Supporting Partnerships for Food Security and Sustainability

Government-University-Industry Research Roundtable Meeting February 16, 2022

Speaker Biographies



Mehmood Khan is the Chief Executive Officer of the Hevolution Foundation, a first of its kind non-profit organization that funds research through grants and provides investments in biotech to incentivize healthspan science across disciplines and borders for the benefit of all. Its vision is to expand healthy human lifespan for the benefit of all humanity. The Hevolution Foundation aims to be positioned as a global leader, catalyst, partner, and convener, to increase the number of scientists entering the field, to increase the investable opportunities in the field of aging, to help shape the regulatory and government environment. The Foundation was established by a Saudi Royal Decree with its headquarters in Riyadh with additional international hubs to support the expansion and execute the global mission.

Dr. Khan also currently serves as the Executive Chairman of Life Biosciences Inc., where he joined the company in April 2019 as the Chief Executive Officer and Board Member. Life Biosciences was founded to advance scientific research and develop innovative new therapies to improve and extend healthy lives for everyone. Dr. Khan previously served as Vice Chairman and Chief Scientific Officer of Global Research and Development at PepsiCo, a Fortune 50 company employing upwards of 250,000 employees across 22 brands. At PepsiCo, Dr. Khan played a pivotal role in the company's global R&D efforts to create breakthrough innovations in food, beverages, and nutrition, including the incorporation of healthier and more nutritious offerings across its portfolio. He also oversaw PepsiCo's global sustainability initiatives based on the belief that success in business is inextricably linked to the sustainability of the world we share. Prior to joining PepsiCo, Dr. Khan served as President of Global R&D at Takeda Pharmaceuticals, leading the global efforts of one of the largest pharmaceutical companies in the world by revenue.

Before moving into industry, Dr. Khan had a distinguished medical career as a faculty member in endocrinology at the Mayo Clinic and Mayo Medical School where he served as Director of the Diabetes, Endocrine and Nutritional Trials Unit. He also spent nine years leading programs in diabetes, endocrinology, metabolism and nutrition in Minneapolis, MN.

Ahmed Kablan is a senior science advisor in the Bureau of Resilience and Food Security at the U.S. Agency for International Development (USAID). Dr. Kablan is a biotechnologist and has over 18 years of research, teaching, and science policy and regulatory experience. His research focuses on metabolic syndrome, malnutrition, and the health consequences of obesity. During his tenure at Feed the Future (FtF) he contributed to the publication of several key policy and strategy initiatives and papers, including the USAID multi-sectoral nutrition strategy; FtF Nutrition Action Plans; Global Food Security Strategy (GFSS); and GFSS research strategy.

Dr. Kablan is the program manager for the FtF Innovation Labs for Food Systems for Nutrition; Soybean Value Chain Research; and the Reduction of Post-Harvest Loss, and leads FtF efforts on food safety and nutrition-sensitive research. He manages part of the USAID-CGIAR partnership, and is a member of the USAID food safety-working group, serves on the advisory committee for the Agriculture, Nutrition and Health (ANH) Academy Technical Working Group on food safety, and is a member of the Nutrition Innovation Lab Technical Advisory Board and the Board of Directors. **Lynn Brown** joined HarvestPlus in her current role as the Director of Alliances and Policy in July 2020 after a long career focused on food and nutrition policy. She had an extensive career at the World Bank and held senior positions within the UN World Food Programme (WFP), including as its first Chief Economist. Since 2013, Brown has been a senior independent adviser to several leaders and organizations in the areas of gender, food and nutrition security, agricultural policy, and livelihoods/social protection.

Her expertise spans the food security agenda. She worked in both the agricultural and nutrition sectors in the World Bank, including managing the World Bank's nutrition portfolio in Bangladesh. At WFP, Brown also worked as the chief of social protection. She was the representative for Rachel Kyte to the Global Panel on Agriculture, Food Systems and Nutrition, negotiated WFP's entry into the Global Donor Platform for Rural Development, and founded the Nutrition workstream in that Platform. Joining HarvestPlus completes a career cycle as she began her career at IFPRI, where she co-led IFPRI's research on gender, which together with biofortification has been a career long commitment.



