

# The OECD Global Forum on Technology: inaugural event Speaker biobook

### Plenary session: Opening remarks and high-level panel

## Mathias Cormann Secretary-General, OECD

Mathias Cormann is the 6th Secretary-General of the Organisation for Economic Co-operation and Development (OECD). His five-year term commenced on 1 June 2021. Working with OECD members, his priorities as Secretary-General are:



- Optimising the strength and the quality of the post COVID recovery while responding to the economic and social impacts of the war in Ukraine.
- Leadership on climate action to help secure global net-zero by 2050 in a way that is effective and fair.
- Seizing the opportunities of the digital transformation while better managing some of the associated risks, challenges and disruptions.
- Helping to ensure well-functioning global markets and a global level playing field with a rules-based trading system in good working order.
- Global engagement: advancing OECD standards, through membership and partnerships and a sound approach to development.

Prior to his appointment to the OECD, Mathias served as the Australian Minister for Finance, the Leader of the Government in the Australian Senate and as Federal Senator representing the State of Western Australia. In these roles, he has been a strong advocate for the positive power of open markets, free trade and the importance of a rules-based international trading system.

**Chloe Smith**Secretary of State for Science, Innovation and Technology, United Kingdom



Chloe Smith was appointed as Secretary of State for Science, Innovation and Technology on 28 April 2023 while the Rt Hon Michelle Donelan MP is on maternity leave.

She was previously Secretary of State for Work and Pensions from 6 September 2022 to 25 October 2022. She was previously appointed Minister of State (Minister for Disabled People, Health and Work) at the Department for Work

and Pensions from 16 September 2021 to 6 September 2022. She was Minister of State (Minister for the Constitution and Devolution) from 13 February 2020 to 15 September 2021. She was Parliamentary Secretary at the Cabinet Office from 9 January 2018 to 13 February 2020 and Parliamentary Under Secretary of State for Northern Ireland and

Assistant Government Whip for the House of Commons from 15 June 2017 to 8 January 2018. She was elected Conservative MP for Norwich North on 23 July 2009. She was appointed Economic Secretary to the Treasury in October 2011 and from September 2012 to October 2013 she served as Parliamentary Secretary for the Cabinet Office. Before entering Parliament, Chloe worked for international consultancy firm Deloitte, advising private businesses, government departments and public bodies.





# Gareth Mitchell Presenter, BBC World Service



Gareth Mitchell is a science, technology and business radio presenter on the BBC World Service. He also lectures on the Science Communication MSc at Imperial College London. Alongside that, Gareth is a busy event host and moderator, and jointly runs a training partnership offering transferrable skills training courses for early career academic researchers. In over two decades of journalism, Gareth has appeared on the BBC News Channel, Radio 4, 5 Live and World Service.

Carme Artigas
Secretary of State for Digital Transformation and AI, Spain



Carme Artigas is a Spanish businesswoman and manager, recognized expert in Big Data, Artificial Intelligence and technological innovation, with more than 25 years of experience in the technology sector. She was appointed as Secretary of State for Digitisation and Intelligence in January 2020.

Jose W. Fernandez
Under Secretary of State for Economic Growth, Energy and the Environment, United States



Jose W. Fernandez was confirmed by the Senate as Under Secretary for Economic Growth, Energy, and the Environment on August 6, 2021. He leads the State Department's bureaus and offices that stand at the center of the Biden-Harris Administration's efforts on climate change, clean energy, health, supply chain security, and other economic priorities. Under Secretary Fernandez is also the United States Alternate Governor to the World Bank, the European Bank for Reconstruction and Development, and the Inter-American Development Bank. From 2009 to 2013, he served as the Assistant Secretary of State for Economic, Energy, and Business Affairs, one of the bureaus he now oversees.

Prior to his most recent appointment at the Department of State, Under Secretary Fernandez was a partner at Gibson Dunn & Crutcher LLP in New

York. His practice focused on mergers, acquisitions, and finance in Europe and emerging markets, advising U.S. and foreign clients in the telecommunications, energy, water, banking, and consumer industries. He was named one of the "World's Leading Lawyers" by Chambers Global for his M&A and corporate work, a "Highly Regarded" practitioner by the International Financial Law Review, and one of the "World's Leading Privatization Lawyers" by Euromoney Publications. He has been chair of the Inter-American law committees of both the American Bar Association and The Association of the Bar of the City of New York, as well as of the Cross-Border M&A and Joint Venture Committee of the New



York State Bar Association. Most recently, Fernandez was an adjunct professor at Rutgers Law School, where he taught the course on international business transactions.

A life-long supporter of the arts and education, Under Secretary Fernandez has served as a trustee of Dartmouth College and NPR-station WBGO-FM, and on the Board of Directors of Acción International, the Council of the Americas, Ballet Hispanico of New York, the Middle East Institute, and the Partnership for Inner City Education.

The Under Secretary graduated from Dartmouth College and received an honorary degree from the College. He earned a Juris Doctor from Columbia University School of Law, where he was awarded the Charles Evans Hughes Prize and a Parker School Certificate of International Law with honors.

Valeriya Ionan
Deputy Minister for Eurointegration at the Ministry of Digital Transformation, Ukraine



The Ministry of Digital Transformation (MDT) was established in 2019 to implement the "State in a Smartphone" vision, an essential part of the president Zelenskyy Election Program. Valeriya joined the MDT's team right from the start, at 28, as one of the youngest Deputy Ministers in the Ukrainian government.

Before working in government, she was an entrepreneur and a cofounder of a marketing agency and local media for entrepreneurs. Valeriya has two Bachelor's degrees – Management and Spanish Translation, as well as five certificates within the MBA program at Edinburgh Business School Eastern Europe: Marketing, Organizational Behavior, Human Resources, Negotiations and Economics.

