

Global Hubs Salon Series

Salon on “Sustainable Agri-Food Systems and Development”

Wednesday, May 11, 2022 | 8:15am – 9:30am EST

Facilitators

[Wendy W. Wolford](#), Cornell University

[Rachel Beatty Riedl](#), Cornell University

Hosts

[Chris Barrett](#), Cornell University

[Peter Alexander](#), University of Edinburgh

[Kevin Zhigang Chen](#), Zhejiang University

[Chaleeda Borompichaichartkul](#), Chulalongkorn University

[Lydia Mumbi Chabala](#), University of Zambia

[Wenfeng Cong](#), China Agricultural University

[Amlan Das Gupta](#), O.P. Jindal Global University

[Gloria L. Essilfie](#), University of Ghana

[Chunlei Shi](#), Shanghai Jiao Tong University

[Selene Escobar-Ramírez](#), Universidad San Francisco de Quito

[Thorsten Wohland](#), National University of Singapore

[Carole Dalin](#), University College London

[Marina Welker](#), Cornell University

[Peter Alexander](#)

Senior Lecturer in Global Food Security, [School of Geosciences](#) and [Global Academy of Agriculture & Food Systems](#), University of Edinburgh, UK

Peter Alexander's research focuses on the social, economic, and environmental interactions within the food and land use systems, typically applying data and computationally intensive techniques such as agent-based modeling. Alexander was a lead author for the 2022 IPCC Working Group II report. Working with his [group](#), his research considers the interactions between climate change adaptation and mitigation, as well as how the globalization of the food system creates teleconnections between actions in one location having consequences in others. The role of international trade in reducing or exacerbating vulnerabilities to shocks, including geopolitical shocks, is a particular interest. How land use and food system changes interact with dietary choices and human health, e.g., patterns of food consumption influencing environmental outcomes and environmental changes impacting nutrition and health, are also considered. In collaboration with others, he leads the development of the Land System Modular Model ([LandSyMM](#)). This model has been used to quantify the impacts of the changes on ecosystem service indicators such as the land carbon balance, runoff, and nitrogen pollution, and explore the impact of future changes in diet on habitat availability in biodiversity hotspots, as well as the reverse—looking at the food security implications of different land conservation scenario.

[Chris Barrett](#)

Professor, Stephen B. and Janice G. Ashley Professor of Applied Economics and Management and International Professor of Agriculture, Dyson School of Applied Economics and Management; Professor, Department of Global Development, Department of Economics, and Brooks School of Public Policy, Cornell University

Chris Barrett is an agricultural and development economist at Cornell University. He is the Stephen B. and Janice G. Ashley Professor of Applied Economics and Management, and an International Professor of Agriculture at the Charles H. Dyson School of Applied Economics and Management, as well as a Professor in the Department of Economics, in the Department of Global Development, and in the Jeb E. Brooks School of Public Policy, as well as a Fellow of the Cornell Atkinson Center for Sustainability and the Cornell Institute for Food Systems. He is co-editor-in-chief of the journal *Food Policy*, edits the Palgrave Macmillan book series *Agricultural Economics and Food Policy*, co-edits the Elsevier *Handbook of Agricultural Economics*, volumes 5 and 6, and previously was editor of the *American Journal of Agricultural Economics*. He is an elected Fellow of the American Association for the Advancement of Science, the Agricultural and Applied Economics Association, and the African Association of Agricultural Economists, and has won numerous university, national and international awards for teaching, research and policy outreach, and public service. As of May 2022, he is a newly elected member of the National Academy of Sciences.

His more than 350 publications have been cited roughly 50,000 times, placing him among the top five scholars globally in the agricultural economics, development economics, food security, poverty, and

resource economics fields, according to Google Scholar, and well within the top 1 percent of all economists worldwide according to RePEc/IDEAS. His most impactful work concerns poverty traps, food security and food assistance policy, agri-food value chains, technological change and agri-food systems transformation, resilience and risk management, and various food policy topics. He has served as a principal investigator on more than \$48 million in extramural research grants from various corporate, foundation, government agency and nongovernmental organization sponsors. He has supervised more than 100 graduate students and post-docs, many of whom now serve on faculty and staff at leading universities and research institutes worldwide. He has held senior leadership roles at Cornell, including as the Deputy Dean and Dean of Academic Affairs of the SC Johnson College of Business, and as the David J. Nolan Director of the Dyson School of Applied Economics and Management, as well as externally as President of the Association of Christian Economists, and Chair of the International Section of the Agricultural and Applied Economics Association, as well as on a variety of boards and panels, including on the Independent Science and Development Council of the CGIAR. He previously served on faculty at Utah State University and has been a visiting scholar at Harvard, Melbourne, Monash, Notre Dame, Stanford, and UC-San Diego.

