

Genetically Engineered Crops: Past Experience and Future Prospects

Committee

Fred L. Gould

Chair

Fred Gould is a University Distinguished Professor of Entomology and codirector of the Genetic Engineering and Society Center at North Carolina State University. He studies the ecology and genetics of insect pests to improve food production and human and environmental health. Dr. Gould's research on the application of evolutionary biology and ecological genetics to sustainable insect-pest management has influenced management of insect pests of crops on a global scale and promises to do the same for arthropod vectors of human disease. He has been a leader in shaping the science-based regulatory framework for the deployment of Bt crops in the United States and globally. His research and major contributions have earned him numerous national and international awards, including the Alexander von Humboldt Award in 2004, which is presented annually to the person judged to have made the most significant contribution to American agriculture during the previous 5 years. In 2011, he was elected to the U.S. National Academy of Sciences (NAS). Dr. Gould has served on several NAS-National Research Council committees studying effects of the commercialization of genetically engineered crops. He currently serves on the National Research Council's Board on Agriculture and Natural Resources. He is a fellow of the Entomological Society of America and of the American Association for the Advancement of Science. Dr. Gould is the author or a coauthor of more than 180 refereed publications. He received his BS in biology from Queens College and a PhD in ecology and evolutionary biology from the State University of New York at Stony Brook.

<https://vimeo.com/117282676>

Richard M. Amasino

Member

Richard M. Amasino is a professor with the Department of Biochemistry at the University of Wisconsin-Madison. His work focuses on how plants perceive seasonal cues such as changing day-length and temperature and how they use such cues to determine when to initiate flowering. His most recent focus has been on understanding the biochemical pathway through which perception of winter cold leads to flowering in the spring—a process known as vernalization. Dr. Amasino is also a member of the Great Lakes Bioenergy Research Center, which is one of the three bioenergy research centers established by the U.S. Department of Energy. His work with the center involves studying the biochemical basis of plant biomass accumulation as well as directing the education and outreach program of the center. Dr. Amasino is a Howard Hughes Medical Institute (HHMI) professor, a member of the U.S. National Academy of Sciences, and a fellow of the American Association for the Advancement of Science. His teaching and research have resulted in several national and international awards, including the Alexander von Humboldt Foundation Award in 1999. He has served both as president and chair of the board of trustees of the American Society of Plant Biologists. Dr. Amasino received his BS in biology from Pennsylvania State University and his MS and PhD in biology/biochemistry from Indiana University.

<https://vimeo.com/117532880>

Dominique Brossard

Member

Dominique Brossard is a professor in and chair of the Department of Life Sciences Communication at the University of Wisconsin-Madison (UW-Madison). She is an affiliate of UW-Madison Robert and Jean Holtz Center for Science and Technology Studies, the UW-Madison Center for Global Studies and the Morgridge Institute for Research. Dr. Brossard teaches courses in strategic communication theory and research with a focus on science and risk communication. Her research program concentrates on the intersections between science, media, and policy. A fellow of the American Association for the Advancement of Science and a former board member of the International Network of Public Communication of Science and Technology, Dr. Brossard is an internationally known expert in public-opinion dynamics related to controversial scientific issues, such as genetically engineering crops. She has published numerous research articles on the topic in such outlets as *Science*, *Science Communication*, the *Proceedings of the National Academy of Sciences*, the *International Journal of Public Opinion Research*, *Public Understanding of Science*, and *Communication Research* and was coeditor of the book *The Media, the Public, and Agricultural Biotechnology* (2007). Dr. Brossard has a varied professional background, including experience in the laboratory and in the corporate world. She spent 5 years at Accenture in its Change Management Services Division. She was also the communication coordinator for the Agricultural Biotechnology Support Project II (ABSP II), a position that combined public relations with marketing communication and strategic communication. Dr. Brossard earned her MS in plant biotechnology from the Ecole Nationale d'Agronomie de Toulouse and her MPS and PhD in communication from Cornell University.