Within the Ministry, Valeriya is in charge of the national program of the development of digital literacy, promoting digital transformation for SME's, developing regional digital transformation, and leading the Eurointegration team as well as international relations team in the Ministry.

**Ulrik Vestergaard Knudsen**Deputy Secretary-General, OECD



Ulrik Vestergaard Knudsen took up his duties as Deputy Secretary-General in January 2019. His portfolio includes the strategic direction of OECD policy on the digital and technological transformation; global relations; trade and agriculture. In June 2021, he was appointed OECD Gender & Diversity Champion, and leads the organisation's work on gender equality and diversity. Mr. Knudsen led the transformation of the OECD Executive Committee in Special Session into the Global Strategy Group (GSG) to have a strategic forum to discuss issues of global relevance. He chaired the first GSG meetings from 2013-2017.

Until the end of 2018, Mr Knudsen was Permanent Secretary of State at the Ministry of Foreign Affairs in Denmark. Prior to this, he served as Sherpa and Chief Diplomatic Advisor to two Danish Prime Ministers on

Security Policy and on EU and Foreign Affairs in the Prime Minister's Office. Mr Knudsen served as Ambassador to the OECD and UNESCO in Paris (2008-09). Besides his diplomatic career, which includes postings in London (2003-04), Washington (1998-2000) and Moscow (1997), he briefly served as Group Director for International Policy at Vodafone in London (2013).

He holds a Master's degree in Economics from the University of Copenhagen (1994), where he also acted as external lecturer, and he has published various papers and publications on Asia, WTO, trade policy and globalisation.



#### Breakout session 1: Responsible, values-based and rights-oriented technology

# Nita A. Farahany Robinson O. Everett Distinguished Professor of Law & Philosophy, Duke Law School



Nita Farahany is the Robinson O. Everett Distinguished Professor of Law & Philosophy and Founding Director of the Duke Initiative for Science & Society. She is a widely published scholar on the ethics of emerging technologies, including the critically acclaimed book, *The Battle for Your Brain: Defending the Right to Think Freely in the Age of Neurotechnology.* She is a frequent commentator for national media and radio and keynote speaker at events including TED, the Aspen Ideas Festival, the World Economic Forum, and judicial conferences worldwide. From 2010-2017, she served as a Commissioner on the U.S. Presidential Commission for the Study of Bioethical Issues.

She is as an elected member of the American Law Institute, Fellow of the American Association for the Advancement of Science, immediate past

President of the International Neuroethics Society, ELSI advisor to the NIH Brain Initiative and to the Defense Advanced Research Projects Agency, member of the Forum on Neuroscience and Nervous System Disorders and the Standing Committee on Biotechnology Capabilities and National Security Needs for the National Academies of Sciences, Engineering, and Medicine, and the Global Future Council on the Future of Metaverse for the World Economic Forum. She is the Reporter for the Drafting Committee on updating the Uniform Determination of Death Committee for the Uniform Law Commission (ULC), as well as a ULC Commissioner. Farahany is a co-editor-in-chief of the Journal of Law and the Biosciences and on the Board of Advisors for Scientific American. She also serves on scientific and ethics advisory boards for corporations. Farahany holds an AB (Genetics) from Dartmouth College, an ALM (Biology) from Harvard University, and a JD, MA, and Ph.D. (Philosophy) from Duke University.

**Song Sanghoon**Director General of ICT Policy Bureau, Ministry of Science and ICT, Korea



Dr. Sanghoon Song was appointed as Director General of the ICT Policy Bureau of the Ministry of Science and ICT (MSIT) of the Republic of Korea in August 2022. Prior to the current position, he served as Director of the ICT Policy Division (MSIT), Director General for Investigation and Coordination of the Personal Information Protection Commission, and Director General of the ICT Industry Policy Bureau (MSIT). The ICT Policy Bureau is in charge of coordinating and adjusting Korea's overall ICT policies. As the Bureau's Director General, Dr. Song oversees the national digital strategy, as well policies for the digital society, including ICT regulatory sandbox, ICT convergence expansion, blockchain, digital twin and digital inclusion. Dr. Song holds a Bachelor's and a Master's degree in electronic engineering from Seoul National University, Korea and a PhD in electrical engineering from the University of Tokyo, Japan.







Kei Koizumi is a longtime science-policy professional in Washington, DC. Since January 2021, Koizumi has been at the White House Office of Science and Technology Policy (OSTP), currently as Principal Deputy Director for Policy and previously as Chief of Staff and Acting Director. Immediately before the Biden-Harris Administration, he served on the Biden-Harris Transition Team as the lead for the National Science Foundation (NSF) and a member of the OSTP transition. Koizumi served as Senior Advisor for Science Policy at the American Association for the Advancement of Science (AAAS) between 2017 and 2019. He was Assistant Director for Federal R&D, and Senior Advisor for the National Science and Technology Council, at OSTP from 2009 to 2016. He was Director of the R&D Budget and Policy Program at AAAS from 1995 to 2009. He received his MA from the Center for International Science and

Technology Policy at the George Washington University (where he has taught science policy) and his BA from Boston University in Political Science and Economics. He is a Fellow of the American Association for the Advancement of Science.

**Elina Noor** Senior Fellow, Asia Program, Carnegie Endowment for International Peace



Elina Noor is a senior fellow in the Asia Program at Carnegie where she focuses on developments in Southeast Asia, particularly the impact and implications of technology in reshaping power dynamics, governance, and nation-building in the region.

Previously, Elina was director of political-security affairs and deputy director of the Washington, D.C. office at the Asia Society Policy Institute. Prior to that, Elina was an associate professor at the Daniel K. Inouye Asia-Pacific Center for Security Studies in Honolulu. She spent most of her career at the Institute of Strategic and International Studies Malaysia, where she last held the position of director, foreign policy and security studies. Elina was also formerly with the Brookings Institution's Project on U.S. Relations with the Islamic World.

