

# SPEAKER BIOGRAPHIES

## BORLAUG SUMMER INSTITUTE ON GLOBAL FOOD SECURITY

JUNE 4 – JUNE 17, 2017

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### Phil Abbott



Dr. Philip Abbott is a Professor of Agricultural Economics at Purdue University. His current research focuses on international trade and international agricultural development. Professor Abbott has consulted for several domestic and foreign government agencies, including the United Nations Food and Agriculture Organization, commissions on food policy issues as well as private agencies. Professor Abbott served on the steering committees of the congressionally-mandated USDA study on Export Embargoes and Surplus Disposal of Agricultural Commodities, the International Agricultural Trade Research Consortium, regional research project NC-194--“Organization and Performance of World Food Systems,” and the USDA-USTR Agricultural Technical Advisory Committee for Trade in Grains, Feeds and Oilseeds. He is now conducting research on cocoa for IITA’s Small Tree Crops Program and has authored numerous publications.

**Lecture 1:** Grand Challenge #3: “Global Food Trade: Food Crisis, Price Shocks and Developing Country Impacts”

**Lecture 2:** “Insurance and Credit in Agriculture”

**Practicum:** Global Food Trade

**Discussion:** “Private Sector Engagement in Agriculture”

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### Jay Akridge

Dr. Jay Akridge was appointed Glenn W. Sample Dean of Agriculture at Purdue University in January 2009. He oversees academic programs in the College of Agriculture, the Indiana Agricultural Experiment Station, the Purdue Cooperative Extension Service and a number of state regulatory services, including the State Chemist’s Office and the Animal Disease Diagnostic Laboratory. Dr. Akridge was the James and Lois Ackerman Professor of Agricultural Economics and served as director of the Center for Food and Agricultural Business and the MS-MBA in food and agribusiness management. He served as Interim Vice Provost for Engagement at Purdue in 2007–08. He will serve as the Interim Provost for Purdue University effective July 1, 2017. His research has examined the buying behavior of commercial agricultural producers, innovations in marketing strategies by agribusiness firms, and adoption of new technology by agribusiness. He has worked with agribusiness managers in the areas of strategy and marketing in more than 20 countries including Lithuania, Hungary, Australia, Argentina, Cameroon and China. Dr. Akridge received his doctorate in agriculture economics specializing in marketing and finance and his master’s degree in agricultural economics with an emphasis in agribusiness management and finance from Purdue.



**Keynote:** “Purdue Agriculture”

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# SPEAKER BIOGRAPHIES

## Eli Asem



Dr. Elikplimi Asem grew up in Ghana, West Africa and received his DVM degree in 1980 from the Szent Istvan University, School of Veterinary Sciences in Budapest, Hungary. He then received his Ph.D. (Medical Physiology) in 1985 from St. Louis University School of Medicine, St. Louis, Missouri. From 1985 to 1986 Dr. Asem was a postdoctoral fellow in the Reproductive Biology Unit, Department of Obstetrics and Gynecology, Ottawa Civic Hospital/University of Ottawa, Ontario, Canada, from 1986 to 1989. Dr. Asem came to Purdue in June 1989 as an Assistant Professor in the School of Veterinary Medicine. He is a Professor of Physiology and teaches physiology and pharmacology to veterinary, graduate and medical students. Dr. Asem has served in senior leadership positions in the College of Veterinary Medicine from 1997 to 2007. He is a member of the Purdue Center for Global Food Security Executive Committee.

**Lecture:** “Challenges in Pastoral Agriculture and Food Security in Developing Countries”

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## 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). Dr. Babu is a Senior Research Fellow and currently serves as the Head of Capacity Strengthening for the International Food Policy Research Institute (IFPRI). 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 five years in Malawi, Southern Africa in 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 University of Malawi developing and teaching computer-based policy-oriented post graduate courses.