Dwane Jones is currently the Dean at the University of the District of Columbia's College of Agriculture, Urban Sustainability, and Environmental Sciences. He is a leader with over 20 years of combined experience in leadership, green infrastructure programs, research, urban design, environmental planning and program management with government, academia, nonprofit and community-based agencies, and international governments and universities.

Dr. Jones uses design thinking to problem-solve, innovate, prototype, execute, and research human-centered challenges while using sustainability as a lens to address these problems. He was Founder of the Low Impact Development Certification Program at North Carolina State University (which became a

national model for certification programs in green infrastructure), has led national and international innovation programs, and most recently led the launch of a PhD Program in Urban Leadership + Entrepreneurship, aimed at developing the next generation of innovative thinkers to address issues that are primarily urban. Dr. Jones is also an Executive Leadership Coach who specializes in launching and scaling start-ups. He has degrees in Urban Planning, Environmental Planning, Urban Design, and Evidence-Based Coaching.

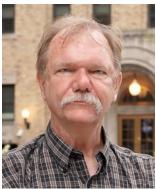


Jamal Yagoobi joined Worcester Polytechnic Institute in 2012. His research expertise includes enhancement of heat and mass transfer with electrohydrodynamics in small and large scales in the presence and absence of gravity, heat and mass transfer in porous media, and enhancement of heat transfer with phase-change materials. He is the founding director of the NSF Industry University Cooperative Research Center entitled, "Center for Advanced Research in Drying (CARD)".

Dr. Yagoobi has over 330 peer reviewed journal and conference publications and book chapters, and ten patents (plus 3 provisional patents). He had an experiment onboard of the International Space Station from 2018 to 2019 and a second one is scheduled for 2023. He is an ASME fellow, an IEEE fellow, and has received a number of national and international awards for his research and teaching activities. He is currently the associate editor of IEEE-IAS Transactions and previously was the

associate editor for the ASME Journal of Heat Transfer.

Dr. Yagoobi was a member of the Review Panel - Innovations in Remanufacturing Program - Science & Engineering Research Council of Singapore (Part of the Agency for Science, Technology & Research of Singapore). He was also a member of the Advisory Board of the Energy and Global Security Directorate of Argonne National Laboratory from 2010 to 2016. He is currently a member of the Alumni Board of the Department of Mechanical Science and Engineering at the University of Illinois at Urbana-Champaign, and a member of the advisory boards of several international conferences.



Lewis Ziska is currently an Associate Professor in the Environmental Health Sciences at the Mailman School of Public Health at Columbia University. After graduating from the University of California, Davis, he began his career as a Smithsonian fellow, then was the Project Leader for global climate change at the International Rice Research Institute in the Philippines prior to a 24-year career at the USDA's Agricultural Research Service. He has worked primarily on documenting the impact of climate change and rising carbon dioxide levels on: Crop selection for CO2 responsiveness to improve production; Climate and agronomic pests, including chemical management; Climate, plant biology and public health impacts on food security with a focus on nutrition and pesticide use.

Dr. Ziska was a contributor to the 1995, 2001, 2007, 2014, International Panel on Climate Change (IPCC) reports and is a contributor to the AR6 report (due June 2022). He is also a contributor to the 2014 and 2018 National Climate Assessment (NCA) (Public Health Chapter and Air quality chapter respectively); and helped lead the 2016 special NCA report on climate and health; <u>The Impacts of Climate Change on Human Health in the United States: A Scientific</u> <u>Assessment</u>. His most recent book is: <u>Agriculture, Climate Change and Food Security in the 21st Century: Our Daily Bread</u>, through Cambridge Scholars publishing.



