# World Health Organization: Biographies of Expert Group on Ethics and Governance of Artificial Intelligence for Health

# Najeeb Al Shorbaji



Dr. Najeeb Al Shorbaji is the President of the eHealth Development Association (Jordan) and President of the Jordan Library and Information Association. He is a consultant, expert and mentor in knowledge management and eHealth. He teaches medical informatics on a part-time basis at PLRI, Germany.

Before his retirement in August 2015, he worked as Director, Department of Knowledge, Ethics and Research at the World Health Organization Headquarters (WHO/HQ) in Geneva since September 2008.

He is from Jordan and holds a PhD in Information Sciences since 1986.

#### **Maria Paz Canales**



Maria Paz Canales is a Chilean lawyer and holds a Master's Degree with a specialization in Law and Technology from the University of California, Berkeley. In 2015-16 she joined as a fellow the Berkman Klein Center for Internet and Society at Harvard University. Since 2017, she is the Executive Director of Derechos Digitales, a fifteen-year old independent non-profit organization based in Chile, working across Latin America on human rights in the digital environment, particularly freedom of expression, privacy, and access to knowledge and information. She was part of the group who founded the organization in 2005. In recent years, Derechos Digitales is building a Latin American perspective to develop public policies that allow for the development of new technologies such as artificial intelligence while properly accounting for and respecting human rights.

She is part of the Multistakeholder Advisory Group for the Internet Governance Forum (IGF) and the programming committee for the LAC IGF preparatory meeting. Previously, her work in private practice and academia covered telecommunications regulation, competition, data protection and intellectual property.

## Abdoulaye Baniré Diallo [OBSERVER]



Prof. Abdoulaye Baniré Diallo is Professor of computer science and bioinformatics at *Université du Québec à Montréal* (UQAM) and Director of the Bioinformatics Laboratory at Centre of Research Excellence in Orphan Disease of *Université du Québec*. He is also co-founder and Chief Scientist of My Intelligent Machines (MIMs), a start □ up integrating Genomics, bioinformatics and Artificial Intelligence. Prof. Diallo holds a Ph.D. degree in computer science (option bioinformatics) from McGill University. He is a former research associate at the Broad Institute of MIT and Harvard and postdoctoral scholar at the Computer Science and Artificial Intelligence Laboratory at MIT. His research focuses on algorithms and methods for biological data analysis, particularly in leveraging bioinformatics and artificial intelligence to improve genomic informed solutions such as personalised medicine, biovigilance, monitoring and surveillance.

He has received several awards for his research including the Next Einstein Fellowship 2017-2019 (which is awarded to top African scientists). He is also proud of the UQAM Professor excellence award in 2016. He is leading two major projects related to precision in health for rare and infectious disease; and precision in dairy providing services to increase profitability of dairy production in Canada. In Africa, Prof. Diallo is leading several projects and workshops on leveraging Bioinformatics and Artificial Intelligence including a platform for monitoring and surveillance of pathogens in West Africa with the IRESSEF, and Graduate studies in bioinformatics.

## Osama el-Hassan [OBSERVER]



Dr. Osama el-Hassan is the Vice-Chair of Emirates Health Informatics Society and a Specialist at the Health Informatics & Smart Health Dept. at Dubai Health Authority. Dr Elhassan is the co-founder and coordinator of the GCC Task-force on Workforce Development in Digital Healthcare (ZIMAM), which aims at empowering young talents, through continuous training programs and career paths development, to participate in digital healthcare transformation projects across the GCC region.

Dr Elhassan also serves as an Adjunct Assistant Professor at the e-School of Health and Environmental Studies at HBMSU. He obtained a PhD in software Engineering from the University of Leicester and an MSc from Imperial College in the United Kingdom. He developed an interest in Healthcare Information Systems during his PhD work, which allowed him to play key roles in several healthcare authorities in the UAE after completing his research work. Dr. Osama joined Dubai Health Authority in Oct. 2012 to take the responsibility of devising and executing DHA's e-Health vision and to establish Dubai's Health Information Exchange project. Dr. Elhassan has also gained invaluable practical experience in eHealth workforce development and Healthcare Information Governance.