**Lecture:** “Emerging Global Food Security Challenges”

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## Dieudonné Baributsa



Dr. Dieudonné Baributsa is an Associate Professor of Entomology at Purdue University. He served as the team manager for the Purdue Improved Cowpea Storage project that worked to improve cowpea storage in West and Central Africa. His areas of interest include international development, Integrated Pest Management (IPM), agricultural technology dissemination and supply chain and management development for agricultural technologies. Dr. Baributsa received his B.S. in Crop Production from Institut Facultaire des Sc. Agronomiques, Kisangani, D. R. Congo, his M.S. in Agronomy and his Ph.D. in Cropping Systems/Agronomy from Michigan State University, East Lansing, Michigan.

**Lecture:** “Purdue Improved Crop Storage (PICS) Project”

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# SPEAKER BIOGRAPHIES

## Robert Bertram

Robert Bertram is the Chief Scientist in the USAID Bureau for Food Security, where he serves as a key adviser on a range of technical and program issues to advance global food security and nutrition. He leads evidence based efforts to advance research, technology and implementation in support of U.S. Government's global hunger and food security initiative, Feed the Future. Prior to his current position, he was Director of the Office of Agricultural Research and Policy in the Bureau for Food Security and guided USAID investments in agriculture and natural resources research. Dr. Bertram studied plant breeding and genetics, earning degrees from University of California, Davis, the University of Minnesota and the University of Maryland. He studied international affairs at Georgetown and was a visiting scientist at Washington University in St. Louis.



**Keynote Address:** "The Global Food Security Act: Achieving the Vision of a World Without Hunger"

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## Julie Borlaug



Julie Borlaug is the granddaughter of Dr. Norman E. Borlaug and the Associate Director of External Relations for 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 B.A. from Texas A&M in International Studies and Political Science in 1997 and her M.B.A. 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 Director of Development. In her role, Julie works 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 advancement of innovation and technology in agriculture. Julie speaks often about the Borlaug Legacy, the need for research and technology in agriculture, as well as youth and innovation.

**Lecture:** "Keeping the Norman Borlaug Dream Alive"

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# SPEAKER BIOGRAPHIES

## Sylvie Brouder

Dr. Brouder is a Professor of Agronomy at Purdue University. Her 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. Dr. Brouder 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.



**Lecture:** Grand Challenge #6: "Ecosystem Sustainability and Food Security"

**Moderator for the Panel:** Ecosystems and Biodiversity

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## Betty Bugusu



Betty Bugusu became the Managing Director of the International Food Technology Center, Purdue University in August 2010. She is responsible for the day to day activities of the Center that leverage Purdue strength in research, technology adoption, and capacity building to address issues related to food security. Dr. Bugusu is leading efforts to increase value addition and market development in developing countries through advances and innovations in food processing. As of May 22, Dr. Bugusu will take part in a \$5 million, five-year effort to prevent post-harvest losses through The Feed the Future Innovation Lab for Food Processing and Post-Harvest Handling through USAID. Prior to joining Purdue, Bugusu worked as a research scientist at the Institute of Food

Technologists (IFT) in Washington, DC where she authored scientific reports for use in the food policy arena and served as a technical resource for IFT programs. She also oversaw IFT's initiatives on emerging sciences such as nanotechnology and served as a liaison to international food standards setting bodies, such as Codex Alimentarius. She worked as a Program Associate for SUSTAIN, a non-profit organization working in the areas of food science, health and nutrition for developing countries. Dr. Bugusu earned her B.S. degree in Agriculture from Egerton University, Kenya and a M.S. and Ph.D. in Food Science from Purdue University, USA. Her research focus was in cereal chemistry.

