

SPEAKER BIOS



Pamela Anderson

Dr. Pamela Anderson (USA) has been Director General of the International Potato Center (CIP) since May 2005. CIP is one of the fifteen international agricultural research centers members of the CGIAR Consortium. Prior to becoming Director General, she served as the Deputy Director General of Research at CIP (2002-2005) and as Senior Entomologist at the International Center for Tropical Agriculture (CIAT), in Cali, Colombia (1997-2002). She received a MSc in Entomology from the University of Illinois, an MSc in Human Ecology from Harvard University, and a DSc in Population Sciences/Vector Entomology from the Harvard School of Public Health.

A leading expert on emerging plant diseases, Dr. Anderson has also conducted research in agricultural entomology and plant virus epidemiology related to food security and income generation for resource-poor populations. Dr. Anderson has worked in Latin America for 30 years and spent two decades working within national agricultural research systems before joining CGIAR.

Suresh Babu

Dr. Babu was educated at Agricultural Universities in Tamil Nadu, India (B.S. Agriculture; M.S. Agriculture) and at Iowa State University, Ames, Iowa (M.S. Economics and PhD Economics).

Before joining IFPRI in 1992 as a Research Fellow, Dr. Babu was a Research Economist at Cornell University, Ithaca, New York. Between 1989 and 1994 he spent 5 years in Malawi, Southern Africa on various capacities. He was Senior Food Policy Advisor to the Malawi Ministry of Agriculture on developing a national level Food and Nutrition Information System; an Evaluation Economist for the UNICEF-Malawi working on designing food and nutrition intervention programs; Coordinator of UNICEF/IFPRI food security program in Malawi; and a Senior Lecturer at the Bunda College of Agriculture, Malawi developing and teaching computer-based policy-oriented post graduate courses.





Rob Bertram

Rob Bertram is the Director of the Office of Agricultural Research and Policy in Technology in USAID's Bureau for Food Security. The office provides leadership to the Agency's investments that leverage biophysical and social sciences and economics across the U.S. and globally, engaging the CRSPs, the CGIAR system, the private sector and USDA.

Rob has been with USAID for more than 25 years and comes from a plant breeding and genetics background with degrees from UC Davis, the University of Minnesota and the University of Maryland. His office is spearheading the Feed the Future Research Strategy and is currently focusing significant efforts on agriculture-nutrition linkages, sustainable intensification of production systems and adaptation to climate change.

Dana Boggess

Dana Boggess is a Program Officer at the Bill & Melinda Gates Foundation, where she leads the Agricultural Development program's work on smallholder and agricultural enterprise finance. Her previous experience includes private sector strategy consulting for the high-tech and telecom sectors, as well as developing capacity building programs for Pact in Cambodia. Ms. Boggess holds a Master's degree from Columbia University, where she focused on Economic Development and Finance.



Julie Borlaug



Julie Borlaug is the granddaughter of Dr. Norman E. Borlaug and the Assistant Director of Partnerships at the Borlaug Institute for International Agriculture at Texas A&M. Since the passing of her grandfather, Julie has worked to continue his legacy through developing agricultural partnerships between public, private and philanthropic groups to further the Borlaug legacy and expand upon his mission to feed the world's hungry.

Julie received her BA from Texas A&M in International Studies and Political Science in 1997 and her MBA in Nonprofit Management from the University of Dallas in 2004. She has spent her career in the nonprofit sector and has worked for organizations such as the Salvation Army and the American Cancer Society as Development Director. She has recently transitioned into her new role as Associate Director of External Relations in order to champion her grandfather's legacy and lend a voice to his desire to see more successful collaborative partnerships between the public and private partnerships in order to ensure the continuation of breakthroughs in international agriculture.

