

SPEAKER BIOGRAPHIES

BORLAUG SUMMER INSTITUTE ON GLOBAL FOOD SECURITY

JUNE 5th – JUNE 18th, 2016

Phil Abbott



Dr. Philip Abbott is a professor in the Department of Agricultural Economics at Purdue University. His current research focuses on international trade and international agricultural development, and four of his students have won national awards for the quality of their dissertations. 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: “Grand Challenge #6: Global Food Trade: Food Crisis, Price Shocks, and Developing Country Impacts”

Jay Akridge

Dr. Jay Akridge was appointed Dean of Agriculture 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. 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 agricultural economics in 1986 from Purdue University specializing in marketing and finance. His master’s degree is in agricultural economics with an emphasis in agribusiness management and finance is also from Purdue.



Keynote

SPEAKER BIOGRAPHIES

Eli Asem



Dr. Elikplimi (Eli) 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, 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.

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

Tamara Benjamin

Dr. Tamara Benjamin is the Assistant Program Leader for Diversified Food and Farming Systems at Purdue University. Previously, she led the Purdue College of Agriculture’s initiatives in Costa Rica working to create bridges for the university with activities in Latin America through CATIE, an internationally known regional institution that focuses on forestry and agricultural systems. Her focus has been on providing internship opportunities for graduate and undergraduate students throughout Latin America, coordinating and teaching study abroad programs in Costa Rica, and collaborating with Purdue University faculty on research projects in the region. Her research has covered the biophysical, social and economic implications of agroecosystem diversification, the impact of agroecosystems on ecological communities, and the management of agroforestry planning. She has worked on a variety of topics covering functional diversity in agroforestry, biofuels, biochar and other soil amendments, phytosanitary issues in the export market and biodiversity conservation. Her Peace Corps assignment in Central America stationed her in Costa Rica showing local farmers reforestation methods for their land. She received both of her graduate degrees from Purdue University.



Moderator for Panel: “Borlaug Fellow Research Experience in Latin America”

SPEAKER BIOGRAPHIES

Alesha Black

Alesha Black is the director the Global Food and Agriculture Program at the Chicago Council on Global Affairs. Black joined the Council from the Bill & Melinda Gates Foundation, where she focused on the foundation's strategic partnerships for agricultural development. She worked at the Bill & Melinda Gates Foundation from 2007 to 2015, where she coordinated foundation partnerships with China, Brazil, and the United States, as well as UN agencies working to support smallholder farmers. Before that, she managed a portfolio of investments working to connect smallholder farmers to better market access opportunities in sub-Saharan Africa. Black also co-led important activities to link nutrition and agriculture programs at the foundation and contributed to numerous strategic projects at the beginning of the Agricultural Development program, including the first Gender Impact Strategy, initial impact measurement framework, and early foundation advocacy activities to raise the profile of smallholder agriculture.



Lecture: "The Chicago Council for Global Affairs' Focus on Food Security"

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 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. She has recently transitioned into her new role as Assistant Director of Partnerships 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.

Lecture: "Keeping the Norman Borlaug Dream Alive"

SPEAKER BIOGRAPHIES

Sylvie Brouder



Dr. Brouder is a Professor of Agronomy and 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 #2: Ecosystem Sustainability and Food Security"

Moderator for the Panel: "Perspectives on Ecosystem Services and the R4D Context"

Aniseh Bro

Aniseh Bro is a PhD candidate in the Department of Community Sustainability at Michigan State University. Aniseh grew up in a farm in Chile, and from very early on had an interest in working internationally on issues related to agricultural production. Her research has taken her to East Africa and Central America to study coffee production and value chain. More specifically, her PhD research (funded by the Borlaug Fellows in Global Food Security) seeks to understand the incentives of coffee producers in Nicaragua to shift towards practices that will help them build adaptive capacity to climate change.



