

5th Annual Digital Agriculture Workshop

An invitation only event at the Statler Hotel

Thought for food...

Our global agriculture and food systems require a radical transformation relying on expertise in multiple areas and research collaborations across disciplines that include agriculture, food safety, engineering, information and computer science, biology, business and the social sciences.

More than 100 faculty from across Cornell's colleges – Agriculture and Life Sciences, Engineering, Computing and Information Science, Arts and Sciences, Veterinary Medicine and Business – have come together to develop a robust research agenda for CIDA, **weaving unmatched excellence into holistic solutions for food and agriculture**. CIDA's mission is to inspire learning, catalyze innovation, and integrate fundamental discoveries to achieve new levels of sustainability in agri-food systems and new food for thought.

Featuring...



Keynote: Roy Steiner, Rockefeller Foundation

Roy Steiner, PhD, is the Senior Vice President for the Food Initiative at The Rockefeller Foundation, where he leads a team focused on creating a more nourishing, regenerative, and equitable food system. A food system that supports human and planetary health requires a better understanding of the interactions between food, health, nutrition, and environment. The Periodic Table of Food Initiative (PTFI) will vastly expand our understanding of the biochemistry of our food and develop impactful demonstration projects that exhibit the power of this new understanding.

Short Talks: Research Innovation Fund (RIF) seed grants and summer stipends

25 faculty grants and 19 student stipends since 2017

seed grant funding to innovative, cutting-edge interdisciplinary research from Cornell faculty and students

Breakouts: led by Symposium Moderators



Renata Ivanek
Associate Professor,
Population Medicine and
Diagnostic Sciences



Julio Giordano
Associate Professor, Animal
Science



Ed Mabaya
Research Professor, Global
Development



Yu Jiang
Assistant Research Professor,
School of Integrative Plant
Sciences – Horticulture Section

9:00am-9:30am: Welcome and CIDA updates

Director, Susan McCouch

Associate Directors, Hakim Weatherspoon, Abe Stroock, Renata Ivanek, Julio Giordano, Fengqi You

9:30am-10:15am: FFAR presentation with Q&A



“Together We’ll Go FFAR: Paving the Way for Improved Nutrition and Sustainable Agriculture”

Sally Rockey

*Executive Director,
Foundation for Food & Agriculture Research*

10:30am-11:00am: Research Innovation Fund presentations

Updates from our faculty Research Innovation Fund (RIF) award recipients

11:00am-1:00pm: Breakout and Reporting sessions

Breakouts lead by session coordinators from the October 11th symposium



Renata Ivanek

*Associate Professor,
Population Medicine and
Diagnostic Sciences*



Julio Giordano

*Associate Professor,
Animal Science*



Ed Mabaya

*Research Professor,
Global Development*



Yu Jiang

*Assistant Research Professor,
School of Integrative Plant
Sciences – Horticulture Section*

1:00pm-2:00pm: Lunch

Boxed lunches provided by the Statler Hotel

2:15pm-3:00pm: Research Innovation Fund presentations

We continue with additional updates from our faculty Research Innovation Fund (RIF) and posters from our student summer stipends

3:15pm-4:45pm: Keynote with Q&A



“The Periodic Table of Food – A revolutionary tool to understand our food”

Roy Steiner

*Senior Vice President,
Food Initiative, The Rockefeller Foundation*

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*Senior Vice President,
Food Initiative, The Rockefeller Foundation*

Abstract: Food is at the center of the world’s most urgent challenges and largest opportunities. According to the World Health Organization, malnutrition is the leading cause of death and disease globally. Yet, our scientific understanding of the foods that nourish us is still quite rudimentary. At most, 150 of our food’s biochemical components are measured and tracked in conventional databases, which only represents a tiny fraction of the tens of thousands of biochemicals in food. Beyond health, we also know today’s food production negatively impacts the quality of our water, soil, and air, and contributes to climate change. A food system that supports human and planetary health requires a better understanding of the interactions between food, health, nutrition, and environment.

The Periodic Table of Food Initiative (PTFI) will vastly expand our understanding of the biochemistry of our food and develop impactful demonstration projects that exhibit the power of this new understanding. Building on recent advances in data science and analytical chemistry, the initiative will develop low-cost mass spectrometry kits, standards, methods, cloud-based analytical tools, and a public database that will include a quantitative and qualitative analysis of a large variety of foods representative of geographic and cultural diversity worldwide. Once the database is in place, the scientific community and private sector will be incentivized to build on this public resource by adding analyses of additional foods, varieties, and preparation methods. The PTFI technical platform will enable conditions for a rapid acceleration in research and innovation in both the public and private sectors.

Bio: Roy Steiner, PhD, is the Senior Vice President for the Food Initiative at The Rockefeller Foundation, where he leads a team focused on creating a more nourishing, regenerative and equitable food system.

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 to develop the Alliance for a Green Revolution in Africa, the creation of Ethiopia’s Agricultural Transformation Agency, and dozens of other partnerships which addressed 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 Master of Science in agricultural and biological engineering with minors in economics and international development from Cornell University, as well as two degrees in mechanical engineering and biology from the Massachusetts Institute of Technology.



Sally Rockey

*Executive Director,
Foundation for Food & Agriculture Research (FFAR)*

Bio: Dr. Sally Rockey became the inaugural Executive Director of the Foundation for Food and Agriculture Research (FFAR) in September 2015. Prior to this role, Dr. Rockey was an award-winning leader in Federal research, overseeing the operations of the extramural programs in both agriculture and biomedicine. She spent 19 years with the U.S. Department of Agriculture (USDA) where she held a number of positions within the Cooperative State Research, Education, and Extension Service. Very early in her career she became the head of the competitive grants program, overseeing the extramural grants process and portfolio. In her final years with USDA she was the Chief Information Officer, applying her breadth of government knowledge to information technology. She brought her experience in agriculture research to her 11-year career at the National Institutes of Health, where she emphasized the connection between agriculture, food, and health. As Deputy Director for Extramural Research, Dr. Rockey oversaw the operations of the largest Federal extramural research program and led groundbreaking initiatives and activities that have and will have a lasting positive impact on the research community.

Dr. Rockey received her Ph.D. in Entomology from the Ohio State University and did postgraduate work at University of Wisconsin prior to joining the government. She has devoted her career to improving people’s lives through research and will continue her mission by seeing FFAR become an essential component of the scientific enterprise.

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