



Africa, Ireland & UCD: Working together to address global sustainability challenges

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Thursday 22 May 12:30-5:30, followed by reception

Location: [O'Brien Centre for Science, University College Dublin](#)

Hosted by UCD Earth Institute and UCD Office of Global Engagement.

[UCD's Africa Engagement Strategy 2023-2028](#) was published last year, establishing Africa as a priority region and committing the university to deepening its research, scholarship and innovation engagement with the continent. This ambition will be achieved through the development of meaningful and equitable relationships with scholars and institutions from across the continent of Africa, as well as leveraging the broad range of existing partnerships.

UCD is among the Irish Higher Education Institutions most actively engaged with Africa and with African partners, based on student population, educational initiatives, and research collaborations. However, this engagement is often siloed within different academic disciplines, limiting a more cohesive approach that fully reflects Africa's global significance and the potential for impactful research partnerships.

In this context, interdisciplinary sustainability, climate and environmental research that tackles urgent global and interconnected challenges is a critical priority. The aims of this day are to connect researchers across UCD who engage with Africa in these areas, engage with the wider political, policy and funding context for these activities, and to build capacity for future initiatives. We hope that the legacy of the event will be a UCD network for sustainability research in Africa and an agenda for future collaborations and partnerships in this area.

Event Programme

All rooms: [O'Brien Centre for Science, University College Dublin](#)

Time	Detail	Location
12:15-16:00	Registration desk (opposite Pi Cafe)	Ground Floor (East) - via Main Entrance.
12:15-13:00	<p>Lunch + research poster display</p> <p>Research Posters</p> <ul style="list-style-type: none"> - <i>Network on Conflict-affected Smallholder Agriculture: Mapping Evidence and Gaps</i> - Dr Caitriona Dowd (UCD) School of Politics and International Relations (SPIRe) - <i>Gendered Impacts and Adaptation Strategies to Climate Change in Urban Informal Settlements: A Case Study of Dar es Salaam, Tanzania</i> - Ronja Walther (UCD School of Architecture, Planning and Environmental Policy) - <i>Comparing the Role of Social Capital in Response to Conflict- and Climate-Driven Crises in the Horn of Africa</i> - Dr Caitriona Dowd (UCD School of Politics and International Relations (SPIRe)) - <i>Collaboration on Linkages of community-based mechanisms for resilient nutrition-sensitive climate-smart approaches for women</i> - Lilian Kamowa (UCD School of Nursing Midwifery and Health Systems) - <i>SYNERGI (Socially Inclusive Edible Urban Green Infrastructures)</i> - Dr Rogers Hansine (UCD School of Geography) - <i>Waves of endemic foot-and-mouth disease in eastern Africa suggest feasibility of proactive vaccination approaches</i> - Dr Miriam Casey (UCD School of Veterinary Medicine) - <i>Bridging Data Gaps in Urban Air Quality Monitoring Using ML and Satellite Data in Uganda</i> - Dr Soumyabrata Dev (ICD School of Computer Science) 	4th Floor Atrium (East)
13:00-14:40	<p>Welcome from Earth Institute Director, Professor Eoin O'Neill</p> <p>Session 1: Showcase of UCD environmental, climate and sustainability research in and related to Africa</p>	Science (Hub) 1.51

Short presentations highlighting the breadth of environmental, climate and sustainability research across multiple disciplines in UCD with African partners or centred on African contexts, exploring intersections, synergies and opportunities to collaborate.

Chairs: Dr Diretnan Dikwal-Bot (UCD School of English, Drama and Film) and Dr Tensay Meles (UCD School of Architecture, Planning and Environmental Policy)

Presentations

Abstracts and speaker bios in the appendix.

- *Material Realities and Technological Futures: Power, Extraction and Resistance in African AI Ecologies* - Dr Diretnan Dikwal-Bot (UCD School of English, Drama and Film) and Dr Thompson Kwarky (UCD School of Information and Communication Studies)
- *Land use change in Sub-Saharan Africa: implications for beneficial insects* - Associate Professor Dara Stanley (UCD School of Agriculture and Food Science)
- *Phylogenomics of Lake Malawi Cichlid Fishes: The Rapid Evolution of 1000 Species in One Lake* - Dr Darrin Hulsey (UCD School of Biology and Environmental Science)
- *The Gendered Dimensions of Hunger in Peacebuilding (GDHP) Project* - Dr Caitriona Dowd (UCD School of School of Politics and International Relations)
- *Personalised mHealth Maternal Nutritional Education for Equitable Nutritional Access and Improved Maternal and Offspring Health Outcomes in Sub-Saharan Africa (AMEN)* - Dr Praveenkumar Aivalli (UCD School of Public Health, Physiotherapy and Sports Science)
- *Exploring the potential use of underutilised African indigenous fruits* - Dr Jean-Christophe Jacquier (UCD School of Agriculture and Food Science)
- *The Importance of Networking to Ensure Successful Collaborations* - Dr John A. Byrne (UCD School of Biology and Environmental Science)
- *Housing Ambition: Understanding how climate change is impacting local cultural practices in Kenya today* - Dr Brendan O'Neill (UCD School of Archaeology)
- *How to conserve wide-ranging vultures?* - Mattie Jane Purinton (UCD School of Biology and Environmental Science)

	<ul style="list-style-type: none"> • <i>The Namibia's Rays and Sharks project: Collecting baseline data on sharks, rays and chimaeras</i> - Dr Ruth Leeney (UCD School of Biology and Environmental Science) • <i>Clinical dietetics research and education collaborations between Ireland and Malawi</i> - Dr Sarah Browne (UCD School of Public Health, Physiotherapy and Sports Science) • <i>Gender, land tenure and climate risk amongst pastoralist communities</i> - Dr Ronan McDermott (Centre for Humanitarian Action, UCD School of Agriculture and Food Science) • <i>Counting invisible elephants; Using eDNA to track wild elephants in Kenya</i> – Dr Andrew Tighe (UCD School of Biology and Environmental Science) • <i>Solar-powered irrigation systems and resilience to climate change in Uganda, Ethiopia and Ghana</i> - Dr Marta Talevi (UCD School of Economics) • <i>Modelling the Health Effects of Climate Change in Africa Using AI and Advanced Statistics</i> – Dr Michelle Carey (UCD School of Mathematics and Statistics) • <i>A52 Lab and South Saharan Africa</i> - Associate Prof Jens Carlsson (UCD School of Biology and Environmental Science) 	
14:40	Short break: tea + coffee on 4th Floor	4th Floor Atrium (East)
14:55-15:55	<p>Session 2: Sustainability research collaborations - Research Ireland / Irish Aid SDG Challenge funding</p> <p>This session will provide funder, researcher and community perspectives on Research Ireland / Irish Aid funding for collaborative, transdisciplinary projects in Africa.</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Dr Maysoun Mustafa, (Scientific Programme Manager, Research Ireland and Challenge Call lead) • WECOAdapt project - Dr Liana Ricci (UCD School of Architecture, Planning & Environmental Policy), Professor Gabriel Kassenga (Ardhi University, Tanzania), Dr Given Mhina (Ardhi University, Tanzania) Dr Tim Ndezi, (Centre for Community Initiatives (CCI), Tanzania) • SANKOFA project - Dr Adwoa Serwaa Ofori (UCD School of Agriculture & Food Science), Professor Miriam Kalanda-Joshua (University of Malawi). 	Science (Hub) 1.51

