





## **Errata**

### 1. Biographies



Michael BARBER
Fellow, Australian Academy of Science

Professor Barber is internationally known for his substantial contributions to the mathematical development of statistical mechanics. With M.E. Fisher he developed the scaling theory of systems of finite size, together with the related theory of remnant functions. His articles and reviews are widely consulted, being the leading exposition of these subjects. He pioneered the application of optimal control theory to the renormalisation group, revealing the limitations of Kadanoff's variational approach. His renormalisation group technique for analysing Monte Carlo data is widely used. He has also made significant contributions to two-dimensional lattice models, and to improved techniques for extrapolating sequences.



Anne BARDSLEY
Associate Director of Research, Centre for Science in Policy, Diplomacy and Society (SciPoDS), University of Auckland

Anne's background is in biomedical science and biotechnology. Her current research interests revolve around the use of evidence in policymaking, concepts of risk and precaution in relation to emerging technologies, and the changing nature of interactions between science and societal decision-making. Anne has considerable expertise in synthesizing and communicating scientific evidence to inform the public and policy-makers on a broad range of topical issues. Working with Sir Peter Gluckman in his former role as the Prime Minister's Chief Science Advisor, she led a number of high-impact projects involving close collaboration with leading scientific and policy experts both within New Zealand and internationally. She has also served as Commissioning Editor for a number of international peer-reviewed scientific journals spanning multiple disciplines. In this role, she helped identify emerging lines of scientific enquiry and facilitated the quality assurance of publications through robust peer review.

Anne holds a PhD in Molecular Biology from the University of Colorado at Boulder, USA, and was a Research Fellow at Lund University in Sweden, and at the University of Auckland.



Yasunori KIMURA

Principal Fellow, Center for Research and Development Strategy (CRDS), Japan Science and Technology Agency (JST) / Senior Fellow, Fujitsu Laboratories Ltd.

Mr. Kimura joined Fujitsu Limited in 1981. Since then throughout his career, he has been engaged primarily in computer system design and development, and was a lead in the computer architecture research group at Fujitsu Laboratories Ltd. Some of the projects he contributed to include: the development of parallel inference machines that was used in the Japanese fifth generation computer systems, parallelizing compilers for commercial servers, and supercomputers, one of which was later called as 'KEI Computer' that was developed under the supervision of RIKEN and the Ministry of Education, Japan.

He got transferred to Fujitsu Laboratories of America in California in November, 2009, and in 2011, was appointed as President and CEO where he led research projects in the areas of healthcare, smart energy, open education, SDN, and security.

He returned to Japan in 2015, and became Fellow at Fujitsu Laboratories Ltd. He was appointed as Principal Fellow at Center for Research and Development Strategy (CRDS), JST (Japan Science and Technology Agency) in January, 2017, while keeping his fellow position (now Senior Fellow) at Fujitsu Laboratories Ltd. He spent a summer at Stanford University as a visiting scholar in 1995, and served as Visiting Professor at the University of Tokyo for four years from 2002, and at Kyushu University in 2009. Mr. Kimura holds a Ph.D. in Computer Science from the University of Tokyo.

His personal interests are reading books, walking, and especially visiting historic sites of Japanese old 100 castles which were selected by Japan Castle Foundation. (He visited only 25 as of September, 2018.) He also started enjoying wine tasting while in California.



Kazuhiko TAKEUCHI
Vice-President, Science Council of Japan (International Activities)

Kazuhiko Takeuchi is President of the Institute for Global Environmental Strategies (IGES), Director and Project Professor of the Integrated Research System for Sustainability Science (IR3S) at the University of Tokyo, Senior Visiting Professor of United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS). He was a Vice Rector and Senior Vice-Rector of the United Nations University from 2008 to 2016. He has served, inter alia, as Chair of the Central Environment Council, Government of Japan, as Editor-in-Chief of the journal Sustainability Science (Springer Nature) and as Distinguished Chair of the Wangari Maathai Institute for Peace and Environmental Studies, University of Nairobi. Educated and trained as a geographer and landscape ecologist at the University of Tokyo, He engages in research and outreach activities on creating eco-friendly environments for a harmonious coexistence of people and nature, especially focusing on Asia and Africa. Recently, he has been working toward establishing a global foundation for developing the field of sustainability science aiming to build a sustainable society.



**Ernest Fernández POLCUCH** 

Chief of Section for Science Policy and Partnerships, Natural Sciences Sector, UNESCO.

Ernesto Fernández Polcuch is a Science Diplomat, a specialist in Science, Technology and Innovation Policy, with a M.Sc. in Science, Technology and Society from the National University of Quilmes, Argentina. He is currently Chief of Section for Science Policy and Partnerships in the Natural Sciences Sector of UNESCO. In this position he manages global UNESCO programmes in Science, Technology and Innovation Policy, Science Communication, Gender and STEM, Science Diplomacy, and Science-Policy-Society linkages, including the UNESCO Global Observatory of STI Policy Instruments GO-SPIN, the UNESCO Science Report, the L'Oréal UNESCO For Women in Science Programme, and the STEM and Gender Advancement (SAGA).

