



ILSI Health and Environmental
Sciences Institute



ILSI

International Food
Biotechnology
Committee

SPEAKER BIOGRAPHIES

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Co-sponsored by:

HESI Protein Allergenicity Technical Committee (PATC)

ILSI International Food Biotechnology Committee (IFBiC)

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Reynaldo Ariel Alvarez Morales, PhD

Born in Mexico City, Dr. Alvarez Morales majored in Microbiology and Biochemistry at the National School of Biological Sciences, Mexico. He obtained his PhD from the University of Sussex in Great Britain. On his return to Mexico in 1986, Dr. Alvarez Morales joined the Center for Research and Advanced Studies (CINVESTAV) at its Unit in Irapuato as senior researcher in the department of Plant Genetic Engineering. He has also been Director of the Biotechnology and Genetic Engineering Unit of CINVESTAV. His experience on biosafety issues includes being a founding member of the National Committee for Biosafety (1990), national risk evaluator and reviewer for the ministry of Agriculture in Mexico, coordinator of the Scientific Consultative Council for Biosafety, technical expert for the Global Environmental Facility, lecturer for the biosafety courses of the ICGEB, and lecturer in biosafety workshops in Mexico, Kenya, Costa Rica, Nicaragua, Chile, Italy, Egypt, Peru and Colombia. He is currently the Executive Secretary of the Intersecretarial Commission for Biosafety and Genetically Modified Organisms of the Mexican Federal Government.

Joseph L. Baumert, PhD

Dr. Joe Baumert currently serves as an Assistant Professor in the Department of Food Science & Technology and Co-Director of the Food Allergy Research and Resource Program (FARRP) at the University of Nebraska. Dr. Baumert received his PhD in food science and technology at the University of Nebraska-Lincoln specializing in food allergy research in association with the Food Allergy Research and Resource Program. He received his BS and MS degrees in Animal Science at the University of Nebraska specializing in Meat Science and Muscle Biology. Dr. Baumert maintains active research and extension programs within the Department. His research interests include determination of minimum eliciting doses for specific allergenic foods, characterization of major food allergens, the development and improvement of immunochemical methods for detection of allergenic food proteins, and the development of animal models for prediction of allergic sensitization. His outreach program focuses on providing the food industry with training on issues related to food allergen detection and control in the supply chain and processing facility; providing credible, science-based information and advice for risk assessment and risk management purposes; and providing analytical services and expert interpretation of results.

Jordan Bean, MSc

Jordan Bean completed his bachelor degree in microbiology and immunology at the University of Western Ontario in 2006, and his master degree in microbiology at the University of Guelph in 2009. He began his career with Health Canada in 2009 as a scientific evaluator in the Novel

Foods Section of the Food Directorate, the section for which he currently works. His primary duty is performing pre-market safety assessments to ensure the safety of novel food products for food use in Canada.

Christal Bowman, PhD

Dr. Bowman is an immunologist and a senior scientist at Bayer CropScience, where she works in the area of human safety related to genetically modified crops and novel proteins. Dr. Bowman is a graduate of the College of William and Mary and holds a PhD in Microbiology and Immunology from Tulane University. She conducted postdoctoral research at the University of North Carolina at Charlotte and the US Environmental Protection Agency in the areas of host defense, immune activation, and food allergy. Following her postdoctoral training, Dr. Bowman served as a staff scientist with EPA's National Center for Environmental Assessment, providing immunotoxicology support for the integrated science assessments used to develop the national ambient air quality standards.

Professor Werner Braun

Werner Braun is a professor in the Department of Biochemistry and Molecular Biology at the University of Texas Medical Branch (UTMB) in Galveston, Texas. He received his academic and professional training at the ETH Zurich, Switzerland, in the group of Dr. Kurt Wüthrich, who was awarded the Nobel Prize in Chemistry in 2002. After a two-year post-doctoral fellowship at Kyushu University, Fukuoka, Japan, he returned to the ETH Zurich, and was promoted in 1987 to Privatdozent for Biophysics. In 1995 he was recruited as faculty and core member of the Sealy Center for Structural Biology and Molecular Biophysics to UTMB.