	Chair: Dr Caitriona Dowd (UCD School of Politics & International Relations)	
15:55-16:05	Comfort break / move to O'Connor Theatre	O'Connor Theatre
16:05-16:20	Welcome & Earth Institute overview and awards (15 mins) Prof Eoin O'Neill, Earth Institute Director	O'Connor Theatre
16:20-17:20	<p>Session 3: Keynote panel - Africa, Ireland and UCD: Working together to address global sustainability challenges</p> <p>This session will address the external and policy context as well as the benefits, challenges and priorities for collaborations around sustainability, climate and environment research between Irish and African research partners, in the context of UCD's research partnerships in Africa and the recent UCD Africa Engagement Strategy.</p> <p>Panel:</p> <ul style="list-style-type: none"> • Prof Kate Robson Brown, UCD Vice President for Research, Impact and Innovation • Dr Aklilu Fikresilassie Kabiso, Regional Director of Cities (Africa) at the World Resources Institute (WRI) • Prof Pat Gibbons, Director, Centre for Humanitarian Action, Academic Lead on the UCD Africa Engagement Strategy • Kyle O'Sullivan, Director of the Africa Unit at the Irish Department of Foreign Affairs and Trade. • Dr Ines Raimundo, Eduardo Mondlane University, Mozambique <p>Chaired by Tom Arnold, Chair of the Ireland Africa Rural Development Committee (IARDC)</p>	O'Connor Theatre
17:20	Concluding remarks by Professor Dolores O'Riordan, UCD Vice President for Global Engagement.	O'Connor Theatre
17:30	Reception	4th Floor Science (East)



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Appendix - Biographies and Presentation / Poster Abstracts

Session 1 - Research showcase (alphabetical)

Dr Praveenkumar Aivalli (UCD School of Public Health, Physiotherapy and Sports Science)

Personalised mHealth Maternal Nutritional Education for Equitable Nutritional Access and Improved Maternal and Offspring Health Outcomes in Sub-Saharan Africa (AMEN)

Bio: Dr Praveenkumar Aivalli is a Postdoctoral Researcher at the School of Public Health, Physiotherapy and Sports Science, University College Dublin (UCD). Dr Aivalli has a strong background in global public health and health policy and systems research, with a particular focus on implementation science to improve maternal and child health outcomes in sub-Saharan Africa. His current research centres on the development and implementation of mobile health strategies that promote balanced nutrition during pregnancy, with an emphasis on leveraging locally available staple foods to support sustainable dietary practices. Dr Aivalli's work is grounded in health systems thinking and seeks to inform the design, adaptation, and scale-up of equitable health interventions in resource-constrained settings.

Presentation: The AMEN (Personalised mHealth Maternal Nutritional Education) project is a transdisciplinary collaboration between researchers in Ireland and South Africa, focussed on reducing maternal and neonatal mortality in Sub-Saharan Africa. Addressing critical barriers to maternal nutrition, including socioeconomic inequities, limited health education, and poor access to locally available, nutritious foods, and using a co-creation approach with local stakeholders, the GRAVID mobile application will be adapted to deliver personalised nutrition education tailored to women's cultural practices, dietary needs, and health status. The project follows a robust, multi-phase research design: qualitative focus group discussions, a cross-sectional survey, scoping review, nutritional profiling of local foods, pilot testing of the adapted app, and a randomised controlled trial to evaluate its effectiveness on maternal dietary behaviours and birth outcomes. Aligned with SDGs 2, 3, 5, and 12, AMEN prioritises sustainability, digital innovation, and equitable access to health information, with strong potential for long-term scalability and impact. The AMEN (Personalised mHealth Maternal Nutritional Education) project is a collaborative initiative between researchers in Ireland and South Africa aimed at improving maternal and neonatal health outcomes in Sub-Saharan Africa. The programme seeks to enhance maternal nutrition by delivering culturally tailored, evidence-based dietary education through the adapted GRAVID mobile app. Using a co-creation approach, it empowers pregnant women with knowledge to make informed food choices within their local context. The project includes focus groups, surveys, nutritional profiling, pilot testing, and a randomised trial. Aligned with SDGs 2, 3, 5, and 12, AMEN promotes equity, sustainability, and digital health innovation.

Dr Sarah Browne (UCD School of Public Health, Physiotherapy & Sports Science)

Clinical dietetics research and education collaborations between Ireland and Malawi

Bio: Sarah Browne is Assistant Professor in Clinical Nutrition and Dietetics at the School of Public Health, Physiotherapy and Sports Science. Current scholarly activities focus on curricular developments in clinical nutrition and dietetics (in the areas of concept-based curricula, obesity, sustainable food systems, global dietetics, interdisciplinary approaches)

and food environments in the school setting in Ireland using participatory methods. With the dietetics team, Sarah began collaborating with faculty at a clinical nutrition and dietetics programme in Malawi in 2023.

Presentation: The relationship between the Clinical Nutrition and Dietetics team at UCD and Lilongwe University of Agriculture and Natural Resources (LUANAR), Malawi began in 2022 with an ESTHER / Irish Aid grant for relationship building. LUANAR hosted three UCD faculty members for a research and education visit in September 2023. The partners collaborated on the first prevalence study of older adult malnutrition in the hospital setting in Malawi, with a publication expected in 2025. Online knowledge exchanges between clinical nutrition and dietetics students at UCD and LUANAR were successfully conducted in Spring 2024 and 2025 using clinical case studies from both countries. Students reported new learning and appreciation of how economic factors, social inequalities, healthcare priorities, and cultural and societal norms influence nutrition interventions in each country. Despite differences in contexts, they also identified the common language and practices they share in global, clinical dietetics. The team were awarded UCD's Africa Engagement Seed funding in 2025 to advance the education partnership on a project entitled 'Advancing Dietetics Training in Malawi: A UCD-LUANAR Knowledge Exchange Initiative'. A Memorandum of Understanding between both institutions was approved in March 2025.

Dr John A. Byrne (UCD School of Biology and Environmental Science)

The Importance of Networking to Ensure Successful Collaborations

Bio: I am a former Head of the Garda National Forensic Coordination Office. I have worked in Sub-Saharan Africa on conservation and research projects since 2005. I am a Director of the Galana Wildlife Conservancy in Tsavo, Kenya and work closely with other conservation groups there and in Namibia. I am Chairman of the NGO, Friends From Ireland, an Irish registered charity supporting community development, education and conservation in Africa. I completed my PhD in 2024, investigating eDNA and avian predator-prey relationships. I am currently a Post-Doctoral Research Fellow in SBES. I have been involved in community development, education and conservation projects in Sub-Saharan Africa for over 20 years. I currently serve as the Director of Research and Development at the Galana Wildlife Conservancy in Tsavo, Kenya and Chair of the NGO Friends From Ireland who build schools, clinics and community cornerstones in remote Kenyan, Namibian and Southern African communities. I am also an advisor to conservation NGOs in Kenya, Tanzania and Namibia.