<https://vimeo.com/117282672>

C. Robin Buell

Member

C. Robin Buell joined the Department of Plant Biology of Michigan State University in October 2007 after spending 9 years at The Institute for Genomic Research. She studies plant genome biology and deciphers the genomes of their pathogens. Her research also uncovers how components of the genome confer function and phenotype on both a plant and the microorganisms that feed on it. Dr. Buell has published extensively on plant genomics and bioinformatics. She has worked on the genomes of *Arabidopsis*, rice, potato, maize, switchgrass, and medicinal plants. Dr. Buell earned her BS from the University of Maryland, her MS from Washington State University, and her PhD from Utah State University. Dr. Buell has an active research group composed of postdoctoral research fellows, research assistants, graduate students, undergraduate students and high school interns and collaborates with scientists across the United States and throughout the world. She has served as an editor at *Plant Physiology*, the *Plant Genome*, *Crop Science*, *Frontiers in Plant Genetics and Genomics*, and *Plant Cell*. She is a fellow of the American Association for the Advancement for Science and the American Society of Plant Biologists, a Michigan State University Foundation Professor and a Michigan State University William J Beal Distinguished Faculty.

<https://vimeo.com/117332600>

Richard A. Dixon

Member

Richard A. Dixon is Distinguished Research Professor in the Department of Biological Sciences of the University of North Texas. He was previously Distinguished Professor and Samuel Roberts Noble Research Chair, senior vice president, and founding director of the Plant Biology Division of the Samuel Roberts Noble Foundation in Ardmore, Oklahoma, where he worked from 1988 to 2013. Dr. Dixon's research centers on the biochemistry, molecular biology, and metabolic engineering of plant natural-product pathways and their implications for agriculture and human health. He is also interested in engineering of lignocellulosic biomass for the improvement of forage and bioenergy feedstocks. He has published over 460 papers and chapters on those and related topics in international journals. He is a member of the editorial Boards of five international journals and has been named by the Institute for Scientific Information as one of the 10 most-cited authors in the plant and animal sciences. Dr. Dixon is a member of the U.S. National Academy of Sciences and a fellow of the American Association for the Advancement of Science. He received his BS and PhD in biochemistry and botany from the University of Oxford, UK, and postdoctoral training in plant biochemistry at the University of Cambridge. He was awarded the doctor of science degree for his research achievements by the University of Oxford in 2004.

<https://vimeo.com/117510008>

Jose B. Falck-Zepeda

Member

José B. Falck-Zepeda joined the International Food Policy Research Institute (IFPRI) in 2004 as a research fellow. He is now a senior research fellow and leader of the Policy Research Team of the Program for Biosafety Systems. His work at IFPRI focuses on the economics and impact assessment of agricultural biotechnology, biosafety, and other emerging technologies. Dr. Falck-Zepeda also conducts research on agricultural R&D and science policy, investments, and technical innovation capacity in developing countries. His research has examined such diverse topics as the socioeconomic impact of Bt and Roundup Ready cotton and maize and other genetically modified technologies, the cost of compliance with biosafety regulations and their impact on investment flows, biotechnology capacity in Latin America and Africa, and the determinants of technology adoption in developing and developed countries. Before joining IFPRI, Dr. Falck-Zepeda worked as a research officer at the International Service for National Agricultural Research (ISNAR) in The Hague, the Netherlands. He also was a postdoctoral research fellow at Auburn University and assistant professor and an instructor at the Panamerican Agricultural School (Zamorano University) in Honduras. Dr. Falck-Zepeda is the author of multiple books, journal articles, and other publications and has been an invited speaker in high-level policy dialogues and professional conferences globally. A citizen of Honduras, he holds an agronomy degree from the Panamerican Agricultural School (Zamorano University), a BS in animal science from Texas A&M University, and an MS and a PhD in agricultural economics from Auburn University.

<https://vimeo.com/117332601>

Michael A. Gallo

Member

Michael A. Gallo is Emeritus Professor (Environmental and Occupational Medicine) at Rutgers-Robert Wood Johnson Medical School. He is also an adjunct professor in the School of Public Health and the Department of Pharmacology and Toxicology of the Ernest Mario School of Pharmacy of Rutgers. He was the founding (interim) director of the Cancer Institute of New Jersey , and a founder of the Environmental and Occupational Health Sciences Institute at Rutgers. In addition he served as the Senior Associate Dean for Research of the the medical school. His expertise includes dioxins and polychlorinated biphenyls (PCBs), experimental models in pharmacology and toxicology, cytoplasmic and cell-surface receptors, hormone biology, and mechanisms of hormonal and environmental carcinogenesis. Dr. Gallo has served on several National Academy of Sciences and National Research Council committees, such as the Roundtable on Environmental Health Sciences, Research, and Medicine; the Committee on Pesticides in the Diets of Infants and Children; the Committee on Risk Assessment Methodology; and on the Drinking Water and Health Committee. He was granted the Society of Toxicology Education Award, chaired the Hormonal Carcinogenesis as well as the Mechanisms of Toxicity Gordon Research Conference, and served as ambassador of toxicology of the Mid-Atlantic Society of Toxicology. Dr. Gallo received his BA in biology and chemistry from Russell Sage College and received his PhD in toxicology and experimental pathology and did postdoctoral work in pathology from Albany Medical College of Union University.

