

Engineering & Scientific Consulting

Rachel Goeriz, Ph.D.

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Professional Profile

Dr. Goeriz specializes in the evaluation and management of hazards and health risks in foods, beverages, cosmetics and dietary supplements. She applies her expertise to assist clients in the prevention or response to situations including product contamination, regulatory enforcement, recall decision making or management and illness outbreaks.

In crisis situations, Dr. Goeriz has specialized expertise in the review of all phases of domestic and import regulatory investigations, compliance and enforcement actions, and emergency responses. Dr. Goeriz offers clients advice across the entire span of industry segments, from agricultural production to retail and food service.

Prior to joining Exponent Dr. Goeriz held several positions with the U.S. Food and Drug Administration (FDA), serving in the Office of the Commissioner and the Center for Food Safety and Applied Nutrition (CFSAN), At CFSAN, Dr. Goeriz served as an entomologist with specialized expertise in hazards related to filth and foreign objects, including associated regulations, compliance actions, and product reconditioning. She also has laboratory experience identifying bacterial pathogens associated with food borne illness vectored by insects and identifying arthropod associated allergen cross reactivity.

Dr. Goeriz served with FDA's Coordinated Outbreak, Response and Evaluation Network (CORE), having expertise in epidemiological surveillance and response, messaging, traceback investigations, product recall, outbreak prevention, and molecular epidemiology, including Pulsed Field Gel Electrophoresis (PFGE) and Whole Genome Sequencing (WGS).

Prior to joining FDA, Dr. Goeriz worked for 15 years as a field ecologist having experience in agricultural food and fiber crops, the tropical rainforest and the salt marsh.

She holds a B.S. in evolution and ecology, with a minor in agricultural entomology from University of California, Davis, a Ph.D. in entomology from the University of Maryland, and completed a Post Doctorial Fellowship at FDA supported by the Oak Ridge Institute for Science and Education.

Academic Credentials & Professional Honors

Ph.D., Entomology, University of Maryland, College Park, 2009

B.S., Evolution and Ecology, University of California, Davis, 1999

FDA Group Recognition Award 2018 - Hepatitis A Virus and Tuna Incident Response Group

FDA Leveraging Collaboration Award 2016 - Listeria in Sprouts Outbreak Control Group -

For superior coordination and speed in ensuring the control of a firm producing sprouts contaminated with Listeria monocytogenes.

FDA Group Recognition Award 2016 - L. monocytogenes and Caramel Apples Incident Response Group - For exemplary performance of duties and collaboration in response to a multi-state outbreak of Listeria monocytogenes linked to caramel apples.

FDA CFSAN Honor Achievement Award 2011- Strategic Planning for Filth in Foods Program - For exemplary work in creating both short and long range strategic plans for the filth program.

Academic Appointments

Pennsylvania State University, Food Microbiology Short Course, Instructor

Prior Experience

Consumer Safety Officer, FDA, 2014-2017

Entomologist, FDA, 2012-2014

Entomologist, Oak Ridge Institute for Science and Education Fellow, FDA, 2010-2012

Professional Affiliations

National Environmental Health Association

International Association for Food Protection

The Entomological Society of America

Publications

Pava-Ripoll M, Pearson REG, et al. Ingested Salmonella enterica, Cronobacter sakazakii, Escherichia coli 0157:H7, and Listeria monocytogenes: Transmission dynamics from adult house flies to their eggs and first filial(F1) generation adults. BMC Microbiology 2015; 15:150.

Pava-Ripoll M, Pearson REG, et al. Protocol for the detection of foodborne pathogens from individual filth flies. Journal of Visualized Experiments 2015; (96)e52372, doi:10.3791/52372.

Pava-Ripoll M, Pearson REG, et al. Prevalence and relative risk of Cronobacter spp., Salmonella spp., and Listeria monocytogenes associated with the body surfaces and guts of individual filth flies. Applied and Environmental Microbiology 2012; 78(22):7891-7902.

Pearson REG, Behmer S, et al. Effects of diet quality on performance and nutrient regulation in an omnivorous katydid. Ecological Entomology 2011; 36:471-479.

Rosenheim JA, Goeriz RE, et al. Omnivore or herbivore? Field observations of foraging by Lygus hesperus (Hemiptera: Miridae). Environmental Entomology 2004; 33:1362-1370.

Rosenheim JA, Glik TE, Goeriz RE, et al. Linking a predator's foraging behavior with its effects on herbivore population suppression: a field test. Ecology 2004; 85:3362-3372.

Pearson TRH, Burslem DFRP, Goeriz RE, et al. Interactions of gap size and herbivory on establishment, growth and survival of three species of neotropical pioneer trees. Journal of Ecology 2003; 91:785-796.

Pearson TRH, Burslem DFRP, Goeriz RE, et al. Regeneration niche partitioning in neotropical pioneers: effects of gap size, seasonal drought and herbivory on growth and survival. Oecologia 2003; 137:456-465.

Presentations

Blankenship J, Goeriz R, et al. 2016. Multistate Outbreak of Salmonella Paratyphi B variant L(+) tartrate(+) and Salmonella Weltevreden Infections Associated with Imported Frozen Raw Tuna. International Association for Food Protection, St. Louis, MO, 2015.

Goeriz R, Karas D. Multistate foodborne outbreaks- FDA/CORE's role. FDA Retail Food Store Partnership Meeting at the Food Marketing Institute, 2016.

Goeriz Pearson R. Salmonella Paratyphi B Outbreak associated with raw tuna. Safe Food Coalition, 2015.

Salter M, Blankenship J, Pearson R. Investigation of a multi-state listeriosis outbreak associated with caramel apples. Council of State and Territorial Epidemiologists, 2015.