Mario Herrero is a professor of sustainable food systems and global change in the Department of Global Development, a Cornell Atkinson Scholar, and a Nancy and Peter Meinig Family Investigator in the Life Sciences. His research focuses on increasing the sustainability of food systems for the benefit of humans and ecosystems. He works in the areas of sustainable intensification of agriculture, climate mitigation and adaptation, livestock systems, and healthy and sustainable diets.

Professor Herrero is a regular contributor to important global initiatives at the heart of the sustainability of global food systems, such as the Intergovernmental Panel on Climate Change, the Lancet Commission on Obesity and the EAT-Lancet Commission on healthy diets from sustainable food systems. He has worked extensively in Africa, Latin America and

Asia. Before joining Cornell, he was Chief Scientist of Sustainability, for Australia's National Science Agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

Mario has published more than 170 peer-reviewed publications and over 300 publications in his areas of expertise. He is currently on the editorial boards of The Lancet Planetary Health, Agricultural Systems, Global Food Security, *Agriculture and Food Security, Tropical Grasslands, Frontiers in Sustainable Food Systems,* and has been a guest editor for the Proceedings of the National Academy of Sciences journal (PNAS).

Professor Herrero is a Corresponding Fellow of the Royal Society of Edinburgh, an Associate Fellow of Chatham House, the Royal Institute of International Affairs, and an Honorary Professor of Agriculture and Food Innovation at the University of Queensland, Australia.



Phil Taylor is Open Innovation Lead for Crop Science R&D at Bayer, based in St. Louis, MO. With over 15 years of AgTech industry experience, he plays a central role in fostering strategic relationships around the globe and developing programs to enable novel ways of accelerating innovation to support Bayer's R&D pipeline and drive external innovation ecosystems.

A strong champion for both external and pre-competitive partnering as a driving force for innovation and change, Phil has held multiple leadership roles at Bayer focused on delivering collaborative approaches to enable R&D and enhance the company's position as an action leader in open innovation and partnering. He was appointed a Bayer Science Fellow in 2020.

Before joining industry, Phil trained as a Plant Cell Biologist, receiving his PhD from the John Innes Centre in Norwich, U.K., and held post-doctoral positions at The University of Leeds and The University of North Carolina – Chapel Hill, as well as a British Council Fellowship at the University of Heidelberg, Germany. Outside of Bayer, Phil is active in the academic and global innovation communities as a member of multiple advisory boards and professional society committees.

A native of the UK, Phil now lives in St. Charles, Missouri, with his wife Amanda and their four children.



Roy Steiner is the Senior Vice President for the Food Initiative at The Rockefeller Foundation, where he leads a team focused on creating access to nourishing food for millions of people in the U.S. and around the world, supporting scientific advances in human nutrition and sustainable food production, and carrying forward the Foundation's enduring commitment to a sustainable Green Revolution in Africa.

Roy comes to The Rockefeller Foundation from the Omidyar Network, where he served as Director of the Intellectual Capital team since 2015, focused on helping Omidyar achieve its strategic objectives at all levels including in the agriculture

space. He dedicated nearly a decade of his career to leadership positions at the Bill & Melinda Gates Foundation, where he was a founding member of the Agricultural Development initiative and was instrumental in working with The Rockefeller Foundation to develop the Alliance for a Green Revolution in Africa, or AGRA. His work for Gates was central to the creation of Ethiopia's Agricultural Transformation Agency, or ATA, which helps accelerate the growth and transformation of Ethiopia's agriculture sector, and dozens of other partnerships that are critical to the fight against food insecurity around the world.

Before the Gates Foundation, Roy spent eight years in Africa where he was founder and CEO of Cyberplex Africa, one of the largest web development and knowledge management companies in southern Africa. Early in his career, he was an original founder and managing director of Africa Online, which pioneered the delivery of Internet service in Zimbabwe. Additionally, he was a founding member of CH2MHill's Strategies Group and has consulted for McKinsey & Company in the areas of technology innovation, growth strategies and international development.