### 2. Change of Moderator

·Parallel Session 1.2 (p.8)

Bart KOLODZIEJCZYK, Chief Technology Officer, H2SG Energy

will be replaced by

Clarissa RIOS ROJAS, Founder & Director at Ekpa'palek / Global Young Academy

### 3. Change of Speaker

·Parallel Session 2.2 (p.9)

Jacquie McGLADE, Professor, University College London

will be replaced by

Peter GLUCKMAN. Chair of INGSA

Ernest Fernández POLCUCH, Chief of Section for Science Policy and Partnerships, UNESCO

·Parallel Session 1.3 (p.10)

Richie POULTON, Professor, University of Otago

**Madiagne DIALLO**, General Secretary, the Economic, Social and Environmental Council of Senegal

will be replaced by

Kristiann ALLEN, Executive Secretary, INGSA

#### Parallel Session 4.3

Vaughan Turekian, Executive Director of the Policy and Global Affairs (PGA) Division at

the US National Academies of Sciences, Engineering, and Medicine

Will be replaced by

Franklin Carrero Martinez, Acting Deputy Science and Technology Adviser to

the Secretary of State

### 4. Change of Rapporteurs (p.35)

Clarissa Rios Rojas

will be replaced by

Shalini Subhash Arya

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# Message from Sir Peter Gluckman

**Chair of the International Network for Government Science Advice** (INGSA), Former-Chief Science Advisor to the Prime Minister of New Zealand, International Science Council President-elect

In the two years since our very successful congress in Brussels, INGSA has undergone rapid development. We now have very vibrant chapters in Africa, Asia and Latin America/Caribbean and developing chapters in both Europe and North America. At this meeting, we will launch a science

The demands on INGSA to deliver workshops, both general capacity building and thematic, have grown exponentially. We will have been involved in 14 workshops this year and the agenda for 2019 already suggests further expansion. Thanks to the support of the IDRC we have been able to fund a small number of research grants in developing countries - the demand for which was very high and I hope we can expand this programme in future.

Over the coming year more of the workshop activities will be led by the regional committees as other demands on INGSA for reports and partnerships with international bodies such as OECD, UNESCO and UNDP grow. We are also considering whether to have a regular research conference to promote research in the science-policy and sciencediplomacy interfaces. A major work programme, under way jointly with the International Science Council (ISC) and others, is exploring how to get science to play a greater role in assisting the SDGs to have greater

The changing environment around how evidence is perceived, is affecting public policy processes globally. Effective structures of science advice will be critical in resisting the 'post-truth' dynamic that has emerged. At the same time the many global, regional, and national challenges encapsulated in the Sustainable Development Goals clearly require science to engage with the policy process to accelerate progress. Increasingly, the input of INGSA is being sought by many organisations and governments as they look to improve this complex interface.

In 2018 the International Council of Science (ICSU), our parent body, merged with the International Social Science Council (ISSC) to form the International Science Council (ISC) - already the new board has recognised that INGSA will have a growing and critically important role in this changing environment. Over the next year, I expect this will lead to more coordination of our activities including fundraising with ISC and to greater formalisation of the network's governance.

This third global INGSA meeting provides an important opportunity at a critical time - to evaluate best practice, the lessons learnt, and the challenges ahead. We are privileged to have a roster of outstanding speakers and panellists. Intentionally, we have organised a meeting smaller in size, and in more intimate facilities, in order to encourage and facilitate informal interactions, which are so important. We also have a series of exciting satellite meetings on parliamentary advice, science diplomacy, urban science advice, and more. In addition, we are delighted to have a joint workshop with the Global Youth Academy. We sincerely thank our Japanese hosts for their support and for the arrangements they

Much of what we do depends on valuable partnerships with local hosts to assist with workshops; generally, these have been government agencies. I particularly want to acknowledge the essential financial support from the Wellcome Trust, the International Development Research Centre, the Royal Society London and the International Science Council. Nothing would be possible without the energy and commitment of a very small secretariat led by Lara Cowen and the input of some very committed members of the executive committee and advisory board.

Thank you also for your attendance at INGSA2018 and I hope you find it an inspiring, challenging, and most of all, valuable event that helps us all drive towards a stronger future.











Chair of INGSA2018 Local Organizing Committee / Science and Technology Advisor to the Minister of **Foreign Affairs of Japan** 

On behalf of the Local Organizing Committees, it is my great pleasure to welcome the INGSA's 3rd biennial conference "INGSA2018" here in Tokyo, the first time this event has been held in Asia, in collaboration with the Government of Japan and Japan's National Graduate Institute for Policy Studies (GRIPS).

The year 2019 marks the 20th anniversary of the "Budapest Declaration". the "Declaration on science and the use of scientific knowledge" adopted by the World Conference on Science in Budapest. That emphasizes the importance of science for development as well as science for society. Since then, almost 20 years have passed, and the role of science in overcoming social challenges is getting more and more important. Now, there is no argument that social science and natural science should be harmonized since innovation cannot be created only by technology development. Natural science solves social problems defined by social science studies, and social science applies technologies developed by natural science for the society. The virtuous cycle between social science and natural science is of great importance, and the establishment of the International Science Council (ISC) by merging the International Council of Science (ICSU) and International Social Science Council (ISSC) will promote this circulation.