Chaleeda Borompichaichartkul

Associate Professor, [Department of Food Technology](#), Faculty of Science, Chulalongkorn University

Chaleeda Borompichaichartkul completed a PhD in Food Science and Technology with major emphasis on Food Processing and Engineering especially in Drying Technology in 2004 (University of New South Wales, Australia). In 2004, she started to work at Department of Food Technology, Faculty of Science, Chulalongkorn University as Junior Lecturer and then in 2005 she obtained a Postdoc Scholarship to UMR-GENIAL Unité Mixte de Recherche Genial Cemagref, ENSIA, INAPG, INRA, Massey, France. Her main research interests are applied research on drying technology, functional food process and development, and extension on Konjac glucomannan processing and applications for functional ingredients and foods. Borompichaichartkul created a research team on Konjac Glucomannan processing and application at Chulalongkorn University. The research area includes physical and chemical properties of Konjac glucomannan, microencapsulation process, and functional film using as well as product development using Konjac glucomannan as material. She has worked closely with food SME, entrepreneurs, and industries on research and development. She has directed and evaluated Thai and International research projects, supervised doctoral theses, trained national and international students, and collaborated with research group in Australia, New Zealand, Italy, Austria, Germany, USA, China, Vietnam, Indonesia, and Malaysia. To date she has published over 50 peer-reviewed research articles.

Lydia Mumbi Chabala

Senior Lecturer, Researcher, Assistant Dean, and Coordinator of International Activities, School of Agricultural Sciences, University of Zambia

Lydia Mumbi Chabala currently is a Senior Lecturer and Assistant Dean in the School of Agricultural Sciences at the University of Zambia. Her research interests are in the areas of sustainable land and natural resource management, remote sensing, and soil ecosystem services in a changing climate. Her

current work relates to digital soil assessment, land use, and climate interactions. Since 2018, she has served as an expert member of the Intergovernmental Technical Panel on Soils (ITPS) of the Global Soil Partnership (GSP - FAO).

Kevin Zhigang Chen

Qiushi Chair and Professor, School of Public Affairs; International Dean, [China Academy for Rural Development](#) (CARD); Director, Global Food Systems and Policy Lab, Zhejiang University

Kevin Chen is trained in agricultural and resource economics, having completed his bachelor degree from Zhejiang Agricultural University in China, Master's degree from the University of Maryland in the United States and Ph.D from the University of Guelph in Canada. He is also Senior Research Fellow at the International Food Policy Research Institute and co-founder of Rural Development Foundation. He is editor-in-chief of International Food and Agribusiness Management Review and co-editor of China Agricultural Economic Review. He served a member of Independent Expert Group (IEG) for Global Nutrition Report (GNR) 2017-2019. He was an assistant and associate professor at the Department of Resource Economics and Sociology at the University of Alberta from 1995-2004. He also served as an editor for Canadian Journal of Agricultural Economics in 2003-04.

His recent research interests focus on the impact of major shocks on China's agriculture and rural areas, agri-food value chain development and food system, public policies on poverty, and modeling of food, environment, and health nexus. He has published over 200 peer-reviewed papers, book chapters, and technical reports. He currently is China leader for CGIAR Research Initiative MITIGATE+ from 2022-2024 that has a total funding of \$US 25 million. MITIGATE+ is looking at measuring and reducing carbon emission in agriculture both globally and at the country level. He also successfully led CIDA's Small Farmers Adapting to Global Markets project in China that had a total funding of \$CAD 40 million during the period from 2005-2009.

Wenfeng Cong

Associate Professor, Department of Plant Nutrition, [College of Resource and Environmental Sciences](#), National Academy of Agriculture Green Development, China Agricultural University

Wenfeng Cong obtained his PhD at Wageningen University in the Netherlands and conducted postdoctoral research at Aarhus University in Denmark. His research focuses on plant-soil interactions in species-diverse systems ranging from natural grasslands to agricultural systems, including understanding the mechanisms underlying the positive effects of crop, genotype, and cropping system diversity on soil carbon sequestration and soil phosphorus utilization, and applying the biological and ecological mechanisms to design sustainable cropping systems to produce sufficient and high-quality food with fewer fertilizer inputs and fewer environmental impacts.

His most recent work extends to agri-food systems, including rational regional planning of cropping systems, micronutrient biofortification, recommendation of production and consumption of whole-grain food and coarse cereals, contributing to nutritional health and environmental sustainability.