Between 2017 and 2019. Elina was a member of the Global Commission on the Stability of Cyberspace. She currently serves on the ICRC's Global Advisory Board on digital threats during conflict.

Elina read law at Oxford University. She obtained an LL.M (Public International Law) from the London School of Economics and Political Science, University of London, graduating with distinction at the top of her class. A recipient of the Perdana (Malaysian Prime Minister's) Fellowship, she also holds an MA in security studies from Georgetown University, where she was a Women in International Security Scholar.



# Breakout session 2: Emerging technologies to address climate change and foster resilient societies

# **Kenneth Cukier**Deputy Executive Editor, The Economist



Kenneth Cukier is Deputy Executive Editor of The Economist. He is the coauthor of "Big Data", a NYT bestseller translated into over 20 languages. His most recent book is "Framers" on the power of mental models and the limits of Al. Earlier, Kenn was a research fellow at Harvard's Kennedy School, a board director of Chatham House and an associate fellow at Oxford's Saïd Business School. He is a member of the Council on Foreign Relations.

Shinichi Nakatani State Minister of Economy, Trade and Industry, Japan



Mr. Shinichi Nakatani was appointed State Minister of Economy, Trade and Industry and State Minister of Cabinet Office (in charge of the World Expo 2025) in August 2022. This appointment marks Mr. Nakatani's second ministerial assignment. Previously, he served as Parliamentary Vice-Minister for Foreign Affairs at the Ministry of Foreign Affairs.

Mr. Nakatani joins the Ministry of Economy, Trade and Industry (METI) from Japan's House of Representatives where he has served as a Member since December 2012. During his time as a Member from Japan's House of Representatives, Mr. Nakatani has successfully won reelection three times.

Prior to seeking elected office, Mr. Nakatani served in the 1st Airborne Brigade of the Japan Ground Self-Defense Force (JGSDF). He joined the JGSDF after graduating from the National Defence Academy of Japan.

**Giulia Gregori** Head of Strategic Planning and Corporate Communication, Novamont



Giulia Gregori is Head of Corporate Strategy Implementation & Engagement at Novamont, world's leader in the bioplastics sector and in the development of biochemicals and bioproducts. She entered in Novamont in 2000, after graduating in Pure Chemistry with a specialization in Bioinorganic (University of Milan, Leiden University).

In her role she is responsible for the overall implementation of the Corporate Strategy, includingNovamont's social impact strategy as a benefit company, with the aim of creating shared value inside and outside the organisation. She also manages Strategic Research & Innovation Projects as well as external relationships with public and private funding institutions and other relevant stakeholders in the circular bioeconomy sector.

She is member of the Governing Board of Circular Bio-based Europe Joint Undertaking (CBE JU), the public-private partnership between the European Commission and the Bio-Based Industries Consortium, Secretary General of the Italian Cluster of Circular Bioeconomy SPRING and member of



the National Coordination Group for the Bioeconomy at the Presidency of Council of Ministers, in charge of the development and implementation of the Italian Bioeconomy strategy.

She is member of the board of directors of the University of Eastern Piedmont and member of the board of directors of Re Soil Foundation, promoted by University of Bologna, Coldiretti, Novamont and Turin Polytechnic to enable a step change in soil health and local regeneration.

**Hila Cohen**Chief of Staff & Head of Business Development, WFP Innovation Accelerator, United Nations World Food Programme



Hila is the Deputy Head at the United Nations (UN) World Food Programme (WFP) Innovation Accelerator. She connects the Accelerator with global innovation networks, companies, governmental bodies and other UN agencies to work towards Zero Hunger. Hila has utilised her extensive background in private sector innovation and start-up ecosystems in combination with her experience in WFP operations since joining the Accelerator in 2015, when it was founded.

Hila's leadership in the team contributed to the Accelerator being named as one of the 'Best Workplaces for Innovators' (2020, 2021) and an 'Innovation Team of the Year' (2020) by Fast Company, for ongoing work in sourcing, nurturing, and scaling innovative start-ups

focused on reducing global hunger. Accelerator-supported innovations utilizing blockchain, artificial intelligence, agri-tech, enhanced supply chains and new business models, positively affected the lives of 9 million people in 2021 alone. The Accelerator's diverse activities now enable external entities such as the Bill & Melinda Gates Foundation, Humanitarian Grand Challenge, and other UN agencies to work towards the full range of UN Sustainable Development Goals (SDGs).

Prior to joining WFP, Hila advised high-tech clients as a corporate lawyer at a leading Tel Aviv firm. She holds an MBA from the SDA Bocconi School of Management (Italy) and a Bachelor of Law from the University of Haifa (Israel).

## Breakout session 3: Digital and technology divides

**Timo Harakka**Minister of Transport and Communications, Finland



Timo Harakka is known in Finland for his active participation in public debate and involvement in society, and as a person with a keen interest in cultural matters. Prior to his political career, Harakka worked for over thirty years as a journalist, author and television producer. During his journalist's career, Harakka served as a columnist for Helsingin Sanomat, Suomen Kuvalehti and Talouselämä. In 1997-2014, he worked as editorial coordinator for Ylioppilaslehti magazine and as editor-in-chief of Vihreä Lanka magazine. His most well-known TV productions are the shows Musta laatikko (Black Box) and Pressiklubi (Press Club) and the 10 Books series, for which he earned the Golden Venla award in 2011.

Harakka has written six books. Two of them concerned with international economy. Luoton loppu (The End of Credit) was published in 2009 and Suuri kiristys (The Great Extortion) in 2014. His latest book, Data Kapitalismi (Data capitalism) was published in 2023.

Harakka was elected to Parliament for the first time in 2015. He represents the Uusimaa electoral district, and as an MP he is known as an expert in economics and taxation. He has been a member of



the Finance Committee (most recently its chair), a member of the Grand Committee and a deputy member of the Committee for the Future. In the Government led by Prime Minister Antti Rinne Timo Harakka served as the Minister of Employment, and now in Sanna Marin's Government he serves as the Minister of Transport and Communications.

