UNU Macau Al Conference 2024 Al for All: Bridging Divides, Building A Sustainable Future

United Nations University Macau, SAR China Thursday, 25 April 2024; 17:00 to 18:30 (Macau time) Room 4

> Panel Session (version 7.0)

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Session title

Developing a UNESCO Toolkit for open science policy for data and AI in times of crisis

Keywords

Responsible Data and AI Governance; Open Science Policy; Artificial Intelligence (AI); Crisis Preparation and Response; Digital Technologies Ecosystem; Sustainable Development Goals (SDGs)

Session description

In the digital age, harnessing the potential of Artificial Intelligence (AI) and open science is crucial for addressing global challenges and building a sustainable future for all. This panel discussion focuses on the work of the UNESCO-CODATA Data Policy for Times of Crisis Facilitated by Open Science: A Global Project on Developing Guidance, a Checklist, and a Factsheet as Contributions to the UNESCO Open Science Toolkit (DPTC). The panel brings together global experts, policymakers, and practitioners from who are at the forefront of open science, data, and AI initiatives. It explores the emerging governance issues of using AI in crisis situations based on digital approaches, including the roles and responsibilities of various actors and stakeholders in ensuring ethical, legal, and social good outcomes of AI, and promote equitable development or empowering affected communities, particularly the vulnerable, marginalized, and underrepresented. The panellists will explore the potential of open data and AI to facilitate rapid response, information sharing, and collaboration, while also addressing challenges related to privacy, data security, and equity.

Alongside a checklist and a factsheet, three guidances on data policy for times of crisis facilitated by open science are under development:

A. Guidance for policymakers

B. Guidance for scientists

C. Guidance for policy implementers and research support personnel

This <u>UNESCO Open Science Toolkit</u>, developed through international collaboration, aims to provide governments, organizations, and researchers with practical guidelines and policy recommendations for navigating the ethical and practical complexities of open science and AI during emergencies. The session is intended to connect stakeholders and promote collaboration on the development of guidances, a checklist, and a factsheet to contribute to the Toolkit, designed to guide governments and organizations in developing policies and practices that promote responsible and effective use of open science, data, and AI during times of crisis. The discussion will seek to bridge divides and chart a sustainable future through the responsible application of data and AI technologies during challenging times.

Within the context of the Sendai Framework, the International Health Regulations, the Warsaw International Mechanism (2012), the Santiago Network, the panel will discuss the broader global implications of adopting open science and AI policies during crises, including the potential for strengthening international cooperation and achieving the United Nations Sustainable Development Goals (SDGs). In particular, the session will explore how open science principles can facilitate the rapid dissemination of research, data sharing, and collaboration during crises. We will examine case studies and best practices highlighting successful open science initiatives global collaboration in crises.

Ultimately, this session is to facilitate a dynamic and interactive discussion that transcends disciplinary boundaries while addresses the pressing need for a comprehensive and policy approach to open science, data, and AI in times of crisis. We invite conference attendees to join us in shaping the future of crisis response and recovery by championing transparency, collaboration, and responsible data and AI governance. The session will contribute to bridging divides and paving the way for a sustainable, equitable, and resilient global future.

Time	Focused topics and discussion
17:00	Opening Remarks from the Session Chairperson Ethics in data policy for crisis situations Building human-centred systems for sustainable data and digital technology Francis P. Crawley Chair, CODATA International Data Policy Committee (IDPC) Leuven, Belgium
17:05	Using the UNESCO Open Science Framework to protect scientific resources and advance data and knowledge sharing in times of crisis Dr. Ana Persic Program Specialist Science Policy and Partnerships Section, Division of Science Policy and Capacity Building UNESCO; Paris, France (virtual)
17:15	A reflection on the need for the role of data policy in times of crisis supported by AI Professor Virginia Murray, Executive Committee Member, CODATA; Co-chair, Thematic Platform for Health EDRM Research Network, World Health Organization (WHO);