#### Arisa Ema



Arisa Ema is Assistant Professor at the University of Tokyo and Visiting Researcher at RIKEN Center for Advanced Intelligence Project in Japan. She is a researcher in Science and Technology Studies (STS), and her primary interest is to investigate the benefits and risks of artificial intelligence by organizing an interdisciplinary research group. She is a co-founder of Acceptable Intelligence with Responsibility Study Group (AIR) (<a href="http://sig-air.org/">http://sig-air.org/</a>) established in 2014, which seeks to address emerging issues and relationships between artificial intelligence and society.

She is a member of the Ethics Committee of the Japanese Society for Artificial Intelligence (JSAI), which released the JSAI Ethical Guidelines in 2017. She is also a board member of the Japan Deep Learning Association (JDLA) and chairing Public Affairs Committee. She was also a member of Council for Social Principles of Human-centric AI, The Cabinet Office, which released "Social Principles of Human-Centric AI" in 2019. She obtained Ph.D. from the University of Tokyo and previously held a position as Assistant Professor at the Hakubi Center for Advanced Research, Kyoto University.

## **Amel Ghouila**



Dr. Amel Ghouila is a bioinformatician working for the pan-African bioinformatics network H3ABionet supporting researchers and their projects while developing bioinformatics capacity throughout Africa. Amel leads the Machine Learning and big data for application to health group focusing on exploring the use of ML tools to improve health outcomes. She also coordinates the sustainability and outreach activities within H3ABioNet aiming at developing strategic public outreach plans including audiences such as governments, patients, and youth.

Amel is a Mozilla Science fellow -- an Open Science and Open Education advocate and was nominated by Mozilla as one of « 50 People Who Are Making the Internet a Better Place ». She is the General Secretary for the African Society of Bioinformatics and Computational Biology (ASBCB) and the founder of Technovation Tunisia, the non-profit is dedicated to teaching young girls coding and entrepreneurship skills while addressing challenges in their communities as part of the global Technovation challenge program.

She has a background in Computer Science with a PhD in Bioinformatics from the LIRMM, Montpellier.

#### Jennifer Gibson



Professor Jennifer Gibson is Sun Life Financial Chair in Bioethics and Director, Joint Centre for Bioethics and Associate Professor, Division of Clinical Public Health and Institute of Health Policy, Management, & Evaluation, Dalla Lana School of Public Health, University of Toronto. She is also Lead of the Centre for Resilience in the Institute for Pandemics, Dalla Lana School of Public Health. Jennifer has a PhD in Philosophy (bioethics and political theory). Her program of research and teaching focuses on health system and policy ethics. She is particularly interested in the role and interaction of values in decision-making at different levels in the health system. Jennifer has advised government on policy issues such as public health emergencies, critical care triage, drug funding and supply, and medical assistance in dying.

Currently, Jennifer is Bioethics Advisor to the Ontario COVID-19 Health Coordination Table, cochair of the Ontario COVID-19 Bioethics Table, and a member of the Ontario COVID-19 Science Advisory Table. In addition, she was a member the Joint Ministers' Roundtable on the Ontario Health Data Platform in 2020 and is a member of the WHO Expert Group on Ethics and Governance of Artificial Intelligence for Health for the World Health Organization.

#### Kenneth W. Goodman



Kenneth W. Goodman, PhD, is founder and director of the University of Miami Miller School of Medicine's Institute for Bioethics and Health Policy and of a World Health Organization Collaborating Center in Ethics and Global Health Policy. He is Professor of Medicine at the University of Miami with appointments in the Department of Philosophy, Department of Public Health Sciences and School of Nursing and Health Studies.

He chairs the Ethics Committee of AMIA (American Medical Informatics Association), for which organization he co-founded the Ethical, Legal and Social Issues Working Group. He has been elected as a Fellow of the American College of Medical Informatics. He is also a Fellow of the American College of Epidemiology, and a past chair of its Ethics Committee. He chairs hospital ethics committees for the University of Miami and Jackson Health Systems in Miami.