<https://vimeo.com/117814039>

Ken Giller

Member

Ken Giller is a professor of plant production systems in the Wageningen Centre for Agroecology and Systems Analysis (WaCASA) of Wageningen University. He leads a group of scientists who have profound experience in applying systems analysis to explore future scenarios for land use with a focus on food production. Dr. Giller's research has focused on smallholder farming systems in sub-Saharan Africa, particularly problems of soil fertility and the role of nitrogen fixation in tropical legumes, with emphasis on the temporal and spatial dynamics of resources in crop-livestock farming systems and their interactions. He is the author of the standard text, Nitrogen Fixation in Tropical Cropping Systems, whose second edition was published in 2001. He leads a number of initiatives, such as N2Africa (Putting Nitrogen Fixation to Work for Smallholder Farmers in Africa), NUANCES (Nutrient Use in Animal and Cropping Systems: Efficiencies and Scales), and Competing Claims on Natural Resources. Dr. Giller joined Wageningen University as chair of plant production systems in 2001 after holding professorships at Wye College, University of London, and the University of Zimbabwe. He holds a PhD in ecology from Sheffield University.

<https://vimeo.com/117282673>

Leland Glenna

Member

Leland L. Glenna is an associate professor of rural sociology and science, technology, and society in the Agricultural Economics, Sociology, and Education Department at The Pennsylvania State University. His research and teaching fit into three areas of emphasis: 1) the social and environmental impacts of agricultural science and technology, 2) the role of science and technology in agricultural and environmental policy making, and 3) the social and ethical implications of democratizing science and technology research. His domestic research focuses on how research funding for and research outputs from university-industry research collaborations in agricultural and food science change over time, especially in the area of genetic engineering technology. His current international research projects focus on agricultural and community development and on international comparative analyses of agricultural research funding and innovations. Prior to his time at Penn State, he served as a postdoctoral associate and lecturer at Cornell University, a research sociologist at the University of California at Davis, and an assistant professor at Washington State University. Dr. Glenna received his bachelor's degree in history from Hamline University, his masters of divinity from Harvard University School of Divinity, and his doctorate of philosophy in rural sociology from the University of Missouri.

<https://vimeo.com/117807624>

Timothy S. Griffin

Member

Timothy S. Griffin is an associate professor in the Friedman School of Nutrition Science and Policy of Tufts University. He directs the interdisciplinary graduate program Agriculture, Food and the Environment and teaches classes on U.S. agriculture, agricultural science and policy, and the intersection of ecology and technology. He also serves on the steering committee for the university-wide graduate program Water: Systems, Science and Society and is a faculty codirector of the Tufts Institute for the Environment, and is a faculty affiliate at the Center for International Environment and Resource Policy at Tufts. His current research focuses on barriers to and incentives for regional food systems, environmental effects of agriculture, climate change, and conservation practices in agricultural systems. Before coming to the Friedman School in 2008, Dr. Griffin was research agronomist and lead scientist with the U.S. Department of Agriculture Agricultural Research Service in Orono, Maine, from 2000 to 2008. He conducted research on many aspects of agricultural production in the northeastern United States, including nutrient cycling and grain production on organic dairy farms, crop management, and long-term sustainability of high-value production systems. He also initiated research on greenhouse-gas emissions, soil carbon and nitrogen cycling, and soil conservation in these systems. From 1992 to 2000, Dr. Griffin was an extension sustainable agriculture specialist with the University of Maine, the first such position in the United States. He developed and delivered a wide-ranging educational and applied-research program on crop production, nutrient availability, and crop-livestock integration. He received his BS in forage and range management and his MS in agronomy from the University of Nebraska and his PhD in crop and soil science from Michigan State University.