Sylvie Brouder

Sylvie Brouder's research addresses implications of converging U.S. biofuel and food security agendas by developing field-to-landscape analyses of the potential for dedicated energy crops to provide renewable fuel on marginal lands while protecting natural resources and food or feed productivity. She directs Purdue's Water Quality Field Station and is responsible for developing and promoting agro-ecology programming campus-wide. A core theme of Brouder's research and the field station's research portfolio is quantitative assessment of synergies and tradeoffs among productivity and environmental objectives to inform development of policy that promotes agricultural sustainability.



She specializes in crop mineral nutrition with an emphasis on crop ecology, water quality and agro-ecosystem nutrient balances and losses. In her research, she concentrates on nitrogen, carbon and potassium, evaluating the practicality of systems and management practices, and ecological viability and sustainability, including influences on water quality and greenhouse gas emissions from agricultural soils. Brouder earned a doctorate in ecology from the University of California, Davis, and a bachelor's degree in biology from Harvard University.



Richard Buckius

Richard Buckius was named in May 2008 as Purdue University's Vice President for Research. This position is charged with assisting faculty and staff in their research efforts and leading research administration and oversight, research development and proposal preparation, funding opportunities, and private sector partnerships. Dr. Buckius has been assistant director of the National Science Foundation's Directorate of Engineering since 2005 and has been on leave from the University of Illinois since 2004, when he became director of the NSF's Division of Chemical and Transport Systems. He was head of the university's Department of Mechanical and Industrial Engineering from 1998 to 2004, the Richard W. Kritzer Professor from 1992 to 1997, and associate vice chancellor for research from 1988 to 1991.

Buckius' research contributions include his work to advance the fundamental knowledge in thermal sciences, specifically in the areas of radiation heat transfer, convective transport, and combustion. He has received numerous awards, including the Richards Memorial Award from the American Society of Mechanical Engineers in recognition of outstanding contributions to research and teaching in the thermal sciences and the Ralph Coats Roe Award from the American Society for Engineering Education in recognition of contributions to research and teaching. He also received the Potter Gold Medal from the American Society of Mechanical Engineers in recognition of eminent achievement in the science of thermodynamics in mechanical engineering.

Gary Burniske

Mr. Burniske is a specialist in international relief and development, with a technical focus on sustainable agriculture, forestry and natural resource management. He is the Managing Director of the Center for Global Food Security within Discovery Park at Purdue University. Mr. Burniske is responsible for the day to day management of the Center and networks with Purdue's faculty and scientists to take a multi-disciplinary approach to tackling global challenges affecting food security.



Prior to joining Purdue, Mr. Burniske held senior leadership positions with prominent international organizations such as Mercy Corps, CARE, Institute for Sustainable Communities, International Tropical Timber Organization and Rainforest Foundation International. Most recently, he led Mercy Corps flagship country offices for nearly 10 years, serving as Country Director in Tajikistan and Colombia. One of Mr. Burniske's most noted accomplishments include the transformation of a small local Tajik NGO, the National Association of Business Women into the largest microcredit provider in Tajikistan, IMON International with a \$30 million portfolio serving 27,000 borrowers.

Mr. Burniske holds an MS in Forest Economics and a BS in Natural Resources Management, both from the University of Massachusetts. He is fluent in Spanish, Russian, Thai and Arabic, and conversational in Portuguese.



Indrajeet Chaubey

Dr. Indrajeet Chaubey is a Professor of Ecohydrology with joint appointments in the Department of Agricultural and Biological Engineering, Department of Earth, Atmospheric, and Planetary Sciences, and the Division of Environmental and Ecological Engineering. He received a B.S. in Agricultural Engineering from the Allahabad Agricultural Institute (India); M.S. in Agricultural Engineering from the University of Arkansas; and a Ph.D. in Biosystems Engineering from the Oklahoma State University. Before joining Purdue University in 2007, he was a faculty at the University of Arkansas where he served as Assistant Professor from 2000 to 2005, and Associate Professor with tenure from 2005 to 2006.