Panelist: "Borlaug Fellow Research Experience in Latin America"

SPEAKER BIOGRAPHIES

Betty Bugusu

Betty Bugusu is the Managing Director of the International Food Technology Center at Purdue University and Director of the Feed the Future Innovation Lab for Food Processing and Post-Harvest Handling financed by USAID. 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. Prior to joining Purdue, Betty 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 also 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.Sc. degree in Agriculture for Egerton University, Kenya and an M.S. and Ph.D. in Food Science from Purdue University, USA. Her research focus was in cereal chemistry.



Panelist: "PICS and Post-Harvest Lab at Purdue: Focus on Global Food Value Chains"

Andrea Burniske



Andrea Burniske is the program manager for the I2D Lab (Innovation for International Development) in Global Engineering. The I2D 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). 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 sectorial 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 BA from UC Berkeley in Slavic Languages; an MA from University of Oregon in Journalism and Communication (thesis research on communication for development); and an MBA+ Certificate in Entrepreneurial Leadership from Portland State University.

Lecture: "Gender in International Development"

SPEAKER BIOGRAPHIES

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

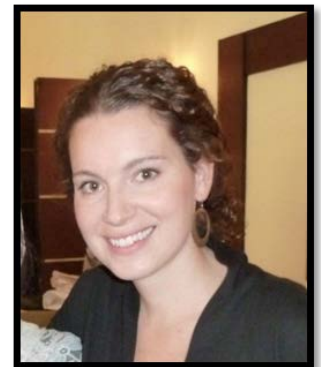
Principal Technical Advisor to the Nicaraguan Forest Service with a leading role drafting forest policies and legislation. He also served as the Executive Director of Rainforest Foundation International, promoting indigenous rights and ownership to tropical forests in Latin America, Africa and Asia. 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. His BS in Natural Resources and an MS in Forest Economics are both from the University of Massachusetts.

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

Moderator for Panel: "Borlaug Fellow Research Experience in Africa"

Diana Caley

Diana Caley is a Ph.D. candidate in Food Studies at New York University. Her mixed methods research explores the nature and measurement of urban food insecurity among the ultra-poor in Kampala, Uganda. Her work evaluates how common food security indicators perform in urban settings and the extent to which these indicators accurately reflect the perceptions, preferences, and coping behaviors that characterize urban hunger. Ms. Caley is a former Norman Borlaug Global Food Security Fellow, former Chicago Council for Global Affairs Food Security Next Generation Delegate, and a Les Dames d'Escoffier New York Founders Award Recipient. She holds a Bachelor of Arts in International Development from George Washington University and is a Returned Peace Corps Volunteer.



Panelist: "Borlaug Fellow Research Experience in Africa"

SPEAKER BIOGRAPHIES

Adam Cobb

Adam Cobb is from everywhere USA and has also lived 7 years in Manila, Philippines. He is a doctoral candidate in Natural Resource Ecology and Management at Oklahoma State University. He earned his Master's in International Agriculture in 2011. His research relates to reducing fertilizer inputs and increasing soil health with symbiosis between sorghum/cowpea crops and arbuscular mycorrhizal fungi. This means he is a dirt worshiper! He is interested in taking his research to sub-Saharan Africa (Kenya, Zambia, etc.) and building local capacity for healthy soil practices across the developing world.



Panelist: "Borlaug Fellow Research Experience in Latin America"

Clara Cohen

Dr. Clara Cohen serves as senior science policy advisor with USAID's Bureau for Food Security, Office of Agricultural Research and Policy (U.S. Agency for International Development). 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. She has recently assumed the position as Executive Secretary of the Board for International Food and Agricultural Development (BIFAD). 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. She holds a BA in biology from Swarthmore College and a PhD 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"

