

RESEARCH TECHNICAL ASSISTANCE CENTER

RTAC VIRTUAL CONFERENCE

PUBLIC INTEREST TECHNOLOGY FOR INTERNATIONAL DEVELOPMENT

SPEAKERS



Abu Shonchoy

Dr. Shonchoy is Associate Professor of Economics at Florida International University in the United States. His presentation, “Cash Transfer, Loss Framing, and SMS Nudges: Experimental Evidence on Alternative Cost-Effective Interventions to Improve School Attendance,” shows how complementing standard conditional cash transfers (CCTs) implementation with short message services (SMS) information and loss framing in CCTs can improve the cost-effectiveness of school attendance.



Alexa Lamm

(Presenting alongside Fallys Masambuka-Kanchewa)

Dr. Lamm is Associate Professor of Agricultural Leadership, Education and Communication at The University of Georgia in the United States. The presentation from Dr. Lamm and her collaborator, Dr. Masambuka-Kanchewa, “The Role of Knowledge Management Systems in Implementing Agriculture Interventions in Southern African Development Community Member States,” provides insights on the status of data capture and knowledge management related to improving implementation of agricultural interventions in selected South African Development community member states. This information is particularly relevant as technological advancements in information and communication make tools and technologies for knowledge management increasingly available.

Ali Ammouri



Dr. Ammouri is Assistant Professor of Practice and Engineering Programs Coordinator of the Industrial and Mechanical Engineering department at the Lebanese American University in Lebanon. His presentation, “Gamification in Higher Education Engineering Courses,” describes a new platform introduced to support online course delivery in response to teaching disruptions caused by the COVID-19 pandemic. The platform incorporates multiple game design elements and focuses on improving students’ skills by removing the “failure to fail” barrier from the teaching process. Engineering students exposed to this platform reported loving this learning environment and outperformed students instructed in the conventional way.

Aubra Anthony



Dr. Anthony leads the Strategy & Research team in the Technology Division of USAID’s Innovation, Technology, and Research Hub. Her team investigates the social, political, and ethical dimensions accompanying the introduction of digital technologies in developing economies. Her portfolio has spanned Machine Learning and Artificial Intelligence, Digital Identity, Open Data, the Data Revolution, the Global Partnership for Sustainable Development Data, and the development of USAID’s first-ever Digital Strategy. Dr. Anthony received her Ph.D. from the University of Texas at Austin and worked in academic research in physics and cosmology before turning to technology policy as a Research Affiliate with the C.U. Boulder Center for Science and Technology Policy Research. She was a Hatfield Scholar with the Center for Democracy and Technology and an AAAS Science & Technology Policy Fellow with USAID’s Center for Data, Analysis & Research before joining ITR/T’s predecessor, the Center for Digital Development, in 2015.



Cath Croxton

(Presenting alongside Sara Abou Ibrahim)

Ms. Croxton is Director of SHARP Digital, a nonprofit organization building literacy skills in digital technology in South Africa. The presentation from Ms. Croxton and her collaborator, Ms. Ibrahim, “SHARP Digital: Bridging the Digital Gender Divide in South Africa”, focuses on the importance of the SHARP program in influencing society’s mindset toward women’s use of and access to technology. Her planned research in South Africa will build on evidence showing the importance of training people on digital basics and tackling the digital gender divide to support development.



Diana Nandagire Ntamu

(Presenting alongside Shakilah Nagujja and Godwin Kwemarira)

Dr. Ntamu is Senior Lecturer and Director of the Entrepreneurship, Innovation and Incubation Centre at Makerere University Business School in Uganda. The presentation from Dr. Ntamu and her collaborators, Ms. Shakila Nagujja and Dr. Kwemarira, “Online Learning: Experiences of Graduate Students at Makerere University Business School,” examines online learning in the context of higher education institutions. The study uses both quantitative and qualitative paradigms to examine online learning at institutions of higher learning.



Ekam Akpakpan

(Presenting alongside Evans Egwim)

Dr. Akpakpan is a Lecturer and Researcher in Biological Sciences at Obong University in Nigeria. The presentation from Dr. Akpakpan and her collaborator Dr. Egwim, “Antioxidant Activities of Probiotics Isolated from Selected Nigerian Fermented Foods for Yoghurt Production,” presents results on the use of probiotics found in common foods (cow’s milk, sheep’s milk, lafun, and garri water) for yogurt production. Peace Nebechukwu and Oluwatosin Ojo at Anchor University in Lagos and Stephen Onifade at Jesil Pharmaceutical Industries Ltd. in Minna also worked on the study.