Dr. Chaubey's research integrates field data collection with simulation-based engineering and computational thinking to advance our understanding of fate and transport of water and related constituents across a wide range of spatial and temporal scales. Specifically, he is interested in ecohydrologic processes affecting fate and transport of sediment, nutrients, and pesticides from various land use activities and developing watershed management strategies to improve water quality.



Melba Crawford

Melba Crawford is a Professor of Civil and Electrical Engineering and Agronomy at Purdue University and serves as the Associate Dean for Research in the College of Engineering. Previously, she was a faculty member at the University of Texas at Austin, where she founded an interdisciplinary research and applications development program in remote sensing. Her current research program focuses on pattern recognition, active learning, and sensor fusion. She received BS and MS degrees from University of Illinois and a PhD from Ohio State University.

Dr. Crawford was a Jefferson Senior Science Fellow at the U.S. Department of State, a member of the NASA Earth System Science and Applications Advisory Committee, the NASA EO-1 Science Validation team, and an advisory committee for the IEEE Committee on Earth Observation to the South African Department of Science and Technology. Dr. Crawford is a Fellow of the IEEE.

Lisa Eakman

Lisa Eakman is the Executive Director for Global Agriculture & Food Initiative in the Chicago Council on Global Affairs since 2011. In the past she worked as Director for Global Agriculture for the Chicago Council and Senior Program Officer for the same institution. She obtained her B.A. in International Studies, Political Science and Spanish at Bradley University; and got her M.A. in Security Policy Studies at The George Washington University.



Gebisa Ejeta

Gebisa Ejeta is the Distinguished Professor of Plant Breeding & Genetics and International Agriculture at Purdue University and the Executive Director of the Purdue Center for Global Food Security. He completed his early education in his native country of Ethiopia, including a BS in Plant Sciences from Alemaya College in 1973. He attended graduate school at Purdue University earning his Masters (1976) and PhD (1978) in Plant Breeding & Genetics. In March 1979, Gebisa joined the International Crop Research Institute for the Semi-arid Tropics (ICRISAT) and conducted seminal sorghum research in Sudan for five years. In January 1984, Dr. Ejeta returned to

Purdue University as an Assistant Professor in the Department of Agronomy. Since then, he has led a comprehensive educational and research program at Purdue with emphasis on African agricultural research and development.

Dr. Ejeta serves on the Board for International Food and Agricultural Development, the Consortium Board of the Consultative Group for International Agricultural Research, the Sasakawa Africa Association, and the Chicago Council for Global Affairs Agricultural Development Program. He is a Fellow of the American Association of the Advancement of Sciences, the Crop Science Society of Agronomy, and the American Society of Agronomy. He was a member of the team that launched the Alliance for Green Revolution in Africa, a joint effort of the Rockefeller and Gates Foundation.

Among his many awards, Gebisa Ejeta was the recipient of the 2009 World Food Prize; and a national medal of honor from the President of Ethiopia.

Sofia Feng

Sofia Feng is a PhD. student in Food Science and Nutrition working under Dr. Jon Allen at NC State University. Sofia arrived at Raleigh, NC with a Fulbright fellowship, to pursue her Masters in 2011. Since then she has been working in Sweet Potato Flour Fortification and Micronutrient Additives Enhancement. She considers the Summer Institute on Global Food Security, 2012, one of the most remarkable moments during her graduate studies, where she was a participant. She completed her early education in her native country of Costa Rica, including a bachelor's degree from University of Costa Rica. Currently, she serves as the President of the Fulbright Student Association at NC State, where she enjoys sharing her experiences with other international and US Fulbrighters.