SPEAKER BIOGRAPHIES

Tomás Díaz de la Rubia

Tomás Díaz de la Rubia is the Chief Scientist and Executive Director of Discovery Park at Purdue University. He is a seasoned, progressive science and technology leader with extensive experience in both the public and private sectors. Previously, Dr. Díaz de la Rubia served as the Innovation Leader and a Director in the Energy and Resources industry practice at Deloitte Consulting LLP. He worked with Fortune 500 clients in the energy and manufacturing industries to help identify and capitalize on the business opportunities presented by the emergence of potentially disruptive, innovative new technologies that will lead to increased performance, new products, more effective operations, leaner execution, enhanced safety, and overall growth. To accomplish these goals, he also engaged 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. In addition, he also helped clients in both the public and private sectors develop new markets and commercialization strategies for their advanced technologies. Tomas also worked with clients to help them adapt to the ever-increasing pace of technology innovation by developing programs aimed at transforming the innovation culture of the corporation, and making innovation across all functions of the company sustainable and a key part of the DNA.



Lecture: “Purdue Discovery Park: Where Disciplines Converge to Solve Global Challenges”

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 has degrees from Cornell University and 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”

SPEAKER BIOGRAPHIES

Barney Dunning

Barney 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: "Perspectives on Ecosystem Services and the R4D Context"

Gebisa Ejeta



Dr. Gebisa Ejeta is Distinguished Professor of Plant Breeding & Genetics and International Agriculture and serves as Executive Director of the Center for Global Food Security at Purdue University. Professor Ejeta has been a member of the faculty of Purdue University since 1984. His career has been devoted to education, research, and international development with contributions in human and institutional capacity building as well as in advocacy for science-based global development. Professor Ejeta has served in advisory roles to several global development organizations including the USAID, the Rockefeller Foundation, the Bill & Melinda Gates Foundation, the Food & Agricultural Organization of the UN, and the International Agricultural Research Centers (CGIAR). He currently serves on the boards of the Chicago Council for Global Affairs' Global Agricultural Development Initiative (GADI), the National Academy of Sciences Board on Agriculture and Natural Resources (BANR), and the Global Crop Diversity

Trust (GCDT). Gebisa Ejeta is the 2009 World Food Prize Laureate and the recipient of a national medal of honor in science from the President of Ethiopia. He is a Fellow of the American Society of Agronomy, Fellow of the Crop Science Society of America, Fellow of the American Association for the Advancement of Sciences, and Fellow of the African Academy of Science. Professor Ejeta has served the United States government in several capacities, as Science Envoy of the U.S. State Department, as Special Advisor to the USAID Administrator Dr. Rajiv Shah, before being appointed by President Obama as member of the Board for International Food and Agricultural Development (BIFAD) in 2010. More recently, Professor Ejeta was appointed by Secretary General Ban Ki Moon to the first U.N. Scientific Advisory Board.

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

Lecture 2: "Purpose-Driven Research"

Moderator for Panel: "PICS and Post-Harvest Lab at Purdue: Focus on Global Food Value Chains"

SPEAKER BIOGRAPHIES

Margot Ellis

Margot Ellis brings more than 25 years in international development and humanitarian response experience to USAID, including work in transformational, in-conflict, emergency and fragile state situations. Prior to her appointment as Deputy Assistant to the Administrator in USAID's Bureau for Food Security in 2015, she served as Deputy Commissioner-General for the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) for five years, providing strategic direction and operational leadership to advance UNRWA's mandate to support the relief and development needs of five million Palestine refugees in the West Bank, Gaza, Lebanon, Jordan and Syria. Ms. Ellis previously served for 23 years as a United States Foreign Service Officer, achieving the rank of Minister-Counselor and receiving the 2009 Meritorious Senior Foreign Service Presidential Rank Award. She served as Acting Assistant Administrator for the USAID Asia Bureau from 2008-2010 and as Mission Director in Uganda for three years, providing strategic oversight to investments in health and economic growth, and efforts to mitigate the causes and consequences of conflict, including the transition from relief to recovery in northern Uganda.