Pava-Ripoll M, Pearson RE, Miller AK, Ziobro GC. Transovarial transmission of foodborne pathogens by the housefly, Musca domestica. International Association for Food Protection, Charlotte, NC, 2013.

Pearson REG, Ziobro GC. Review of allergenic reactions associated with the consumption of insect and mite contaminated foods. Annual FDA Foods Program Science and Research Conference, White Oak, MD, 2012.

Pava-Ripoll M, Pearson REG, Miller AK, Ziobro GC. Prevalence and relative risk of Cronobacter spp., Salmonella spp. and Listeria monocytogenes associated with the body surface and the guts of individual flies collected from urban restaurant dumpsters. Annual FDA Foods Program Science and Research Conference, White Oak, MD, 2012.

Pava-Ripoll M, Pearson REG, Miller AK, Ziobro GC. Prevalence and relative risk of Cronobacter spp., Salmonella spp. and Listeria monocytogenes associated with the body surface and the guts of individual flies collected from urban restaurant dumpsters. International Association for Food Protection, Providence, RI, 2012.

Pearson REG, Pava-Ripoll M, Miller AK, Opit G, Ziobro G. Could incidental storage insect pests be potential food allergens? Entomological Society of America National Meeting, Reno, NV 2011.

Pava-Ripoll M, Pearson REG, Miller AK, Ziobro G. Multiplex PCR for the detection of insects in food. Entomological Society of America National Meeting, Reno, NV, 2011.

Pava-Ripoll M, Pearson REG, Miller AK, Ziobro G. Are foodborne pathogens vertically transmitted in the house fly? Entomological Society of America National Meeting, Reno, NV, 2011.

Miller AK, Pava-Ripoll M, Pearson REG, Ziobro G. Study of non-flammable liquid as an insect preservative. Entomological Society of America National Meeting, Reno, NV, 2011.

Pearson REG, Pava-Ripoll M, Miller A, Opit G, Ziobro G. Allergen cross-reactivity of food-associated insects and crustaceans: A potential public health concern. FDA Foods Program Science and Research Conference, Silver Spring, MD, 2011.

Pava-Ripoll M, Pearson REG, Miller A, Ziobro G. Vertical transmission of Salmonella in the house fly, Musca domestica. FDA Foods Program Science and Research Conference, Silver Spring, MD, 2011.

Pava-Ripoll M, Pearson REG, Miller A, Ziobro G. A molecular-based method for rapid detection of whole insects or insect fragments in food: Focus on the 'dirty-22.' FDA Foods Program Science and Research Conference, Silver Spring, MD, 2011.

Miller A, Pava-Ripoll M, Pearson REG, Ziobro G. Detection of Salmonella from individual flies using a PCR-based system. FDA Foods Program Science and Research Conference, Silver Spring, MD, 2011.

Pearson REG. Nutrient regulation by an omnivore and the effects on performance and distribution. Department of Entomology. University of Maryland, College Park, MD, 2009.

Goeriz RE, Denno RF. Do stoichiometric constraints promote omnivory in a marsh katydid? Ecological Society of America National Meeting, San Jose, CA, 2007.

Goeriz RE, Denno RF. Do stoichiometric constraints promote omnivory in a marsh katydid? Entomological Society of America National Meeting, Indianapolis, IN, 2006.

Goeriz RE, Denno RF. Omnivory as a feeding strategy to supplement a nitrogen-poor plant diet in a marsh-inhabiting katydid. Ecological Society of America National Meeting. Montreal, Canada, 2005.

Goeriz RE, Denno RF. Omnivory as a feeding strategy to supplement a nitrogen-poor plant diet in a marsh-inhabiting katydid. Entomological Society of America National Meeting, Salt Lake City, UT 2004.

Goeriz RE, Fox M, Denno RF. Omnivory enhances growth and diminishes mortality in a marsh-inhabiting grasshopper. Entomological Society of America National Meeting, Cincinnati, OH, 2003.

Goeriz RE, Fox M, Denno RF. Omnivory enhances growth and diminishes mortality in a marsh-inhabiting grasshopper. Ecological Society of America National Meeting, Savannah, GA, 2003.

Pearson TRH, Burslem DFRP, Goeriz RE, Dalling JW. Interactions of gap size and herbivory on establishment, growth and survival of three species of neotropical pioneer trees. Association of Tropical Biology. Panama City, Panama, 2001.

Miller, A., R. Goeriz. 2018. Cosmetics, Pet Products and Other Areas Under the FDA Spotlight. Crisis Management Summit.

Miller, A., R. Goeriz. 2018. Surviving a Dairy Related Foodborne Illness Outbreak. Webinar- International Food Technologists.

Goeriz, R. 2018. How to Help Your Company Survive a Foodborne Illness Outbreak. Microbiology Short Course. Penn State University

Goeriz, R., B. Eblen. 2019. FDA Spotlight: Current and Developing Issues. Crisis Management Summit.

Goeriz, R. 2019. How to Help Your Company Survive a Foodborne Illness Outbreak. Microbiology Short Course. Penn State University.

Goeriz, R., B. Eblen. 2020. Recent Issues: Health Risks or Just Poor Quality? North American Crisis Management Summit.

Horr, T., R. Goeriz. 2020. Get What You Pay For: Safety & Quality Due Diligence in the Food, Beverage & Dietary Supplement Industry. Exponent Live Webinar.

Goeriz, R., A. Cotton, J. Magnus. 2020. Meeting Compliance & Food Safety Challenges During the COVID-19 Pandemic & Beyond. Invited Webinar for California Grocers Association.

Goeriz, R. 2022. How to Help Your Company Survive a Foodborne Illness Outbreak. Microbiology Short Course. Penn State University.