Mario Ferruzzi

Dr. Ferruzzi's long-term goal is to identify food science strategies that will contribute to the prevention of chronic disease in humans. Working toward this goal his research program has focused on the investigation of how the food matrix and processing impact phytochemical physical and chemical stability, and bioavailability with a particular focus on polyphenols and natural pigments (carotenoids and chlorophylls). Dr. Ferruzzi's research addresses both fundamental and applied questions critical to food industry including: (1) Development of methods for determination of phytochemicals in complex matrices; (2) Assessment of phytochemical stability and reactivity in food systems; (3) Exploring of factors impacting phytochemical bioavailability from foods; and (4) Development of strategies for incorporation/stabilization of phytochemicals in food systems. He received his BS at Duke University and his MS and PhD at The Ohio State University.

Joan R. Fulton

Dr. Fulton is a professor in Purdue's MS/MBA program. Dr. Fulton is active in Extension programming. She is Chair of Purdue's New Ventures Team and Director of Purdue's Agricultural Innovation and Commercialization Center (AICC) where she is active in the development and delivery of programs to assist individuals and groups evaluate new business opportunities. Her research focuses on problems related to marketing and business structure both in the United States and internationally. Her recent work examined word-of-mouth marketing among farmers in the United States. In West Africa she has explored the importance of alternative extension programming for technology transfer and adoption of improved technologies. She is currently examining the factors that contribute to successful entrepreneurship for women selling street food in West Africa and other developing countries. Dr. Joan Fulton joined the Purdue Agricultural Economics faculty in July 1997. She received a bachelors degree from University of Saskatchewan, a masters degree from University of Western Ontario and a doctorate from University of Minnesota.



Jay P. Gore

Dr. Jay P. Gore is the Vincent P. Reilly Professor in Mechanical Engineering and a Jefferson Science Fellow at the US Department of State. He is the former Director of the Energy Center in Discovery Park. He served as a Research Fellow in Aerospace Engineering at the University of Michigan and as an Assistant Professor of Mechanical Engineering at the University of Maryland prior to joining Purdue as an Associate Professor. Jay is a past Chairman of the Central States Section of the International Combustion Institute and the ASME K11 Committee on Heat Transfer in Fire and Combustion. He has served as an Associate Editor of the ASME Journal of Heat Transfer. He was the U.S. Editor of the 28th International Combustion Symposium. Dr. Gore currently serves as an Associate Editor of the AIAA Journal.

Jay's research is in the area of combustion and radiation heat transfer with applications to pollutant reduction, efficiency enhancements, fire safety, and improved fundamental understanding. He has received over \$10M in research funding and is currently serving as the PI for grants over \$1M in gas turbine combustion and radiation heat transfer applications. He has authored or coauthored over 100 archival papers, 4 book chapters, and 175 conference papers. Jay has developed/revised 2 courses (Combustion and Advanced Combustion) at Purdue University and three courses in heat transfer and thermodynamics at the University of Maryland. He received a bachelor's degree from University of Poona, and masters and doctorate degrees from Penn State.

Steve Hallet

In Dr. Hallett's book, *Life without Oil*, he explains that we must plan for a future without reliance on oil and shift to a new energy future by adopting a wiser, more sustainable stewardship of our natural resources. Dr. Hallett's research interests are in the broad area of the ecology of plant pathogen interactions.

His applied research targets the development of bioherbicides for weed control and studies the mechanisms of herbicide resistance while his basic research studies the ecology of the interactions between weeds and soil microbial communities in agricultural and natural systems. In 2002 Dr.

Hallet received the "Award of excellence" from the Weed Science Society of America. He received a BSc and PhD from Lancaster University.



Thomas Hertel

Professor Hertel is Distinguished Professor of Agricultural Economics at Purdue University, where his research focuses on the economy-wide impacts of global trade and environmental policies. Dr. Hertel is a Fellow, and Past-President, of the Agricultural and Applied Economics Association (AAEA). He is also the founder and Executive Director of the Global Trade Analysis Project (GTAP) which now encompasses more than 10,000 researchers in 150 countries around the world (<http://www.gtap.agecon.purdue.edu/>). This Project maintains a global economic data base and an applied general equilibrium modeling framework which are documented in the book: *Global Trade*

Analysis: Modeling and Applications, edited by Dr. Hertel, and published by Cambridge University Press in 1997.