The concept of Science Technology and Innovation (STI) for United Nations Sustainable Development Goals (SDGs), STI for SDGs in short, is actively discussed both in the national and international arenas. In Japan, the 5th Science and Technology Basic Plan, starting from 2016, defines not only the technological focus areas but also our future society as "Society 5.0." It means a human-centered and inclusive society to be realized by fusion of cyber and physical spaces. We think future society created by achievements of SDGs as Society 5.0. However, we must remember that STI have lights and shadows. For example, data science is at the crossroads. Thanks to the ICT innovation, data science can give solutions to challenges such as energy shortage, natural disasters, and so on. On the other hand, data gap between those who have and do not have can be a problem.

The "INGSA2018" focuses on critical issues such as challenges of evidence based scientific advice for policy-making, relations between innovative technology and society, creations of innovation for SDGs implementations and so on under the overarching theme of "Science Advice for a changing world. I firmly believe that there will be significant discussion on such important topics at the conference and strong networks among diverse stakeholders - practitioners, academics, researchers, advisers, and policymakers- will be further enhanced. In closing, I wish for the "INGSA2018" full success.









**PROGRAM** 

### **DAY ONE TUESDAY 6TH NOVEMBER**

Time	Program	
08:00-08:30	Registration	
08:30-09:00	Opening Session	Sokairo Hall
	Opening remarks: <b>Teruo KISHI</b> , Science and Technology Advisor to the Minister of Affairs of Japan	
	Welcome remarks: Akihiko TANAKA, President, National Graduate Institute for (GRIPS)	Policy Studies
	Welcome remarks: <b>Michinari HAMAGUCHI</b> , President, Japan Science and Tec (JST)	hnology Agency
	Greetings: Kazuhiko TAKEUCHI, Vice President, Science Council of Japan Presidential address: Sir Peter GLUCKMAN, Chair of the International Network Science Advice (INGSA), Former-Chief Science Advisor to the P of New Zealand, International Science Council President-elect	
09:00-09:30	Keynote Speech I	Sokairo Hall
	Rt Hon. Helen CLARK, Former Administrator of United Nations Development Progr Former Prime Minister of New Zealand	amme (UNDP),
09:30-11:00	Plenary Session I: SDGs and the science-policy interface	Sokairo Hall
	The Sustainable Development Goals (SDGs) are a critical framing device for progressing and the global agendas. In nearly all of the SDGs, natural science, social science, data is technology, economic and political science, and particularly implementation science will This session will explore the ways that science relates to the SDGs. Aspects such as, he can help deliver the SDGs, the changing scientific and technological context in which the considered, and how to use science and the science-policy nexus and science diplointegrate the SDGs into domestic policy.	ccience, be needed. bw science e goals must
	MODERATOR Yuko HARAYAMA, Professor Emeritus, Tohoku University  SPEAKERS Matthew WALLACE, Senior Program Officer, International Developme Research Centre (IDRC)	nt
	Daya REDDY, President, International Science Council (ISC) Klaus TILMES, Senior Advisor, Science Technology and Innovation, Wo Michiharu NAKAMURA, Counsellor to the President of Japan Science Technology Agency (JST)	
	<b>Rt Hon. Helen CLARK</b> , Former Administrator of UNDP, Former Prime New Zealand	Minister of
11:00-11:30	Coffee Break	











### Stream 1: Science Advice in an era of Technological and Societal Transformation

Human innovation and ingenuity has both upsides and downsides, especially at scale. How can risks and challenges be mitigated and benefits maximised? This stream will examine the role of science advice in bridging the multiple conversations required.

- 1.1: Human wellbeing in a digital age Are new measures and considerations needed in the face of pervasive technology?
- 1.2: Technological risk management Dealing with uncertainties, risks, trade-offs and human values
- 1.3: Big Data transforming policy-making What are the opportunities and challenges?

### Stream 2: Science Advice and the Sustainable Development Goals

The Sustainable Development Goals (SDGs) provide a framework for truly joint, global action on our shared challenges. The SDGs require not only new knowledge but also radically new systems and approaches. These sessions will examine the types of knowledge that are required to help advance the SDGs and how such knowledge must be framed and mobilised in innovative new ways.

- 2.1: The role of arts, humanities and the interpretive social sciences in advancing knowledge advice for the SDGs
- 2.2: Mapping critical policy nodes Identifying the articulation points between interacting SDGs and domestic policy priorities
- 2.3: The role of the private sector in advancing the SDGs Implications for science advice

#### Stream 3: The Future of Science Advice

Science advice has never been so important. At a time when the use of 'evidence' to guide public policy can be so openly revered and reviled, trusted and tested – depending on one's political position – there has never been a greater need for it. Yet, the position of science advisor or science advisory mechanisms is vulnerable sitting as it does between science and public policy, and largely between facts and values. In this in-between, it is important to maintain the trust of parties who do not always trust each other. While the position requires a distinct set of skills and experiences, there is no formal training for this brokerage and often structural barriers prevent it functioning effectively (in both science and policy sectors). These sessions will look at the future of science advising and the skills needed. What are the implications of institutionalising these? Who are the next generation advisors and will they want the job?