Evans Egwim

(Presenting alongside Ekam Akpakpan)

Dr. Egwim is Director of the Center for Genetic Engineering and Biotechnology at the Federal University of Technology Minna in Nigeria. The presentation from Dr. Egwim and his collaborator, Dr. Akpakpan, “Antioxidant Activities of Probiotics Isolated from Selected Nigerian Fermented Foods for Yoghurt Production,” provides results on the use of probiotics found in common foods (cow’s milk, sheep’s milk, lafun, and garri water) for yogurt production. The study was done in collaboration with Peace Nebechukwu and Oluwatosin Ojo at Anchor University in Lagos and Stephen Onifade at Jesil Pharmaceutical Industries Ltd. in Minna.



Faheem Hussain

Dr. Hussain is Clinical Assistant Professor in the School for the Future of Innovation in Society at Arizona State University in the United States. His research interests include Digital Solutions for Refugees, Information and Communication Technology for Sustainable Development, Digital Afterlife, Social Media, Digital Rights, Gender Empowerment using STEM, and Sustainable Development Goals. Dr. Hussain’s presentation, “ICTS, Education, Gender and Displacement,” will highlight the role of ICTS to support refugees’ access to education.

Dr. Hussain is cohosting the virtual conference together with Dr. Parmentier.



Fallys Masambuka-Kanchewa

(Presenting alongside Alexa Lamm)

Dr. Masambuka-Kanchewa is a Post-Doctoral Research Associate at the University of Georgia in the United States. The presentation from Dr. Masambuka-Kanchewa and her collaborator, Dr. Lamm, “The Role of Knowledge Management Systems in Implementing Agriculture Interventions in Southern African Development Community Member States,” provides insights on the status of data capture and knowledge management related to improving implementation of agricultural interventions in selected South African Development community member states. This information is particularly relevant as technological advancements in information and communication make tools and technologies for knowledge management increasingly available.



Godwin Kwemarira

(Presenting with Diana Nandagire Muwanga and Waswa Balunya)

(Presenting with Diana Nandagire Ntamu and Shakilah Nagujja)

Dr. Kwemarira Lecturer at the Uganda Management Institute in Uganda. The presentation from Dr. Kwemarira and his collaborators, Dr. Ntamu and Dr. Balunya, “Public Interest Lost: The Ugandan Education Sector During Covid-19,” examines how a loss of public interest in the Ugandan educational sector during the COVID-19 pandemic led to a failure by government institutions to fulfill their fundamental mission of serving the public.



Jane Payumo

(Presenting alongside Julia Bello-Bravo)

Dr. Payumo is the Head of the Research Evaluation and Data Analysis Team at Michigan State University in the United States. The presentation from Dr. Payumo and her collaborator, Dr. Bello-Bravo, “Demonstrating the Nexus Effects of Online Videos, Research Outputs, and Investments to Knowledge Absorption Using Linguistically Adapted Animations,” examines the global impact of educational videos on the social media platform YouTube. Their analysis tests the relationship of one YouTube educational channel—Scientific Animations Without Borders (SAWBO)—and global innovation metrics.



Joseph Owusu

Owusu is a Lecturer in the Computer and Electrical Engineering Department at the University of Energy and Natural Resources in Ghana. His presentation, “Monitoring Climate Conditions Effect on Precision Agricultural through the Use of Secure Sensor Network to Ensure Early Control Measures and Precise Decision Taking,” presents a model of secure wireless sensor networks for detecting the needs of plants, their growth, and signs of early disease, supporting farm management and decision-making.

Julia Bello-Bravo

(Presenting alongside Jane Payumo)



Dr. Bello-Bravo is an Assistant Professor at the School of Food Science and Human Nutrition at Michigan State University in the United States. The presentation from Dr. Bello-Bravo and her collaborator, Dr. Payumo, “Demonstrating the Nexus Effects of Online Videos, Research Outputs, and Investments to Knowledge Absorption Using Linguistically Adapted Animations,” examines the global impact of educational videos on the social media platform YouTube. Their analysis tests the relationship of one YouTube educational channel—Scientific Animations Without Borders (SAWBO)—and global innovation metrics.