Presentation: Over these years I have been responsible for first contact with communities, universities and regulatory authorities which often requires a unique approach, tailored to the varying domestic, cultural, jurisdictional and legislative requirements prevailing in each country. Engaging with Consulates and Embassies has been key, in my experience, to establishing and progressing projects. Diplomatic support often invites domestic political interest, which in turn supports the roll-out of projects and gives gravity to collaborations and often a level of protection.

Dr Michelle Carey (UCD School of Mathematics and Statistics)

Modelling the Health Effects of Climate Change in Africa Using AI and Advanced Statistics

Bio: Dr. Michelle Carey is an Assistant Professor of Statistics at University College Dublin, specializing in Functional Data Analysis (FDA). Her research bridges statistics, machine

learning, and applied mathematics, with a focus on physics-informed statistical learning. Following her PhD, she completed postdoctoral research at the University of Rochester Medical Center (New York) and McGill University (Canada), developing frameworks for uncertainty quantification in data-driven dynamical systems. Since joining UCD in 2017, she has led the development of FDA methodologies in Ireland. Her work supports the modelling of complex dynamic systems in biology, epidemiology, and spatial data analysis.

Presentation: This research investigates the complex and growing impact of climate change on health outcomes across Africa using a combination of advanced statistical modelling and artificial intelligence techniques. By integrating climate data (e.g., temperature, precipitation, extreme weather events) with health records and demographic information, the project aims to quantify how environmental shifts are influencing disease patterns, mortality, and overall public health.

Associate Professor Jens Carlsson (UCD School of Biology and Environmental Science)

A52 and South Saharan Africa

Bio: Dr Jens Carlsson, Associate Professor at University College Dublin, is active in conservation efforts across Sub-Saharan Africa. As Adjunct Associate Professor at Pwani University in Kenya, he supports biodiversity research and capacity building. In Namibia, he leads UCD's partnership with the Namibian University of Science and Technology, fostering student exchange and giving talks on environmental DNA. In Zambia, he works with The Nature Conservancy, the Zambia Carnivore Programme, and the University of Zambia. His research uses advanced molecular tools to support conservation and sustainable development in diverse African ecosystems.

Presentation: Area 52 have been doing research and student exchange in Kenya since 2015 and we are now expanding into Namibia with which we signed an MoU in 2024. The presentation will highlight what have been done and opportunities in primarily Kenya and Namibia

Dr Diretnan Dikwal-Bot (UCD School of English, Drama and Film) and Thompson Kwarkye (UCD School of Information and Communication Studies)

Material Realities and Technological Futures: Power, Extraction and Resistance in African AI Ecologies

Bio: Diretnan Dikwal-Bot is an Assistant Professor in Digital Media Studies and Ad Astra Fellow at UCD's Department of English, Drama and Film. Her research focuses on media, cultural politics, and social inequalities in Africa. She leads a UCD Global-funded mentoring initiative linking African students with alumni professionals and is currently co-researching the African AI value chain, with particular attention to its socio-economic and gendered dimensions. Her recent publications include a book with Palgrave Macmillan and peer-reviewed articles in *Critical Discourse Studies*, *Feminist Media Studies*, and the *Journal of Media and Cultural Politics*.

Bio: Dr Thompson Gyedu Kwarkye is a postdoctoral fellow at UCD School of Information and Communication Studies. His research interests unite inquiries linked to data politics, technology ethics, AI governance and regulations, digital transformation, and technology use in conflict regions. At UCD, Thompson develops micro-credential modules on AI ethics. The modules, which target technology developers, end users, policymakers, and law enforcement,

empower them to assess the ethical dimensions of technological choices. He has also been a postdoc at the Faculty of Law, University of Oxford, where he led work packages examining how social media and new technologies affect migration within and between Africa and Europe.

Presentation: This project critically examines the political economy of the global AI value chain through the lens of African labour, resources, and resistance. While African minerals and human labour, often gendered, informal, and precarious, are essential to powering AI systems, the continent remains structurally excluded from decision-making, design, and value accumulation. Through an in-depth study of e-waste economies such as Agbogbloshie, the project investigates how gendered hierarchies and racialised power dynamics are reproduced through digital extractivism, particularly in the labour performed by women and children under hazardous and informal conditions. Bridging feminist political economy, critical AI studies, and decolonial theory, the research reveals how narratives of sustainability and innovation often mask enduring asymmetries in global tech ecosystems. Its novel contribution lies in reframing Africa not as a peripheral actor but as a critical site of exploitation, resistance, and technological imagination, offering urgently needed conceptual and empirical tools to rethink digital justice and AI futures from the global South.

Dr Caitriona Dowd (UCD School of Politics and International Relations)

The Gendered Dimensions of Hunger in Peacebuilding (GDHP) Project

Bio: Caitriona Dowd is Assistant Professor and Ad Astra Fellow in UCD's School of Politics and International Relations. Her research focuses on the role of conflict in humanitarian crises and food insecurity; civilian targeting; and quantitative methods for violence monitoring. Caitriona co-leads a Research Ireland-funded COALESCE project on the gendered dimensions of hunger in peacebuilding, with collaborators at the Centre for the Study of Violence and Reconciliation, South Africa; and a Research Ireland-funded New Foundations project on the impact of violent conflict on smallholder agriculture, with partners at The Innovation Lab for Policy Leadership in Agriculture and Food Security, University of Ibadan, Nigeria.

Presentation: The Gendered Dimensions of Hunger in Peacebuilding (GDHP) project investigates whether and how gendered aspects of food insecurity and food rights are addressed in peacebuilding in three African countries: South Sudan, Liberia and South Africa. It seeks to understand women, girls', men, boys' and minorities' experiences of conflict-driven food insecurity and/or violations of food rights and their place in peace transitions. Outputs to date include mapping food in the Women, Peace & Security agenda; one completed qualitative case study of intergenerational exposure to gender-based violence in South Africa's rural agri-food system; and a case study in progress on legacies of the Liberian civil war for gendered inequalities in urban aquaculture. GDHP is co-led by researchers at UCD's School of Politics and International Relations and Centre for the Study of Violence and Reconciliation in Johannesburg, South Africa and is funded by a Research Ireland and Department of Foreign Affairs COALESCE grant.