- 3.1: Building trust between evidence brokers and multiple audiences
- 3.2: Skills development for evidence brokerage
- 3.3: Structural considerations for science advice in public policy From embedded to open science

### Stream 4: Contexts and Case Studies of Science Advice

Science advising is often discussed in the abstract, by way of principles and practices. Putting these into context can provide a better way to share experience and lessons. This is especially important because the practice of science advising is highly contextualised. The advisor or advisory mechanism can quickly become a decision-maker in crises, for instance. Science advice to local officials may need to confront more immediate and direct democratic processes than at other levels, but may also have more immediate and direct impacts. At the same time, at the international level, diplomats and tradenegotiators have to marshal scientific understandings in new and unprecedented ways. These are just some of the unique contexts in which science advice plays a role. This session drills deep into the diverse contexts of science advice to better understand its real-world application.

- 4.1: Dealing with disaster The role of science advice before, after, during
- 4.2: Smart Cities Urban and Urbanising
- 4.3: The local is global The intersection of science advice and science diplomacy





Time	Program		
11:30-13:00	Parallel Panel Session One		
	Parallel Session 1.1: Human wellbeing in a digital age – Are new measure and considerations needed in the face of pervasive technology?	Room 4A	
	This session builds on work undertaken by INGSA for the OECD's Going Digital initiative (http://www.going-digital/). Wellbeing is defined broadly to reflect on the wellbeing of individuals and social group social and civic (liberal democratic) contexts and how this is evolving as a result of digital transforma transformation includes networking, communications, monitoring, surveillance and predictive techno Examples including AI, machine learning and predictive algorithmic applications; the internet of thing the monitoring and measurement that ensues; new media and communication, etc. Panellists will be consider the ways in which the unprecedented speed and pervasiveness of these technologies are a human wellbeing in the broadest sense.		
	MODERATOR  SPEAKERS  Kristiann ALLEN, Executive Secretary of INGSA  Toyoaki NISHIDA, Professor, Graduate School of Informatics, Kyoto Fabrice MURTIN, Head of Section at the Organisation for Economic C Development (OECD) in the Households Statistics and Progress Measur Tahu KUKUTAI, Professor, University of Waikato Mylène DESCHÊNES, Director, Ethics and Legal Affairs, Office of the Fonds de Recherche du Québec Yuko HARAYAMA, Professor Emeritus, Tohoku University	Co-operation and rement Division	
	Parallel Session 2.1: The role of arts, humanities and the interpretive social sciences in advancing knowledge advice for the SDGs	Sokairo Hall	
	It is undeniable that today's global challenges are fundamentally social issues. Achieving the collective consciousness and risk-awareness necessary for the change required will mean profound shifts in individe and population attitudes and behaviours – solutions which are not typically the remit of the natural and processes and technology. How have the arts, humanities and social sciences approached the issues? In what ways are they helping to advance the SDG agenda, both in their own right and in collaboration acrodisciplines? What can we learn from observing other disciplines and how can lessons be applied collecting to do the arts, humanities and social sciences engage in advising governments?		
	MODERATOR SPEAKERS David Budtz PEDERSEN, Professor of Science Studies, Aalborg University of Bergen Marc SANER, Full Professor and Chair, University of Ottawa, Depart Environment and Geomatics	stralian National University the Library of Chile's and Humanities (SVT),	
	Parallel Session 3.1: Building trust between evidence brokers and multiple audiences	Room 1A&1B	
	Invited panelists in this session have a wealth of experience in providing science advice and analysis of advisory situations, including the most challenging. Representing esteemed advisory organisations and plenty of stories and lessons to share, panelists will explore the break-down and rebuilding of trust and essential for any hope of evidence informed policy.		
	MODERATOR  Jan Marco MÜLLER, Coordinator for Science to Policy and Science International Institute for Applied Systems Analysis (IIASA)  Rebekah WIDDOWFIELD, Chief Executive, Royal Society of Edinburgh Motoko KAKUBAYASHI, Press officer at the Kavli Institute for the Physithe Universe (Kavli IPMU), The University of Tokyo Roger PIELKE, Professor, Department of Athletics at the Center for Technology Policy Research at the University of Colorado Boulder Tracey BROWN, Director of Sense About Science Janusz BUJNICKI, Professor, Member of the European Commission Scientific Advisors, International Institute of Molecular and Cell Biological Policy Research at the University of Colorado Scientific Advisors, International Institute of Molecular and Cell Biological Policy Research at the University of Colorado Boulder Tracey BROWN, Director of Sense About Science	sics and Mathematics of Science and n's Group of Chief	