Roy holds a PhD and a MS in agricultural and biological engineering with minors in economics and international development from Cornell University, as well as two bachelor degrees in mechanical engineering and biology from the Massachusetts Institute of Technology.



Chavonda Jacobs-Young has served as Administrator of the Agriculture Research Service (ARS) within the U.S. Department of Agriculture since February 2014. Previously, she served as ARS Associate Administrator for National Programs, where she led the Office of National Programs, which manages the research objectives of the Agency, and the Office of International Research Programs, which is responsible for ARS' liaison with its international partners.

Prior to moving into her roles at ARS, Dr. Jacobs-Young served as the Director of the Office of the Chief Scientist at USDA, where she was responsible for facilitating the coordination of scientific leadership across the Department to ensure that research supported by, and scientific advice provided to, the Department and external stakeholders were held to the highest standards of intellectual rigor and scientific integrity. She also served as the Acting Director for USDA's National

Institute of Food and Agriculture.

Dr. Jacobs-Young has also served as a senior policy analyst for agriculture in the White House Office of Science and Technology Policy where she supported the President's science adviser and others within the Executive Office of the President on a variety of agricultural scientific activities and worked across the Federal Government to improve interagency cooperation and collaboration on high-priority scientific issues.

Dr. Jacobs-Young is a native of Georgia. She holds MS and PhD degrees in Wood and Paper Science and a BS degree in Pulp and Paper Science and Technology from North Carolina State University. She also is a graduate of American University's Executive Leadership in Public Policy Implementation Program.



Sally Rockey is the inaugural Executive Director of the Foundation for Food & Agriculture Research (FFAR).

Prior to this role, Dr. Rockey was a leader in federal research, overseeing the operations of the extramural research programs in both agriculture and biomedicine. She spent almost twenty years with the U.S. Department of Agriculture, where she held several positions within the Cooperative State Research, Education and Extension Service including head of Competitive Research Grants and Chief Information Officer. From there, she spent eleven years with the National Institutes of Health (NIH). As the NIH Deputy Director for Extramural Research, she led the operations of the world's largest extramural research program.

Returning to her roots in agriculture, she has seen FFAR through its startup phase and witnessed it grow into a significant force in the agriculture research community through the development of innovative private-public research partnerships.

Dr. Rockey received her doctorate degree in entomology from the Ohio State University and did postgraduate work at the University of Wisconsin. She has devoted her career to improving people's lives through research and continues this mission today.



Ignacio Martinez joined Flagship Pioneering in early 2013 to lead the sustainability activities of the firm. He also focuses on entrepreneurial activities in life sciences more broadly, with a special interest in food, nutrition, and human health. Ignacio is co-founder, founding CEO and Chairman of <u>Senda Biosciences</u> (a therapeutics company developing novel platforms to develop biological transfer systems and programmable medicines); co-founder and founding CEO of Montai Health (a company pioneering molecular nutrition); co-founder and founding CEO of <u>CiBO Technologies</u> (a company developing an industry-changing digital platform to provide science-based insights to drive transparency, efficiency and sustainability of agricultural farmland); <u>Inari Agriculture</u> (a company developing the world's first Seed Innovation Foundry); <u>Invaio Sciences</u> (a company developing integrated biological solutions to accelerate the transition to a sustainable agriculture system; and

founding director at <u>Indigo Agriculture</u> (a company dedicated to harnessing nature to sustainably feed the planet). Ignacio was also a member of the board of directors of <u>Novomer</u> (a company developing and producing cost competitive, sustainable chemicals and polymers from plant-based and renewable feedstocks) which was acquired by Danimer Scientific (DNMR) in 2021.