Keynote

Songlin Fei



Dr. Fei is an Associate Professor of quantitative ecology in the Department of Forestry and Natural Resources at Purdue University. His research focuses on (1) macroscale invasion patterns and processes and (2) impact of climate change on forest ecosystem. He received a MS in Statistics and PhD in Ecology from the Pennsylvania State University

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

SPEAKER BIOGRAPHIES

Suresh Garimella



Suresh Garimella is Purdue University's Executive Vice-President for Research and Partnerships, and the Goodson Distinguished Professor of Mechanical Engineering. He previously served as Chief Global Affairs Officer (2013-2014), and as Associate Vice President for Engagement (2011-2013). He is also Director of the National Science Foundation Cooling Technologies Research Center. He received his PhD from the University of California at Berkeley in 1989, his MS from The Ohio State University in 1986, and his Bachelor's degree from the Indian Institute of Technology Madras in 1985. His areas of expertise include *micro- and nano-scale transport phenomena, thermal management and energy efficiency in electronics systems, renewable and sustainable energy systems technology and policy, and global academic-public-private partnerships*. Dr. Garimella served as Jefferson Science Fellow at the U.S. Department of State from

2010 to 2011, in the International Energy Office. He was the State Department delegate to the Committee on Energy Research & Technology of the International Energy Agency (IEA), and also participated as a Member of the U.S. - Russia Bilateral Presidential Commission Science & Technology Working Group visit to Moscow in February-March, 2011. Most recently, he was appointed Senior Fellow of the State Department's Energy and Climate Partnership of the Americas (ECPA), a regional partnership announced by President Obama at the April 2009 Summit of the Americas to promote clean energy, advance energy security, fight energy poverty, reduce greenhouse gas emissions, support strategies for sustainable landscapes and build capacity for climate change adaptation.

Opening Remarks

Jay Gore

Dr. Jay P. Gore is the Reilly University Chair Professor of Engineering in the School of Mechanical Engineering. His research focuses on combustion and radiation heat transfer with applications to pollutant reduction, efficiency enhancements, food science, optical biopsy, fire safety, and improved fundamental understanding. He has authored/coauthored over 150 peer-reviewed papers, 4 book chapters; and over 200 conference papers. Dr. Gore has developed and revised three courses (Thermodynamics, Combustion, and Advanced Combustion) at Purdue University. Dr. Gore previously served as the first Director of Purdue's Energy Center in Discovery Park (2005-2010) and Associate Dean for Research and Entrepreneurship in the College of Engineering (2002-2007). Between 2002 and 2007, he founded and led the College of Engineering's award-winning Summer Undergraduate Research Fellowship (SURF) program. Outside of Purdue, Dr. Gore served as a Jefferson Science and Technology Fellow in the U.S. State Department (2010-2011), where he worked with U.S. and international governors and mayors on cooperatively addressing energy and climate issues. He has been the Chairman of the Central States Section of the International Combustion Institute and the Chairman of the ASME K11 Committee on Heat Transfer in Fire and Combustion. Dr. Gore also served previously as Associate Editor of both the ASME Journal of Heat Transfer and the AIAA Journal.



Panelist: "Energy and Food Security"

SPEAKER BIOGRAPHIES

Steve Hallett

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. Hallett received the "Award of excellence" from the Weed Science Society of America. In March 2016, he led a study study-abroad trip to Cuba. Steve holds a B.S and Ph.D. from Lancaster University.



Panelist: "Perspectives on Ecosystem Services and the R4D Context"

Patrick Hatzenbuehler



Patrick Hatzenbuehler is a Ph.D. Candidate in the Department of Agricultural Economics at Purdue University. His dissertation is entitled, "The Food Security Implications of Crop Price Transmission in Nigeria." He conducted dissertation research as a U.S. Borlaug Fellow in Global Food Security at the International Institute of Tropical Agriculture Headquarters in Ibadan, Nigeria from February through July 2014, and December 2015 through early April 2016. His Ph.D. research will be concluded by August 2016, at which time he will begin the position of Associate Research Fellow at the International Food Policy Research Institute in Abuja, Nigeria. His primary research interests are food security in Nigeria, agricultural commodity trade and marketing, and macroeconomics and agriculture. Prior to Purdue he earned a M.S. degree in Agricultural Economics at Louisiana State University and an A.B. degree in Government from Georgetown

University.