Dr Darrin Hulsey (UCD School of Biology and Environmental Science)

Phylogenomics of Lake Malawi Cichlid Fishes: The Rapid Evolution of 1000 Species in One Lake

Bio: I study the mechanistic basis and nutrigenomic consequences of fish feeding specialisation. Within African cichlid fishes, a huge number of historically independent and convergent trophic phenotypes have arisen through modifications of conserved musculoskeletal elements that comprise their highly kinetic skull. This replicated evolutionary framework provides the power to address broad questions concerning the mechanisms underlying the developmental genetics of ecological novelty. Additionally, understanding the genomic basis of feeding adaptations and evolutionary relationships among diverse fish groups like the Lake Malawi cichlids has consequences for indigenous fishery sustainability, health of local human populations, and conservation of this unique aquatic biodiversity.

Presentation: The Lake Malawi cichlid fishes have evolved astounding phenotypic diversity in traits like coloration and trophic morphology in the last two million years. However, the extremely high diversification rate in Lake Malawi cichlids and their extensive potential for hybridization has cast doubt on whether even whole genome-level phylogenetic reconstructions can genetically delineate many of these species. Yet, we have shown repeatedly that genomic level data can readily taxonomically differentiate many of these fish lineages. Also, because of the recent time-frame of their diversification, we can often uncover the genomic basis of adaptive phenotypic divergence among species. Finally, the understanding of the evolutionary relationships among these fishes has consequences for our understanding of sustainability of indigenous fisheries, one health of local populations, and conservation of this unique aquatic diversity.

Dr Jean-Christophe Jacquier (UCD School of Agriculture and Food Science)

Exploring the potential use of underutilised African indigenous fruits

Bio: Dr Jean-Christophe Jacquier is a Lecturer in Food Analysis at UCD's Institute of Food and Health and School of Agriculture. With a PhD in Analytical Chemistry from Université Pierre et Marie Curie, his research bridges chemistry and food science, focusing on in vitro digestion, bioactive peptide identification, and plant phenolics. He has led numerous projects funded by DAFM, EI, and IRC, resulting in over 80 publications, a patent, and significant industry collaboration. An active mentor and international collaborator, he has supervised over 20 PhD and MSc students. Dr Jacquier also serves on multiple journal editorial boards.

Presentation: The recent study is a collaboration between researchers in UCD and Meru University in Kenya based on an Erasmus+ ICM exchange of staff and postgraduate students with part of the work undertaken in both Ireland and Kenya and led to one PhD thesis and three publications so far on exploring the potential use of underutilised African indigenous fruits. *Dovyalis caffra* and *Dovyalis abyssinica* are examples of African indigenous fruits that remain highly unexploited in the continent. In Kenya, the fruits are considered wild, with utilization only limited to establishment of live fences. The result of this is widespread underutilisation accompanied by great post-harvest losses of the unused fruits. The research aimed at filling this information gap through the determination of the nutritional and phytochemical characteristics of *Dovyalis* fruits, studying the effects of processing and storage on the characteristics of the fruits and the determination of the fruits potential in the formulation of fruit juices and yoghurts.

Dr Ruth Leeney (UCD School of Biology & Environmental Science)

The Namibia's Rays and Sharks project: Collecting baseline data on sharks, rays and chimaeras.

Bio: Dr. Ruth H. Leeny is a Teaching Fellow in the School of Biology and Environmental Science. She has worked on the African continent for over 15 years, largely on the conservation status of sharks and rays, and their economic and cultural importance to coastal communities. Most recently she ran a research project to collect baseline data on sharks and rays in Namibian waters, and she is currently developing a collaborative project in Madagascar to address overfishing of sharks and rays, and the lack of viable livelihoods for coastal communities. She incorporates training, capacity-building and the development of educational materials into her work.

Presentation: Until recently there had been almost no research conducted on sharks, rays and chimaeras in Namibian waters. The NaRaS project conducted two years of baseline research to document the species present in Namibian waters, with a focus on the Namibian Islands Marine Protected Area, and to assess the threat of bycatch in commercial fisheries. The project has highlighted the species diversity in Namibian waters and the importance of habitats like kelp forests. Numerous educational materials on sharks and the importance of a healthy ocean were also produced.

Dr Rónán McDermott (UCD Centre for Humanitarian Action, School of Agriculture and Food Science)

Gender, land tenure and climate risk amongst pastoralist communities

Bio: Dr Rónán McDermott is an Assistant Professor based at the Centre for Humanitarian Action within the School of Agriculture and Food Science. Prior to his current appointment, he held positions at the School of Geography, University of Nottingham and at the Department of Global and Local Governance, University of Groningen. His main areas of interest include disaster risk reduction and climate adaptation, particularly the role of governance in enabling these outcomes.

Presentation: This project explores how land tenure regimes serve to distribute climate vulnerability across gender within pastoralist communities. It does so by comparing the impact of land tenure regimes in northern Kenya and southern Ethiopia on women and men within such communities that are mobile across the border. The project is jointly advanced by UCD, Addis Ababa University, Bule Hora University, and University of Nairobi.

Dr Brendan O'Neill (UCD School of Archaeology)

Housing Ambition: Understanding how climate change is impacting local cultural practices in Kenya today

Bio: Brendan is a Lecturer/Assistant Professor in Experimental Archaeology and Material Culture at UCD. His work supports teaching and research in these areas, with a strong focus on accessibility and public engagement. He teaches at undergraduate and postgraduate levels using active learning, lectures, seminars, and workshops. He has led numerous public outreach projects with institutions such as the National Museum of Ireland and local heritage groups. His research focuses on early medieval Irish domestic life, experimental archaeology, and traditional architecture in Kenya. He works across disciplines on projects from Neolithic to medieval periods. Since 2017, he has been Co-Director of UCD's Centre for Experimental Archaeology and Material Culture, helping to shape its strategic direction and foster university-wide collaboration.

Presentation: Housing Ambition is a cross-disciplinary collaboration between the University of Nairobi and University College Dublin. This project aims to halt the loss of the unparalleled

Housing Research Development Unit's (HRDU) archive from academic and social discourses. The HRDU was established at the University of Nairobi in 1965, just two years after Kenya's independence. It was part of a global wave of progressive architecture programs that challenged institutional norms and dominant Western thinking in the post-war period. It also led the way in its engagement with vernacular building, ecology and climate.

Today, this mixed media archive is largely forgotten, underused and, as a result, under threat. Our collaboration is aimed at preserving this archive of over 15,000 files and restoring it as an important, forward looking voice how different cultures are experiencing climate change today.

Mattie Jane Purinton (UCD School of Biology and Environmental Science)

How to conserve wide-ranging vultures?

Bio: Mattie is a PhD candidate studying the foraging behavior of African vultures to better inform conservation efforts for their protection. She is collaborating with other conservationists to collect and analyze the GPS movement tracks of populations of vultures in different regions, identifying any effects from increasing human activity on their foraging decisions. Additionally, she is advancing methods of quantifying area importance to vulture populations in a way more easily conveyed to the public and policy makers. When she's not working at her desk, she enjoys taking photos of Irish wildlife, especially the birds (despite the lack of vultures in Ireland)!