**Panelist:** "Institutional Pathways for Impact"

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# SPEAKER BIOGRAPHIES

## Andrea Burniske

Andrea Burniske is Program Manager for the 12D Lab (Innovation for International Development) in Global Engineering. The 12D Lab aims to foster a vibrant community of faculty, staff and students working with international partners to address grand challenges in international development based on engineering innovations and market-driven approaches. This includes research, design, adaptation and field-testing of appropriate technologies and services that have a strong scaling potential as solutions for energy access, healthcare, water and sanitation, labor-saving innovations and disaster/humanitarian response. She is also a Purdue Delegate for the Extension Disaster Education Network (EDEN) and serves as a member of the College of Agriculture Diversity Committee. Her background includes 20 years' experience working overseas and in Washington DC for international development organizations. She has designed and led projects while living in Tajikistan, Colombia, Bulgaria, Peru, and Russia. Her sectoral experience and main interests comprise disaster risk reduction and disaster response (as a member of the Latin American Response Team for Mercy Corps); gender assessment; child protection; environmentally sustainable development; social enterprise development; and climate change adaptation. Andrea has a B.A. from UC Berkeley in Slavic Languages; an M.A. from University of Oregon in Journalism and Communication (thesis research on communication for development); and an M.B.A+ Certificate in Entrepreneurial Leadership from Portland State University.



**Lecture:** "Gender in International Development"

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## Gary Burniske



Gary Burniske is Managing Director of Purdue's Center for Global Food Security. He is responsible for managing the Center and collaborates with Purdue's faculty and scientists to take a multi-disciplinary approach to tackling global challenges affecting food security. Fluent in five languages, he has 35 years of experience in international development covering 50 countries in Africa, Asia, Latin America and the Former Soviet Union. Holding senior level technical and managerial positions with humanitarian organizations and international public institutions, he served as Country Director for Colombia, Tajikistan, and Russia. He worked as Regional Technical Advisor in Agriculture and Natural Resources with CARE covering 25 countries in Asia and Latin America. He headed the International

Tropical Timber Organization's conservation efforts globally, and was Principal Technical Advisor to the Nicaraguan Forest Service with a leading role drafting forest policies and legislation. He also served as the Executive Director of Rainforest Foundation International, promoting indigenous rights and ownership to tropical forests in Latin America, Africa and Asia. Burniske's recent accomplishments include the design and management of Mercy Corp's regional flagship program for Latin America utilizing alternative dispute resolution to resolve land conflicts on 2 million acres of Afro-descendent and indigenous communal land in the Darien Gap region of Colombia. In Tajikistan, he led the transformation of a small Tajik NGO, the National Association of Business Women into the largest microcredit provider in the country. Burniske holds a B.S. in Natural Resources and an M.S. in Forest Economics - both from the University of Massachusetts.

**Lecture:** "Summer Institute Goals and Introduction of Group Project"

**Panelist:** "Institutional Pathways for Impact"

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# SPEAKER BIOGRAPHIES

## Luciano Castillo

Luciano Castillo is the Don Kay and Clay Cash Distinguished Engineering Chair in Wind Energy and Professor in the Department of Mechanical Engineering at Texas Tech University. His research in turbulence using experimental techniques, direct numerical simulations and multi-scale asymptotic analysis has injected new ideas in turbulent boundary layers and our understanding of initial conditions on large scale turbulence, particularly on wind energy. Prior to his current position he was the Executive Director/President of the National Wind Resource Center (NWRC). He has published over 100 publications, edited several books on renewable energy and co-authored several patents (e.g., energy, health care, etc.). Some of his awards include:



Fellow ASME, the NASA Faculty Fellowship, the Martin Luther King Faculty Award, the Robert T. Knapp Award on complex flows from the ASME, the Best Paper Award from the Journal of Renewable Energy, the Best Paper Award from IEEE for his innovative approaches on engineering education (by bringing active learning, design and innovation in the classroom). He has given several keynotes lectures, plenary lecture, and distinguished lectures on wind energy. Dr. Castillo received his B.S. and Ph.D. in Mechanical Engineering from the State University of New York at Buffalo.

**Lecture:** Grand Challenge #4: “The Case for Wind Energy in Food Security”

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## Indrajeet Chaubey



Dr. Indrajeet Chaubey is the Associate Dean and Director of International Programs in Agriculture at Purdue University. He received his 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 an Assistant Professor from 2000 to 2005 and an Associate Professor with tenure from 2005 to 2006 at the University of Arkansas. 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.