Time	Program		
	Parallel Session 4.1: Dealing with disaster – The role of science advice before, after, during	Room 4B	
	Science advisors and science advisory mechanisms typically do not crossover into the role of de However in quickly evolving crises, the lines can be blurred. The stages of a crisis require distinct and packaging of advice, all of which also depend on the issue at hand. Panelists will draw on exexplore lessons learned in dealing with various types of crisis including its aftermath.		
Abhi VEERAKUMARASIVAM, Professor/Doctor, Department of Biotech Science and Technology, Sunway University  Haruo HAYASHI, President, National Research Institute for Earth Science and Tom De GROEVE, Deputy Head of Unit, European Commission, Joint Relizabeth Silvestre ESPINOZA, Vicerrector of Research of Universidad Toribio de Mogrovejo  Meghnath DHIMAL, Senior Research Officer and Chief, Health Research Health Research Council (NHRC)  Anne BARDSLEY, Associate Director of Research, Centre for Science in Diplomacy and Society (SciPoDS), University of Auckland		d Disaster Resilience Research Centre Católica Santo ch Section, Nepal	
13:00-14:00	Lunch		
	Clarivate Analytics Luncheon Seminar "Mapping the landscape of research on SDGs" (13:15 – 13:55)	Room 1A&1B	
14:00-15:30	Plenary Panel Session II: Socio-techno transformation and the Global Goals	Sokairo Hall	
	The Sustainable Development Goals require both technical and social innovation if they are to be realised. From municipalities to multi-laterals, all jurisdictions in all countries have a role to play as these goals are not a traditional "development issue." The session will explore all types of innovations taking place right now or those that are planned in the near future to help realise the goals. What can we learn from each other? How is the science community engaging?		
	MODERATOR SPEAKERS Connie NSHEMEREIRWE, Co-Chair, Global Young Academy Kay FIRTH-BUTTERFIELD, Head of Al and Machine Learning at the World Economic Forum Haruo TAKEDA, Corporate Chief Engineer, Hitachi, Ltd. Xavier ESTICO, Chief Executive Officer, National Institute of Science Technology & Innovation (NISTI) E. William COLGLAZIER, Editor-in-Chief, Science & Diplomacy Michael BARBER, Executive Committee Australian Academy of Sciences		
15:30-16:00	Coffee Break		
16:00-16:30	Keynote Speech II	Sokairo Hall	
	Vladimir ŠUCHA, Director-General, European Commission - Joint Research Centre		
16:30-17:00	Wrap-up and Conclusions of the first day	Sokairo Hall	
	<ul> <li>Rapporteurs</li> <li>Amal Amin Ibrahim SHENDI NADA</li> <li>Bernardo URBANI</li> <li>Marc SANER - Conclusions from Day 1</li> </ul>		
18:00	Conference Reception		
	Belle Salle Roppongi Grand Conference Centre, Roppongi Grand Tower 9F		
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### **DAY TWO WEDNESDAY 7TH NOVEMBER**



Time	Program			
08:20-08:30	Opening Session: Re-cap of Day 1 and Plan for Day 2	Sokairo Hall		
	James WILSDON, Vice-Chair of INGSA / Professor of Research Policy, University of Sheffield			
08:30-09:00	Keynote Speech III	Sokairo Hall		
	Dr Rémi QUIRION, Chief Scientist of Québec			
09:00-10:30	Plenary Panel Session III: Science advice at multiple levels – From local to global	Sokairo Hall		
	All public policy at all levels should be evidence informed, but especially regarding the SDGs. This is because the SDGs by definition will require a sustainable and coordinated global effort to achieve, but there is rarely easy consensus on the best way forward especially where a perceived solution will have trade-offs and implications. In these circumstances, evidence, honestly brokered, can be an arbiter and help point a direction toward consensus. Can knowledge brokers from multiple levels play a role in developing consensus? Under what conditions does this work or not work? How are power dynamics dealt with across levels and jurisdictions? Can science play a bridging role?			
	Tateo ARIMOTO, Visiting Professor, National Graduate Institute for Policy Principal Fellow, Japan Science and Technology Agency (JST) and Vice Di International Institute for Advanced Studies  SPEAKERS  Alex HARRIS, Head of Global Policy, The Wellcome Trust ZAKRI Abdul Hamid, Former Science Advisor to the Prime Minister of Ma Michael HALPERN, Deputy Director, Center for Science and Democracy, Concerned Scientists  Carla-Leanne WASHBOURNE, Lecturer in Environmental Science and Poof Science, Technology, Engineering and Public Policy, University College Kerry ALBRIGHT, Chief, Research Facilitation and Knowledge Management	Agency (JST) and Vice Director General, ome Trust o the Prime Minister of Malaysia Science and Democracy, Union of ronmental Science and Policy, Department Policy, University College London		
10:30-11:00	Coffee Break			
11:00-12:30	Parallel Panel Session Two			
	Parallel Session 1.2: Technological risk management – Dealing with uncertainties, risks, trade-offs and human values	Room 4A		
	Technological change is inherently risky and inherently uncertain. Yet we rely on it to progress societal goals and interests. More often than not, there are trade-offs associated with new technologies. What strategies are there to achieve the greatest benefit from promising technologies while minimising the risks? Are there instances when decision-makers have been too cautious or not cautious enough and what are have been the implications?			
	MODERATOR SPEAKERS  Bart KOLODZIEJCZYK, Chief Technology Officer, H2SG Energy Hema SRIDHAR, Chief Advisor - C4ISR, Ministry of Defence Atsushi SUNAMI, Vice President, National Graduate Institute for Policy St (GRIPS) / Executive Director, The Sasakawa Peace Foundation Pieter van BOHEEMEN, Researcher, Rathenau Instituut Vardit RAVITSKY, Associate Professor, University of Montreal Yasunori KIMURA, Principal Fellow, Center for Research and Development Japan Science and Technology Agency (JST) / Senior Fellow, Fujitsu Laborate	Strategy (CRDS)		