Jumoke I. Oladele

Dr. Oladele is a Postdoctoral Researcher in the Department of Science and Technology Education at the University of Johannesburg in South Africa. Her presentation, “A Feasibility Study on Computer Adaptive Testing Performance for Postgraduate Certification in Education Assessments,” describes the results of simulated Computer Adaptive Testing for Postgraduate Certification in Education Assessments and its adaptation for educational assessment to complement online teaching and learning. The study bolsters the utility of artificial intelligence in educational assessment to ensure the production of qualified teachers, leading sustainable developments in Africa.



Katina Michael

Dr. Michael is a Professor at the School for the Future of Innovation in Society and the School of Computing, Informatics and Decisions Systems Engineering at Arizona State University in the United States. Her presentation, “Public Interest Technology in the Context of Global Development,” demonstrates how public interest technologies take on an infrastructural emphasis preoccupied by the creation of shared and open “rights-of-way,” ensuring that the basic needs of the communities, such as clean drinking water, better sanitation, and communication services, are met.





Madeleine Bailey

(presenting alongside Dr. Vanessa Bouche)

Ms. Bailey (J.D.) is an associate attorney at Husch Blackwell and a Research Coordinator for [Humantraffickingdata.org](https://www.humantraffickingdata.org). The presentation by Ms. Bailey and her collaborator, Dr. Bouche, “Mining Human Trafficking Prosecutions Data: Insights from Structuring the Unstructured,” illuminates the benefits, challenges, limitations, and insights involved in the creation of [HumanTraffickingData.org](https://www.humantraffickingdata.org). It also describes promising avenues to leverage web scraping, artificial intelligence, and machine learning (including optical character recognition and natural language processing) to improve human trafficking case collection, coding efficiencies, and data quality.



Mary Jane Parmentier

Dr. Parmentier is a Clinical Associate Professor at the School for the Future of Innovation and Society at Arizona State University in the United States. Her presentation, “Democracy, Human Rights, and Public Interest Technology,” shows how information and communication technologies can help address and improve human rights and political participation but can also be used as platforms for repression and misinformation. Relationships of power and control demand reflection on who is the public and in whose interest technology is deployed.

Dr. Parmentier will cohost the virtual conference together with Dr. Hussain.



Muhammad Subhan Qureshi

(Presenting alongside Zeeshan Saeed Shah)

Dr. Qureshi is President of the Dairy Science Park at the University of Agriculture Peshawar in Pakistan. The presentation by Dr. Qureshi and his collaborator, Mr. Saeed Shah, “Removing Policy Barriers Across Food Value Chain through Public Interest Technologies,” examines how the lack of good governance, infrastructure, and friendly regulations restrict entrepreneurship and damage the interests of weaker stakeholders across the food value chain in Pakistan. The Khyber Pakhtunkhwa Livestock Action Plan aims to create an enabling environment for the growth of emerging entrepreneurs through a coordinated approach and by promoting value chain development and innovations.



Netra Chhetri

Dr. Chhetri is an Associate Professor at the School for the Future of Innovation in Society at Arizona State University in the United States. His presentation, “Grassroots Innovation: Source of New Ideas in Agricultural Development,” provides insights on three specific areas of grassroots innovation: community seedbanks, solar-powered irrigation systems for climatically challenged areas, and biochar as a soil amendment for marginal land. These innovations are an integral part of rural livelihoods and contribute to the food security of rural populations.



Sam de Silva

Mr. De Silva’s is Engagement Advisor at the Oxen Privacy Tech Foundation in Australia. His presentation, “Assessing the Digital Security Needs and Practices of Human Rights Defenders,” presents new research pointing to an urgent need to change approaches in teaching digital security practice as well as in creating secure technologies that enhance the work of human rights defenders and journalists. Mr. De Silva also promotes information literacy strategies to address the spread of harmful and dangerous information.



Sara Abou Ibrahim

(presenting alongside Cath Croxton)

Ms. Sara Abou Ibrahim is an Associate Professor in the Department of Education at the Modern University for Business and Science in Lebanon. The presentation by Ms. Ibrahim and her collaborator, Ms. Croxton, “SHARP Digital: Bridging the Digital Gender Divide in South Africa,” focuses on the importance of the SHARP program in influencing society’s mindset toward women’s use of and access to technology. Their research in South Africa will build on evidence of importance of training people on digital basics and tackling the digital gender divide to support development.