Goodman's research has emphasized issues in health information technology and in epidemiology and public health. His most recent book, Ethics, Medicine, and Information Technology: Intelligent Machines and the Transformation of Health Care (Cambridge University Press 2016) identifies and analyzes issues in biomedical informatics. He has also co-authored a book on artificial intelligence, edited a book on ethics and medical computing, co-edited a volume on artificial intelligence, and published and presented papers in bioethics, the philosophy of science, and computing.

## **David Gruson [OBSERVER]**



David Gruson has been involved since 2002 in the field of healthcare policies. He is now Director of Healthcare for Jouve, a French Group specialized in IT transformation.

Former adviser for healthcare to the Prime Minister, he has been CEO of La Réunion University Hospital.

David Gruson studied at the French National School of Administration and the French National School for Public Health, has a PHD in Law and a Master in IT Technologies. He is a Member of the Board of the Sciences Po Paris Healthcare Chair since 2008. He teaches hospital management and healthcare IT policies. He is also Attached Professor to the Paris-Descartes Medical University: he teaches Genetics Law and he is involved in the Applied AI Chair.

In 2017, he founded Ethik IA. Federating a group of IT and healthcare scholars and professionals, Ethik IA put on the French national agenda the idea of AI Positive Regulation. It tackles the issues of the bioethics law reexamination and the impacts of AI on HR in the healthcare sector. Ethik IA presented the first comprehensive sets of soft regulations in that field.

David Gruson co-chaired the working group for the French National Council for Ethics dedicated to IT and AI in the context of the Bioethics Law Reexamination.

#### Jeroen van den Hoven



Jeroen van den Hoven is University Professor and full professor of Ethics and Technology at Delft University of Technology. He is founding Editor in Chief of <a href="Ethics and Information Technology">Ethics and Currently the Scientific director of the Delft Design for Values Institute</a>. He was the founding scientific director of <a href="ATU.Centre for Ethics and Technology">4TU.Centre for Ethics and Technology</a> (2007-2013). In 2009, he won the World Technology Award for Ethics as well as the IFIP prize for ICT and Society for his work in Ethics and ICT. Jeroen van den Hoven was founder, and until 2016 Programme Chair, of the program of the Dutch Research Council on <a href="Responsible Innovation">Responsible Innovation</a>. He published <a href="Designing in Ethics">Designing in Ethics</a> (Van den Hoven, Miller & Pogge eds., Cambridge University Press, 2017) and <a href="European Group on Ethics">Evil Online</a> (Cocking & Van den Hoven, Blackwell, 2018) He is a permanent member of the <a href="European Group on Ethics">European Group on Ethics</a> (EGE) to the European Commission and member of a National Committee on Digitalization in The Netherlands. He is The Netherlands representative of CLAIRE (Confederation of Laboratories for Al Research in Europe). In 2017 he was knighted in the Order of the Lion of The Netherlands.

## Malavica Jayaram



Malavika is the inaugural Executive Director of the Digital Asia Hub, and Faculty Associate at the Berkman Klein Center for Internet and Society at Harvard University. She founded the FAT/Asia conference in 2019, to expand discourses and scholarship on fairness, accountability and transparency in the region, particularly in relation to Al and frontier technologies. She was recently appointed Lee Kong Chian Fellow and Assistant Professor (Practice) at the SMU School of Law, Singapore, which has launched a new Centre for Al and Data Governance.

A technology lawyer for over 15 years, she practised law at Allen & Overy, London, and was Vice President and Technology Counsel for Citigroup, EMEA. She was recently commended in Who's Who Legal's "Data 2018: Data Privacy, Protection and Security Analysis" as "highly visible in the market and (...) known for her exceptional expertise in data policy and e-commerce law". She taught India's first course on information technology and law in 1997, and has taught at Northwestern's Pritzker School of Law as part of the Master of Science in Law program bridging STEM subjects and the law.