Prior to joining Flagship, Ignacio was founding member and managing director of Syngenta Ventures, the pioneering corporate venture capital group of agricultural giant Syngenta International, the world's largest agrochemical business. During his tenure at Syngenta, Ignacio was directly involved in corporate strategy and led multiple venture capital investments in agribusiness, biotechnology, and sustainability companies in Europe, North America, and Latin America. Prior to Syngenta, Ignacio was the founding CFO of Progenika Group, and spent several years working for Najeti Ventures Fund, investing in software and biotech companies in Europe.

He holds a BS in Economics and Business Administration from Deusto University in Spain, and an International MBA from Instituto de Empresa in Spain and WHU Otto Beisheim School of Management in Germany.

Gregory Belt is Founder and CEO of EverGrain, which produces great tasting, healthy, and sustainable ingredients from barley in a circular way. Prior to his current role, Greg led AB-InBev's global sustainability program and the creation of their 2025 sustainability goals. Greg brings over 20 years of experience in innovation and supply chain across large corporations and start-ups. Greg graduated from Allegheny College with a Bachelor's Degree in Economics and has a Master's Degree in Business Administration from Washington University in St. Louis. He resides in St. Louis with his wife Katherine and three children—Henry, Owen and Caroline.

Shannon Kenny is a Senior Advisor in the U.S. Environmental Protection Agency's Office of Research and Development. Shannon focuses on research needed to help the United States meet its goal to halve food waste by 2030, in line with the United Nations Sustainable Development Goal Target 12.3. She has been with the Agency since 2000.

Shannon holds a master's degree from Duke University. Her expertise includes the breadth of environmental impacts related to food waste and the development of environmental indicators. Shannon has contributed to climate policy from a number of positions including positions in EPA's Office of Policy and supporting members of the House of Representatives' Energy and Commerce Committee.



Roni Neff is an Associate Professor at Johns Hopkins Bloomberg School of Public Health. She researches wasted food, food system resilience, and food worker issues through the lens of public health and equity. She is a co-PI of an NSF-supported research network addressing wasted food, through which she leads evaluations of food waste solutions in schools and local governments; works with a cohort of food workers to co-create and examine impacts of worker-led interventions; and explores interconnections between food system resilience and food waste. Dr. Neff is also a PI of an Innovations at the Nexus of Food, Water, and Energy Systems (INFEWS) study assessing resource use and waste across the U.S. seafood supply chain, and is working with a team in Albany, NY to study the lifecycle environmental and health impacts of fruit/vegetable food rescue.

During the pandemic, Dr. Neff served on the executive team for the National Food Access and COVID Research Team (NFACT), co-leading U.S. and Maryland food security surveys. Her team (led by Erin Biehl) built on pre-pandemic food system resilience work and new pandemic insights, to develop tools to help local governments strengthen their food system resilience to climate change and other threats. She engages with public health practice and with broader food system issues in her role as a program director at Johns Hopkins' Center for a Livable Future, an academic center focused on food systems and public health. She is co-leading a new doctoral track focused on Environmental Sustainability, Resilience and Health, and she co-direct the school's MPH Concentration and Certificate program in Food Systems & Public Health.

Dr. Neff edited the first textbook on the US food system, *Introduction to the US Food System: Public Health, Environment, Equity* (Wiley-Jossey Bass, 2014).

James Kanoff is the co-founder and CEO of the Farmlink Project, a nonprofit on a mission to transform the food system to support families in need while reducing carbon emissions from wasted food. Founded by college students during the COVID-19 pandemic, Farmlink has delivered over 60 million meals of healthy produce to families in need that would have otherwise been wasted preventing over 80 million pounds of GHG emissions.

James is a Mayfield fellow at Stanford, focused on using artificial intelligence to accelerate our transition to a more sustainable food system. Prior to Stanford, James worked for disaster response organizations in the Middle East and Central Africa and wants to bring that dedicated, mission-driven approach into addressing the climate crisis. He and his co-founder Aidan Reilly, were recognized as Forbes 30 Under 30 in 2022 and received the Congressional Medal of Honor Society Service Award for Farmlink's work.