The key themes for Minister of Transport and Communications Timo Harakka are fast and reliable connections, both in transport and online. Transport becomes a service and digitalisation is at the heart of everything. The keys to Finland's success are the 5G and 6G networks, cyber expertise and world-class IT skills. Rail investments are needed to expand the commuting areas and secure a sustainable growth.

#### Pichet Durongkaveroj

Executive Director, Bangkok Bank Pcl.; Former Minister of Digital Economy and Society and Former Minister for Science and Technology, Thailand



Dr. Pichet Durongkaveroj was Thailand's former Minister of Digital Economy and Society during 2016-2019. Prior to that he was Minister for Science and Technology. An outstanding career in the field of public policy, he has laid the foundation of the country's new economy encompassing the development of policies and subsequent strategic implementations of science, technology, innovation and digital technology that greatly help empowering the progress in infrastructure, trade, industry, agriculture, education and more. His pioneering work in promoting startups and entrepreneurship since 2014 has provided vast opportunities and invigorated the young generation and the creativities that follow. Dr.Pichet was active in international affairs including APEC, CLMV, ASEAN and others through his science and digital diplomacy

initiatives. He was instrumental in getting both ministries the memberships into CSTP and CDEP under the OECD Directorate for Science, Technology and Innovation in 2016 and 2018 respectively.

Prior to his political appointments, he founded and headed many organizations including the National Science Technology and Innovation Policy Office, the Knowledge Network Institute of Thailand, e-ASEAN working group etc. A policy architect who understands the collaborative role of partnerships, Dr. Pichet has been instrumental in establishing many functional platforms such as university-industry linkages, ASEAN telecom, Digital Park, Startup Thailand, Digital government Program etc.

Dr. Pichet is currently the executive director of Bangkok Bank Pcl. He received his Bachelor's in Electrical Engineering from the University of New South Wales, Master's in Applied Solar Energy from Trinity University and Ph.D. in Public Policy and Management from the Wharton School, University of Pennsylvania.

#### **Noha Adly**

Research and Development Advisor to the Minister of Communications and Information Technology for Research and Development, Egypt



Dr. Adly is currently the Research and Development Advisor to the Minister of Communication and Information Technology. Dr. Adly is also a Professor of Computer and Systems Engineering at Alexandria University.

From 2016 to 2020, Dr. Adly was the Scientific Advisor to the Director of the Bibliotheca Alexandrina, and Head of SIMAR "Serageldin Institute for Multi-disciplinary Advanced Research" at the BA, conducting quantitative analysis and modeling in different Multi-disciplinary areas. From 2013 until 2016, Dr. Adly assumed the role of the First Deputy to the Minister of Communication and Information Technology. During this period, she was responsible for the ICT Sector overall strategy formulation as well as the development of the sector strategic business plans and the specialized strategies. She managed



along with her leadership to develop the ICT sector strategic business plans for 2020. She also was responsible for the development of the National Digital Arabic Content Strategy, the Free Open Source Systems Strategy as well as the Government Cloud Computing Strategy. Until 2013, Dr. Adly served as Head of ICT sector at the Bibliotheca Alexandrina, having joined initially in 1997 serving in several managerial positions.

She has obtained her PhD in Computer Science from Cambridge University, UK, in 1995. Dr. Adly has served in several positions in her academic career since 1988 at different universities in Egypt and abroad. She had many consultancy and leading roles concerning the design and implementation of information systems and digital libraries in several world-class institutions. She is also a member of ACM and IEEE as well as other scientific organizations. She is author/co-author of more than 50 publications in peer reviewed journals and scientific conferences in the field of computer science and engineering.

# **Chris Fabian**Co-founder of the Giga initiative, UNICEF



Chris is a technology executive who co-founded and currently leads Giga. Giga is a partnership between UNICEF and ITU that is working to connect every school in the world to the internet.

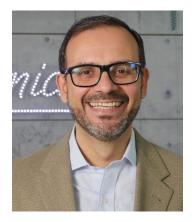
His career has focused on how the intersection between new technology and global policy can solve the world's most pressing problems and advance humanity.

He has previously advised two UN Secretary-Generals on new technologies, founded and scaled UNICEF's Innovation Unit, and worked with Heads of State and Fortune 100 CEOs to invest in responsible, forward-looking technologies.

Chris has built, invested in, and mentored technology companies from startup through multiple financing rounds and exits. He has led teams that developed some of the largest implementations of open-source software in the world, the first public-sector drone/UAV corridors, the first crypto-currency denominated fund in the public sector, and the Digital Public Goods Alliance with the Government of Norway.

He is a Commissioner for the Lancet-Financial Times, an Honorary Scholar at the Chinese Central Academy of Fine Arts, a Board Member of the European Parliament's STOA Centre for Artificial Intelligence. He was recognized by Time Magazine as one of the "World's 100 Most Influential People" in 2013 and as one of WIRED's "25 People Changing the World" in 2019.

José Juan Haro
Director Wholesale & Public Affairs HISPAM, Telefonica Hispanoamerica



José Juan Haro is Attorney at Law from the Pontifical Catholic University of Peru (1997), with a LLM degree from the University of Chicago Law School (2000). On January 2020, he became Chief Wholesale & Public Affairs Officer of Telefonica Hispam America, the unit that operates Telefonica's business units at Mexico, Venezuela, Colombia, Ecuador, Peru, Chile, Argentina and Uruguay. He is founder and member of the Internet para Todos Board (a company dedicated to rural connectivity in Peru whose partners include Facebook, CAF and IDB Invest), Chairman of the Board of Directors of Telefonica Centroamerica Inversiones (TCI), former Chair of the GSMA Latin America Policy Group and Vice President of the Inter-American Association of Telecommunications Companies (ASIET). He joined Telefónica del Perú in 2003 where he held responsibilities in business areas, especially in the wholesale organization.