Panelist: "Borlaug Fellow Research Experience in Africa"

SPEAKER BIOGRAPHIES

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 (<https://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. He has supervised more than three dozen PhD 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.

Lecture: “Grand Challenge #4: The Long Run Global Supply and Demand for Agricultural Land”

Matt Huber

Dr. Matthew Huber is a Professor of Earth, Atmospheric and Planetary Sciences at Purdue. Previously, he was a 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 his Ph.D. in Earth Sciences at University of California Santa Cruz.



Lecture: “Grand Challenge #3: Climate Change and Food Security”

Practicum: “Climate Change and Food Security”

SPEAKER BIOGRAPHIES

Nic Jelinski

Nic Jelinski is an Assistant Professor at the University of Minnesota. His research is on pedology, variation of soil properties at multiple spatial scales, and the use of isotopic tracers in studies of soil genesis. In addition, he conducts research in innovative approaches to teaching soil science in classroom and field environments. Jelinski also works with the University of Minnesota's soil judging team. He was also a Borlaug Fellow. During his fellowship Jelinski's research went into linking dynamic soil properties to land management and existing yield gaps. Through utilization of Land Degradation Surveillance Framework, he quantitatively assessed the impact of land-use history and landscape change on dynamic soil properties relevant to productivity and ecosystem services in the East African Highlands and the Southern and Eastern African maize-based systems. Jelinski addressed issues of yield gap attribution and the effects of soil resource change on food security and ecosystem services. Jelinski utilized existing data from Ethiopia, Kenya and Tanzania. Additionally, he established two new monitoring sites in northern Tanzania and Rwanda.



Panelist: "Borlaug Fellow Research Experience in Africa"

Mike Ladisch



Dr. Michael R. Ladisch, is Director of the Laboratory of Renewable Resources Engineering and Distinguished Professor of Agricultural and Biological Engineering with a joint appointment in Biomedical Engineering at Purdue University and courtesy appointment in Food Science. He earned his BS from Drexel University and MS and PhD degrees from Purdue University, all in chemical engineering. He has a broad background in bioscience and bioengineering, and has authored numerous journal papers, as well as a textbook. His research addresses fundamental topics in bioprocess engineering as it applies to bioproducts, biorecovery, and bio-nanotechnology. His research has resulted in new industrial bioenergy processes, and systematic approaches and correlations for scaling-up laboratory chromatographic purification techniques to process-scale manufacturing systems. He is currently investigating the scale-down of bioseparations and the rapid prototyping of microfluidic biochips for the rapid

detection of pathogenic microorganisms. His discovery and learning activities engage bioproducts, biopharmaceutical, and biotechnology industries on a national basis, as well as industries and stakeholders in the State of Indiana.

Lecture: "Grand Challenge #7: Meeting the Energy Demands of Our Growing Global Food System"

Moderator for Panel: Energy and Food Security

SPEAKER BIOGRAPHIES

Vic Lechtenberg



Dr. Victor Lechtenberg is Special Assistant to the President at Purdue and served as Vice Provost for Engagement from 2004 to 2011, Interim Provost at Purdue from 2007-08, and Interim Vice President for Governmental Relations from 2008-09. He joined the Purdue faculty as a Professor of Agronomy in 1971 where he taught crop science and conducted research on forage and biomass crops until 1982. He served as Associate Director of Agricultural Research Programs and as the Executive Associate Dean of Agriculture from 1982-93, and was Dean of Agriculture from 1993-04. Since 2004, as Vice Provost for Engagement, he has led Purdue's engagement and outreach efforts to governmental agencies, corporate leaders, schools and community leaders across Indiana and beyond. 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.

