M.M. Enhancing human superorganism ecosystem resilience by holistically 'managing our microbes'. Invited manuscript in Special Issue (Human Microbiota Influence on Human Health Status) for *Applied Microbiology* 1(3):471-497
- **2021.** Coleman, M.E., North, D.W., Dietert, R.R., Stephenson, M.M. Examining evidence of benefits and risks for pasteurizing donor breastmilk. Invited manuscript in Special Issue (Human Microbiota Influence on Human Health Status) for *Applied Microbiology* 1(3):408-425
- **2021.** Stephenson, M.M. and Coleman, M.E. Database of Primary Microbial Testing Program Data for Raw Milk Stored in Microsoft Access®. Report prepared for Weston A. Price Foundation
- **2021.** Coleman, M.E. *Improving the Credibility of the Food Standards Australia New Zealand Report Entitled Microbiological Risk Assessment of Raw Cow Milk (2009) Considering New Evidence*. Report in preparation for Australian Raw Milk Movement, Incorporated
- **2020.** Coleman, M.E. *Technical Review of Food Safety Authority of Ireland (FSAI) Document Entitled 'Advice on Shiga Toxin-Producing Escherichia coli (STEC) Detection in Food'*. Report prepared for Elizabeth Bradley, Carlow Farmhouse Cheese Company, Ireland
- **2018.** Coleman, M.E., C.A. Elkins, B.W. Gutting, et al. Microbiota and dose-response: Evolving

paradigm of health triangle. *Risk Analysis* 38(10):2013-2028

- **2018.** McClellan, G.E., M.E. Coleman, D. Crary, et al. Human dose-response data for *Francisella tularensis* and a dose- and time-dependent mathematical model of early-phase fever associated with tularemia after inhalation exposure. *Risk Analysis* 38(8):1685-1700
- **2017.** Coleman, M.E., H.M. Marks, R.C. Hertzberg, et al. Mechanistic modeling of salmonellosis: Update, future directions. *Human & Ecological Risk Assessment* 23(8):1830-1856
- **2017.** Marks, H.M., M.E. Coleman. Scientific data and theories for salmonellosis dose-response assessment. *Human and Ecological Risk Assessment: An International Journal*. 23(8):1857-1876
- **2017.** Coleman, M.E., H.M. Marks, T. Bartrand, et al. Modeling rabbit responses to single and multiple aerosol exposures of *Bacillus anthracis* spores. *Risk Analysis* 37(5):943-957
- **2012.** Peer review/beta testing for US FDA CFSAN iRISK tool
- **2011.** National Research Council. *Continuing Assistance to the National Institutes of Health on Preparation of Additional Risk Assessments for the Boston University NEIDL, Phase 3*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/13310>
- **2010.** Coleman, M.E. Reviews of *Food Safety Risk Analysis* and *Food-Borne Microbes: Shaping the Host Ecosystem*. Invited book reviews, *Risk Analysis* 30(5):866-871
- **2009.** Prepared invited review of US EPA framework for microbial risk assessment
- **2008.** Prepared invited review of USDA FSIS methodology for microbial risk assessment
- **2008.** Coleman, M.E., B. Thran, S.S. Morse, et al. Inhalation anthrax: Dose response and risk analysis. *Biosecurity Bioterrorism: Biodefense Strategy, Practice, and Science* 6(2): 147-160
- **2007.** Coleman, M.E., B. K. Hope, H.G. Claycamp, et al. *Microbial Risk Assessment Scenarios, Causality, and Uncertainty*. *Microbe* 2(1):13-17
- **2005:** National Research Council. Review of Testing and Evaluation Methodology for Biological Point Detectors. Washington, DC: The National Academies Press. <https://nap.nationalacademies.org/catalog/11287/review-of-testing-and-evaluation-methodology-for-biological-point-detectors>
- National Academies of Sciences, Engineering, and Medicine. 2005. Review of Testing and Evaluation Methodology for Biological Point Detectors: Abbreviated Summary. Washington, DC: The National Academies Press. <https://doi.org/10.17226/11287>.
- **2005.** Marks, H.M., and M.E. Coleman. Presenting scientific theories within risk assessment, *Human and Ecological Risk Assessment* 11(2):271-287
- **2005:** Marks, H.M., and M.E. Coleman. Accounting for inherent variability of growth in microbial risk assessment, *International Journal of Food Microbiology* 100(1-3):275-287
- **2005.** FSIS SE Risk Assessment Team. *Risk Assessments of Salmonella Enteritidis in Shell Eggs and Salmonella spp. in Egg Products*. Available at <https://tinyurl.com/y5x2mdrb>
- **2004.** Coleman, M.E., H.M. Marks, N.J. Golden. Discerning strain effects in microbial dose-response data, *Journal of Toxicology and Environmental Health* 67(8-10):667-685
- **2003.** Coleman, M.E., M. Tamplin, J. Phillips, et al. Influence of agitation, inoculum density, pH, and strain on growth parameters of *Escherichia coli* O157:H7 on risk assessment, *International Journal of Food Microbiology* 83(2):147-160
- **2003.** Coleman, M.E. S. Sandberg, S. Anderson. Impact of microbial ecology of meat and poultry products on predictions from exposure assessment scenarios for refrigerated storage, *Risk Analysis* 23(1):215-228
- **2001.** USDA FSIS *Escherichia coli* O157:H7 Risk Assessment Team. *Risk Assessment of the Public Health Impact of Escherichia coli O157:H7 in Ground Beef*. Available at