Professor Hertel's most recent research has focused on the impacts of climate change and mitigation policies on global land use and poverty. During the 2011-12 year he was on leave at Stanford University, where he was engaged in inter-disciplinary research on these topics. Previously, Professor Hertel has conducted extensive research on the impacts of multilateral trade agreements, including the linkages between global trade policies and poverty in developing countries. His book on the poverty impacts of a WTO agreement (co-edited with Alan Winters) received the AAEA Quality of Communication award. Other AAEA awards include: Distinguished Policy Contribution and Outstanding Journal Article. He received a bachelors degree from University of North Carolina at Chapel Hill, a masters degree from Woodrow Wilson School, Princeton University, and a doctorate from Cornell University.

Matthew Huber

Dr. Matthew Huber is a Professor of Earth and Atmospheric Science. He is a Co-founder and Member Purdue Climate Change Research Center. He is the head of the Climate Dynamics Prediction Laboratory. His research and that of the CDPL is focused on past, present and future climate, the mechanisms that govern climate, the different forms that climates can take on Earth, and the relationship between climate change and life. Major research areas include the radiative and dynamical processes generating tropical 'thermostats', and polar amplification of warming, as well as the ecological and evolutionary implications of these processes and patterns.



He has won numerous awards and accolades including the IBM Scholars Program for Linux Award. He is the Fmr. Co-Chair of the NCAR CCSM Paleoclimate Working Group, Fmr. Associate Editor of Paleoceanography, and is Currently Topical Editor of EGU Journal, "Earth System Dynamics.

He received a Bachelors from the University of Chicago in Geophysics, a Masters from the University of California Los Angeles in Atmospheric Sciences, and a Ph.D. from the University of California Santa Cruz in Earth Sciences.



Kevin Keener

Dr. Keener's main interests consists in applying engineering principles to improve production efficiencies, enhance quality, and reduce waste in an overall effort to promote economically sustainable practices in the production of food, pharmaceutical, and biological products and educating students and industry personnel on applying engineering principles to solve problems in food, pharmaceutical, and biological systems. He obtained his B.S. and M.S both in agricultural engineering from Ohio State University, and then got his Ph.D. in Food Process Engineering from Purdue University. He is currently a professor in the Food Science Department at Purdue University.

Jess Lowenberg-DeBoer

Jess Lowenberg-DeBoer is professor in the Department of Agricultural Economics and Associate Dean and Director of International Programs in Agriculture (IPIA) at Purdue University. His research focuses on agricultural production economics, including soil fertility management, cropping systems, technology adoption, risk management and financing. Since 1997 he has been West Africa facilitator for the USAID Bean/Cowpea Collaborative Research Support Program (CRSP)



working to build multidisciplinary teams and supervising CRSP social science research.

Lowenberg-DeBoer has a Master's degree in Agricultural Economics from Cornell University, Ithaca, New York, and a Ph.D. in Economics from Iowa State University, Ames. He joined the Purdue faculty in 1985, dividing his time between the West Lafayette campus and Purdue activities in West Africa. He returned in 1992 from a four year tour of duty in the Republic of Niger, West Africa, where he served as economist and team leader for a Purdue University project. He brings to his research and teaching a perspective gained through private sector experience as farmer and journalist western Iowa.