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

Jess Lowenberg-DeBoer

Dr. Jess Lowenberg-DeBoer College of Agriculture Professor of Excellence in International Entrepreneurship and is Professor in the Department of Agricultural Economics. He was formerly the 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 an economist and team leader for a Purdue University project.



Lecture: "Purdue Improved Crop Storage Project and Post-Harvest Innovation Lab"

SPEAKER BIOGRAPHIES

Luna Lu

Na (Luna) Lu is an Associate professor of Civil Engineering at Purdue University. She obtained her doctoral degree in Career and Technology Education in 2007 from Clemson University. She received two master degrees, Construction Science and Management in 2006 from Clemson University, and Business Management in 2003 from Xi'an University of Architecture and Technology, China. Her bachelor degree is in Construction Engineering, also from Xi'an University of Architecture and Technology.

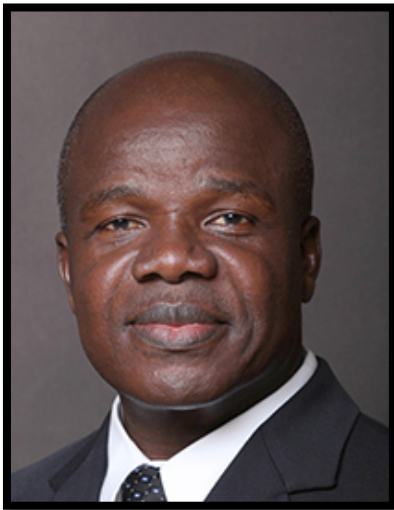
Prior to joining Purdue, Dr. Lu was an Assistant Professor of Engineering Technology and an adjunct faculty member of Electrical Engineering at the University of North Carolina at Charlotte. She was also an Assistant Professor at the School of Engineering at Roger Williams University. Dr. Lu is a 2014 recipient of the NSF CAREER award.

Dr. Lu's research focuses on the discovery of functional materials with tunable (mechanical, electrical, thermal, and optical) properties, to enable renewable energy and sustainability in civil infrastructures.



Panelist: "Energy and Food Security"

Dr. Charles Ebow Owubah



Dr. Charles Ebow Owubah, Partnership Leader (Vice President) for Evidence & Learning Unit, World Vision International, joined World Vision United States in 1999. While with World Vision United States, Dr. Owubah held several positions. In 2002, he became the Monitoring & Evaluation Specialist for the Food Resources Team and, in 2004, assumed the role of Team Leader for the East Africa Regional Team. In 2005, he was appointed the Director for Operations for the HIV & AIDS Team. In 2007, Dr. Owubah was appointed National Director of World Vision Zambia. In 2009, Dr. Owubah was appointed as Regional Vice President for World Vision East Africa—a position he held until 2014 when he was appointed as Partnership Leader for the Evidence & Learning Unit. He holds a Ph.D. in Natural Resources Management and Policy from Purdue University, West Lafayette, Indiana, USA. From 2002 to 2007, Dr. Owubah was a member of Board of Directors of the Pinchot Institute for Conservation, a

Washington, DC-based think-tank on forest conservation thought, policy, and action. In 2013, Dr. Owubah became a recipient of Purdue University's Distinguished Agriculture Alumni award. As Partnership Leader for Evidence & Learning, Dr. Owubah provides global leadership for World Vision's Monitoring & Evaluation, Research and Learning, and Knowledge Management teams.