Phil Brune, PhD

Dr. Brune currently holds the position of Technical Expert for Compositional Analysis, Product Safety for Syngenta Crop Protection, LLC in Research Triangle Park, NC, USA. He has been in this position since 2009. Dr. Brune received a BA degree in Biology from Wittenberg University (Springfield, OH), and a MS degree in Plant Pathology from The Ohio State University. He then went on to obtain a PhD degree in Plant Pathology from North Carolina State University. From 1995 to 1997, Dr. Brune held an assistant professorship in the Math and Science Department at St. Mary's College (Raleigh, NC). In 1997, he accepted a position with Syngenta Crop Protection, where he has held positions as a research scientist (conducting field research on disease control of most major field, fruit, and vegetable crops), in data management (data capture, analysis, and mining; experimental design), and as team lead for Compositional Analysis of genetically modified crops. Dr. Brune is Co-Chair of the ILSI Crop Composition Task

Force, and was one of the organizers of the ILSI IFBiC Crop Composition Workshop held in Washington, DC, in September 2012.

Dr. Dean Bushey

Dr. Bushey obtained his doctoral degree in Synthetic Organic Chemistry from the University of South Carolina and a post-doctorate at the Massachusetts Institute of Technology (MIT). He joined Union Carbide Agricultural Company in 1977 as a synthetic chemist in the insecticide discovery area. In 1985-1986, he spent two years at Cornell University as a Visiting Scientist as a member of the Cornell Biotechnology Institute where he made his initial foray into biotechnology. After the purchase of Union Carbide Agricultural Company by Rhone Poulenc Ag Company (1987), he managed an insect biochemistry/molecular biology group for 10 years. In 1999, Aventis was formed with the merger of Rhone Poulenc and Agrevo during which time he managed a water analytical lab, organized the university relations in the US, and was a member of the global technology transfer group. When Bayer purchased Aventis (2002), he transferred to a New Business Ventures group for four years before moving to Regulatory where he worked on cotton for two years. Starting in the fall of 2009, he became the global regulatory manager for Research. His responsibilities include working with Research personnel in all crops and all technology to assure that there are no regulatory issues in the early phases of these programs that would prevent their future registration.

Angela Hendrickson Culler, PhD

Dr. Angela Hendrickson Culler is a Plant Biochemist and Lead of Monsanto's Regulatory Compositional Biology Center. Dr. Hendrickson is Co-Chair of the ILSI International Food Biotechnology Committee (IFBiC) Crop Composition Issues Task Force (TF12), and was one of the organizers of the Crop Composition Workshop held September 2012. Dr. Hendrickson Culler has published in the areas of auxin analysis, auxin biosynthesis, and compositional and metabolite variability in safety assessments. Dr. Hendrickson Culler obtained her BA in Biology from Hamline University in Saint Paul, Minnesota, and her PhD in Plant Biological Sciences from the University of Minnesota. Dr. Hendrickson Culler completed a postdoctoral research fellowship at the University of Minnesota, and then joined Monsanto in 2008. She has worked in the area of compositional analysis since joining, and led the Metabolism and Pathways function prior to assuming her current role.

Jeremiah Fasano, PhD

Jeremiah Fasano is a Consumer Safety Officer in FDA's Center for Food Safety and Applied Nutrition, within the Division of Biotechnology and GRAS Notice Review. He has worked on a

wide variety of food safety issues, including plant biotechnology. He received his PhD in Plant Biology from Penn State in 2001. He is a current member of the ILSI Health and Environmental Sciences Institute (HESI) Protein Allergenicity Technical Committee (PATC).