Presentation: Vultures have huge ranges owing to their soaring flight which they use to seek out the carcasses that make up their diet. This aspect of their biology makes them notoriously difficult to conserve which is of utmost concern given the multiple challenges they face across Africa. Collisions, land use change and poisoning have exacted a huge toll on vulture populations pushing them to the edge of extinction. Our research attempts to use vulture movement ecology to give some insights into the areas they use to focus our efforts in conserving these magnificent birds.

Dr Dara Stanley (UCD School of Agriculture and Food Science)

Land use change in Sub-Saharan Africa: implications for beneficial insects

Bio: Dara is an Associate Professor in Applied Entomology in the School of Agriculture and Food Science. As an ecologist, she is interested in insects and their interactions with plants with a focus on pollinators. Her research spans from pollinator ecology and behaviour, to understanding impacts of threats and interactions with agriculture, with the ultimate goal of providing scientific evidence to guide land management, agricultural production and biodiversity conservation. She has worked on projects in Ghana, Zambia and South Africa on these topics, and how they relate to rural livelihoods and sustainability. She is also interested in science communication and public engagement.

Presentation: In many parts of Africa, extensive forest ecosystems are being modified due to changing land use. Using case studies in Ghana and Zambia, we explored how land use change from primary forest to agriculture was impacting pollinating insects who provide important ecosystem services to both land use types. We found mixed responses of different pollinator groups to land use change suggesting that conservation actions need to be developed with this response diversity in mind. Our findings have implications for the conservation of natural forest ecosystems, and the provision of ecosystem services to natural and agricultural systems.

Dr Marta Talevi (UCD School of Economics)**Solar-powered irrigation systems and resilience to climate change in Uganda, Ethiopia and Ghana**

Bio: Dr. Marta Talevi is Assistant Professor of Environmental Economics at UCD School of Economics. Marta is an applied microeconomist with research interests at the intersection of environment, energy, and development. After a PhD at the London School of Economics (LSE), Marta was a Postdoctoral Associate at Yale School of the Environment (YSE) and Assistant Professor at IVM, Vrije Universiteit Amsterdam. Research interests: policy/program/project impact evaluations; energy access (electrification and clean cooking); solar-powered irrigation and agricultural adaptation to climate change; forced displacement; gendered dimensions of energy use and pro-environmental behaviour; uptake of pro-environmental technologies and behavioural practices.

Presentation: Climate change and unpredictable weather patterns are a concern for developing countries where a substantial share of the population relies on rain-fed agriculture. Electrification has the potential to improve resilience in these contexts but energy access and affordability remain challenging for rural communities. We aim to explore the viability of solar-powered irrigation systems (SPIS) as a means to improve agricultural resilience to climate change and to make solar mini-grid economically viable and financially sustainable for rural communities. Data on existing and planned SPIS projects in Uganda, Ethiopia and Ghana will be collected to map the current situation and assess post-construction performances and functionality. The project will then apply a viability analysis framework that takes account of local context to conduct economic net benefit calculations for farmers in selected sites in each country to understand the potential for scaling the technology and the distribution of costs and benefits over time compared to alternatives such as diesel systems. The approach, already developed by team members for Ethiopia, will be extended to Uganda and Ghana to provide a synthesis framework for other African settings.

Dr Andrew Tighe (UCD School of Biology and Environmental Science)**Counting invisible elephants; Using eDNA to track wild elephants in Kenya**

Bio: For the past three years, I have been conducting a project in Arabuko Sokoke forest in Kenya to develop non-invasive DNA sampling protocols for the elephant population living in the forest. Results suggest these elephants have been isolated from the wider population by human farmland encroachment. The project is a collaboration between UCD and Pwani University, where I am an adjunct staff member and supervise (and fund) Kenyan masters students. We also work closely with local agencies such as Kenya Wildlife Service and the Wildlife Research and Training Institute, as well as a number of local NGOs and stakeholders.

Presentation: For the past three years I have been leading a research project in Arabuko Sokoke forest developing DNA techniques for conservation. This project is a collaboration between UCD (where I am a Research Fellow) and Pwani University in Kenya (where I am an adjunct). My project has involved a large amount of local stakeholders, and the project funding was also used to cover the costs of a Kenyan student to undertake an MSc under my supervision. Our project involves developing a SNP based approach to provide an estimate of the number of elephants living in Arabuko Sokoke Forest, as the dense nature of the forest prevents traditional counting methods.

Posters (alphabetical by surname)

Dr Miriam Casey (UCD School of Veterinary Medicine)**Waves of endemic foot-and-mouth disease in eastern Africa suggest feasibility of proactive vaccination approaches (paper published in 2018)**

Bio: Miriam Casey is a veterinarian interested in infectious disease epidemiology. After several years in practice, MSc's in pathology and comparative medicine, and a PhD about the epidemiology of foot-and-mouth disease at the wildlife-livestock interface in northern Tanzania, she worked in the National Disease Control Centre of the Irish state veterinary service and UN-FAO. She returned to academia in 2019, focussing on SARS-CoV2 and bovine tuberculosis transmission, and developing specialist skills in dynamic transmission of infection modelling. She is currently an Ad Astra fellow and keen to explore whether she can contribute quantitative skills in infectious disease epidemiology to African projects.

Poster: Foot-and-mouth disease is a highly contagious livestock disease widespread in Africa that contributes substantially to poverty. Yet its control is not prioritized: standard vaccination regimens are too costly, its impact on the poorest is underestimated, and its epidemiology is too weakly understood. Our analysis in Tanzania shows that the disease is of high concern, reduces household budgets for human health, and has major impacts on milk production and draft power for crop production. Foot-and-mouth disease outbreaks are driven by livestock-related factors. Contrary to findings in southern Africa, we find no evidence of frequent infection from wildlife, with outbreaks in cattle sweeping slowly across the region through a sequence of dominant serotypes. This regularity suggests that timely identification of the epidemic serotype could allow proactive vaccination ahead of waves of infection, mitigating impacts, and we identify potential vaccine candidates. This strategy is more realistic than wildlife-livestock separation or conventional vaccination approaches.

Dr Soumyabrata Dev (UCD School of Computer Science)**Bridging Data Gaps in Urban Air Quality Monitoring Using ML and Satellite Data in Uganda**

Bio: Dr Soumyabrata Dev is an Assistant Professor at the School of Computer Science, University College Dublin, specializing in AI-driven remote sensing and environmental monitoring. His research focuses on leveraging satellite data and machine learning to address critical challenges in climate science and sustainable development, with a particular emphasis on data-scarce regions such as Africa. As a UCD Climate Fellow (2024–2026), he actively engages in interdisciplinary collaborations to foster impactful research and public outreach. Dr Dev has published extensively in leading journals and regularly contributes to initiatives that bridge the gap between advanced data science and real-world environmental applications.