**Lecture:** “Grand Challenge #2: Water Resources and Food Security”

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## Mark Christie

Dr. Mark Christie is an Assistant Professor at Purdue University in the Department of Biological Sciences and the Department of Forestry and Natural Resources. His research integrates rapidly-advancing molecular and analytical tools to ask a broad array of ecological and evolutionary questions. With these tools, he answers questions in both basic and applied ecology and evolution, often focusing on the conservation and successful management of marine and freshwater fishes.



**Lecture:** “The Ecological and Genetic Sustainability of Fisheries and Aquaculture”

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# SPEAKER BIOGRAPHIES

## Clara Cohen



Dr. Clara Cohen is Chief, Division on Human and Institutional Capacity Development Office, Office of Agricultural Research and Policy and Executive Director, Board for International Food and Agricultural Development, Bureau for Food Security, USAID. She leads office activities focusing on human and institutional capacity development and has contributed to the design and launch of several new programs emphasizing research and education system strengthening. Previously, she worked as a Research Scholar for the Health and Global Change Unit at the International Institute for Applied Systems Analysis (IIASA), in Vienna, Austria and at the US National Academy of Sciences, where she designed and implemented the Bill and Melinda Gates Foundation-funded

African Science Academy Development Initiative, a 10-year effort to strengthen the capability of African science academies to inform national health policy. She also directed studies on agricultural research, including a Congressionally mandated review of the four research agencies under USDA's Research, Education, and Economics Mission Area (ERS, ARS, CSREES, and NASS). She served as an AAAS Diplomacy Fellow in USAID's Center for Economic Growth and Agricultural Development, Office of Agriculture and Food Security, from 1998–2000. She has conducted research on leguminous cover crops at the Rodale Institute Research Center and served as a Peace Corps aquaculture volunteer in Guatemala. Dr. Cohen holds a B.A. in biology from Swarthmore College and a Ph.D. in plant physiology, with minors in molecular biology and soil science, from Cornell University.

**Lecture:** “Innovation for Food Security: USAID’s Feed the Future Research, Policy & Capacity Development Programs”

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## Greg Deason

Greg Deason is Senior Vice President and Director of Innovation and Entrepreneurship for the Purdue Foundry. The Purdue Foundry exists to help Purdue students, faculty and local alumni move ideas to the marketplace more quickly. Deason repositioned Purdue Research Park in West Lafayette from a basic real estate venture to a vibrant high-tech hub that incubates and supports firms in the life sciences, homeland security, engineering, advanced manufacturing, and information technology. It is Indiana’s first and largest certified technology park, with more than 100 tech-related companies sharing common ground. He also led the development of research parks in Merrillville (2004), New Albany (2009) and Indianapolis (2009). Mr. Deason received his B.S. in Agricultural Economics from Purdue University in 1986.



**Lecture:** “Entrepreneurship in Agriculture”

**Discussion:** “Private Sector Engagement in Agriculture”

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# SPEAKER BIOGRAPHIES

## Tomás Díaz de la Rubia



Tomás Díaz de la Rubia is a seasoned, progressive science and technology leader with extensive experience in both the public and private sectors. At present, Dr. Diaz de la Rubia is Chief Scientist and Executive Director of Discovery Park. In this position, his responsibilities include building upon Discovery Park's foundation of excellence which has enabled high-impact research that crosses traditional academic boundaries. He works closely with the faculty and deans to help catalyze Purdue's many strengths and build on its legacy of interdisciplinary research with global impact. He is also a Professor of Materials Science and of Strategic Management (by Courtesy) in the Krannert School of Management. Before coming to Purdue he served as innovation leader and director of Deloitte's energy and resources industry practice, working with Fortune 500 clients in the energy and manufacturing industries to help identify and capitalize on the business opportunities arising from potentially disruptive, innovative new technologies. To accomplish these goals, he also engages with start-up and early stage companies, national laboratories and academic institutions to help them identify opportunities for scaling and commercialization of their new technologies, and create market-facing messages and strategic partnerships with appropriate clients in the industry. Diaz de la Rubia has published more than 150 peer-reviewed articles and has co-edited several books.