She is on the Advisory Board of the Electronic Privacy Information Center (EPIC), and an Associate Fellow with Chatham House (the Royal Institute of International Affairs), as part of its Asia-Pacific Programme. She has been part of the Advisory Board for Mozilla's Tech Policy Fellowship, the Executive Committee of the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems, and the Highlevel Expert Advisory Group to the 24-month OECD project, "Going Digital: Making the Transformation Work for Growth and Well-being". She is a member of the World Economic Forum Global Future Council on Human Rights and Technology for the 2018-2019 term.

## Daudi Jjingo



Dr. Daudi Jjingo is a Principal Investigator of the NIH/Fogarty Bioinformatics training grant in Uganda and Co-Investigator of the Ugandan H3BioNet node. He serves as the Director of the African Center of Excellence (ACE) in bioinformatics and data intensive sciences within the Infectious Diseases Institute (IDI), whose mandate involves providing cutting-edge computational platforms for biomedical research. Dr. Jjingo is a Senior Scientist and Lecturer at Makerere University in the College of Computing.

He earned his PhD in Bioinformatics as a Fulbright Scholar at the Georgia Institute of Technology in Atlanta USA, preceded by an MSc in Bioinformatics from the University of Leeds, UK and a BSc in Biochemistry from Makerere University, Uganda. He previously served as a bioinformatics consultant for the U.S. Centers for Disease Control (CDC) in Atlanta and holds research interests in the molecular epidemiology of TB/HIV and cancer epigenetics.

#### **Tze-Yun Leong**



Tze-Yun Leong is Professor of Practice of Computer Science at the School of Computing, National University of Singapore. She is also Director of Al Technology at Al Singapore, a national program on Artificial Intelligence. She is an elected Fellow of the American College of Medical Informatics (ACMI) and a founding Fellow of the International Academy of Health Sciences Informatics (IAHSI).

Her research interests include decision-theoretic artificial intelligence, cognitive modeling, transfer and reinforcement learning, adaptive computing and biomedical and health informatics. She has over 150 international peer-reviewed publications. She has also served on editorial boards and program committees of leading international journals and conferences on artificial intelligence and biomedical informatics. Her recent work focuses on designing and operationalizing Al Grand Challenges – multidisciplinary research, innovation, and education programs that harness the power of Al to address complex, national and global issues in health, education, and other domains with significant social and economic impact.

With both academic background and business experience, Tze-Yun regularly contributes to panels and committees that advise on research and development directions and education models in computer science, artificial intelligence and health informatics in Singapore and abroad. She served as working committee member of the Information and Communication Technology and Media Master Plan 2025 in Singapore (2013-2015), advisory board member of the United Nations University Institute for Computing and Society (UNU-CS) (2012-2016), and vice president of the International Medical Informatics Association (IMIA) (2013-2016). Currently, she is a member of the Ministry of Education Autonomous University Digital Readiness workgroup and a reviewer of the Al Ethics Body of Knowledge in Singapore.

Tze-Yun received her SB, SM, and PhD degrees in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology (MIT), USA.

#### **Alex John London**



Alex John London, Ph.D., is the Clara L. West Professor of Ethics and Philosophy and Director of the Center for Ethics and Policy at Carnegie Mellon University. He is an elected Fellow of the Hastings Center whose work focuses on ethical and policy issues surrounding the development and deployment of novel technologies in medicine, biotechnology and artificial intelligence. He is co- editor of *Ethical Issues in Modern Medicine*, one of the most widely used textbooks in medical ethics and has published over 90 papers in leading philosophy journals (such as *Mind* and the *Philosopher's Imprint*), high impact science and medical journals (such as *Science*, *eLife*, *JAMA*, *The Lancet*, and *PLoS Medicine*), as well as numerous other journals and collections. Professor London's work on ethics and Al and autonomous systems examines the nature of algorithmic bias, the relative value of explainability and verifiability, how to encode alternative models of moral decision making in formal systems, social trust and the nature and source of uncertainty in Al systems.