Poster: Air quality data remains sparse in many African cities due to the high costs of reference-grade monitoring. This study evaluates the use of machine learning to estimate fine particulate matter (PM_{2.5}) concentrations in Kampala, Uganda, by integrating satellite-derived aerosol optical depth (AOD) with low-cost and reference-grade sensor data. Using Multivariate Linear Regression, Random Forest, and Multi-Layer Perceptron models, we find that Random Forest consistently performs best, with an R^2 of 0.72 and RMSE of 7.72 $\mu\text{g}/\text{m}^3$. Notably, models trained on combined datasets outperform those using single-source data. Low-cost sensor data alone, when used as ground truth, show promising results ($R^2 = 0.59$), indicating their potential in data-scarce environments. This work highlights the viability of combining

satellite data and machine learning to enhance air quality monitoring in resource-constrained urban settings.

Dr Diretnan Dikwal-Bot (UCD School of English, Drama and Film) and Thompson Kwarkye (UCD School of Information and Communication Studies)

Material Realities and Technological Futures: Power, Extraction and Resistance in African AI Ecologies

See above for bios and project description

Dr Caitriona Dowd (UCD School of Politics and International Relations)

1. Network on Conflict-affected Smallholder Agriculture: Mapping Evidence and Gaps

Bio: Caitriona Dowd is Assistant Professor and Ad Astra Fellow in UCD's School of Politics and International Relations. Her research focuses on the role of conflict in humanitarian crises and food insecurity; civilian targeting; and quantitative methods for violence monitoring. Caitriona co-leads a Research Ireland-funded COALESCE project on the gendered dimensions of hunger in peacebuilding, with collaborators at the Centre for the Study of Violence and Reconciliation, South Africa; and a Research Ireland-funded New Foundations project on the impact of violent conflict on smallholder agriculture, with partners at The Innovation Lab for Policy Leadership in Agriculture and Food Security, University of Ibadan, Nigeria.

Poster: A worldwide food crisis is severely undermining global health, human security, and progress towards SDG 2. While it is widely recognised that conflict drives hunger, we also know not all conflicts produce the same depth or breadth of food insecurity. It remains unclear how specific conflict tactics and dynamics, and their intersections with specific aspects of agriculture, including land use, cropping and household labour decisions, lead to different food security outcomes. The Research Ireland- and Irish Aid-funded Network on Conflict-Affected Agriculture in Nigeria brings together experts in conflict studies and smallholder agriculture to explore knowledge gaps, map available evidence and identify priority areas to improve agricultural resilience and food security in conflict, focused on Nigeria. The project is co-led by Dr Caitriona Dowd at SPIRe in UCD, and Professor Adebenga Adekoya of The Innovation Lab for Policy Leadership in Agriculture and Food Security (PiLAF) at the University of Ibadan, Nigeria.

2. Comparing the Role of Social Capital in Response to Conflict- and Climate-Driven Crises in the Horn of Africa

The Role of Social Capital in Urban Fragile and Conflict-Affected Contexts (SoCap) is a recently launched three-year Irish Aid-funded research project aiming to generate new evidence analysing the interactions between social capital, resilience, the urban environment, and conflict and fragility. One work strand aims to understand the interactions between social capital and resilience among displaced populations in Banaadir, Somalia and Borama, Somaliland. The former is host to populations forcibly displaced by a combination of conflict- and climate-related factors; while the latter has witnessed large-scale displacements largely due to climate hazards. As such, the study intends to contribute to humanitarian response and policy addressing, mitigating and supporting recovery from conflict- and climate-related emergencies at the interface of the humanitarian-development-peace nexus. At the same

time, it aims to deepen scholarly understanding of the ways crises affect populations, and the resources on which individuals, households and communities draw to adapt and recover.

Dr Rogers Hansine (UCD School of Geography)

SYNERGI (Socially Inclusive Edible Urban Green Infrastructures)

Bio: Lecturer and Researcher in the Geography Department of the Eduardo Mondlane University, Mozambique. Post-doctoral researcher at the School of Geography, University College Dublin, under the research project SYNERGI (Socially INclusive Edible URban Green Infrastructure). In this project we are looking at the Edible Urban Green Infrastructures (UGI) in two Mozambican cities, namely Maputo and Xai-Xai to examine the potential for co-creating socially inclusive (UGI) as a strategy to support food security and climate resilience as well as social inclusion. His research interest includes urban food security; urbanization and climate change and geography of population in sub-Saharan Africa.

Poster: SYNERGI is an interdisciplinary project with urban communities in Mozambique. Our aim is to explore the potential for co-creating socially-inclusive 'edible urban green infrastructure' (EUGI) to support food security and climate resilience with socio-economically disadvantaged communities in a country highly vulnerable to climate risks. In light of a policy vacuum and the precarity of UA land due to market-driven encroachment, we are working with communities through urban school gardens to realise our objectives. Engaging with communities through these spaces has facilitated greater awareness, interest and experience with sustainable forms of UA, like agro-ecology. Moreover, it is helping to strengthen educational programs aimed at disseminating to young people sustainable and inclusive local supplementary alternatives for urban food production. SYNERGI is a collaboration between UCD and Eduardo Mondlane University, Mozambique, and is funded by Research Ireland in partnership with Irish Aid.

Lilian Kamowa (UCD School of Nursing Midwifery and Health Systems)

Collaboration on Linkages of community-based mechanisms for resilient nutrition-sensitive climate-smart approaches for women

Bio: Lilian Kamowa is a strategic international development professional with over 10 years of global health experience in maternal, child, and adolescent health and nutrition across multiple sectors, including agriculture, gender, and education. Currently a PhD candidate at University College Dublin, her research focuses on health and the climate change-nutrition nexus in low- and middle-income countries (Africa and the Pacific). She has worked effectively with various stakeholders, including donor agencies, government ministries, UN agencies, and NGOs. Lilian advocates for governance, partnership cultivation, and stewardship to drive quality improvements and sustainable program impact.

Poster: Community platforms, which engage local members in designing and implementing activities at the community level, are commonly used in the health, nutrition, and agriculture sectors in Low- and Middle-Income countries. They are crucial in addressing social and cultural issues, but must have documented evidence of their operational connections to climate change. In this era of heightened climate risks, strengthening these linkages is essential for improving nutrition, health and livelihood outcomes, particularly for women and girls, who bear the most ramifications of climate change. This study investigates the integration of Nutrition-Sensitive Climate-Smart Approaches (NSCSAs) within community platforms in Uganda to enhance livelihoods, particularly for women, amidst climate challenges. The

approaches include promoting drought-resistant seed varieties, improving post-harvest handling, and managing natural resources. The research explores the operational linkages among community platforms, their impact on women's participation, and their role in addressing gender inequalities. Furthermore, the study aspires to enhance multisectoral coordination by defining climate-smart, nutrition-sensitive interventions and mapping community platform connections and strategies for reducing gender inequalities in the platforms. The study is nested in World Vision's Nature-based Opportunities Underpinning Resilient and Sustainable Households (NOURISH) Programme, which focuses on using nature to create strong and sustainable households and is further supervised externally by Makerere University.