Venu Gangur, DVM, MVSc, PhD

Venu Gangur obtained his basic training in Veterinary Medicine (Bangalore Veterinary College, India) followed by a Master's degree in Immunology (Indian Veterinary Research Institute) and a PhD in Immunology/Allergy (Manitoba Medical College, Winnipeg, Canada). He completed his post-doctoral fellowship trainings in Allergy & Immunology at the Manitoba Medical College, Canada, and at the National Institutes of Health, Bethesda, MD, USA. He then started his independent research career at the Michigan State University. He is currently a tenured Associate Professor and directs a food allergy and immunology laboratory. His research interests include: hypersensitivity disorders such as food allergies and asthma; development and validation of mouse model of food allergy; mechanisms of life-threatening food induced anaphylaxis; and immune biomarkers in maternal and child health. He teaches advanced courses in immunology, immunotoxicology, food safety and microbiology. He serves on the Editorial Board of *Journal of Food Protection* and as a reviewer for many biomedical journals and funding agencies. He has received many research awards including the *Respiratory 2000 International Young Investigator Award* and the *Tom-Olenick Research Award in Human Immunology*.

Kevin Glenn, PhD

Dr. Kevin Glenn is a Senior Science Fellow and Lead of the Monsanto Regulatory Product Characterization Center. Dr. Glenn is the Chair of the ILSI International Food Biotechnology Committee (IFBiC). Dr. Glenn has also previously chaired the ILSI IFBiC Task Force on Nutritional and Safety Assessments of GM Crops and the Subcommittee on DNA/Protein Detection within the industry-wide Agricultural Biotechnology Stewardship Technical Committee (ABSTC). Dr. Glenn is author of more than 50 scientific publications and 21 patents. Dr. Glenn obtained his BS degree in microbiology from the California State Polytechnic University, Pomona, and his PhD in cell biology from the University of California, Irvine. Dr. Glenn joined Monsanto in 1983 after completing an American Heart Association postdoctoral research fellowship at the University of Washington, Seattle.

Andrea F. Huberty, PhD

Andrea Huberty is the branch chief of the Regulatory and Environmental Analysis Branch at the USDA APHIS Biotechnology Regulatory Service. Her branch develops policies and regulations

for those genetically engineered organisms that are regulated by APHIS. From 2005-2006, Andie was an American Association for the Advancement of Science Risk Policy Fellow. She is an author, researcher, or statistician on 18 publications, including published articles in the journals *Nature*, *American Naturalist*, and *Ecology*. Andie received her PhD and MS in Entomology from the University of Maryland (College Park, MD), and her BS degree in Ecology and Evolutionary Biology from the University of Rochester (NY).

Gregory S. Ladics, PhD, DABT, ATS

Gregory S. Ladics received his Bachelor of Science *cum laude* in Toxicology from the Philadelphia College of Pharmacy and Science in 1987. In 1991, he received his Doctor of Philosophy in Pharmacology and Toxicology from the Medical College of Virginia/Virginia Commonwealth University. He has been employed by the DuPont Co. for over 21 years where he is presently a Research Fellow. In 1999, Dr. Ladics became a Diplomate of the American Board of Toxicology and a *Fellow* of the Academy of Toxicological Sciences (ATS) in 2012. He serves on the ILSI Health and Environmental Sciences Institute's (HESI) Protein Allergenicity Technical Committee (PATC) as Co-Chair and the HESI Immunotoxicology Technical Committee. Dr. Ladics is also Chair of the CropLife International Protein Allergenicity Team and is currently President of the Society of Toxicology Immunotoxicology Specialty Section. He is a member of the Editorial Boards for the *Journal of Immunotoxicology*, the *International Journal of Toxicology*, *Dataset Papers in Biology*, and the *ISRN Biotechnology Journal*. Current research activities involve the evaluation and validation of test methods to assess protein allergenicity potential and research to address issues and further refine bioinformatic/protein modeling approaches for assessing potential protein allergenicity. Dr. Ladics has over 140 abstract, journal, and book chapter publications in the field of Immunotoxicology and Allergy.