<https://www.fsis.usda.gov/wps/portal/fsis/topics/science/risk-assessments>

- **2000.** Coleman, M.E., H.M. Marks. Mechanistic modeling of salmonellosis, *Quantitative Microbiology* 2:227-247
- **1999.** *Principles and Guidelines for the Application of Microbiological Risk Assessment.* Codex Alimentarius Commission, Committee on Food Hygiene CAC/GL 30-1999
- **1999.** Coleman, M.E., H.M. Marks. Qualitative and quantitative risk assessment, *Food Control* 10(4-5):289-297
- **1998.** Marks, H.M., M.E. Coleman, C.-T. J. Lin, & T. Roberts. Topics in microbial risk assessment: Dynamic flow tree modeling, *Risk Analysis* 18(3):309-328
- **1998.** Coleman, M.E. & H.M. Marks. Topics in dose-response modeling, *Journal of Food Protection* 61(11):1550-1559
- **1998.** Marks, H.M. & M.E. Coleman. Estimating distributions of numbers of organisms in food products, *Journal of Food Protection* 61(11):1535-1540
- **1996.** Coleman, M.E., D.W. Dreesen, R.G. Wiegert. A simulation of microbial competition in the human intestinal tract, *Applied and Environmental Microbiology* 62(10):3632-3639
- **1983.** Chaplin, H., M.E. Coleman, M.C. Monroe. In vivo instability of red-blood-cell-bound C3d and C4d, *Blood* 62(5):965-971

Key Presentations and Lectures

- **2024.** Invited lectures on *Microbiome and Immunology: Interactions for Risk Assessors from 21st Century Science* at SUNY College of Environmental Science and Forestry at Syracuse (2018 to 2024, ENS 470, Environmental Risk Assessment)
- **2023.** Accepted presentation on *Incorporating Superorganisms in OneHealth Approaches*, SRA annual meeting, Washington, DC
- **2023.** Invited lectures on *Considering Risk Management for Complex Systems* at Ohio State University (2 lectures in PUBHEHS 7375 Quantitative Microbial Risk Analysis Modeling:
- **2022.** Workshop and round table panel symposium organizer/presenter on *Learnings from Applying Risk Analysis Quality Test tool to Historical QMRAs*, SRA annual meeting, Tampa FL
- **2022.** Invited lecture on *Incorporating Food and Gut Microbiota into 21st Century Risk Analysis* University of Liverpool, Institute for Risk and Uncertainty, UK
- **2021.** Accepted presentation on *Recent Evidence for Benefit-Risk Analysis of Raw and Pasteurized Milks* delivered at 8th World Congress on Targeting Microbiota 2021 sponsored by the International Society of Microbiota
- **2021.** Invited webinar for SRA entitled *Resilience and the Human Superorganism: Give Us this Day our Daily Microbes* (<https://www.sra.org/webinar/resilience-and-the-human-superorganism-give-us-this-day-our-daily-microbes/>)
- **2020.** SRA virtual meeting, organizer, co-chair, technical symposium on *Data and Models for Dose-Response Relationships for SARS-CoV-2*, jointly sponsored by the SRA Dose-Response and Microbial Risk Analysis Specialty Groups, and co-author, *Human Data for Time- and Dose-Dependent Severity of COVID-19*
- **2020.** Webinar on *Recent Advances in Knowledge About the Microbiota of Milk and Butter* for Farm-to-Consumer Legal Defense Fund
- **2019.** SRA, Arlington, VA, co-author of presentation on *Evidence and Analysis Debunk Speculations about Raw Milk Risks*

- **2019.** 16th International Symposium on Milk Genomics conference, Copenhagen, Denmark.co-author of poster on *Producing Hygienic Raw Milk: Standards, Testing, and Farmer Education*
- **2018.** SRA, New Orleans, LA, organizer/presenter for round table panel symposium on *Communicating Evidence for Benefits and Risks of Raw Milks*
- **2017.** SRA webinar entitled *Preparing to Deliberate Evidence on Benefits and Risks Posed by the Microbiota of Milks* in series Advancing the Science: Microbiota Informing Benefits & Risks
- **2017.** Air and Waste Management Association/American Industrial Hygiene Association, Skaneateles, NY, invited lecture, *Evolution of Quantitative Microbial Risk Assessment (QMRA): Benefits of Low-Dose Exposures*
- **2014.** SRA, Denver, CO, presentation on *Exploring Disagreements Regarding Health Risks of Raw and Pasteurized Human and Bovine Milk*
- **2003.** 4th International Predictive Modeling Conference, Quimper, France, presentation on *Accounting for Inherent Variability of Growth in Microbial Risk Assessment*
- **2000.** Third International Conference on Predictive Microbiology in Foods, Leuven, Belgium, *Campylobacter, Salmonella, Listeria, and the Spoilage Flora: Who Wins the Battle?*
- **1997.** IAMFES/IAFP, Orlando, FL. Invited lectures on: *Risk Assessment/Risk Management: Clarifying the Relationships; Topics in Dose-Response Modeling; and Estimating Distributions of Numbers of Organisms in Food Products*
- **1996.** U.S./Japan Conference on Cholera and Diarrheal Diseases, Nagasaki, Japan. Invited lecture on *Microbial Risk Assessment*
- **1996.** SRA, New Orleans, LA, presentation on: *Topics in Microbial Risk Assessment*

**COMPLETE LIST OF PUBLICATIONS/ PRESENTATIONS
PROVIDED AS SUPPLEMENT UPON REQUEST**