



Applications of Artificial Intelligence and Digital Technologies in Agricultural Development and Practice

13-14 October

2025

📍 **Location:**
University College
Dublin

Day 1



Registration and Check-in

Cedar and Cypress Room,
UCD University Club

9:00AM - 10:00AM

Opening Remarks

Cedar and Cypress Room,
UCD University Club

10:00AM - 10:30AM

Session 1

Cedar and Cypress Room,
UCD University Club

10:30AM - 11:30AM

Poster Session

UCD Agriculture & Food Science Center

11:45AM - 12:30PM

Lunch on Your Own

12:30PM - 1:30PM

Session 2

Cedar and Cypress Room,
UCD University Club

1:30PM - 2:30PM

Break

2:30PM - 3:00PM

Session 3

Cedar and Cypress Room,
UCD University Club

3:00PM - 4:30PM

Reception to follow from 4:30PM to 6:00PM

Day 2



Issues in Scientific Publishing

Cedar and Cypress Room,
UCD University Club¹

8:30AM - 9:30AM

Session 4

Cedar and Cypress Room,
UCD University Club

9:30AM - 10:30AM

Poster Session

UCD Agriculture & Food Science Center²

10:45AM - 11:30AM

Closing Remarks

Cedar and Cypress Room, UCD University Club

11:35AM - 12:00PM



Opening



Professor Frank Monahan is Dean of Agriculture and Head of the School of Agriculture and Food Science at University College Dublin. A Full Professor of Food Science, his research spans food authentication, muscle fatty acids, antioxidants, and the impact of animal diets on meat quality. He has authored over 200 peer-reviewed publications and led numerous national and EU-funded research projects. Prior to joining UCD, Professor Monahan held research appointments at the University of California, Davis and Michigan State University, and continues to shape food science education and innovation in Ireland and beyond.



Dr. Grady Roberts is a Professor of Agricultural Education and a Distinguished Teaching Scholar at the University of Florida. His research focuses on enhancing the effectiveness of educators and educational institutions, particularly in higher education settings both domestically and internationally. With a career spanning teaching, research, and extension, Dr. Roberts has received numerous accolades, including the NACTA Distinguished Educator Award. He leads an applied research program funded by USDA/NIFA and USAID, aimed at improving human capacity in food, agriculture, and natural resources.

AAD extends its gratitude to the following sponsors:



Sessions



Session 1

Large Language Models for Agricultural and Rural Development: An Application of Foundation Models in Extension

Paul Hill & Lendel Narine, Utah State University



Dr. Paul Hill is a tenured Extension Professor at Utah State University, where he leads community, workforce, and economic development initiatives through the Remote Online Initiative (ROI), which he founded in 2018. His research centers on remote work adoption and innovation diffusion, with programming that has expanded across Utah and ten additional states. Dr. Hill's work has earned over 20 national awards and the Utah Governor's Medal for Science and Technology. He is recognized for his leadership in transforming rural economies through digital connectivity and workforce development.

Asking the Right Question: Toward a Research Agenda for Responsible GAI in Agricultural Extension

Jawoo Koo, IFPRI; Eliot Jones-Garcia, IFPRI; Niyati Singaru, IRRI; Kristin Davis, IFPRI



Eliot Jones-Garcia is a Senior Research Analyst at the International Food Policy Research Institute (IFPRI), based in Washington, DC. His research explores human-AI interaction, user-centered design, and the ethical integration of AI into agricultural advisory services. Eliot is completing a PhD at Wageningen University on the digitalization of agricultural extension and holds degrees in Rural Development and International Agriculture. His work bridges technical innovation with inclusive design, advancing responsible AI for smallholder farming communities.



Sessions



Session 2

Creative Teaching Methods for Imagining the Future of Technology in Farming: Storytelling for Responsible Transitions

David Christian Rose, Harper Adams University



Professor David Christian Rose holds the Elizabeth Creak Chair in Sustainable Agricultural Change at Harper Adams University and directs the Centre for Social Science. His research spans human behavior change, technology adoption, and responsible innovation in agriculture. A Fulbright Scholar and Cambridge graduate, he has authored over 80 publications and advised organizations including FAO, OECD, and Defra. Professor Rose is a frequent contributor to public discourse on agricultural transitions, with appearances in Parliament, major media outlets, and international forums.