**Lecture:** "Purdue Discovery Park: Where Disciplines Converge to Solve Global Challenges"

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## Otto Doering

Dr. Otto Doering is a Professor of Agricultural Economics at Purdue University. His broader university responsibilities include undergraduate and graduate teaching, research, and public service on policy issues relating to agriculture, resources, and the environment. His experience with climate issues includes work assessing the impacts of climate change and climate variability on agriculture and service on national and international climate change assessments. He was director of Purdue University's Energy Policy Research and Information Program, directed Indiana's State Utility Forecasting Group, and works with the National Science Foundation's Power Systems Engineering Research Center. He serves on the National Academies' Water Science and Technology Board, the U.S. Environmental Protection Agency's Science Advisory Board, and he is Chair of EPA's Integrated Nitrogen Committee. He has held advisory positions with the U.S. Department of Agriculture for the '77, '90 and '96 Farm Bills, and works with the Natural Resources Conservation Service on the design and assessment of conservation programs. Dr. Doering received his B.A. and Ph.D. from Cornell University and his M.S.C. from the London School of Economics. In previous lives he has been a wrangler in the Canadian Rockies, prepared cases in the New York City Municipal Courts, and worked in Southeast Asia for the Ford Foundation.



**Lecture:** "Cultural, Social, Economic, and Policy Dimensions of Technology Development and Transfer"

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# SPEAKER BIOGRAPHIES

## Jeff Dukes



Dr. Jeff Dukes is a Professor of Forestry and Natural Resources and Biological Sciences, as the Belcher Chair for Environmental Sustainability, and the Director of Purdue Climate Change Research Center. I grew up in Northern California, attended Brown University as an undergraduate and did my Ph.D. research in the Department of Biological Sciences at Stanford University. My thesis advisor was Hal Mooney. The core of my dissertation research was published in *Oecologia* (Dukes 2001) and *Ecological Applications* (Dukes 2002). With funding from the National Science Foundation and the Department of Energy (previously from the National Institute for Climatic Change Research and currently from the Terrestrial Ecosystem Science division), his group is directing the Boston-Area Climate Experiment (BACE) in Waltham, Massachusetts. The

BACE is designed to characterize old-field responses to climate change, and features 4 levels of warming across each of three precipitation treatments. He also leads the NSF-funded INTERFACE Research Coordination Network, which seeks to advance global environmental change research by bringing together researchers conducting field experiments, researchers who use ecosystem-scale models, and researchers working on land-atmosphere interactions in Earth system models (ESMs).

**Panelist:** "Ecosystems and Biodiversity"

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## Barny Dunning

Barny Dunning is a Professor of Wildlife Ecology in the Department of Forestry and Natural Resources at Purdue. Prior to coming to Purdue, Dr. Dunning held positions as a postdoctoral research associate and research scientist at the University of Georgia's Institute of Ecology. During that time, he worked on the wildlife impact of forest management across large spatial scales at the Savannah River Ecology Laboratory in Aiken, South Carolina. This research was funded by grants from the Department of Energy, U.S. Forest Service and the National Science Foundation. Dr. Dunning teaches courses in environmental conservation, ornithology, global environmental issues, and conservation biology. His research focuses on the effects of habitat change across large landscapes on native wildlife species. Much of this research has focused on various species of sparrows in grasslands, wetlands and other open habitats. He is involved in a long-term field experiment on forest management and its impacts on Indiana wildlife (the Hardwood Ecosystem Experiment) as a component of the Sustainable Hardwood Ecosystems area of excellence.



**Panelist:** "Ecosystems and Biodiversity"

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# SPEAKER BIOGRAPHIES

## Gebisa Ejeta



Gebisa Ejeta is Distinguished Professor of Plant Breeding & Genetics and International Agriculture, and is Director of the Center for Global Food Security at Purdue University. Professor Ejeta has had the honor of serving at the highest level of science and policy advisory for several international development and U.S. government agencies, including as Special Advisor to the USAID Administrator Dr. Rajiv Shah, as Science Envoy of the U.S. State Department, and as a member of the UN Secretary General Ban Ki Moon's Scientific Advisory Board. He currently serves on the boards of the Global Crop Diversity Trust, the Chicago Council for Global Affairs' Global Food and Agriculture Program, the National Academy of Sciences Board on Agriculture and Natural Resources, the International Water Management Institute, and on the U.S. Board for International Food and Agricultural Development. A 2009 World Food Prize Laureate and recipient of a national medal of honor from the President of Ethiopia, Professor Ejeta is a Fellow of the American Association for the Advancement of Sciences, Fellow of the American Society of Agronomy, Fellow of the Crop Science Society of America, and Fellow of the African Academy of Sciences.