Shakilah Nagujja

(Presenting alongside Diana Nandagire Ntamu and Godwin Kwemarira)

The presentation by Ms. Nagujja and her co-presenters, Dr. Ntamu and Dr. Kwemarira, “Online Learning: Experiences of Graduate Students,” examines online learning in the context of higher education institutions. The study uses quantitative and qualitative paradigms to examine online learning at institutions of higher learning.



Susan Abbott

Ms. Abbott is Director of Cross-Pollinate Consulting and an independent consultant for NORC at the University of Chicago and Cloudburst Consulting in the United States. She is finishing her doctorate at the University of Westminster in London and is an adjunct instructor at the University of Colorado Boulder. Her presentation, “Understanding Disinformation & Media Literacy and Why It Matters to Democracy Promotion,” covers emerging issues and themes of disinformation and media literacy in the context of international development and democracy promotion and includes discussion of the recently released USAID Disinformation Primer.



Susan Ndungu

Ms. Ndungu is a Doctoral Student in Business Administration Global Strategy Management at the United States International University in Kenya. Her presentation, “Effects of Political, Economic, Socio-cultural, Technological, Legal and Environment on Performance of Global Digital Transformation Strategy Adoption: A Case of Agriculture and Food Security in Kenya,” shows how the adoption of digital solutions during the pandemic can strengthen the performance of agriculture and organization effectiveness. Innovative solutions assist in cost savings, improved efficiency and effectiveness, increased turnover, increased competitiveness and profitability.



Ticora V Jones

Dr. Jones is the Deputy for Research in the Innovation, Technology & Research Hub of the US Agency for International Development. She manages research and development programs for the Agency that build bridges between development professionals and universities through a multidisciplinary lens on science, technology, innovation and entrepreneurship. Beginning in 2009 as an AAAS Diplomacy, Security, and Development Fellow, she helped manage the establishment of an Agency-wide agenda for science and technology through policy and programming designed to elevate USAID's presence in this area.

Prior to joining USAID, Dr. Jones served as the 2008-2009 Materials Societies Congressional Fellow for Senator Russell D. Feingold (D-WI) where she worked on energy and environment issues. Before beginning her congressional fellowship, Dr. Jones conducted post-doctoral research focused on creating and characterizing nanoparticle/composite-based functional materials at Lawrence Livermore National Laboratory. Dr. Jones earned her BS degree in Materials Science and Engineering from MIT and her PhD in Polymer Science and Engineering from the University of Massachusetts at Amherst.



Vanessa Bouche

(Presenting alongside Madeleine Bailey)

Dr. Bouche is an Associate Professor of Political Sciences at Texas Christian University in the United States. The presentation by Dr. Bouche and her collaborator, Dr. Bailey, "Mining Human Trafficking Prosecutions Data: Insights from Structuring the Unstructured," discusses benefits, challenges, limitations, and insights from the creation of HumanTraffickingData.org. It also describes promising avenues to leverage web scraping, artificial intelligence, and machine learning (including optical character recognition and natural language processing) to improve human trafficking case collection, coding efficiencies, and data quality.



Waswa Balunya

(Presenting alongside Godwin Kwemarira and Diana Nandagire Muwanga)

Dr. Balunya is Principal of Makerere University Business School in Uganda. The presentation by Dr. Balunya and collaborators Dr. Ntamu and Dr. Kwemarira, “Public Interest Lost: The Ugandan Education Sector During Covid-19,” examines the loss of public interest in the Ugandan educational sector during COVID-19. Their work examines how government institutions fulfill the fundamental mission of serving the public.



Zeeshan Saeed Shah

(Presenting alongside Muhammad Subhan Qureshi)

Mr. Saeed Shah’s is CEO and President of Greenwend Energy in Pakistan. The presentation by Mr. Saeed Shah and Dr. Qureshi, “Removing Policy Barriers Across Food Value Chain through Public Interest Technologies,” describes how the lack of good governance, infrastructure, and friendly regulations restrict the growth of emerging entrepreneurs and damage the interests of weaker stakeholders across the food value chain in Pakistan. The KP Livestock Action Plan aims to create an enabling environment for the growth of emerging entrepreneurs through a coordinated approach and promoting value chain development and innovations.