Lecture: "Evidence-based Programming and Development in the 21st Century"

SPEAKER BIOGRAPHIES

Brian Pace



Brian Pace is in the final year of his doctoral program at The Ohio State University in the Department of Horticulture and Crop Science. Brian has just returned from a year of research in Chiapas, Mexico as a US Borlaug Global Food Security Fellow. There, his research focused on diverse maize landraces conserved in situ by farmers and the physiological basis for their local adaptation to an elevation gradient. The broader goals of his research are to better understand how maize landraces will respond to climate change in their center of origin, and to make predictions about whether or not the high diversity stewarded there by farmers will continue to be retained. He is originally from Portland, Oregon and believes that agrobiodiversity and agroecology are important tools for adapting to global climate change.

Panelist: “Borlaug Fellow Research Experiences in Latin America”

Rajul Pandya-Lorch

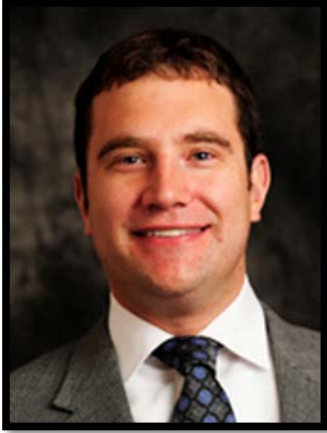
Ms. Rajul Pandya-Lorch serves as Chief of Staff and Head 2020 Vision Initiative at International Food Policy Research Institute. Ms. Pandya-Lorch is head of IFPRI's 2020 Vision for Food, Agriculture and the Environment Initiative, a global initiative that seeks to identify solutions for meeting world food needs while reducing poverty and protecting the environment. In recognition of her achievements, the Agricultural and Applied Economics Association (AAEA) presented Ms. Pandya-Lorch with its 2010 Quality of Communication Award for their work on Millions Fed: Proven Successes in Agricultural Development. She has also received the American Agricultural Economics Association's 2002 award for Distinguished Policy Contribution, along with Per Pinstrup-Andersen and Mark Rosegrant. Ms. Pandya-Lorch has facilitated four major international conferences on (1) “Leveraging Agriculture for Improving Nutrition and Health,” in New Delhi, India, on February 10-12, 2011; (2) “Taking Action for the World's Poor and Hungry People”, in Beijing, China, on October 17-19, 2007; (3) “Assuring Food and Nutrition Security in Africa by 2020”, in Kampala, Uganda on April 1-3, 2004; and (4) “Sustainable Food Security for All by 2020”, in Bonn, Germany on September 4-6, 2001. She recently led a major project, “Millions Fed: Proven Successes in Agricultural Development” that documents evidence on policies, programs, and investments in agricultural development that have significantly reduced hunger. Ms. Pandya-Lorch earned a bachelor's degree in economics from Wellesley College and a master's degree in public and international affairs from Princeton University.



Lecture: “Food Security: Challenges, Developments, and Opportunities”

SPEAKER BIOGRAPHIES

Jacob Ricker-Gilbert



Jacob Ricker-Gilbert is an Assistant Professor of Agriculture Economics at Purdue University. His research and teaching activities are primarily related to economic growth and poverty reduction in developing countries. Jacob has a special interest in how technology, market access, and public policy affect peoples' decisions and well-being. He has international experience in Latin America, Asia, and Africa. Jacob's dissertation research, evaluating the impact of fertilizer subsidies on small farmers in Malawi, won the 2009 T.W. Schultz award for best paper at the Triennial Meeting of the International Association of Agricultural Economics. His dissertation work was also recognized by the African Association of Agricultural Economists in 2010. Prior to his doctoral studies, Jacob worked as an agricultural economist at the Economic Research Service in the U.S. Department of Agriculture from 2005 to 2007.