Chad Martin

Chad Martin is the Renewable Energy Extension Specialist in Agricultural and Biological Engineering at Purdue University. He earned an A.A.S. degree in Agriculture Business from Joliet Junior College, Illinois; a B.S. degree in Agriculture Education from Western Illinois University at Macomb, IL; and an M.S. in Agricultural & Extension Education from Purdue University. His background in renewable energy began while working as a research and outreach associate with the Illinois Institute for Rural Affairs at Western Illinois University. He worked specifically with the Agriculture Community Action Program which helped organize New Generation Cooperatives for capitalizing biofuels production operations with farmer and local ownership throughout rural Illinois, and provided support to the IIRA's Illinois Wind project. Before coming to Purdue, he was the business development specialist with the Indiana Cooperative Development Center in Indianapolis. Martin focuses his Extension efforts in the areas of on-farm energy efficiency, biomass energy resources, and wind energy. He works with producers, small businesses, Purdue faculty and Extension educators, and state and federal government agencies to deliver programs. He is a member of the Indiana Wind Working Group, and along with Purdue faculty has initiated the Indiana Biomass Energy Working Group. He provides presentations to diverse groups and coordinates the development of educational resources.

Maureen McCann

Maureen McCann is a professor and assistant head of biological sciences at Purdue University. She is also Director of the Energy Center at Purdue University. Dr. McCann is internationally recognized for her work on the molecular architecture of cell walls and pioneering use of enabling technologies for direct imaging of wall structure, mapping biomass heterogeneity, and use of novel spectroscopic screens for cell wall mutants with over 80 published journal articles. Recently, she has identified several novel gene families that impact the growth of plants in Arabidopsis. Her model of the dicot cell wall is widely cited and served as a template in the DOE-GTL Research Roadmap to Breaking the Biological Barriers to Cellulosic Ethanol (2005). She is an active member of the Midwest Bioenergy Center. Her current research focus is on the architecture of lignocellulosic biomass and gene discovery in maize for translation to other bioenergy



species. Her contributions to the project will be in the genetic and phenotypic analyses of the maize lines, and as an expert in cell wall architecture. Dr. McCann leads an interdisciplinary team of biologists, chemists and chemical engineers in a DOE-funded Energy Frontier Research Center focused on developing technologies for the direct catalytic conversion of biomass to biofuels (C3Bio). She received a PhD from University of East Anglia.



Philip E. Nelson

Dr. Philip E. Nelson, Professor Emeritus at Purdue University, was awarded the 2007 World Food Prize for his innovative breakthrough technologies which have revolutionized the food industry, particularly in the area of large-scale storage and transportation of fresh fruit and vegetables using bulk aseptic food processing. An icon of the food world, Dr. Nelson's discoveries have made major contributions to the availability of nutritious foods worldwide. Commonly credited for recognizing the untapped potential of aseptic technologies for much larger scale applications, the aseptic bulk processing and packaging technology pioneered by Nelson can be found in almost every country in the world.

Bryan Pijanowsk

Dr. Pijanowski's main interests are the impacts of land use and climate change on ecosystem services. His expertise is in the development of spatial-temporal simulation models that attempt to characterize how human activities impact landscape structure and function. He is also interested in complex socio-ecological systems and how theoretical frameworks can be used to study land-climate-hydrological systems around the world. Dr Pijanowsky is a co-PI on the Climate-Land Interaction Project funded by the NSF Biocomplexity in the Environment program. The work focuses on land use and climate change at local to regional scales in East Africa. He is a professor in Purdue Department of Forestry and Natural Resources. He received his Ph.D. in zoology from Michigan State University.



Leigh Raymond

Leigh Raymond is a Professor of Political Science at Purdue University and a founding member and Director of the Purdue Climate Change Research Center. He received his M.S. and Ph.D. in Environmental Science, Policy, and Management from U.C. Berkeley, and a B.A. in Philosophy from Yale University. Prior to his arrival at Purdue in 2002, he taught for two years as a Lecturer in Environmental Studies at the University of Chicago.

Dr. Raymond's research focuses on the role of norms and values in shaping political behavior and policy outcomes, especially in contrast to economic motivations. His primary focus has been on norms and values related to property rights as they affect market-based policies for environmental protection, including emissions trading, as considered in detail in his 2003 book *Private Rights in Public Resources*. Recently, he has completed two multi-year NSF-funded studies of state environmental policies, one addressing the role of norms of precaution on policies toward environmental risk, the other on how moral and other frames influence state policies related to renewable fuels. He is currently conducting research on the role of economic versus and non-economic frames in shaping farmer interest in conservation tillage, and a project on framing climate science. He is also at work on a new book on recent developments in emissions trading policy.