Time Program

### Parallel Session 2.2: Mapping critical policy nodes – Identifying the articulation points between interacting SDGs and domestic policy priorities

Sokairo Hall

With 17 Goals and more than 169 targets, how can policy makers begin to address the SDGs in a meaningful way? What's more, taking positive action on one goal could have a detrimental impact on another, but indirectly help progress yet a different goal. This complexity of interactions has long been recognised as a possible complication for policy makers, but it can also be a benefit.

The International Council for Science and INGSA are embarking on a project that will not only map the key critical interactions, but also support countries to prioritise them in accordance with national contexts and domestic policy goals. This session will be dedicated to testing ideas about how the goals interact and about how to prioritise. Panelists will draw on their expertise and experience in priority setting in complex policy environments and discuss how scientific and technical knowledge is mobilised in explicating the options and ranking the issues and responses.

MODERATOR Anne-Sophie STEVANCE, Science Officer, International Science Council (ISC) SPEAKERS Satoru OHTAKE, Adjunct Fellow, CRDS, JST/Visiting Professor, Policy Alternative Research Institute, The University of Tokyo

Rémi QUIRION, Chief Scientist of Quebec

Jacquie McGLADE, Professor and Director of the Sekenani Research Centre of the Maasai Mara University, Kenya

Apollonia MIOLA, Project Leader, European Commission - Joint Research Centre

### Parallel Session 3.2: Skills Development for Evidence Brokerage

Room 1A&1B

Those engaged in science advising are more than communicators in the traditional sense, they are evidence brokers. This role encompasses a skill set that straddles multiple domains of expertise. What characterises evidence brokers in both the innate and learned components? The European Commission's Joint Research Centre (JRC) has recently led an effort to map the essential skills with a view to building capacities of brokers at the interface of evidence and public policy. Panelists will share their views about essential skills and how to learn/ teach them.

MODERATOR David MAIR, Head of Unit, Joint Research Centre, European Commission Emily HAYTER, Programme Specialist & Acting Head, Evidence for Policy, INASP Carlos ABELEDO, Professor of Science Policy, University of Buenos Aires Mitsunobu KANO, Vice Executive Director, Chair of the SDGs Initiative Planning Committee, and Professor, Okayama University

> Marga GUAL SOLER, Senior Project Director, AAAS Center for Science Diplomacy Eeva HELLSTRÖM, Senior Lead, The Finnish Innovation Fund - Sitra

### Parallel Session 4.2: Smart Cities - Urban and Urbanising

Room 4B

Increasing urbanisation means that the world's cities are positioned at the heart of the SDGs. The metropolitan/ municipal level of government is the closest to the site of action on sustainability and social innovation. It is also the prime testbed for new sustainable technologies and an ideal unit of analysis for exploring social acceptance of these.

Yet large cities especially are also diverse and socially fragmented, sometimes to a greater extent, than at macro scales. In addition, they may not have access to the level and quality of advice as higher-level jurisdictions, which can create tensions. How can cities become leaders for change? What promising practices and projects are already underway and what are the lessons learned? What is the role of science advice?

MODERATOR Rob MOORE, Executive Director, Gauteng City-Region Observatory, South Africa SPEAKERS Alice SIRAGUSA, Project Officer, Joint Research Centre, European Commission Takashi OGUCHI, Professor, Institute of Industrial Science, The University of Tokyo FONG Wee Kean, Deputy China Country Director and Global Lead for Subnational Climate Strategy at World Resources Institute (WRI)

> Carla-Leanne WASHBOURNE, Lecturer in Environmental Science and Policy, Department of Science, Technology, Engineering and Public Policy, University College London