## Insights from breakout sessions: looking to the future

#### **Richard Johnson**

Chair, Technology and Innovation Committee, Business at OECD (BIAC); CEO Global Heliz LLC



Rick Johnson plays multiple global and U.S. policy strategy and thought leadership roles in advancing: (1) synthetic biology/engineering biology and next-generation biotechnology; (2) emerging technologies for addressing societal grand challenges; (3) forward-looking policies for securing and protecting the bioeconomy; and (4) innovative collaborations for translating research and technology into impact.

Johnson has been a member of the National Academy of Sciences Board on Life Sciences; numerous National Academies (NASEM) national committees on emerging technologies and STI; and the U.S. national strategy review for the future of the NASEM and STI policy. In those roles, he has co-authored more than 10 high impact NASEM reports. Rick also was a member of the NAS Synthetic Biology Forum; Co-Chair of the Six Academies Synthetic

Biology Initiative among the U.S., UK, and China; and Chair of the "Safeguarding the Bioeconomy" workshops.

Rick currently serves as Director of the iGEM Foundation; BioMADE (the new U.S. Manufacturing Innovation Institute for bioindustrial manufacturing and design); the BioBricks Foundation at Stanford; and the Engineering Biology Research Consortium. On the international front, he is Chairman of the OECD/BIAC Technology, and Innovation Committee; Chairman of the International Advisory Committee for Australia's Synthetic Biology Centre of Excellence; Co-Chair of the Global Forum on Engineering Biology; and a co-convener of the Global Biofoundries Alliance.

Rick is the CEO and founder of Global Helix LLC, a thought leadership and policy strategy firm for emerging technologies. After 30 years, Johnson retired as Senior Partner at Arnold & Porter in Washington, D.C., where he represented leading research universities, non-profit institutes, and innovative companies. For many years, Rick served on the MIT Corporation Committee, Chairman of the Brown University Biology & Medicine Council, and numerous task forces at the intersection of technology, security, and innovation.

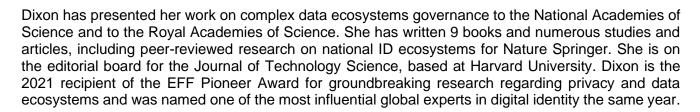
# **Pam Dixon** Founder and Executive Director, World Privacy Forum; Civil Society Information Society Advisory Council (CSISAC)



Pam Dixon is the founder and executive director of the World Privacy Forum. a respected NGO and public interest research group. An author and researcher, she has written influential studies in the area of identity, Al, health, and complex data ecosystems and their governance for more than 20 years. Dixon has worked extensively on privacy and governance across multiple jurisdictions, including the US, India, Africa, Asia, the EU, and additional jurisdictions.

Dixon currently serves as the co-chair of a UN Statistical Commission Data Governance working group, and is the co-chair of the World Health Organization Research and Academia working group. At OECD, Dixon cochairs the civil society multistakeholder work in OECD's Al Working Party, AIGO. In prior work, Dixon was part of the AI expert group that crafted the

OECD AI Principles, which were adopted in 2019.



#### **Amanda Ballantyne**

Director, Technology Institute, American Federation of Labor and Congress of Industrial Organizations (AFL-CIO); Trade Union Advisory Committee (TUAC) to the OECD



Amanda Ballantyne is Executive Director of the AFL-CIO's Technology Institute, where she works to develop strategies to engage workers in the innovation process. Prior to joining the AFL-CIO, she was Executive Director of the Main Street Alliance, a national network of small business owners and entrepreneurs focused on policy and employment issues. She brings nearly 20 years of organizing, policy and legal experience in unions and NGOs. Amanda graduated from Smith College and earned her law degree from the University of Washington School of Law.

**Daniel Erasmus** Author, Futurist, Inventor



With more than 25 years of experience as a leading futurist and scenario thinker, Daniel co-founded the Digital Thinking Network (DTN) where he has been leading large scale global transformation processes for private and public institutions.

He is the CEO of the planetary scale NLP sense-making Al platform NEWSCONSOLE/Erasmus.Al, which processes over a billion text items to reinvent news; disrupt traditional investment practice and risk management; achieve breakthrough insights in innovation and medicine and gain global overviews where none existed.

Daniel has been a Visiting Professor at Ashridge Business School, a Fellow of Rotterdam School of Management, with two decades teaching executive MBAs on innovation, future studies/decision theory and

entrepreneurship. He has written three books on breakthrough innovation (redesigning Shell's breakthrough innovation process GameChanger), the future of the Internet and the future of Fintech. Previously, he was editor of Convergence, authored the column The Economy of Ideas and The Information Society, the latter column for The Financial Times Review.

Daniel has joined the University of Stellenbosch's Faculty of Science Advisory Board and he sits on the advisory board of Titan Advanced Energy Solutions, the Board of the Quad9 Foundation. He was a founding member of the European Internet Archive, was elected as the founding Secretary General of the Internet Society's European Co-ordinating Council, and a founding Board member of ISOC.NL.





# Matthias Weber Professor, Austrian Institute of Technology, Head of Department, Center for Innovation Systems and Policy



Dr. Matthias Weber is Head of Center for Innovation Systems & Policy at AIT Austrian Institute of Technology and Invited Professor at Université Gustave Eiffel, Laboratoire Interdisciplinaire Science, Innovation, Societé (LISIS). He has a background in process engineering, political sciences and economics, and has been working for more than twenty-five years on the transformation of socio-technical systems, innovation system analysis, foresight, and the governance and evaluation of STI policy. In recent years, he has been member of various expert and advisory groups to the European Commission, the European Council, the OECD and national governments on matters of foresight for STI policy, and transformative innovation policies. Currently, he is Director the "Foresight on Demand" framework contract in support of the European Commission's Horizon Europe framework programme, and coleader of the EC-funded TRAMI project on transnational cooperation on the missions approach.