**Lecture 1:** "Global Food Security: Humanity's Foremost Challenge"

**Lecture 2:** "Purpose-Driven Research"

**Panelist:** "Institutional Pathways for Impact"

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## Songlin Fei

Dr. Fei is an Associate Professor of Measurements and Quantitative Analysis in the Department of Forestry and Natural Resources at Purdue University. His research focuses on invasive exotic species prevention and mitigation, natural resource and sustainability and geospatial tool development and application. Dr. Fei's academic interests evolve around ecosystem dynamic modeling, invasive species modeling and surveillance and biometrics and spatial analysis. Fei believes that bringing attention to macrosystems ecology can help address pressing global challenges. He received a M.S. in Statistics from Peking University and Ph.D. in Ecology from the Pennsylvania State University.



**Lecture:** "Biodiversity and Food Security: Challenges and Opportunities"

**Panelist:** "Ecosystems and Biodiversity"

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# SPEAKER BIOGRAPHIES

## Suresh Garimella



Dr. Suresh Garimella is Purdue University's Executive Vice President for Research and Partnerships, and the Goodson Distinguished Professor of Mechanical Engineering. He also serves as Director of the National Science Foundation Cooling Technologies Research Center. He previously served as Purdue's Chief Global Affairs Officer (2013-2014), and as Associate Vice President for Engagement (2011-2013). He serves on the Board of Directors of Modine Manufacturing Company. Dr. Garimella's research group has made seminal contributions in micro- and nano-scale thermal and fluidic engineering, materials processing and manufacturing, and renewable energy. He has supervised over 90 Ph.D. and M.S. students, and co-authored 500 refereed journal and conference publications and 21 patents and patent applications. He received his Ph.D. from the University of California at Berkeley in 1989, his M.S. from The Ohio State University in 1986, and his bachelor's degree from the Indian Institute of Technology Madras in 1985.

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## Marcus Glassman

Marcus Glassman is the research associate with the Global Food and Agriculture Program at the Chicago Council on Global Affairs. Prior to taking this position in 2015, he previously worked as the refugee epidemiologist for the State of Illinois, on food safety policy at the Center for Science in the Public Interest, and has researched Salmonella transmission and livestock behavior with the USDA Agricultural Research Service. He holds an M.S. in public health microbiology from The George Washington University and a B.A. in medical anthropology from Purdue University.



**Lecture:** "The Chicago Council on Global Affairs Food & Agriculture Program: Making the Case for Food Security in a Changing Global Landscape"

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## Michael Gunderson



Michael Gunderson joined Purdue University as an Associate Professor in the Department of Agricultural Economics in August 2012. In addition to his responsibilities teaching in Purdue's undergraduate and graduate classrooms on campus, Professor Gunderson leads a quantitative methods course in the MS-MBA in Food and Agribusiness Management, a dual-degree, online program for working agribusiness professionals. He is also heavily involved in designing, developing and delivering non-credit, professional development programs through the department's Center for Food and Agricultural Business. Mike serves as the center's associate director of research, as well. Mike also holds a master's degree in agricultural economics from Cornell University and a bachelor's degree in agribusiness, farm and financial management from the University of Illinois.