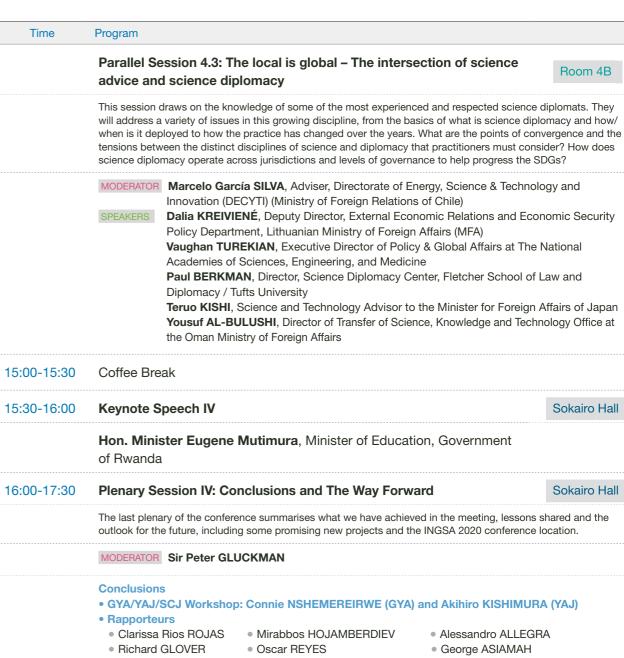






	Program		
12:30-13:30	Lunch		
13:30-15:00	Parallel Pa	nel Session Three	
		ession 1.3: Big data transforming policy-making – What portunities and challenges?	Room 4A
	Big data has been described as a new gold rush. Mining databases with new questions, linking and them in novel ways is said to be able to reveal new insights and patterns about the behaviours, her and other trends about people and things. How has the introduction of big data capabilities transfer public service? Do policy makers and decision makers approach policy problems differently with be insights? Has it changed evaluation and monitoring behaviour? Do policy makers test hypotheses what other ways are they making use of big data? Is it the expected gold rush? What are the opposition of the policy making.		
	MODERATOR SPEAKERS	Anders KARLSSON, Vice President, Global Strategic Networks, Elsevier Richie POULTON, Professor; Director of Dunedin Multidiciplinary Health Research Unit (DMHDRU), University of Otago  Madiagne DIALLO, General Secretary, The Economic, Social and Environmenta André Carlos PONCE DE LEON FERREIRA DE CARVALHO, Professor, Mathematics and Computer Sciences  Pearl DYKSTRA, Full Professor, Erasmus University Rotterdam	& Development  Council of Senegal
	Parallel Se	Jennifer CURTIN, Director, Public Policy Institute, University of Auckland ession 2.3: The role of the private sector in advancing the	Sokairo Hall
	SDGs - Im	plications for science advice	Containo Fraii
	Governmental and multilateral organisations often step in to lead when there is a market fai the SDGs, such leadership is essential to kick-start the movement and ensure coordinated is it a case of true market failure? Traditional firms in every sector are increasingly seeing fo socially inclusive and environmentally sound actions are simply good business, while entrey opportunities in following public sentiment toward to SDGs. What opportunities are there for partnerships with government sufficient? How to ensure compatibility between the needs of SDGs? What is missing? What could be improved? What is the role of industry?		nmitments, but emselves that neurs are seeing ms to lead? Are
	MODERATOR SPEAKERS	Aidan GILLIGAN, Founder, CEO at SciCom - Making Sense of Science Pierre JAFFRE, President, AIRBUS Group Asia Pacific Royston BRAGANZA, CEO, Grameen Capital India Pvt. Ltd Hiroshi UEDA, Director & Senior Managing Executive Officer, Sumitomo Company, Limited.  Kenichiro YAMAGUCHI, Senior Manager, CDP Worldwide-Japan	Chemical
		ession 3.3: Structural considerations for science advice in cy - From embedded to open science	Room 1A&1B
	mechanism or elements of so	vising becoming an institutionalised role? Is it a profession? Must there be a reconstruction of the control of	plicit and implicit
	MODERATOR	Anna-Maria ARABIA, Chief Executive, Australian Academy of Science Mark FERGUSON, Director General, Science Foundation Ireland and Ch	





- Ana-Maria ILIEV
- Farah Atiqah Awang ISMAIL

- **The Way Forward**

- What are the next steps for science advice globally?
- Building momentum
- INGSA Reseach and Project Plans
- SIRD / FMSTAN / CSAN
- Announcing INGSA 2020
- Closing Address Sir Peter GLUCKMAN
- SDGs Interactions Project
- International Science Council
- Final Remarks Teruo KISHI

#### 17:30 **Closing of the Conference**











**BIOGRAPHIES** 

### **SATELLITE EVENTS**

### 5th November 2018

### **GYA/YAJ/SCJ Capacity Building Workshop**

Invitation-only workshop on Science Leadership and Science Advice, developed by the Global Young Academy (GYA) and the Young Academy of Japan (YAJ)

Time 10:00 - 17:00

Venue Room at Science Council of Japan

### Science Diplomacy Workshop - In collaboration with FMSTAN

Invitation-only workshop on the topic of Science Diplomacy, utilising the expertise of members of FMSTAN