Session agenda

Time	Focused topics and discussion
	Head, Global Disaster Risk Reduction, UK Health Security Agency (UKHSA), United Kingdom [virtual]
17:25	AI for Mental healthcare and personalised support Dr. Nidhi Nagabhatla Senior Research Fellow United Nations University Institute on Comparative Regional Integration Studies (UNU-CRIS), Brugges, Belgium Member, CODATA International Data Policy Committee (IDPC)
	Panel Open Discussion
17:35	 How can we apply AI through human-centred systems to achieve robust and sustainable data in crisis situations? How can we use AI to connect stakeholders, communities, and support collaboration among diverse groups when confronted with crisis situations? In what ways can AI be used to develop data driven, inclusive, and sustainable policy governance for crisis situations? What should the UNESCO-CODATA DPTC Working Group do to support and enable a multi-stakeholder community on AI for crisis situations that is inclusive of the Global South and the Cultural East?
17:45	The 'PROTECT Framework' of essential elements for data policy in managing crises Dr. Lili, Zhang, Computer Network Information Center, Chinese Academy of Sciences, Beijing, China; Co-chair, CODATA International Data Policy Committee (IDPC)
17:55	Community needs in times of crisis of data supported by AI Professor B. Burcak Basbug Erkan Department of Statistics, Middle East Technical University (METU) Academic Partnerships Director, Institute of Civil Protection and Emergency Management (ICPEM), United Kingdom Member CODATA International Data Policy Committee (IDPC) Ankara, Turkey [virtual]
18:05	The application of AI to the science, economics, and social dimensions of climate change for addressing crisis situations Mr. Christopher Zhenzhi Zhu, Imperial College London Research Fellow, CODATA International Data Policy Committee (IDPC)
18:15	Rethinking the role of data and AI in policy and governance for crisis situations Professor Perihan Elif Ekmekci, MD, PhD Head of History of Medicine and Ethics Department Deputy Dean of the School of Medicine Head of the Institutional Review Board TOBB University of Economics and Technology

Time	Focused topics and discussion
	Co-chair CODATA International Data Policy Committee (IDPC) Ankara, Turkey
18:25	Summary of the panel discussion and next steps Francis P. Crawley
18:30	Close of the session

Speaker biographies

Mr. Francis P. Crawley, Chair, CODATA International Data Policy Committee (IDPC); Leuven, Belgium (in person)



Francis P. Crawley chairs the International Data Policy Committee of the International Committee on Data (CODATA), International Science Council (ISC). He is a philosopher specialized in research ethics, integrity, and methodology, and data/AI ethics & law. He is the Executive Director of the Good Clinical Practice Alliance – Europe (GCPA) and the Strategic Initiative for Developing Capacity in Ethical Review (SIDCER) in Leuven, Belgium. He

coordinated the GCPA-SIDCER European Fellowship in Research Ethics (EFRE). He is Chairman of the EOSC Future / RDA Artificial Intelligence and Data Visitation Working Group & EOSC Future / RDA Ambassador for Ethics & Law.

Dr. Ana Persic, Program Specialist, Science Policy and Partnerships Section, Division of Science Policy and Capacity Building, UNESCO; Paris, France (virtual)



Ana Persic is a Program Specialist at UNESCO's headquarters in Paris, in the Science Policy and Partnerships Section at the Division of Science Policy and Capacity Building. She is an ecologist by training with a Master in Ecological Sciences from the University of Padova, Italy, and PhD in Ecotoxicology from the University of Paris South, France. She has previously worked on UNESCO's Man and the Biosphere program and served as a Science Specialist at the UNESCO Liaison Office in New York from 2011 to 2018. Persic's role at UNESCO is focused on strengthening

the science-policy interface and the promotion of science technology and innovation in the implementation of the United Nations 2030 agenda for sustainable development. She is a UNESCO focal point for science diplomacy and coordinates the UNESCO Recommendation on Open Science and partnerships for Open Science. Dr. Ana Persic joined InsSciDE in July 2021, taking over for Swiss diplomat Christina Bürgi Dellsperger. She coordinates UNESCO's duties under the project: managing communication, providing visibility and ensuring project legacy, as well as embedding linkages between InsSciDE and EU science policy- and decision makers.