Artificial Intelligence in Education: Perspectives of Secondary Teachers

James Lindner, Christopher Clemons, & Jason McKibben, Auburn University



Dr. James “Jimmy” Lindner is an Alumni Professor at Auburn University, where he leads one of the nation’s largest Agriscience Education programs. Recognized as the most prolific researcher in agricultural education, his work spans the human and behavioral dimensions of agriculture, with a focus on innovation adoption and research methodology. With over 6,600 citations and an h-index of 37, Dr. Lindner’s scholarship has shaped research practices across the field. His leadership and commitment to teaching, research, and outreach continue to influence the next generation of agricultural educators.



Sessions



Session 2 continued



Dr. Christopher Clemons is an Associate Professor of Agriscience Education at Auburn University, where he brings over a decade of experience in secondary education and school leadership. He serves as Principal Investigator for the “Sustaining Our Agricultural Resources” initiative, focusing on preparing future educators through experiential learning and community engagement. Dr. Clemons’ work integrates classroom innovation with practical agricultural applications, advancing the mission of inclusive and impactful education.



Dr. Jason McKibben is an Assistant Professor of Agriscience Education at Auburn University, where he specializes in agricultural mechanics and curriculum development. His research explores pedagogical strategies and barriers in skill-based instruction, with a focus on forestry and natural resource education. Dr. McKibben is a frequent contributor to national conferences and has published extensively on agricultural education practices and teacher preparation.



Sessions



Session 3

Revisiting Everett M. Rogers: A Systematic Review and Random Forest Analysis of Technology Adoption in Modern Agriculture

Jaehyun Ahn, Brian Myers, Laura Warner, John Diaz, & Pablo Lamino,
University of Florida



Dr. Jaehyun “Jae” Ahn is an Assistant Professor of Artificial Intelligence (AI) Extension in the Department of Agricultural Education and Communication at the University of Florida. He brings a diverse background spanning agricultural education, economics, and public health, with doctoral training in Agricultural Leadership and research in Health Services. Dr. Ahn leads interdisciplinary projects that utilize AI, machine learning, and data science to tackle food security, agricultural innovation, and community resilience issues. His work has received support from USDA, DHS, USAID, and the Texas A&M Institute of Data Science. Dr. Ahn promotes AI applications for sustainable agriculture and resilient food systems through partnerships connecting extension, science, and policy.

Application of Reinforcement Learning from Human Feedback for Localizing Quality Agricultural Advice using Generative AI

Rikin Gandhi, Alesha Miller, & Jona Repishti, Digital Green



Alesha Miller serves as Chief Strategy Officer at Digital Green, a global nonprofit co-creating a world where farmers use data and technology to build resilient communities. With a background in digital innovation and international development, she leads the organization’s learning, impact, and partnership strategy. Alesha has been instrumental in scaling Farmer Chat, an AI-powered pocket advisor designed to deliver hyper-local, voice-responsive agricultural guidance. Her work reflects a deep commitment to empowering smallholder farmers through inclusive and adaptive tech solutions.



Sessions



Session 3 continued

Single Case Experimental Designs (SCEDs) in Agricultural Advisor Training: A Novel Method for Evaluating Capacity Building in Farmer Mental Health Interventions

Louise McHugh, Alison Stapleton, & Tomás Russell, University College Dublin



Professor Louise McHugh is a Professor of Psychology at University College Dublin and Director of the UCD Contextual Behavioural Science Lab. A Fellow of the Association for Contextual Behavioral Science, she is internationally recognized for her work in Acceptance and Commitment Therapy (ACT) and Relational Frame Theory (RFT). Her recent public engagement includes EU-level panels on farmer mental health and food security. Professor McHugh also serves as President of the UK and ROI Chapter of ACBS and has chaired numerous international conferences.