#### A deep dive into synthetic biology

# **Drew Endy**Professor and Martin Family Fellow in Undergraduate Education, Stanford University; President, The BioBricks Foundation



Drew Endy is a bioengineer at Stanford University who studies and teaches synthetic biology. His goals are civilization-scale flourishing and a renewal of liberal democracy, by or before 2050. Prof. Endy helped launch new undergraduate majors in bioengineering at both MIT and Stanford, and also the iGEM — a Paris-based global genetic-engineering "Olympics" enabling thousands of students annually. Endy helped start two DNA synthesis companies and his past students now lead companies like Ginkgo Bioworks and Octant. He is married to Christina Smolke, CEO of Antheia, the essential medicine company. Endy served on the US National Science Advisory Board for Biosecurity (NSABB), the US Committee on Science Technology & Law (CSTL), the International Union for the Conservation of Nature's (IUCN) Synthetic Biology Task Force and, briefly, the Pentagon's Defense Innovation Board (DIB). He currently serves on the World Health

Organization's (WHO) Advisory Committee on Variola Virus Research (i.e., smallpox) and the boards of the iGEM, BioBricks, and BioBuilder foundations, all charities advancing synthetic biology for public benefit. Esquire magazine recognized Drew as one of the 75 most influential people of the 21st century.





Director, Singapore Consortium for Synthetic Biology; Dean's Chair in Medicine and Associate Professor in Biochemistry, National University of Singapore



Matthew Chang is Dean's Chair in Medicine and Associate Professor of Biochemistry and Synthetic Biology at the National University of Singapore's Yong Loo Lin School of Medicine. He is concurrently the Director of several research institutes across Singapore. These include the NUS Synthetic Biology for Clinical and Technological Innovation (SynCTI), the university's focal research programme for synthetic biology, as well as the Synthetic Biology Translational Research Programme (Syn Bio TRP). At the same time, he is the Director of the Wilmar-NUS Corporate Laboratory, a research partnership between NUS and the agribusiness company Wilmar International Limited, and the Singapore Consortium for Synthetic Biology (SINERGY), an initiative that actively promotes collaboration across academia, industry, and government.

Chang's research focuses on the engineering of biology to develop programmable cells with specific functionalities for biomedical and biomanufacturing applications. To date, he has published over 120 research papers and patents, and his scientific contributions have been recognized with numerous media recognitions and honors, including the Investigatorship Award from the National Research Foundation of Singapore, the NUHS-Mochtar Riady Pinnacle Research Excellence Award, the Korean Federation of Science and Technology Societies Presidential Award, and the Scientific and Technological Achievement Award from the U.S. Environmental Protection Agency.

Beyond his accomplishments in the laboratory, Chang is also highly engaged in scientific outreach and leadership. He has given over 160 invited talks at key scientific conferences and meetings, and he serves as an editor and editorial board member for over 15 leading scientific journals. He also sits on the advisory committees of international synthetic biology programmes such as the CSIRO Synthetic Biology Future Science Platform, Synthetic Biology Africa, and the E.U.'s Horizon 2020. Recognising the importance of fostering collaborative networks, he co-led the establishment of the Asian Synthetic Biology Association (ASBA) and the Global Biofoundry Alliance (GBA), on top of co-chairing the World Economic Forum's Global Future Council on Synthetic Biology.

**Benson Mburu** Principal Scientist, National Commission for Science, Technology and Innovation, Kenya



Dr. Benson Mburu Kinyagia is a Principal Science Analyst at the Kenya's National Commission for Science, Technology, and Innovation (NACOSTI) and is the Acting Head of Health and Biological Sciences Department. He holds a PhD in Pesticide Science from South China University of Agriculture, a Master of Science and a bachelor's degrees from Kenyatta, Nairobi, Kenya.

He has a wide experience in policy, legal and regulatory frameworks in the areas of Biosciences, Biodiversity, Biotechnology, Bioeconomy, Natural Products Initiative, Biosafety, Biosecurity and Synthetic Biology in Kenya. Dr Kinyagia was in the team that came up with Traditional Knowledge and Traditional Cultural Expression Act of 2016 and is taking part in the documentation and digitization of Traditional Knowledge and Culture

Expression and the Genetic Resources associated with them in Kenya. He led the team that reviewed the Kenya National Biotechnology Development Policy in 2017. He was part of the team that drafted the Eastern Africa Regional Bioeconomy Strategy for Creating sustainable economic growth through innovation in 2020.

Dr. Kinyagia has been part of the Kenyan Delegation to the Conference of Parties to the Convention on Biological Diversity (CBD) since 2014. He was nominated a member of the Ad Hoc Technical Expert



Group (AHTEG) on Synthetic Biology representing the East and Central African Region between 2015 and 2018. He was a member of the Future Council on Synthetic Biology at the World Economic Forum between 2021 and 2022 and has been reappointed for 2023 and 2024 session. He is part of the team that is researching on development of synthetic biology rapid kits that can be used on detection of Vibrio Cholerae in water and detection viral diseases in plants, leading the part on legal frameworks required for the products use in the country. He is part of a team developing Kenya National Research and Development Policy.

**Kenneth Oye**Professor of Political Science, Professor of Data Systems and Society, Director of the Program on Emerging Technologies, MIT



Kenneth Oye is a Professor of Political Science and Data Systems and Director of the Program on Emerging Technologies at MIT. His recent research centers on the regulation of rapidly changing technologies, with emphasis on international issues in biotechnology and biomedical policy.