Scott McClain, PhD

Scott McClain's academic background is in animal physiology and environmental toxicology having received his MS and PhD degrees in the Center for Environmental Toxicology and Statistics at Miami University, Oxford, OH. Prior to returning to a graduate PhD degree after finishing his MS, he started his professional career by working for 7 years as a research immunologist and protein biochemist developing bioactive food ingredients. Dr. McClain's professional background is in the biotechnology sector and his training and experience is in immunology and clinical allergy diagnostics, product efficacy and product safety testing for novel food and nutraceutical technologies. The last 7 years have been spent in the product safety and regulatory divisions of the agricultural biotechnology sector with an emphasis on conducting and communicating the allergy and toxicology safety of novel food and feed crop products.

Currently, Dr. McClain is employed with Syngenta and he co-chairs the ILSI Health and Environmental Sciences Institute (HESI) Protein Allergenicity Technical Committee (PATC) and participates on the CropLife International Allergy Expert Team.

Cynthia McOliver, PhD

Dr. Cynthia McOliver is an Environmental Health Scientist at the US EPA, Office of Research and Development, National Center for Environmental Research. She manages three programs as part of the Human Health Team in the Health Research and Fellowships Division – Tribal Environmental Health Research, Food Allergy/Allergenicity, and Endocrine Disrupting Chemicals – and is a staff member for the quarterly *Environment, Health and Society* Bulletin. She joined NCER in July 2011. Her areas of interest are environmental epidemiology, health disparities, community engagement/community-based participatory research, risk assessment, and water quality and access. Prior to joining NCER, she was an EPA/ASPH Environmental Health Fellow in EPA's Office of Water Office of Science and Technology. Her work addressed human health risks from waterborne and water-based contaminants, microbial risk assessment, tribal stakeholder concerns related to the upcoming revised Recreational Water Quality Criteria, and children's risks from waterborne illness. She has a background in environmental health sciences, environmental epidemiology and risk assessment. She obtained her undergraduate degree in Biology from the University of Mississippi, a Master's in Public Health (MPH) from the University of Texas in Houston, and her PhD and post-doctoral studies in Environmental Health Sciences from Johns Hopkins Bloomberg School of Public Health in Baltimore, MD.

Wayne Parrott, PhD

Wayne Parrott has a degree in agronomy from the University of Kentucky, and MS and PhD degrees in Plant Breeding and Plant Genetics from the University of Wisconsin. He is currently a professor of Crop Science at the University of Georgia, where he has been for the past 23 years. He conducts research on the development and deployment of transgenic crop plants. One major research thrust is the development of soybeans resistant to insects, nematodes and fungi, as well as modifying soybean for novel feed uses. He has published a guide for environmental risk assessment, along with over 90 journal articles in refereed publications, with 14 book chapters. He has served on the Editorial Boards of *Plant Cell Reports*, *Plant Cell Tissue and Organ Culture*, and *Crop Science*. He has been elected chair of the biotechnology section of the Crop Science Society of America and of the plant section of the Society for In Vitro Biology, and is a fellow of the Crop Science Society of America and of the Society for In Vitro Biology. He is actively engaged in training graduate students and postdoctoral fellows, and teaches graduate-level courses in genetics and undergraduate courses in agroecology and

sustainable agriculture. The latter course is taught on-site in Costa Rica. He has traveled extensively throughout Latin America and other countries, and worked with legislators and regulators in the various countries with their legal and regulatory issues relating to biosafety and biotechnology.