**Lecture:** "Investment and Finance in Agriculture"

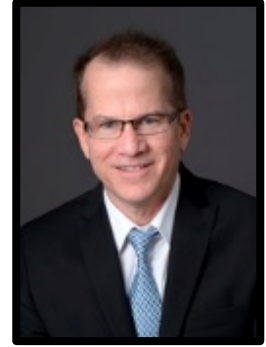
**Discussion:** "Private Sector Engagement in Agriculture"

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# SPEAKER BIOGRAPHIES

## Bruce Hamaker

Dr. Bruce Hamaker is Distinguished Professor of Food Science at Purdue University, director of the Whistler Center of Carbohydrate Research, and the Roy L. Whistler Chair in Carbohydrate Science in the Department of Food Science at Purdue University. He obtained his undergraduate degree in biological sciences from Indiana University and completed his M.S. in human nutrition and Ph.D. in food chemistry at Purdue. He did postdoctoral study at the Instituto de Investigacion Nutricional in Lima, Peru. Dr. Hamaker's research program focuses on food carbohydrates and proteins with applications in health and wellness. He has over 180 refereed journal publications in food science, human nutrition, biochemistry, and broad-spectrum journals and numerous book chapters. He has numerous clinical and nutrition science collaborations with experience in protein and carbohydrate digestion patterns and dietary fiber effect on the gut microbiome. As an active international research collaborator in Africa and Asia, he has worked for over 20 years on projects to improve utilization and nutritional properties of cereal grains and establish technology-based incubation centers to work with local entrepreneurs.



**Lecture:** "Food Processing Innovations for Africa"

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## Tom Hertel



Dr. Thomas Hertel is a Distinguished Professor of Agricultural Economics, whose research and teaching focus is on international trade, food and environmental security. 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 11,000 researchers in 160 countries around the world. 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. He has supervised more than three dozen Ph.D. students and published more than 100 peer reviewed journal articles, along with numerous book chapters and books. Professor

Hertel is the inaugural recipient of the Purdue University Research and Scholarship Distinction Award. He has also received a number of national awards including: Quality of Communication (AAEA), Distinguished Policy Contribution and Outstanding Journal Article (both AAEA), as well as Outstanding Journal Article in the *Australian Journal of Agricultural and Resource Economics*. His most recent research has focused on the impacts of climate change and mitigation policies on global trade, land use and poverty. Dr. Hertel received his B.A. in Economics from University of North Carolina at Chapel Hill and his Masters in Public and International Affairs from Princeton University. He received his Ph.D. in Applied Economics from Cornell University.

**Lecture:** Grand Challenge #7: "Global Supply and Demand for Agricultural Land"

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# SPEAKER BIOGRAPHIES

## Matt Huber

Dr. Matthew Huber is a Professor of Earth, Atmospheric and Planetary Sciences at Purdue University. Previously, he was co-founder and director of the Purdue Climate Change Research Center. He was previously the head of the Climate Dynamics Prediction Laboratory. His research 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 earned B.A. from the University of Chicago in Geophysics, his M.S. from the University of California Los Angeles in Atmospheric Sciences and his Ph.D. from the University of California Santa Cruz in Earth Sciences.



**Lecture:** "Grand Challenge #1: Climate Change and Food Security"

**Practicum:** "Climate Change and Food Security"

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## Louise Iverson



Louise Iverson is the Assistant Director of the Global Food and Agriculture Program for the Chicago Council on Global Affairs. Before coming to the Chicago Council on Global Affairs in 2013, Iverson worked for Common Hope, a development NGO based in Antigua, Guatemala, and also held positions at the Consortium on Financial Systems and Poverty at the University of Chicago and American Institutes for Research. She received her Master of Public Policy with a specialization in international development from the University of Chicago and a B.A. from the University of Minnesota.

**Lecture:** "The Chicago Council on Global Affairs Food & Agriculture Program: Making the Case for Food Security in a Changing Global Landscape"

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## Vic Lechtenberg

Dr. Victor Lechtenberg has served Purdue University in many capacities since he joined the faculty in 1971 as a Professor of Agronomy. As professor he taught crop science and conducted research on forage and biomass crops until 1982. He served as Associate Director of Agricultural Research Programs, the Executive Associate Dean of Agriculture from 1982-93, and was Dean of Agriculture from 1993-04. He was Vice Provost for Engagement from 2004 to 2011, Interim Provost from 2007-08, and Interim Vice President for Governmental Relations from 2008-09. Beginning in 2004, while Vice Provost for Engagement, he led Purdue's engagement and outreach efforts to governmental agencies, corporate leaders, schools and community leaders across Indiana and beyond. Dr. Lechtenberg currently serves as Special Assistant to the President for the University. He has written nearly 200 technical papers, abstracts, and book chapters. He served 6 years as chair of the U.S. Department of Agriculture's national Agricultural Research, Extension, Education and Economics Advisory Board. Dr. Lechtenberg received his bachelor's degree from the University of Nebraska and a doctorate from Purdue University.