Dr. Nidhi Nagabhatla, Senior Research Fellow, United Nations University Institute on Comparative Regional Integration Studies (UNU-CRIS), Brugges, Belgium; Member, CODATA International Data Policy Committee (IDPC)



Nidhi Nagabhatla is a Senior Research Fellow and Cluster Coordinator: Climate Change and Natural Resources program at UNU CRIS. In this capacity, Nidhi Nagabhatla coordinates the projects, programs and activities of the cluster while contributing to environmental governance-related activities and outputs collaborating with staff and networks. She is also the Project Leader at UNU CRIS for "GCRF Global Seaweed STAR –

Safeguarding the future of Seaweed Aquaculture' a partnership with The Scottish Association for Marine Science (SAMS) focusing on developing countries in East Africa and Southeast Asia. Dr. Nagabhatla is a sustainability science specialist and a systems analyst. With 21 years of work experience, she has led, coordinated, and implemented transdisciplinary projects in various geographical regions of Asia, Africa, Europe, and Americas working with international organisations viz., IWMI, World Fish Centre, IUCN, Asia Pacific Climate Centre, and United Nations University (INWEH) leading research and capacity development initiatives. She is also affiliated with leading academic institutes: Oxford University (UK); Leibniz University (Germany) in various roles, mostly related to sustainability research, science-policy interfacing and mentoring young professionals. Dr. Nagabhatla is an Adjunct Professor at the School of Earth, Environment & Society McMaster University, Canada, and a Guest Professor at Universidad Mayor de San Andrés, Bolivia. She served as the Chair of The Partnership for Environment and Disaster Risk Reduction (UNEP) and co-leads the 'Water and Migration Working Group' of The Food and Agriculture Organization (FAO) of the United Nations. She also served on the Technical Committee of The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) from 2013-2018 and was a lead author in the Global Assessment Report. She also served as the Vice-Chair and Chair of the Steering Board for Young Professional Platform for Agriculture Research and Development (YPARD), FAO from 2011-2018. Currently, she is actively involved with three expert working committees of the UN Decade on Ecosystem Restoration (2021-2030).

Professor Virginia Murray, Executive Committee Member, CODATA; Co-chair, Thematic Platform for Health EDRM Research Network, World Health Organization (WHO); Head, Global Disaster Risk Reduction, UK Health Security Agency (UKHSA), United Kingdom (virtual)



Professor Virginia Murray is a public health doctor committed to improving health emergency and disaster risk management. She was appointed as Head of Global Disaster Risk Reduction for UK Health Security Agency (formerly Public Health England) in April 2014. She is currently the chair of the UNDRR/ISC Hazard Information Profile Steering Group for the 2025 update, having been the Chair of the

UNDRR/ISC Hazard Classification and Review Technical Working Group from 2019 with the report published in 2020 and the UNDRR-ISC Hazard Information Profiles: Supplement in 2021. She was a member and then vice-chair of the UN International Strategy for Disaster Reduction (UNISDR) Scientific and Technical Advisory Group (STAG), 2008-2017, supporting as required negotiations for the Sendia Framework for Disaster Risk Reduction 2015–2030 by the UN member states. She is a member of the CODATA Executive Committee. She is a co-chair of the WHO Thematic Platform Health and Disaster Risk Management Research Network, and by working in collaboration with this network, she is one of the editors of the WHO Guidance on Research Methods for Health and Disaster Risk Management, published in October 2021 and updated in 2022. She is a visiting/honorary Professor and fellow at several universities.