<https://vimeo.com/117524596>

Bruce R. Hamaker

Member

Bruce R. Hamaker is Distinguished Professor of Food Science, director of the Whistler Center of Carbohydrate Research, and holder of the Roy L. Whistler Chair in Carbohydrate Science in the Department of Food Science of Purdue University, West Lafayette, Indiana. He obtained his undergraduate degree in biological sciences from Indiana University; his graduate studies, at Purdue, were in human nutrition (MS) and food chemistry (PhD); and he did postdoctoral study at the Instituto de Investigacion Nutricional in Lima, Peru (supervisor, George Graham, Johns Hopkins University). He was in the U.S. Peace Corps in Liberia, West Africa, from 1977 to 1979. Dr. Hamaker has over 170 refereed journal publications in food science, human nutrition, biochemistry, and broad-spectrum journals and numerous book chapters. He has advised over 50 MS and PhD students and nearly 20 postdoctoral scientists. Dr. Hamaker's research program is known for its focus on food carbohydrates and proteins with applications related to health and wellness. In that regard, he has a number of clinical and nutrition science collaborations with research experience in protein and carbohydrate digestion patterns related to quality and physiological response, and dietary fiber effect on the gut microbiome. Dr. Hamaker works with ingredient and processed-food companies principally to assist in improving nutritional or health quality of processed products. He is active in international research collaborations in Africa and Asia. In Africa, he has worked for over 20 years on public and foundation-funded projects on improvement of utilization and nutritional properties of cereal grains and on setting up technology-based incubation centers to work with local entrepreneurs.

<https://vimeo.com/117496866>

Peter M. Kareiva

Member

Peter M. Kareiva is the Director of The Institute of the Environment and Sustainability at UCLA and the Chair of the Science Cabinet at The Nature Conservancy. Dr. Kareiva is also cofounder (with Gretchen Daily and Taylor Ricketts) of the Natural Capital Project, a pioneering partnership among The Nature Conservancy, Stanford University, and WWF. The Natural Capital Project develops models that quantify nature's assets (or ecosystem services) with the aim of informing the choices that people make on the scale of local communities and regions, all the way up to nations and global agreements. He is the author of more than 150 scientific publications in such journals as Nature, Science, and the Proceedings of the National Academy of Sciences of the United States of America. He has published on gene-flow issues and environmental risk analysis related to genetically engineered crops. He was named a member of the National Academy of Sciences in 2011. He is also a fellow of the American Academy of Arts and Sciences and a member of the Ecological Society of America and the Society for Conservation Biology. Dr. Kareiva received his BA in zoology from Duke University, his MS in environmental biology from the University of California, Irvine, and his PhD in ecology and evolutionary biology from Cornell University.

<https://vimeo.com/117496950>

Daniel B. Magraw

Member

Daniel Magraw is Professorial Lecturer and Senior Fellow of the Foreign Policy Institute of Johns Hopkins University's School of Advanced International Studies (SAIS). He has extensive experience in international law, institutions, processes and policies, particularly in relation to environmental protection, dispute settlement, and human rights. He has worked in government, nongovernmental organizations, intergovernmental organizations, business, and academe. Mr. Magraw was a member of the National Research Council Committee on the Biological Confinement of Genetically Engineered Organisms and a member of the U.S. government's Trade and Environment Policy Advisory Committee. While in the U.S. government during 1992-2001, he cochaired a White House assessment of the regulation of genetically engineered organisms and was director of the International Environmental Law Office and acting principal deputy assistant administrator in the Office of International Activities of the Environmental Protection Agency. He has taught at the University of California, Berkeley, the University of Colorado, the University of Miami, and the Georgetown University Law Center. He worked as an economist and business consultant in India as a Peace Corps volunteer. Mr. Magraw has a JD from the University of California, Berkeley, where he was editor-in-chief of the California Law Review, and a BA (magna cum laude) in economics from Harvard University.