His papers on synthetic biology include: "Revisit NIH Biosafety Guidelines" (Science 2017); "Regulate Home Brew Opiates" (Nature 2015); "Regulating Gene Drives" (Science 2014); "iGEM as a Testbed for Proactive and Adaptive Risk Management" (ACS SynBio 2014); and "What Rough Beast: Synthetic Biology and the Future of Biosecurity" (Politics and Life Sciences, 2010). His papers on biomedical policy have appeared in Clinical Pharmacology and Therapeutics, with articles treating adaptive licensing (2013, 2014, 2016), E2E trials (2022, 2019,

2014) and enhanced data utilization and integration (2015, 2018).

He serves on the NIH Novel and Exceptional Technologies Research Advisory Committee. He chairs the Broad Institute Foundry safety committee and is former chair of the safety committee of iGEM. He served on leadership councils of NSF SynBERC, NSF EBRC and the EPFL International Risk Governance Council. He has also served as an invited expert for the UN BWC and WHO, the Netherlands RIVM, the European Medicines Agency, and US PCAST, OSTP, NSF, and EPA.

Before joining the MIT faculty, Professor Oye taught at Harvard University, the University of California, Princeton University and Swarthmore College as was a guest scholar at the Brookings Institution. He holds a BA in Economics and Political Science with Highest Honors from Swarthmore College and a PhD in Political Science with the Chase Prize from Harvard University.

#### **Claudia Vickers**

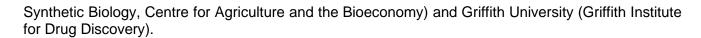
Adjunct Professor, Queensland University of Technology; Former Director, Synthetic Biology Future Science Platform, CSIRO



Professor Vickers is a leading Australian synthetic biologist with over 25 years' experience in academia, government research, and industry. She has worked closely with Australian federal and state governments and NGOs to develop synthetic biology strategy, and often represents Australia in international fora. She was founding Chair of Synthetic Biology Australia, inaugural Director of CSIRO's synthetic biology program, served on the Executive of the Global Biofoundaries Alliance, and co-chaired the World Economic Forum's Global Future Council on Synthetic Biology. She holds advisory board positions for Food Standards Australia New Zealand and numerous international synthetic biology initiatives. She is focused on building capability, improving translation of bioengineering technology, establishing new synthetic biology industry, and delivering real world impact from this science. She

has Adjunct Professorships at Queensland University of Technology (ARC Centre of Excellence in





## A deep dive into immersive technologies

#### **Judith Okonkwo** Founder, Ìmísí 3D



Judith Okonkwo is a Technology Evangelist, Business Psychologist and Organisation Development Consultant with experience working in Africa, Asia and Europe. She sits on the Board of the European Organisation Design Forum, advises Startups, not-for-profits and SMEs on emerging technologies and is a guest lecturer at several HEIs. She is also the creator of the Oriki Coaching Model™ and a co-founder of We Will Lead Africa. Judith is a Fellow of the Royal Society of Arts and an Associate Fellow of the British Psychological Society. In 2016 Judith set up Imisi 3D a creation lab in Lagos focused on building the African ecosystem for extended reality technologies (AR/VR/MR), and connecting XR communities across the continent. The lab provides learning opportunities and access to XR resources for creators and enthusiasts, while supporting engagement and adoption by the wider community, and

consulting and content creation for industry. In 2017 she set up AR/VR Africa which holds large XR events on the continent, the most recent - the 2022 AR/VR Africa hackathon - had participants from 42 African countries. In 2021 Imisí 3D organised the first African Delegation to a global XR event, the African Delegation at Laval Virtual 2021. Judith is especially passionate about the adaptation of immersive technologies to create solutions on the continent, particularly low/mid cost virtual reality, for education, healthcare and storytelling. Imisi 3D's recent VR film production Lagos At Large made the Forbes list of the Top 50 XR Experiences of 2019. Judith is a member of the World Economic Forum's Global Future Council for the Metaverse, and a Chen Yidan Visiting Global Fellow at Harvard's Graduate School of Education.

Pradeep Khanna Executive Director, Asia Pacific, VR AR Association (VRARA); CEO, Global Mindset; Co-Founder InSquare



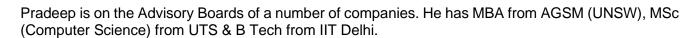
Pradeep Khanna has Multiple Global Roles in the Metaverse / XR ecosystem and knows more than 10,000 entities globally in this ecosystem. He is CEO of Global Mindset and also Executive Director Asia Pacific, Sydney President & Global Co- Chair Education for the global Virtual Reality Augmented Reality Association. He is also an Advisory Board member of global Metaverse Fashion Council as well as Metaverse Strategic Advisor to IIT Jodhpur/i-Hub Drishti.

Pradeep has 30+ years of executive experience and has been a leader for IBM Australia/NZ leveraging India, China, Philippines, Vietnam, Egypt, Romania, Brazil & Argentina. He is Adjunct Professor in Australia and Asia. He is on the Academic Board of Astra Institute of Higher Education.

Pradeep is a regular speaker at international conferences all over the world and typically is invited to speak on overage at 1 to 2 conferences a week. He is an acknowledged Leader in Emerging Technologies, Immersive Technologies, Metaverse and Ed Tech.

Pradeep is also Co-Founder of a social enterprise INSquare - Inclusive Innovation in the New Normal. He is also convenor for Global Chapters & Emerging Technologies (including Immersive Technologies) for IIT Delhi Alumni Association (IITDAA), a worldwide community of more than 50,000 professionals.





### **Simone Kliass** Co-founder and Vice President, Brazilian Extended Reality Association



Simone Kliass is a co-founder and board member of XRBR, the main channel of global promotion for the Brazilian XR industry. Holding a degree from FGV, a leading business school in Latin America, she serves as president of the XR, Metaverse, and Games committee for IAB Brazil, is a lead ambassador for Women in Voice, and has given talks on innovation at SXSW, Immerse Global Summit, Women in Voice Summit, Rio2C, IAB Next, Meta Innovation Day, and Oracle Fest, among other events – as well as at companies such as Ambev, Unilever, Febraban, Shutterstock, Stellantis, and Meta. She's an award-winning voice artist and has narrated immersive experiences such as "The Line" (Primetime Emmy Award for Outstanding Innovation in Interactive Media and Best VR Experience at Venice Film Festival), "Wonderful You VR," and "Ink and Fire" (awarded at Laval Virtual). Simone sits on São Paulo state government committees that fund and promote XR initiatives, acts as a

juror for SOVAS (Society of Voice Arts and Sciences), and has contributed chapters to two books that will be published this month: The Entrepreneurial Humanities (Routledge) and Rise and Raise Others.