Paul E. Schickler

Paul E. Schickler is president of DuPont Pioneer, the advanced seed genetics business of DuPont. In this role, which he has held since 2007, he has continued to expand Pioneer's global business by remaining focused on innovation that improves local productivity and profitability of farmers in more than 90 countries. Since joining Pioneer in 1974, Schickler has served in a variety of finance and administrative leadership roles throughout the business, including vice president of International Operations from 1999 to 2007. He currently serves on the DuPont Committee on Agricultural Innovation and Productivity in the 21st Century and the DuPont Agriculture Decision Board, and is a member of the DuPont Operating Team.



Schickler is a graduate of Drake University, where he received bachelor of science and master of arts degrees in business administration. He currently serves on The Chicago Council on Global Affairs board of directors, The Chicago Council's Global Agricultural Development Initiative Advisory Group, the Grand View University board of directors and the Iowa Business Council. A strong contributor to the community, Schickler is an active supporter for United Way, The World Food Prize Foundation, Meals from the Heartland and the Farm Journal Legacy Project.



Darrell Schulze

Darrell Schulze is a Professor of Soil Science in the Agronomy Department at Purdue University where he joined the faculty in 1982. He has Bachelors and Masters degrees in Agronomy and Soil Science from Texas A&M University and a Ph.D. in Soil Science from the Technical University of Munich. His current research interests are in quantifying how differences in soils and landscapes impact the livelihoods of small holder farmers in East Africa, specifically Kenya and Uganda. The *Soils and Landscapes* class that he co-teaches with Phillip Owens features the innovative use of iPads to allow

students to study detailed maps of soil properties while in the field. Students see how features observed at one point in the landscape are part of a much broader distribution of soils and landscapes across Indiana. These maps are also available online at <http://isee.purdue.edu/>. The *African Development Colloquium* class he co-teaches with George Van Scoyoc brings together students from Purdue, the University of Eldoret in Eldoret, Kenya, and the University of Fort Hare in Alice, South Africa for joint, real-time presentations and discussions via Skype and Google+ on topics dealing with various aspects of African development.

Jose Pablo Soto-Arias

Jose Pablo is a PhD student in the Department of Plant Pathology at the University of Wisconsin-Madison. His PhD research project focuses on investigating the “potential role of insects pest of vegetable crops in the growth, survival, and transmission of the human pathogen *Salmonella enterica*”; the major bacterial cause of foodborne illness around the world. One of his strongest passions in life is to find scientific solutions to solve agricultural problems, and implement new technologies to enhance the safety, profitability, and efficiency of crop production. He is highly motivated and committed to a scientific-academic career, making research and knowledge more accessible and understandable to diverse audiences, in particular to young generations and farmers; but also to advocate for agriculture research while promoting the importance of agriculture for the benefit of the human society.



Mary Tiedeman is from Sioux City, Iowa. She is finishing her Master’s degree in Soil Science and Environmental Science at Iowa State University. Her thesis is “Influence of Ant Colonization on Pedogenesis in a remnant Iowa Prairie.” Her research investigates specifically how ants alter their soil environment and what this, in turn, may mean for the health and sustainability of the soil as a natural resource. She is interested in food security in African and Central American tropics with personal travel experience to Ghana, Uganda, Guatemala, Mexico, and Costa Rica.