Professor London is active in policy and has helped to shape key ethical guidelines for the oversight of research with human participants. From 2012-2016 he was a member of the Working Group on the Revision of CIOMS 2002 International Ethical Guidelines for Biomedical Research Involving Human Subjects. Prior to that he was an expert commentator at three World Medical Association meetings for the revision of the 2013 Declaration of Helsinki. From 2007-2018 he was a member of the ethics working group of the U.S. HIV Prevention Trials Network where he was part of the group that drafted the HIV Prevention Trials Network Ethics Guidance for Research. From 2016-2017 he was part of the U.S. National Academy of Medicine Committee on Clinical Trials During the 2014-15 Ebola Outbreak and from 2016-2018 he was a member of the U.S. Health and Human Services Advisory Committee on Blood and Tissue Safety and Availability. He has served as an ethics expert in consultations with numerous national and international organizations including U.S. National Institutes of Health, the World Health Organization, the World Medical Association, and the World Bank.

#### Partha Majumder (Co-Chair)



Parth Majumder is the Founder of the National Institute of Biomedical Genomics Institute. Currently, he is a Distinguished Professor in the Institute, and also an Emeritus Professor of the Indian Statistical Institute. He is a Sir J.C. Bose National Fellow and an elected Fellow of all the three science academies of India, of the West Bengal Academy of Science and Technology (WAST), of The World Academy of Sciences (TWAS) and the International Statistical Institute. He is currently the President of the Indian Academy of Sciences and of WAST.

Partha Majumder has made significant contributions to human genetics and evolution using statistical, molecular genetics and anthropological methods. He has devised innovative paradigms and statistical methods for solving biological problems related to modes of inheritance of complex human traits and mapping genes underlying such traits. He applied these methods to data on various common disorders, and their quantitative precursor states, that has resulted in a clear understanding of the genetic bases of such disorders. In the past ten years, he has made significant contributions to genomics of oral cancer and has identified genomic drivers of this cancer type. Partha currently leads several large academic programmes, including the International Cancer Genome Consortium-India Project, a large longitudinal population cohort study, and a multi-institutional study on systems medicine. He has contributed to capacity-building in human and statistical genetics in India by sustained organization of workshops, summer and winter schools.

He is a Member of the Organizing Committee of the International Human Cell Atlas consortium and the Indian National Coordinator of the International Cancer Genome Consortium.

#### Tshilidzi Marwala



Tshilidzi Marwala is the Vice-Chancellor and Principal of the University of Johannesburg. Previously he was the Deputy Vice-Chancellor for Research and Internationalization and the Executive Dean of the Faculty of Engineering and the Built Environment both at the University of Johannesburg. He holds a Bachelor of Science in Mechanical Engineering from Case Western Reserve University (USA), a Master of Mechanical Engineering from the University of Pretoria and a Ph.D. specializing in Artificial Intelligence and Engineering from the University of Cambridge in 2000.

Tshilidzi is a registered professional engineer, a Fellow of TWAS (The World Academy of Sciences), the Academy of Science of South Africa, the African Academy of Sciences and the South African Academy of Engineering. He is a Senior Member of the IEEE (Institute of Electrical and Electronics Engineering) and a distinguished member of the ACM (Association for Computing Machinery). He has published 13 books in artificial intelligence, one of these has been translated into Chinese, over 300 papers in journals, proceedings, book chapters, and magazines and holds four patents. He is an associate editor of the International Journal of Systems Science (Taylor and Francis Publishers). He has been a visiting scholar at Harvard University, University of California at Berkeley, Wolfson College of the University of Cambridge and Nanjing Tech University as well as a member of the programming council of the Faculty of Electrical Engineering at the Silesian University of Technology in Poland.