**Ronja Walther (UCD School of Architecture, Planning and Environmental Policy)
Gendered Impacts and Adaptation Strategies to Climate Change in Urban Informal Settlements: A Case Study of Dar es Salaam, Tanzania**

Bio: Ronja Walther is a researcher with a background in climate adaptation and mitigation. After completing an MSc in Development Practice, Ronja worked as a research assistant on the SFI and Irish Aid sponsored WECOAdapt project with Dr Liana Ricci, contributing to a gender-inclusive toolkit for co-designing urban climate change adaptation plans. Currently, Ronja is pursuing a second MSc in Geospatial Data Analysis at University College Dublin, building expertise in spatial analysis, remote sensing, and data science to better understand environmental change and support evidence-based decision-making.

Poster: We compare the impacts of climate change, land and water management practices, livelihood activities, and adaptation strategies of men and women in Dar es Salaam, Tanzania. Using a household survey and focus groups in three informal settlements, our findings reveal that both men and women identify floods and droughts as the most severe environmental issues. However, women are disproportionately burdened by flooding's immediate effects, such as dealing with insects, snakes, and damaged assets, which increases their household responsibilities. Female-headed, low-income households, often residing closer to rivers and experiencing frequent flooding, lack the assets to cope, compelling them to borrow from high-interest lenders with short repayment periods, which can lead to gender-based violence. Conversely, women are more likely to implement adaptation measures like raised foundation plinths and to leverage support structures like savings groups to mitigate climate impacts.

Session 1 chairs:

Dr Diretnan Dikwal-Bot (UCD School of English, Drama and Film) - see bio above

Dr Tensay Meles (UCD School of Architecture, Planning and Environmental Policy)

Bio: Tensay Meles is an Assistant Professor of Environmental Economics & Policy at UCD. He holds a PhD in Economics from University of Gothenburg (Sweden), MPhil from University of Oslo (Norway), and BA from Mekelle University (Ethiopia). Before joining UCD, Tensay worked at the ESRI (Ireland) and Mekelle University. His research focuses on electricity markets and tariffs, environmental valuation, and renewable energy adoption. He has extensive research experience in Africa, particularly in Tanzania and Ethiopia, with work on electricity pricing and reliability, as well as in designing and implementing household and



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firm surveys. His work has been published in several well-regarded journals, such as Energy Economics, Environmental and Resource Economics, and Energy Policy.

Session 2: Funding for sustainability research collaborations in Africa - Research Ireland / Irish Aid projects

This session will provide funder, researcher and community perspectives on Research Ireland / Irish Aid funding for collaborative, transdisciplinary projects, including SDG Challenge and COALESCE calls.

Dr Maysoun Mustafa, Scientific Programme Manager, Challenge Research, Research Ireland

Maysoun is a Scientific Programme Manager at Taighde Eireann-Research Ireland where she leads on Challenge-based funding programmes thematically aligned with food and environmental sustainability. She previously led on the management of significant exchequer investment in cohort-based PhD training programmes within the Republic of Ireland. Maysoun is a plant biologist with expertise in fostering inclusive research to enhance sustainable agricultural practices. Prior to joining Research Ireland (formerly Science Foundation Ireland), she coordinated research and capacity-building programmes for enhancing food security and smallholder livelihoods across Southeast Asia and sub-Saharan Africa, including managing a Doctoral Training Programme on agricultural diversification. Maysoun holds a PhD in Biosciences from the University of Nottingham, is a certified Project Management Professional, a Fellow of the Higher Education Academy (Advance HE) and a Fellow of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES).

WECOAdapt - Water management through ECOhydrology for climate change ADAPTation in Dar-es-Salaam Tanzania (SDG Challenge funded)

Dr Liana Ricci, UCD School of Architecture, Planning and Environmental Policy

Liana is Assistant Professor of Environmental Policy at the School of Architecture, Planning and Environmental Policy. Her research interests concern the interface of human relations with the natural and built environments with a focus on urban and environmental planning, climate change adaptation and alternative forms of infrastructure and service provision. Between 2010 and 2015 Liana developed independent and collaborative research projects on Adaptation to climate change in coastal Dar es Salaam: methodologies for mainstreaming adaptation into local plans for urban development and environmental management (2012-2014), on Methodology for analysis and design of local plans of action for adaptation to climate change (2010-2012) and on water infrastructure resilience in coastal Dar es Salaam in Tanzania (2015-2016). She led the WECOAdapt Water management through ECOhydrology for climate change ADAPTation in Dar-es-Salaam, Tanzania.

Professor Gabriel R, Kassenga, Ardhi University, Tanzania

Prof. Gabriel R. Kassenga is a Professor in Environmental Engineering at Ardhi University. His major fields of specialisation are ecological engineering, climate change and adaptation and disaster risk reduction. He has conducted several research projects and conducted consultancy assignments in the same areas of specialisation. He has headed a number of



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projects including preparation of Water Resources Management Strategic Interventions and Action Plan for Climate Change Adaptation for Tanzania; EU funded research project on Adapting to Climate Change in Coastal Dar es Salaam, Tanzania and, a USAID funded Regional Disaster Risk and Vulnerability Reduction Capacity Development Project. He has also been involved as a researcher in a European Union funded research projects on Climate Change and Urban Vulnerability in Africa and, Water Resilient Green Cities for Africa project.

Dr Tim Ndezi, Centre for Community Initiatives (CCI), Tanzania

Dr. Tim Ndezi is founding Director of the Centre for Community Initiatives (CCI) Organisation based in Tanzania. He holds a PhD from the UK University on water and sanitation management and has vast experience in integrating Practice and Research work in addressing urban challenges on water, sanitation, affordable housing and Climate Change. His Research focus has been on Urban Poverty; Urban Risk and Resilience; Urban water and Sanitation; and Integration of Nature Based Solutions. In all these Research mainstreaming of gender and co-production has been a core in ensuring all actors are involved in the whole process to achieve sustainability.

Dr Given Mhina, Ardhi University, Tanzania

Dr. Mhina is an Environmental Engineer specializing in environmental engineering, environmental management, urban ecosystem restoration, and disaster management. He is a Senior Lecturer and Head of the Environmental Management Department at Ardhi University, Tanzania. Mhina has led and contributed to various research projects on water management and climate change, including initiatives funded by DANIDA, USAID, and the EU. He has published journal articles, conference papers, and consultancy reports on environmental issues. Mhina is a registered Environmental Expert with the National Environmental Management Council, a member of TAEES, and a practicing environmental engineer.

SANKOFA (SDG Challenge funded)

Dr Adwoa Serwaa Ofori, UCD School of Agriculture and Food Science

Adwoa Serwaa Ofori is a postdoctoral research fellow in the School of Agriculture and Food Science, University College Dublin. She previously worked on the Citizen Rural project which investigated how rural populations can harness digital technologies to enhance participative democracy in the planning and policy formulation for local sustainable development. She is currently the Principal Investigator on a Research Ireland funded SDG Challenge, SANKOFA, which is looking at integrating climate smart agricultural technologies with indigenous knowledge for sustainable food production in Malawi.