Dr. Lili Zhang, Computer Network Information Center, Chinese Academy of Sciences, Beijing, China; Member, International Data Policy Committee (IDPC), CODATA (in person? or virtual)



Lili Zhang is a research scientist in the scientific data center at the Computer Network Information Center of Chinese Academy of Sciences. Zhang received her M.A. and Ph.D. degree in information management from Peking University, China and she also graduated from Nankai University, China, with a bachelor's

degree in management science and economics. Her research focuses on research data sharing policies and practices as well as on information economics. Currently, she also serves as the deputy director of the editorial office of the China Scientific Data (www.csdata.org), which is the leading data journal publishing bilingual data papers of multidisciplinary fields in China.

Professor B. Burcak Basbug Erkan; Department of Statistics, Middle East Technical University (METU); Academic Partnerships Director, Institute of Civil Protection and Emergency Management (ICPEM), United Kingdom; Member CODATA International Data Policy Committee (IDPC); Ankara, Turkey (virtual)



Burçak is a Professor of Statistics and Disaster Science at the Middle East Technical University (METU). She was the Course Director of MSc in Disaster Management and Resilience at Coventry University in the United Kingdom between August 2019 and August 2020. She was the Director of the METU Disaster Management Centre, Ankara, Türkiye between 2008 and 2018. She is a board member and co-chair of the CODATA International

Data Policy Committee since 2022. She is the Academic Director of the Institute of Civil Protection and Emergency Management (ICPEM). She has 25 years of experience in disaster risk reduction, disaster risk management, policy development, resilience, disaster risk finance, and disaster risk management education at the international level. She has been in the field for Syrian Refugee Camps 2015, 2011 Van Earthquakes, May 2014 Soma Mine Fire, 2020 Giresun Flood, 2020 Izmir Earthquake, and the 2023 Kahramanmaras Earthquake.

Mr. Christopher Zhenzhi Zhu, Imperial College London, Research Fellow, CODATA International Data Policy Committee (IDPC) (in person)



Christopher Zhu is a master's student at Imperial College London studying AI and Climate Change. He currently holds the position of Research Fellow at the CODATA International Data Policy Committee (IDPC). His interest is in Environmental Economics beginning with his undergraduate studies in economics, where he became fascinated with the interplay between the

public and private sectors in regional economic growth. Since then, his passion for sustainable development has only intensified. He previously studied at SYSU/Oxford where he gained extensive knowledge as well as and practical from specialized courses in eEconomy and eSociety, He has developed a solid foundation in this field. Additionally, he has experience consulting for the Guangdong and Macao governments with experience in formulating and implementing financial and macroeconomic policies.

Professor Perihan Elif Ekmekci, TOBB ETU; Ankara, Turkey; Co-chair, CODATA International Data Policy Committee (IDPC) (in person)



Perihan Elif EKMEKCI was born in Ankara in 1971. After she completed her education at TED Ankara College, she graduated from the Medical Faculty of Ankara University in 1995. She has her Ph.D. in History of Medicine and Ethics from Ankara University in 2014. Currently, she is an associate professor and head of the History of Medicine and Ethics department at TOBB ETU School of Medicine. She was a research fellow at Imperial College, London, the UK in

2006. She has been a Fogarty Fellow at Harvard University and had her Fogarty/NIH Program Master's Certification in Research Ethics in 2014. She has been a fellow of WIRB International IRB Western Institutional Review Board Research Ethics Training Program, Seattle Washington (USA) in 2016. She served as the head of the EU relations department of the Ministry of Health Turkey (2007-2016) and developed several projects in alliance with the EU. She was the Turkish representative for the European Center for Disease Control Advisory Board and served in this position between the years 2011-2016. Currently, she is the chair of the International Unit in Bioethics/ WMA Cooperation Center and deputy dean of TOBB ETU School of Medicine. She is chairing the Intuitional Review Board of TOBB ETU, and she is a member of the open science committee of TOBB ETU. She is a member of the World Association for Medical Law and the International Forum of Teachers of the International Unit in Bioethics. She has several publications in distinguished journals on ethics and the history of medicine. Professor Ekmekci is the co-author of the book titled *Artificial intelligence and Bioethics* published by Springer in 2020. She is teaching undergraduate and postgraduate courses on the history of medicine and ethics.