#### Roli Mathur



Dr Roli Mathur heads the Indian Council of Medical Research (ICMR) Bioethics Unit and involved in developing National ethics policy, guidance and regulations related to conduct and review of biomedical research. Prior to joining ICMR, she received the Young Scientist award for her research in molecular genetics while she was at the All India Institute of Medical Sciences. Her recent contribution in the field has culminated in the National Ethical Guidelines for Biomedical Research on Human Participants (2017), National Ethical Guidelines for Research in Children (2017), the Definitions pertaining to End of Life Care (2018), Handbook on Ethical Guidelines (2019) and the ICMR policy on Research Integrity and Publication Ethics (2019).

She has represented ICMR in several national and International platforms and is part of many expert advisory groups. She is helping the Department of Health Research, Ministry of Health & Family Welfare in setting up an online ethics committee registry and is the member secretary of the Central Ethics Committee on Health Research (National Ethics Committee). She is passionate about building capacity for ethical conduct and review of research, developing ethics teaching-training opportunities, creating tools for ethics committees, holding country wide consultations and engaging with multi-sectoral stakeholders towards developing ethics policy on several key issues (<a href="http://ethics.ncdirindia.org/">http://ethics.ncdirindia.org/</a>)

## **Timo Minssen**



Timo Minssen is Professor of Law at the University of Copenhagen (UCPH) and the Founding Director of UCPH's Center for Advanced Studies in Biomedical Innovation Law (CeBIL). His research, supervision, teaching & part-time advisory practice concentrates on Intellectual Property-, Competition & Regulatory Law with a special focus on new technologies, big data & artificial intelligence in the health & life sciences.

Timo is member of several international committees and regularly advising the WHO, WIPO, EU Commission, various research organizations, national governments, and law firms.

#### **Andrew Morris**



Since August 2017 Andrew Morris has been the inaugural Director of Health Data Research UK, the multifunder UK Institute for Health and biomedical informatics research that will capitalise on the UK's renowned data resources and research strengths to transform lives through health data science. He is seconded from his position as Professor of Medicine, and Vice Principal of Data Science at the University of Edinburgh, having taken up position in August 2014. Prior to this Andrew was Dean of Medicine at the University of Dundee.

Andrew was Chief Scientist at the Scottish Government Health Directorate (2012-2017) and has served and chaired numerous national and international grant committees and Governmental bodies.

Andrew was awarded a CBE in the 2018 New Year's Honour's List.

His research interests span informatics and chronic diseases. He has published over 300 original papers and has attracted over £50million in grant funding.

# Daniela Paolotti



Daniela Paolotti is a Research Leader at ISI Foundation, in the Computational Epidemiology and Public Health Group.

Her research revolves around the field of infectious diseases epidemiology with a special focus on digital epidemiology, participatory surveillance, and mathematical modelling.

She examines complex techno-social systems and new data-collection schemes aimed at detecting disease-related information directly from the general population, both with passive and active approaches.

# Rasha Abdul Rahim (Observer)



Rasha Abdul Rahim Director of Amnesty Tech at the International Secretariat of Amnesty International in London, where she heads up the Al and Big Data Team. Rasha covers issues related to privacy and data protection, surveillance, platform accountability and ensuring human rights are respected in the design and use of new and frontier technologies.

Rasha also leads Amnesty's work on fully autonomous weapons systems and other emerging artificial intelligence technologies for military and police use. Rasha sits on the Steering Committee of the Campaign to Stop Killer Robots.

#### Jerome Singh



Jerome Amir Singh (BA, LLB, LLM, MHSc, PhD) is Head of Ethics and Law at the Centre for the AIDS Programme of Research in South Africa (CAPRISA), Nelson R. Mandela School of Medicine, University of KwaZulu-Natal (UKZN). He is also Adjunct Professor in the division of Clinical Public Health, Dalla Lana School of Public Health Sciences, and the Joint Centre for Bioethics at the University of Toronto, Canada, and Course Director for Bioethics and the Law, at Howard College School of Law, UKZN.