Dr. Cong has published over 30 papers in peer-reviewed scientific journals, including Trends in Plant Science, Trends in Ecology & Evolution, and Global Change Biology. He is leading or participating in sustainable cropping systems-related projects funded by the National Natural Science Foundation of China and the Chinese Academy of Engineering. He is acting as a member of the editorial board of Frontiers in Agronomy and Frontiers in Soil Science.

[Carole Dalin](#)

Associate Professor in Sustainable Food Systems and Research Director of the [Institute for Sustainable Resources](#), University College London (UCL)

Carole Dalin is Associate Professor in Sustainable Food Systems, and the Research Director of the Institute for Sustainable Resources at University College London (UCL). Dalin just received funding from the European Research Council to lead the [FLORA project](#) ("Sustainable and healthy food solutions: system dynamics and trade-offs") as a 5-year Starting Grant, which will start in 2022. This inter-disciplinary project aims to help find effective solutions for sustainable food systems worldwide. It will enable Dr Dalin's team to recruit three postdoctoral researchers and one doctoral student with different scientific expertise, from environmental, health, and data sciences to economics.

Dalin joined UCL in 2016 with a 5-year Independent Research Fellowship, funded by the UK Natural Environment Research Council. Her fellowship research focused on the environmental sustainability of global food production and trade. Her research group works on this theme, with particular interests in water resources, biodiversity and climate change (learn more about the team's research [here](#) and follow [Dr. Dalin on Twitter](#) for the latest updates).

From 2014 to 2016, Carole was a Research Officer at the Grantham Research Institute on Climate Change and the Environment at the London School of Economics (LSE). There, she worked with Declan Conway on the water-food-energy nexus in Southern Africa.

She obtained in 2014 her Ph.D. in Environmental Engineering & Water Resources with Ignacio Rodriguez-Iturbe and her Certificate in Science, Technology and Environmental Policy with Denise Mauzerall, both at Princeton University. Her doctoral thesis focuses on water resources transfers, through Chinese and international agricultural trade.

[Amlan Das Gupta](#)

Associate Professor, Assistant Dean (Research), and Director, Economics and Finance for Society Initiative, Jindal School of Banking & Finance (JSBF), O.P Jindal Global University

Amlan Das Gupta is a Development Economist who has been engaged in teaching and research since 2015. He has taught at various institutions including the Indian Statistical Institute Delhi, Drake University, Des Moines, USA and the Institute of Financial Management and Research in India. Das Gupta's research interests lie in development and environmental economics. His work uses quantitative

methods and econometric models to answer questions about economic behavior and policy in the developing world.

Selene Escobar-Ramírez

Biology Coordinator, College of Biological and Environmental Sciences, Universidad San Francisco de Quito

Gloria L. Essilfie

Senior Lecturer, Department of Crop Science, University of Ghana

Dr. Gloria Essilfie is a Food Microbiologist who has also specialized in postharvest technology. She is a Senior Lecturer in the Department of Crop Science at the University of Ghana leading programs in postharvest food safety and quality assurance. Her research interests are in the adaptation and assessment of low-cost preservative technologies to reduce postharvest loss in agricultural commodities. More specifically, she focuses her research on the use of locally available materials such as cassava starch, beeswax, coconut oil, shea butter, etc. as edible coating on horticultural produce to maintain quality and extend shelf life as well as the use of locally built evaporative coolers to extend shelf life of horticultural produce. She is also interested in the development of management and intervention strategies that may be applied to eliminate or control pathogenic contamination in fruits and vegetables. Her work in this area focusses on the waste water irrigated vegetables by urban and peri-urban farmers.

Essilfie is the Team Lead for Agrifood Systems and Nutrition at the [West Africa Centre for Crop Improvement](#) (WACCI). She holds a doctorate degree in Food Science from the University of Georgia, Athens, USA, an M. Phil in Food Science and a Bachelor's in Food Science and Nutrition from University of Ghana. She is a member of the Institute of Food Technologists (IFT), the International Association of Food Protection (IAFP), and the Africa Continental Association of Food Protection (ACAFC). She is also a member of the Food Safety Taskforce set up by Hortifresh Ghana to develop strategies and activities to address current and emerging food safety challenges in the horticultural sector in Ghana.

Rachel Beatty Riedl

Director and John S. Knight Professor of International Studies, Mario Einaudi Center for International Studies; Professor, Department of Government, College of Arts and Sciences, Cornell University

Rachel Beatty Riedl's research interests include institutional development in new democracies, local governance and decentralization, and authoritarian regime legacies in Africa. Her latest book, coauthored with Gwyneth McClendon, is [From Pews to Politics: Religious Sermons and Political Participation in Africa](#) (Cambridge University Press, 2019). Her previous book, [Authoritarian Origins of Democratic Party Systems in Africa](#) (Cambridge University Press, 2014), won the African Politics Best Book award. Riedl also cohosts the [Ufahamu Africa](#) podcast about life and politics on the African continent. Most recently, she was a fellow at the Nantes Institute for Advanced Study and a Fulbright

scholar. Previously, she was director of the Program of African Studies and an associate professor in the Department of Political Science at Northwestern University.