<https://vimeo.com/117507810>

Carol Mallory-Smith

Member

Carol Mallory-Smith is a professor of weed science in the Department of Crop and Soil Science of Oregon State University. She earned her BS in plant protection and her PhD in plant science from the University of Idaho. Her main research interests are gene flow and hybridization between crops and weeds (including genetically engineered and conventionally bred), herbicide resistance, weed management in agronomic crops, and weed biology. She is the author or coauthor of more than 120 journal articles, eight book chapters, and numerous extension and popular-press articles. Dr. Mallory-Smith visited Australia and Korea as an invited expert on gene flow and other weed issues. She has been an invited speaker in Australia, France, Korea, and Thailand to address the potential risks and benefits of introducing genetically engineered crops. Dr. Mallory-Smith served as a Fulbright Scholar lecturer in Argentina. She is a fellow of the Western Society of Weed Science and the Weed Science Society of America and served as president and treasurer of the Weed Science Society of America and secretary-treasurer of the International Weed Science Society. Dr. Mallory-Smith awards include the Alumni Achievement Award from the University of Idaho's College of Agriculture in 2007, the Excellence in Graduate Mentoring Award from Oregon State University in 2009, the Western Society of Weed Science Outstanding Weed Scientist in 2009, the Distinguished Service Award for Individual Contribution to the Agricultural Industry by the Oregon Department of Agriculture in 2014, and the Weed Science Society of America Outstanding Researcher Award in 2016.

<https://vimeo.com/117282669>

Kevin Pixley

Member

Kevin Pixley is the director of the Genetic Resources Program of the International Maize and Wheat Improvement Center (CIMMYT), a position he has held since 2011. Dr. Pixley joined CIMMYT as a postdoctoral fellow in 1990 and served as a maize breeder (1993) and then also as team leader (1997) at the center's Harare, Zimbabwe, research station. After 11 years in Africa, he returned to CIMMYT headquarters in Mexico to serve in directing positions in the Global Maize Program with primary responsibilities in Asia and Latin America while leading CIMMYT's breeding program and a multidisciplinary global network of scientists developing nutritionally enhanced maize. His current responsibilities include oversight of research to characterize and facilitate use of genetic resources, as well as biosafety related to transgenic maize and wheat research at CIMMYT. Dr. Pixley is also an adjunct associate professor at the University of Wisconsin, where he teaches about agriculture, health, and nutrition and their roles in household livelihoods and international development. His accomplishments include mentoring 12 undergraduate and 12 graduate students and their thesis projects, being the author of more than 50 refereed journal articles and book chapters, and leading international collaborative maize-breeding projects for enhanced disease resistance and nutritional quality. Dr. Pixley received his BS from Purdue University, his MS in crop physiology from the University of Florida, and his PhD in plant breeding from Iowa State University.

<https://vimeo.com/120418903>

Elizabeth P. Ransom

Member

Elizabeth P. Ransom is an associate professor of sociology in the Department of Sociology and Anthropology at the University of Richmond. Her research focuses on international development and globalization, the sociology of agriculture and food, and social studies of science and technology. Specifically, she concentrates on the intersection of science and technology policy within agriculture and food systems, with particular emphasis on analyzing the ways in which policy changes impact producers and production practices in both the United States and sub-Saharan Africa. Her previous research has focused on agricultural biotechnologies and cross-national pesticide regulations. Currently, she has two ongoing research programs. The first program studies the linkages between Southern Africa (South Africa, Botswana, and Namibia) red meat industries and global agriculture and food systems governance. The second analyzes international agricultural development assistance in developing countries, with an emphasis on the ways in which agricultural assistance targets women and focuses on gender empowerment. She has published articles focusing on agricultural biotechnologies, the patterns and problems surrounding modern food consumption practices, the global red meat trade, and gender and agricultural development assistance. Dr. Ransom was a 2005-2006 American Association for the Advancement of Science policy fellow where she focused on Codex Alimentarius agrifood standards as an international trade specialist at the U.S. Department of Agriculture. In addition to her position at the University of Richmond, she is currently a research associate with the Institute of Theory and Practice of International Relations at the College of William and Mary. Dr. Ransom received her BA in sociology and political science from Western Carolina University and her MA and PhD in sociology from Michigan State University.

<https://vimeo.com/117814412>

Michael Rodemeyer

Member

Michael Rodemeyer completed his adjunct professorship in 2015 in the Department of Engineering and Society of the University of Virginia, where he taught and directed the Science and Technology Policy Internship Program. Mr. Rodemeyer founded the Pew Initiative on Food and Biotechnology and served as its executive director from 2000 to 2005. Before that, he spent nearly 25 years in the federal government. In 1998 and 1999, he was the assistant director for environment in the Office of Science and Technology Policy in the Executive Office of the President. He served for 15 years on the staff of the House of Representatives Committee on Science, including 7 years as the Chief Democratic Counsel. From 1976 through 1984, Mr. Rodemeyer was a staff attorney with the Federal Trade Commission. He also taught congressional and environmental policy-making as an adjunct professor of the Johns Hopkins University School of Arts and Sciences from 2000 through 2004. Mr. Rodemeyer graduated with honors from Harvard Law School in 1975 and received his undergraduate degree in sociology with honors from Princeton University in 1972.