Dr. Alison Stapleton is a Chartered Psychologist of the Psychological Society of Ireland and an Assistant Professor at University College Dublin. Alison co-founded the ACBS Neurodiversity-Affirming Research and Practice Special Interest Group and has published eight book chapters and 20 scientific articles, most recently contributing to the Guilford Press Handbook of Third Wave Therapies and a systematic review of adults' experiences of being identified as autistic in adulthood.



Dr. Tomás Russell is Assistant Professor in Agricultural Extension and Innovation at University College Dublin and Programme Director for the Masters in Agricultural Extension and Innovation. His research explores farmer decision-making, particularly around succession and inheritance and the role of extension services in supporting these transitions, farmer mental health and digital agriculture. Previously, Dr. Russell worked with Teagasc as an Agricultural Development Officer, bringing practical experience to his teaching and research.



Sessions



Session 4

Maintaining Connection: Using Emotionally Engaged Thinking to Enhance Artificial Intelligence Initiatives in Agricultural Domains

Nicole Stedman, University of Florida



Dr. Nicole LP Stedman serves as the Associate Provost and Dean of the Graduate School. In this role she provides oversight and leadership to graduate student academics and success. Graduate student academic affairs are guided by the Graduate Council, which she chairs. This includes academic curriculum, programs, and policy. As an active and publishing researcher, she has partnered in \$3.2 million in funded grants and participated in international outreach to Belize, Costa Rica, the Czech Republic, the Dominican Republic, Ecuador, Ireland, the Netherlands, Portugal, Spain, and the United Kingdom. Her scholarship, grounded in critical thinking pedagogy, has driven her collaborative work in developing models of Emotionally Engaged Thinking (EET), which promotes use of emotion as a catalyst for decision-making.

Insights and Learnings from the Use of Design Thinking for Agricultural Innovation Design

Karen McGrath, Jim Kinsella, & Tomás Russell, University College Dublin



Dr. Karen McGrath is a Postdoctoral Researcher affiliated with University College Dublin, where she contributes to the Knowledge Exchange in Agriculture Group within the School of Agriculture & Food Science. Her work focuses on agricultural digitalisation and digital technology adoption amongst farmers. Dr. McGrath's research emphasises participatory research design, promoting bottom-up and co-design approaches to create practical solutions and development strategies for challenges in agriculture.



Sessions



Session 4 continued



Professor Jim Kinsella is Professor of Agricultural Extension and Rural Development at University College Dublin. With a career spanning humanitarian work in East Africa and development roles with Irish Aid, his academic focus includes agricultural innovation, rural livelihoods, and social farming. He has led multiple master's programs in rural development and agricultural extension, and his research has influenced national and international policy on knowledge transfer and farm-based innovation. Professor Kinsella remains actively engaged in community development and farming in Kilkenny.



Dr. Tomás Russell is Assistant Professor in Agricultural Extension and Innovation at University College Dublin and Programme Director for the Masters in Agricultural Extension and Innovation. His research explores farmer decision-making, particularly around succession and inheritance and the role of extension services in supporting these transitions, farmer mental health and digital agriculture. Previously, Dr. Russell worked with Teagasc as an Agricultural Development Officer, bringing practical experience to his teaching and research.



Closing



Dr. Amy Harder is Associate Dean and Associate Director for Extension at the University of Connecticut. A nationally recognized scholar in agricultural education and extension, she has authored over 110 peer-reviewed publications and served in leadership roles for multiple academic journals. Her research focuses on competencies, motivation, and organizational development within domestic and international extension systems. Dr. Harder is a Senior Fellow of the Association for International Agricultural and Extension Education and recipient of numerous awards for research and service.



About AAD

Advancements in Agricultural Development (ISSN 2690-5078) is an open-access journal publishing social science research in the context of food, agriculture, and natural resources. The aim of AAD is to influence agricultural development practices by rapidly disseminating theoretically and conceptually sound research focused on practical outcomes. The scope of AAD includes research focused on education, extension, human capacity building, diffusion of innovations, leadership, and communication in the context of food, agriculture, and natural resources. AAD defines agricultural development research as that which provides new knowledge that can be applied to advance agriculture through improved human practices.

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