[Chunlei Shi](#)

Chair and Professor, Department of Food Science and Engineering, School of Agriculture & Biology, [Shanghai Jiao Tong University](#)

Chunlei is a lead scientist in the [National Key R&D Program](#) in the 13th five-year plan of China. She used to be a postdoctoral fellow in the Department of Food Science at Cornell University. Her research interest focuses on the prevalence and control of foodborne pathogenic bacteria in the food system. In 2015, she was honored to be involved in the China-New Zealand Scientist Exchange Program sponsored by the Ministry of Science & Technology (MOST) of China and the Ministry of Research, Science & Technology (MORST) of New Zealand. She has presided over 20 projects under the financial support from MOST and the National Natural Science Foundation of China (NSFC). She has had more than 120 peer-reviewed publications in international journals; participated in the compilation of 5 monographs; applied for 28 patents, of which 17 were authorized; and composed 5 national and industrial standards. In 2014, she hosted the Sino-Danish Seminar on Food Safety “From Farm to Fork – and Chopsticks”. Meanwhile, she also has joint membership in the Institute of Food Technologists (IFT) and the American Society for Nutrition (ASN), as well as the International Association for Food Protection (IAFP), and the American Society of Microbiology (ASM). She is on the Editorial Board of *Frontier in Microbiology* and the *Journal of Food Safety*. She graduated with a PhD on Biotechnology from Shanghai Jiao Tong University, China, in 2006.

[Marina Welker](#)

Associate Professor, Department of Anthropology, College of Arts & Sciences, Cornell University

Marina Welker’s research interests include Southeast Asia, capitalism, commodities, corporations, international development, extractive industries, and tobacco. Her first book, [Enacting the Corporation: An American Mining Firm in Post-Authoritarian Indonesia](#) (University of California Press, 2014), applied anthropological theories of personhood and social studies of the state to the corporation, and was based on two years of ethnographic research on a Denver-based gold mining firm and its Indonesian operation. She is currently writing a commodity-centered ethnographic account of Sampoerna, an Indonesian subsidiary of Philip Morris International, provisionally entitled *Kretek Capitalism: Making, Marketing, and Consuming Clove Cigarettes in Indonesia*. She has published articles in *American Ethnologist*, *Comparative Studies in Society and History*, *Cultural Anthropology*, *Current Anthropology*, *Journal of the Royal Anthropological Institute*, and the *Seattle University Law Review*.

[Thorsten Wohland](#)

Professor, Departments of Biological Sciences and Chemistry, Faculty of Science, National University of Singapore; Principal Investigator, [Biophysical Fluorescence Laboratory](#)

Thorsten Wohland is a Physicist working on single molecule spectroscopy in cell and developmental biology. He studied physics at the Technical University of Darmstadt and the University of Heidelberg and received his PhD from the Swiss Federal Institute of Technology in Lausanne (EPFL). After a postdoc at Stanford University, he joined the faculty at the National University of Singapore (NUS), where he is a professor in the Departments of Biological Sciences and Chemistry.

He joined the Dean's office at the Faculty of Science to oversee research activities as Vice Dean. During that time, he started working on the promotion of smart Urban Farming initiatives within the faculty. With the announcement of the 30/30 initiative by the Singapore government – an initiative to sustainably produce 30% of our nutritional needs locally by 2030 – he joined at the the Office of the Deputy President of Science and Technology to work, among other tasks, on the development of new initiatives in the fields of Agriculture, Aquaculture and Food Science and Technology.

Wendy W. Wolford

Vice Provost for International Affairs; Robert A. and Ruth E. Polson Professor, Department of Global Development, College of Agriculture and Life Sciences, Cornell University

As vice provost, Wendy Wolford is responsible for strengthening the university's global connections and worldwide interdisciplinary initiatives. Her research focuses on international development, land use and distribution, social mobilization, and agrarian societies with a regional concentration in Latin America—particularly Brazil. For 20 years, she has worked with one of the most important grassroots social movements in Latin American history: the *Movimento dos Trabalhadores Rurais Sem Terra* (MST), or the Movement of Rural Landless Workers. Part of Cornell's faculty since 2010, Wolford served as the faculty director of economic development at the [Cornell Atkinson Center for Sustainability](#), where she co-led CARE-Cornell and Oxfam-Cornell collaborations.