Ronald F. Turco

Dr. Ronald F. Turco is a Professor in the Department of Agronomy, Director of the Indiana Water Resources Research Center and the Purdue Water Community. He has a B.S. degree from the University of Idaho in Bacteriology and Soil Science and a Ph. D. from Washington State University in Soil Microbiology. His research program is divided over four areas: understanding the fate of introduced E. coli in soil and water and the role these processes play in such things as water and food contamination, developing a better predictive capacity to understand the environmental fate of manufactured nano materials (fullerenes, single wall carbon nanotubes and nanometals) in soil and water, defining the unintended consequences of using our soils resources for biofuel production and a long-term interest in the fate and degradation of organic materials and metals introduced to soil, the subsurface and water. He has authored many articles and reports and has delivered numerous invited and volunteered presentations. He has also managed numerous large projects from USDA, NSF and EPA. Dr. Turco teaches two graduate level courses: Soil Microbiology and a course titled Biotransformation of Anthropogenic Molecules. He also teaches an undergraduate course on Soil Ecology.



Wallace E. Tyner

Dr. Tyner, who is co-director of the Purdue Center for Research on Energy Systems and Policy, uses economic analysis to inform lawmakers who set energy policies. His studies have covered everything from coal and gasoline to solar power and biofuels. He lends his expertise as a member of the National Academy of Science Committee on the Economic and Environmental Impacts of Biofuels and as a consultant for agencies ranging from the U.S. Department of Energy to the United Nations Food and Agriculture Organization. In 2005, he received the “Distinguished Policy Contribution” award from his professional association. In June 2007, Senator Richard G. Lugar of Indiana named Tyner an “Energy Patriot” for his work on energy policy analysis. In 2009 he received the Purdue College of Agriculture Outstanding Graduate Educator award. He has 35 years of professional work experience including extensive long term and short term experience in developing countries. He spent three years (1985-88) in Morocco working as Senior Agricultural Economist and Deputy Team Leader for a project on planning, economics, and statistics for agriculture. Dr. Tyner has short-term experience in Senegal, Mali, Niger, the Gambia, Ghana, Burkina Faso, India, Bangladesh, China, Brazil, Morocco, Tunisia, Algeria, Egypt, Lebanon, Jordan, Kazakhstan, Estonia, Latvia, Lithuania, and Malaysia. He received his B.S. degree in chemistry (1966) from Texas Christian University, and his M.A. (1972) and Ph.D. (1977) degrees in economics from the University of Maryland.

Connie Weaver

Dr. Connie Weaver was named professor and head of the Department of Nutrition Science in August 1991. In 2000, she became a Distinguished Professor in the department. Also in 2000, she was appointed director of a National Institutes of Health-funded Botanical Research Center to study dietary supplements containing polyphenolics for age-related diseases. In 2008 she became Deputy Director of The Indiana Clinical and Translational Sciences Institute. In 2010, she was elected to the Institute of Medicine of the National Academy of Science.



Her research interests include mineral bioavailability, calcium metabolism, and bone health. Dr. Weaver was appointed to the 2005 U.S. Dietary Guidelines Advisory Committee, and she served on the National Academy of Sciences Food and Nutrition Board Panel to develop new recommendations for requirements for calcium and related minerals. She has published over 300 original research articles and 100 book chapters and reviews. For her contributions in teaching, Dr. Weaver was awarded Purdue University's Outstanding Teaching Award. In 1993, she was honored with the Purdue University Health Promotion Award for Women, and in 1997, she received the Institute of Food Technologists Babcock Hart Award. Dr. Weaver received a Bachelor of Science and Master of Science in food science and human nutrition from Oregon State University. She received a PhD in food science and human nutrition from Florida State University and holds minors in chemistry and plant physiology.



Steve Yaninek

Dr. Yaninek is a Professor and Head of the Department of Entomology at Purdue University. Previously, he worked as a National Program Leader for USDA Cooperative State Research and was the Project Coordinator for the Plant Health Management Division of the International Institute of Tropical Agriculture. In this position, he was responsible for coordinating all cassava plant protection activities at IITA, as well as initiating and managing all research. He received the Entomological Society of America North Central Branch, Award of Excellence (2009). He received a bachelors and masters degree in Zoology and a PhD in Entomology from U.C. Berkeley.