Professor Miriam Kalanda-Joshua, University of Malawi

Miriam Dalitso Kalanda Joshua is an Associate Professor of Geography and Head of Geography, Earth Sciences and Environment Department, in the University of Malawi. She has successfully participated in the planning and implementation of over 10 multidisciplinary research activities that have informed policies and interventions at various levels for both national and international organisations with special interests in environmental management,

livelihoods, food security, agriculture and climate change. She is also a member of African Group of Negotiators Expert Support (AGNES), which provides agricultural related expert support to African negotiators in the UNFCCC negotiations. She is the Malawi lead on the SANKOFA project.

Chair:**Caitriona Dowd, UCD School of Politics and International Relations**

Caitriona Dowd is Assistant Professor and Ad Astra Fellow in UCD's School of Politics and International Relations. Her research focuses on the role of conflict in humanitarian crises and food insecurity; civilian targeting; and quantitative methods for violence monitoring. Caitriona co-leads a Research Ireland-funded COALESCE project on the gendered dimensions of hunger in peacebuilding, with collaborators at the Centre for the Study of Violence and Reconciliation, South Africa; and a Research Ireland-funded New Foundations project on the impact of violent conflict on smallholder agriculture, with partners at The Innovation Lab for Policy Leadership in Agriculture and Food Security, University of Ibadan, Nigeria.

Session 3: Africa, Ireland and UCD: Working together to address global sustainability challenges**Prof Kate Robson Brown, UCD Vice President for Research, Impact and Innovation**

Professor Kate Robson Brown is Vice-President for Research, Innovation and Impact, at University College Dublin, Ireland. In this role she leads both UCDResearch (discovery and applied research) and NovaUCD (enterprise and commercial activities), and is the University AI Champion. She is Professor of Engineering Mathematics and Biological Anthropology. She is a member of the Ireland National Advisory Forum for Space Research, Honorary Fellow of the Alan Turing Institute for Data Science and AI, President of the European Low Gravity Research Association, co-chair of the UK Space Academic Network, and a Visiting Professor in Data Science at Strathmore University in Nairobi. Her previous role was Director of the Jean Golding Institute for Data Science and AI at the University of Bristol. Her research explores the computational modelling of the microstructure and performance of living tissues and manufactured materials and their response to changing and extreme environments, including space. She has a collaborative ESA and UKSA funded experiment currently in orbit on the ISS.

Prof Pat Gibbons, Director Centre for Humanitarian Action, UCD, Academic Lead Africa Strategy

Pat Gibbons PhD is Director of the UCD Centre for Humanitarian Action (CHA). Pat worked for more than a decade on both humanitarian and development programmes, in Africa and Ireland, before returning to UCD in 1997 to establish the Master's Programme in Humanitarian Action under the auspices of the Network on Humanitarian Action (NOHA). His experiences spans a range of aid sectors including public, private, and NGO sector as well as academia. He served as President of NOHA between 2007 and 2014. Pat is the academic lead for UCD's Africa Engagement Strategy.

Dr Aklilu Fikresilassie Kabiso, Regional Director of Cities (Africa), World Resources Institute at the World Resources Institute (WRI)

Aklilu Fikresilassie (PhD) is the Director of Thriving Resilient Cities at WRI Africa and Representative of WRI in Ethiopia. With over 19 years of experience in urban development, environmental policy, and program management, he has held leadership roles in both governmental and international organizations. He previously worked with UN-Habitat in Ethiopia, UNDP in South Sudan, as a state bureau head overseeing regional state economic cooperation, and as a city manager. A researcher on urbanisation and environmental issues, Dr. Aklilu holds a PhD in Environmental Policy and Urbanisation and is an Adjunct Associate Professor at UCD Environmental Policy.

Kyle O'Sullivan, Director of the Africa Unit at the Irish Department of Foreign Affairs and Trade

Kyle O'Sullivan is a senior Irish diplomat who has served as the Irish ambassador to Nigeria (2007-2010), as well as to Israel and to Indonesia. An alumnus of UCD, he also served in Hong Kong, Brussels, Tehran and Beijing. As Africa Director, Kyle works with Irish embassies and partners to improve relations between Ireland and African states, and to deliver Ireland development, political and development goals across the continent. Kyle has recently become a member of UCD's new Africa Advisory Group, which operates under the aegis of UCD's Office of Global Engagement.

Dr Ines Raimundo, Eduardo Mondlane University

Inês Raimundo is Associate Professor of Human Geography at Eduardo Mondlane University, Mozambique. She specialises in migration in Mozambique, including international and transborder dynamics, internal rural-urban mobilities, and forced displacements from environmental disasters. She is currently co-PI of the Research Ireland Coalesce project, SYNERGI: Mozambique (Socially Inclusive Edible Urban Green Infrastructure) together with Dr Christine Bonnin, UCD School of Geography. Inês is a leading policy expert on the interlinkages of food insecurity, poverty, migration policy, and informality in Mozambique. She has published extensively in Mozambique and internationally in these areas, where she has been involved in research over the last 20 years.

Chaired by Tom Arnold, Chair of the Ireland Africa Rural Development Committee

Tom Arnold currently serves as Chair of the Ireland Africa Rural Development Committee (IARDC), Board member of the Global FoodBanking Network (GFN); member, Global Panel on Agriculture and Food Systems for Nutrition (GloPan); board member, Malabo Montpellier Panel; board member, John and Pat Hume Foundation; board member, Glencree Centre for Peace and Reconciliation. His previous roles include serving as Ireland's Special Envoy for Food Systems; Chair, Food Vision 2030 agri-food strategy group; Coordinator, Scaling Up Nutrition (SUN) Movement; Director General, Institute for International and European Affairs (IIEA); Chair, Irish Constitutional Convention; CEO, Concern Worldwide; Chair, OECD Committee for Agriculture; Chief Economist and Assistant Secretary General, Department of Agriculture, Food and the Marine (DAFM); Administrator, European Commission. Tom is also a member of UCD's new Africa Advisory Group, which operates under the aegis of UCD's Office of Global Engagement.

Closing Remarks: Professor Dolores O'Riordan, UCD Global Engagement



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Professor Dolores O'Riordan is the Vice-President for Global Engagement. In this role she is responsible for the development and implementation of UCD's Global Engagement Strategy. She is a Full Professor of Food Science with a research focus on the physico-chemical properties of food ingredients and creating food structures that enhance health benefits. Her research programme has active links with colleagues in Europe, the US, New Zealand and China. She is UCD's lead investigator in a Private-Public Research Partnership, Food for Health Ireland (FHI) and has been the recipient of academic and innovation awards for her contribution to food research. She has supervised 48 postgraduate students to completion and has over 100 peer-reviewed publications. Prior to joining UCD she worked in a research and development capacity with a multinational food company servicing global markets. She is a member of a number of national and European boards.