He is the Principal Investigator / Director of the Ethical, Legal, Social, and Cultural Issues (ELSCI) Program on Synthetic Biology, funded by the Bill and Melinda Gates Foundation. He has previously served as a Senior Consultant to the Ethical, Social, and Cultural Program on Global Health, St Michael's Hospital, Toronto, Canada, which advised the Bill and Melinda Gates Foundation on ethical, social, cultural, and regulatory issues. Before then, he served as the Co-Director of the Ethical, Social, and Cultural Issues Advisory Services to the Bill and Melinda Gates Foundation's Grand Challenges in Global Health Initiative.

He currently serves on several bodies, including the International Ethics Review Board of Médecins Sans Frontières (MSF), the Research Ethics Committee of the South African Human Sciences Research Council, and the Scientific Advisory Board of the Aurum Institute of Health Research. He also serves as a member of the Critical Path for TB Drug Regimens (CPTR) Advisory Panel and as a Special Advisor to the Biomedical Research Ethics Committee of the Nelson Mandela School of Medicine.

## Effy Vayena (Co-Chair)



Effy Vayena is a Professor of Bioethics at the Swiss Federal Institute of Technology (ETHZ) and renowned expert at the intersection of medicine, data, and ethics. Her work focuses on important societal issues of data and technology as they relate to scientific progress and how it is or should be applied to public and personal health. Vayena completed her education as a social historian with a PhD in Medical History from University of Minnesota. A keen interest in health policy has led her to work with the World Health Organization where she served as a technical officer for several years.

Upon her return to academia, Vayena was awarded a professorship by the Swiss National Science Foundation. She founded the Health Ethics and Policy Lab to tackle pressing questions that arise through technological advances such as genomic technologies and big data analytics in healthcare and research. She received her habilitation from the University of Zurich in the field of bioethics and policy and has been appointed Faculty Associate at the Berkman Klein Center for Internet & Society at Harvard University, where she was previously a Fellow. She is a member of the Swiss Academy of Medical Sciences and chairs the Ethical, Legal and Societal Implications advisory group of the Swiss Personalized Health Network, a national infrastructure and research program aiming to advance personalized health in Switzerland.

Effy Vayena is a leading expert in the dynamic and diverse field of health data and ethics, successfully leveraging her academic work and international network to promote a fruitful debate about the ethics of health in the digital age.

## **Robyn Whittaker**



Dr Robyn Whittaker is a public health physician and Associate Professor at the University of Auckland, New Zealand. She is currently Clinical Director of Innovation at the Waitemata District Health Board where she leads the organisation's Leapfrog Programme implementing enterprise-wide health IT solutions (recently winning the national CIO Awards for Business transformation through digital and IT). She co-leads the health technology team at the National Institute for Health Innovation where her research includes mHealth development and evaluation, particularly for healthy behaviour change and self-management support for people with long-term conditions.

Robyn sits on several regional and national groups including as chair of the Northern Region Health Systems Design Council, IS Strategic Plan Design Authority, National Telehealth Leadership Group, Clinical & Technical Advisory Group for Health Informatics New Zealand, Digital Investment Board for the NZ Ministry of Health, Management Team for the MedTech Centre of Research Excellence, Theme Lead for the Precision Driven Health research partnership. She has been a long term expert for the WHO/ITU Be Healthy, Be Mobile global mHealth initiative, and is on several international research collaborations/networks.

## Yi Zeng



Yi Zeng is a Professor and Deputy Director at Research Center for Brain-inspired Intelligence, Institute of Automation, Chinese Academy of Sciences, a board member for the National Governance Committee for the New Generation Artificial Intelligence, Ministry of Science and Technology China, and is also the Director for the Research Center on AI Ethics and Safety, Beijing Academy of Artificial Intelligence, and a member of the World Economic Forum Global Future Council on Values, Ethics and Innovation. He initiated and led the Beijing Artificial Intelligence Principles and is one of the main contributors for the National Governance Principles for the New Generation AI.

His major research interests focus on technical models for Brain-inspired AI, AI Ethics and Governance. He leads the efforts on Brain-inspired Cognitive Engine, Linked Brain Data, a knowledge engine on the relationships among different cognitive functions, brain building blocks and brain diseases) and the Linking AI Principles platform.