<https://vimeo.com/117501313>

David M. Stelly

Member

David M. Stelly holds joint appointments with Texas A&M University and Texas A&M AgriLife Research. He is a professor in the Department of Soil and Crop Sciences and has over 30 years of professional experience in breeding of diploid and polyploid crops, germplasm introgression, reproductive biology and cytology, cytogenetics, genetics, and genomics. The research, breeding, and graduate-education programs under Dr. Stelly's guidance have emphasized use of naturally occurring germplasm for crop improvement. Common elements of the research are wild-species germplasm introgression, chromosome manipulations and substitution, ploidy manipulations, conventional and molecular cytogenetics, genetic analysis, marker development, marker-assisted selection, reproductive cytology and genetics, and various types of genome mapping (linkage, BAC physical, and radiation hybrid mapping), sequencing, and their integration. Most of his work has been devoted to genetic improvement of Upland cotton, but some of it is devoted to developing a platform for wide hybridization of sorghum and creation of new energy crops. Dr. Stelly has served Texas A&M through its Council for Principal Investigators (CPI), helping to spawn and now serving on the Texas A&M Institute for Genome Sciences and Society (TIGSS) and codirecting his department's faculty-driven core AgriGenomics Laboratory. He served a number of years ago as the first elected chair of the International Cotton Genome Initiative (ICGI) and also served as president of the National Association of Plant Breeders (NAPB). He was re-elected and now serving again as Chair of ICGI. Dr. Stelly received his MS in Plant Breeding and Cytogenetics from Iowa State University and his BS in Genetics and PhD in Plant Breeding and Plant Genetics from the University of Wisconsin-Madison.

<https://vimeo.com/117282671>

C. N. Stewart, Jr.

Member

C. Neal Stewart is a professor of plant sciences at the University of Tennessee and holds the Ivan Racheff Chair of Excellence in plant molecular genetics. He is also the co-director of the Tennessee Plant Research Center. After a postdoctoral position at the University of Georgia, Dr. Stewart joined the faculty of the University of North Carolina at Greensboro as an assistant-, then associate professor in biology, prior to moving to the University of Tennessee and assuming the Racheff Chair. He teaches courses on plant biotechnology and research ethics. The laboratory's research spans plant biotechnology, synthetic biology, genomics, and ecology with an interest in understanding and manipulating systems relative to agricultural production and environmental function. Dr. Stewart earned his BS in horticulture and agricultural education from North Carolina State University and an MA in education from Appalachian State University. He then received an MS in biology and ecology and a PhD in biology and plant physiology from Virginia Polytechnic Institute and State University. Dr. Stewart is also a singer and songwriter.

<https://vimeo.com/117316623>

Robert J. Whitaker

Member

Robert Whitaker received his PhD in biology from the State University of New York at Binghamton in 1982. On graduating, he joined DNA Plant Technology Corporation as a postdoctoral research scientist and eventually served as both vice president for vegetable research and development and vice president for product development for the company. During his tenure there, Dr. Whitaker had responsibility for plant tissue culture, breeding, food science, chemistry, and genetic-engineering functions related to vegetable products. In 1998, he joined NewStar as vice president of product development and quality; there, he developed corporate food safety programs and spearheaded product-development activities. In April 2008, he became the chief science and technology officer of the Produce Marketing Association, overseeing food safety and technology efforts from field to fork. He has served as a volunteer leader for the United Fresh Produce Association and as chairman of the International Fresh-cut Produce Association (IFPA) board and has been directly involved on a number of industry and government food safety and technology initiatives. In 2006, Dr. Whitaker was awarded IFPA's Technical Achievement Award for his work in food safety and product development. He also received NSF Food Safety Leadership award in 2015. Bob was named to the Executive Committee for the Center for Produce Safety (CPS) in 2007 and served as chairman of the CPS Technical Committee until 2013. He still serves as a member of the CPS Technical Committee, which oversees the solicitation and awarding of funds for produce food safety research and on the Executive Committee of the CPS Board of Directors.

<https://vimeo.com/117503300>