## **Kavya Pearlman** CEO and Founder, XR Safety Initiative



Well known as the "Cyber Guardian," Kavya Pearlman is an awardwinning cybersecurity professional and the founder & CEO of the XR Safety Initiative (XRSI), a Standard Developing Organization with the mission to help build safety and inclusion in emerging tech ecosystems. Kavya is the pioneer of the novel XRSI Privacy and Safety Framework for the Immersive Technologies Domain, Metaverse Safety Week Annual Awareness Campaign, and various baseline security, privacy, and ethics standards for Emerging Technologies. She has won several awards for her work and has been named one of the Top twenty Cybersecurity influencers for three consecutive years, 2018-2019-2020, and again for the year 2022 by IFSEC Global.

Kavya has previously advised Facebook on third-party security risks during the 2016 US presidential elections and worked as the head of security for the oldest virtual world, "Second Life" by Linden Lab. Kavya is the leading voice in cybersecurity, privacy, and Ethics for Emerging technologies including AR, VR, and XR, exploring cross-sections of 5G, AI, and BCI - leading Standards development and promoting Diversity and Inclusion in Immersive Technologies. Kavya serves as the key member of the Global Coalition for Digital Safety at the World Economic Forum (WEF), chair for the Privacy, Cybersecurity & Identity Working Group at the Metaverse Standards Forum, co-chair for ITU's Metaverse Focus Group's Working group on Data Protection and PII, and a subject matter expert at several Security and safety-focused multidisciplinary groups including INTERPOL's Metaverse Experts Group (i-MEG), United Nations Business and Human Rights Working Group and the Metaverse Initiative at WEF. Kavya currently advises over 60 global governments and several big tech corporations on cybersecurity and global policymaking to safeguard humans in emerging tech ecosystems.

Kavya holds a master's degree in Computer, Information and Network Security from DePaul University, Chicago and many prestigious Information Security certifications. Kavya is truly passionate about her work and inspires many around the world including women and underrepresented communities in security and emerging technologies.



#### **Rehana Schwinninger-Ladak**

Head of Interactive Technologies, Digital for Culture and Education, European Commission



Rehana Schwinninger-Ladak is the Head of the Unit "Interactive technologies, Digital for Culture and Education" since January 2018.

The Unit 's mission is three folds: i) To foster a wider use of extended reality technologies in industrial and societal domains; to support the digital transformation of cultural and education institutions by promoting the digitisation, preservation and reuse of cultural heritage assets and the further development of Europeana as Europe's platform for digital cultural heritage and as the core of the common European Data space for cultural heritage and iii) to support the modernisation of education and training systems in an age of rapid technological changes.

In her previous positions at the European Commission, Rehana was the deputy Head of the Unit responsible for Learning, Multilingualism and

Accessibility. Prior to it, she was closely involved in the development and follow-up of the European regulatory framework on audio-visual media and the Commission's strategy on Data.

## **Closing plenary**

**Kerri-Ann Jones**Deputy Secretary-General, OECD



Dr. Kerri-Ann Jones, an American national, took up her duties as Deputy Secretary-General of the OECD on 1 July 2022. Her portfolio includes Environment, Development, Science and Innovation, Statistics & Data and Public Governance.

Prior to joining the OECD, she served in senior leadership positions working to advance the role of science in programs and policies. Most recently, she served as the Vice President, Research and Science, at the Pew Charitable Trusts. From 2009 -2014, she served as the US Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs (OES). In this position, she led the bureau responsible for bilateral, regional, and multilateral engagement on oceans, environment, science, space, and health, including the role

of Special Representative on Avian and Pandemic Influenza. In 2014, she received the U.S. Department of State Foreign Affairs Award for Public Service.

Earlier she served in the White House Office of Science and Technology Policy (OSTP), where she was appointed Associate Director for National Security and International Affairs and served on the National Security Council. During that appointment she served for a period as Acting Director of OSTP. She has also served as Director of the Office of International Science and Engineering at the National Science Foundation (NSF) and held positions with the U.S. Agency for International Development (USAID) and the National Institutes of Health (NIH).

Dr. Jones obtained her Ph.D. from the Department of Molecular Biophysics and Biochemistry at Yale University. She holds a bachelor's degree in chemistry from Barnard College, Columbia University. Her advisory work includes serving on the WHO Advisory Group for Pandemic Influenza Preparedness. She is a Fellow of the American Association for the Advancement of Science (AAAS).







Claire Giry was appointed Director General of Research and Innovation at the Ministry of Higher Education and Research in June 2021.

A doctor in molecular and cellular biology, trained at the Ecole Normale Supérieure in Lyon, Claire Giry was responsible for developing national, European and international partnerships at the French Alternative Energies and Atomic Energy Commission (CEA) and the French National Institute for Health and Medical Research (Inserm).

She was also technical advisor to the Prime Minister for higher education and research between 2007 and 2009. She then became head of the joint department of the General Directorate for Higher Education and Professional Integration (Dgesip) and the General Directorate for Research and Innovation (DGRI) of the Ministry of Higher Education and

Research. She was in charge of territorial issues and the implementation of the first Programme d'investissements d'avenir (PIA).

Claire Giry then directed the "Centers of Excellence" program of the French General Commission for Investment, before joining Inserm in 2012 where she held various positions before being appointed Vice-CEO.