**Lecture:** "Advancing the U.S. Land Grant University Model for International Development"

**Moderator for Panel:** "Institutional Pathways for Impact"

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# SPEAKER BIOGRAPHIES

## Tesfaye Mengiste

Tesfaye Mengiste is a professor of botany and plant pathology at Purdue University. He grew up in a farming village and received broad training in plant science at an agricultural college in his native Ethiopia. His pursuit of a career in research and more education took him first to England and Switzerland, where he earned his doctorate at the University of Basel, and then to North Carolina as a post-doctoral scientist working for Syngenta, a global agribusiness company. He came to Purdue in October 2002. Mengiste's research explores the mechanisms that plants use to fend off infections by microbial pathogens. By applying genetic, molecular, and biochemical approaches, he seeks to determine how these key components regulate plant immune responses required for resistance. The overarching goal of his research is to expedite genetic improvement of sorghum to increase productivity in disease prone sorghum producing regions.



**Lecture:** "Biotechnology in Crop Improvement"

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## Bob Nielsen



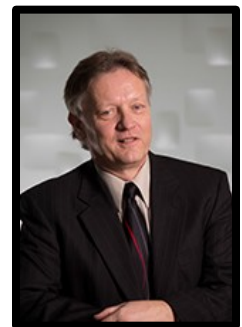
Dr. Robert Nielsen is a Professor in the Department of Agronomy at Purdue University and an Extension Corn Specialist for the state of Indiana. He is actively involved with Purdue's Crop Diagnostic Training Center. One of his major Extension activities is the development and maintenance of Web-based corn information sites. His current field research involves investigations into the relationship between crop canopy reflectance and optimum nitrogen fertilizer rates in corn, on-farm seeding rate trials, on-farm nitrogen rate trials and the productive utilization of site-specific crop management tools. Dr. Nielsen obtained a B.S. in Agronomy from the University of Nebraska and a M.S. and Ph.D. in Plant Breeding from the University of Minnesota.

**Panelist:** "Institutional Pathways for Impact"

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## Ronald F. Turco

Dr. Ronald F. Turco is a Professor of Agronomy and Assistant Dean of Agricultural and Environmental Research. He has B.S. degrees 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 nanomaterials (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.



**Lecture:** "Writing Fundable Proposals"

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# SPEAKER BIOGRAPHIES

## Connie Weaver



Dr. Connie Weaver is a Distinguished Professor in the Department of Nutrition Science at Purdue University. In 2013, Dr. Weaver was bestowed the honor of the Spirit of the Land Grant Award. In 2012, she was selected as the Herbert Newby McCoy recipient. This award is the most prestigious research honor given by Purdue University. In 2010, she was elected to membership in the Institute of Medicine of The National Academies, of which she is a member of the Food and Nutrition Board. In 2010 the Women's Global Health Institute (WGHI) was formed at Purdue University. As founder and director, Dr. Weaver oversees the mission of improving the health of women globally through research and training by proactively identifying the causes and prevention of diseases related to women. In 2008, she

became Deputy Director of the National Institutes of Health funded Indiana Clinical and Translational Science Institute. From 2000 to 2010, she was Director of the NIH Purdue-UAB Botanical Research Center to study dietary supplements containing polyphenolics for age-related diseases. Her research interests include mineral bioavailability, calcium metabolism, and bone health. Dr. Weaver was appointed to the 2005 Dietary Guidelines Advisory Committee for Americans. She has published over 260 research articles.

**Lecture:** Grand Challenge #5: "Nutrition and Food Security"

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