William D. Price, PhD, PAS, Diplomate

William D. Price is a private consultant and retired from US/FDA/CVM. He has thirty years of experience in regulating GM crops for food and feed. Dr. Price was a member of the US Team that wrote the policy for the evaluation of food derived from New Plant Varieties and was the lead person responsible for animal feed evaluation. Until his retirement in 2010, Dr. Price was the FDA's Center for Veterinary Medicine point person responsible for policy and evaluation of all New Plant Varieties for animal feed use and the US representative for feed issues to the OECD Task Force on the Safety of Novel Foods and Feeds. He was a substantial contributor to many OECD Consensus Documents on Composition Considerations for New Plant Varieties, including maize, soybeans, cotton, barley, grain sorghum, sweet potatoes, tomatoes, rice, and cassava. Dr. Price is a Board Certified Animal Nutritionist by the American Registry of Professional Animal Scientists and a Fellow of the American Society of Animal Science. He was an FDA Contract Officer for grants supporting the National Research Council's publications on Nutrient Requirement of Animals. Dr. Price was a Career Service and Directors Award winner of the US FDA CVM, and was the Outstanding Achievement Award winner for the Washington DC Chapter of ARPAS. Dr. Price has a BS from Michigan State University, an MS and a PhD in animal nutrition from Purdue University, and a Certificate in mathematical statistics from the USDA Graduate School.

Catherine H. Schein, PhD

Dr. Catherine H. Schein, PhD, is Associate Prof. rt., Institute for Human Infections and Immunity, University of Texas Medical Branch (UTMB), Galveston, TX. She uses computational and experimental methods to determine antigenic regions of allergens and viral proteins. She was educated as a biochemical engineer and microbiologist, with degrees from the University of Pennsylvania (BA), Massachusetts Institute of Technology (MSc), and the Swiss Federal Institute of Technology, Zürich (PhD). After a postdoc with Charles Weissmann at the University of Zürich, she developed processes and managed production of recombinant human interferons and other cytokines at the 125, 000 l scale for preclinical trials at Biogen. She has many well cited publications on producing soluble proteins. As an Oberassistentin at the ETH Zurich, she learned sequence analysis and structural prediction from Gaston Gonnet and Stephen Benner, and, funded by the Zürcher Krebsliga, studied the role of ribonucleases in

cellular response to interferons. Her projects at the UTMB include epitope analysis and structural comparison of allergenic proteins (Structural Database of Allergenic Proteins, SDAP; in collaboration with Werner Braun) and viral proteins (the Flavitrack database). Her group has established new methods for determining consensus sequences that have revealed common epitopes of allergens and viruses. Dr. Schein's group has also determined inhibitors of bacterial toxins using 3D-pharmacophores, compound library screening, and molecular docking. Her research projects have been funded by the US FDA, US EPA, USDA, NIH, the Department of the Army, Mission Pharmacal, San Antonio TX, Bayer Crop Sciences, and the Institute for Translational Research, UTMB.

Jaimie Schnell, PhD

Jaimie Schnell received her PhD in molecular biology in 2008 from the University of Ottawa. She then joined Agriculture and Agri-Food Canada as a Visiting Fellow, where she was involved in research on the global gene expression profiles of transgenic plants. She has been a risk assessor with the Plant and Biotechnology Risk Assessment Unit of the Canadian Food Inspection Agency since 2009.

Ray Shillito, PhD

Dr. Ray Shillito has more than 30 years' experience in Agricultural Biotechnology, is co-inventor on several patents, and is co-author of more than 50 publications. He has a BSc in Quantitative Biochemistry, and PhD in Botany (Tissue Culture). Dr. Shillito started his Biotech journey in tissue culture research, developed transgenic plants in the Netherlands and Switzerland, and joined Syngenta (Ciba Geigy) in the USA in 1986. He moved to Bayer in 1997 where he has for the past 9 years been responsible for external relations on sampling, analytical methods and some aspects of regulatory science for Bayer BioScience. Dr. Shillito has been a member of the ILSI International Food Biotechnology Committee (IFBiC) and some of its task forces since 1998; he led the development of the crop composition database, and presently leads the sampling and detection methods working group. He was chair of IFBiC from 2003-2012.

Severin Stevenson, PhD

Severin Stevenson is originally from California, but attended school in Nevada where he earned a BS/MS in Biotechnology from the University of Nevada Reno in 2006 under the guidance of David Shintani. Shortly thereafter, Severin joined the graduate school program at the University of Missouri, where he worked under Jay Thelen employing quantitative proteomic methods to study seed development. He earned a PhD in 2011 and immediately started working for the start-up company, PepPro Analytics, LLC as Research Manager.