Panelist: "PICS and Post-Harvest Lab at Purdue: Focus on Global Food Value Chains"

Ronald F. Turco

Dr. Ronald Turco is the Assistant Dean for Agricultural and Environmental Research at Purdue University. He is also the Director of the Indiana Water Resources Research Center (IWRRRC.org). His research is concentrated on understanding how the behavior of microorganism and the processes they control in natural systems, is influenced by human activity. In particular his group has used enzyme activity, phospholipid analysis, and molecular techniques to understand community structure and function as impacted by management and introduction of materials. His early work has concentrated on the fate of pesticides and organics in soil systems. His group has also addressed rhizosphere ecology and managed systems such as turfgrass. His current projects are divided across three theme areas: understanding the fate of introduced E. coli in soil and water and the role these processes play in 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 and defining the unintended consequences of using our soil resources for biofuel production. His work on environmental pathogens led to the development of EPI-Net.org a USDA national facilitation project.



Lecture 1: "Grand Challenge #1: Water Resources and Food Security"

Lecture 2: "Writing Fundable Proposals"

SPEAKER BIOGRAPHIES

Wally Tyner

Wally Tyner is a James and Lois Ackerman Professor of Agricultural Economics at Purdue University. His professional work experiences include extensive long- and short-term work experience in developing countries. Wally spent two years in India as a Peace Corps Volunteer in poultry development. He also spent three years in Morocco working as senior agricultural economist and deputy team leader for a project incorporating agricultural planning, economics and statistics. Wally was responsible for building agricultural policy analysis capability in the Morocco Ministry of Agriculture. He has short-term experience in Senegal, Mali, Niger, the Gambia, Burkina Faso, India, Bangladesh, China, Brazil, Morocco, Tunisia, Algeria, Egypt, Kazakhstan, Estonia, Latvia and Lithuania. Wally has worked as a consultant for numerous national and international organizations including the World Bank, OECD, FAO, the National Science Foundation, USAID, and the Congressional Office of Technology Assessment. His recent international work has focused on agricultural trade and policy issues in developing economies, particularly in the Middle East, North Africa, and West Africa.



Panelist: “Energy and Food Security”

Connie Weaver



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. Also, 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”

SPEAKER BIOGRAPHIES

Charles Woloshuk

Charles P. Woloshuk is a professor in the Department of Botany and Plant Pathology at Purdue University. Since his arrival at Purdue in 1993, he has mentored 7 post-doctoral associates and 11 graduate students (5 PhD and 6 MS). Dr. Woloshuk's research interests include corn/mycotoxin pathology, especially in the areas of genetics, biochemistry, and physiology of mycotoxin biosynthesis. His long-range research goal is to contribute to the development of novel approaches for eliminating the risk of mycotoxin contamination of food sources. He investigates the biosynthesis of mycotoxins (aflatoxin and fumonisin) and uses mycotoxin-producing fungi as model systems to advance the current understanding of secondary metabolism in fungi. Dr. Woloshuk also is involved in research and extension activities that inform and educate grain producers, handlers, and processors about best management practices for grain storage.



Panelist: "PICS and Post-Harvest Lab at Purdue: Focus on Global Food Value Chains"

Laura Zanotti



Laura Zanotti received her PhD in Anthropology from the University of Washington in 2008 and joined the faculty at Purdue in 2009. She is appointed in the Anthropology Department and has affiliations with the Center for the Environment, American Studies, Latin American and Latino Studies, and the Center for Diversity and Inclusion. Zanotti is an environmental anthropologist and interdisciplinary social scientist whose research program partners with communities to better understand how local, mostly rural, livelihoods and well-being can be sustained for future generations. Using a feminist political ecology framework, Zanotti maps out spatial inequalities and injustices experienced by resource-dependent communities and highlights local creativity in the context of acute change.

In all of her work she stitches together insights from visual anthropology and engaged anthropology to create petcollaborative and meaningful projects. In addition to environmental anthropology, she finds kinship with decolonizing approaches to research inquiry alongside insights from cultural geography, Indigenous studies, and Latin American studies. She has partnered with the Kayapó, an indigenous community in Brazil, for over ten years and is currently working on projects around the United States and in Latin America on "media sovereignty" and digital landscapes, environmental justice and valuing nature, and community resilience and healing.

Panelist: Perspectives on Ecosystem Services and the R4D Context