Time 13:00 – 17:00

Venue Room 1A&1B, GRIPS

#### Sense About Science / Elsevier - Public Guide to Data Science

Invitation-only workshop with Sense About Science and Elsevier on Data Science

Time 10:00 - 12:30

Venue Conference Room No 5, Roppongi Academy Hills, Mori Tower 49F

Getting there http://forum.academyhills.com/roppongi/en/access/

Map http://bit.lv/MoriTower

#### **GRIPS Forum**

Open public forum featuring lecture from Kay Firth-Butterfield (World Economic Forum)

Time 16:40 - 18:10

Venue Sokairo Hall, GRIPS

#### 8th November 2018

### Science in the Global South - LMIC Breakfast - Hosted by IDRC

Invitation-only breakfast to discuss Science in the Global South

Time 8:00 - 10:30

Venue Lounge, GRIPS

#### Cities and Urban Science Advice Workshop

Invitation-only workshop on Urban Science Advice Urban Science Advice Workshop - Integrating the local, regional and global contexts for science advice in cities

Time 10:00 - 12:30

Venue Room 4A, GRIPS

### **Parliamentary Advice Workshop**

Invitation-only workshop on Parliamentary Science Advice Workshop

Time 9:00 - 16:30

Venue Room 1A&1B, GRIPS



### Carlos ABELEDO

Professor of Science Policy, University of Buenos Aires

Carlos Abeledo is currently Professor of Science Policy at the Graduate Program in Science and Technology Policy of the University of Buenos Aires. He obtained an undergraduate degree in Physical Chemistry at the University of Buenos Aires in 1957 and a PhD in Chemical Physics at Northwestern University 1961. From 1961 to 1976 he has been a faculty member at the University of Buenos Aires, University of Chile and Brandeis University

Between 1984 and 1989 he was President of CONICET, the Argentine National Council of Scientific and Technological Research.From 1991 to 1997 he was a science and technology specialist at the Inter-American Development Bank, involved in the design and evaluation of programs to support institutional science development programs in several Latin American countries

Carlos Abeledo has been a consultant to several Latin American countries as well as institutions such as UNDP, IDRC, European Commission and Inter-American Development Bank in science policy, governance and evaluation of S&T institutions. He has been a member of the United Nations Advisory Council for Science and Technology for Development and a member of the Executive Council of the "Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo (CYTED)".

Carlos Ábeledo is currently Chair of the Steering Committee of INGSA's Latin America Chapter.



### Kerry ALBRIGHT

Chief, Research Facilitation and Knowledge Management, UNICEF

Kerry Albright is a Socio-Political Scientist with over 20 years of experience in international development. She is currently based at UNICEF's Office of Research-Innocenti in Florence, Italy and is responsible for research oversight and capacity-building across UNICEF's 190+ offices worldwide. Her areas of responsibility include: •Research Governance and Knowledge Management- leading the development of global research policy, research quality assurance and ethical evidence generation and ensuring that lessons from previous research can be easily found and shared. •Research Uptake and Impact- identifying institutional incentives to reward quality research including the annual Best of UNICEF Research competition and identifying new practices for independent validation of research impact. \*Evidence Synthesis- commissioning products including evidence gapmaps, research digests and systematic reviews to set UNICEF research within a broader body of evidence and identify knowledge gaps •Research Capacity-Building- leading design and execution of written outputs and training activities related to research management and methods "Strengthening an Evidence and Learning Culture Amongst UNICEF staff and partners- strengthening the use of evidence in policy and programming and building evidence literacy and critical thinking skills
She is currently UNICEF's representative on the new Multi-Donor Partnership on Organizational Learning for Development and recently featured in USAID's

Leaders in Learning podcast series.

Before joining UNICEF in 2015, Kerry worked for the UK government's Department for International Development (DFID) where she co-founded the Global Open Data for Agriculture and Nutrition (GODAN) initiative alongside the U.S. and Dutch governments. Prior to this, she established and headed up a new Evidence Into Action Unit in DFID's Research & Evidence Division- a multi-disciplinary team specializing in research uptake/impact, evidence-brokering and capacity-strengthening across DFID. She also oversaw a portfolio of programmes aiming to strengthen science-communication, evidence-brokering and capacity for evidence-informed policymaking with science journalists, parliaments, researchers, policymakers and other evidence-brokering intermediaries.



### Kristiann ALLEN

Exective Secretary, INGSA/Science Policy Specialist, Office of the Chief Science Advisor, Canada

Kristiann Allen is a senior policy practitioner with specialisation in evidence-to-policy processes and senior advisor experience in multiple policy contexts internationally, including provincial, federal and multi-lateral systems. Most recently, she has served as Chief of Staff to the Prime Minister's Chief Science Advisor, NZ. Prior to this, Kristiann worked within the science policy system in her native Canada. During 2018-19 Kristiann returns to the Canadian science advisory system through professional interchange with the Canadian Chief Science Advisors' office and the Canadian Institutes for Health Research. Kristiann is a founding member of INGSA, serving as executive secretary and providing strategic direction, developing training material and undertaking mentorship.



Anna-Maria ARABIA

Chief Executive, Australian Academy of Science

Prior to her appointment as Chief Executive of the Australian Academy of Science, Anna-Maria was Principal Adviser to

Anna-Maria brings with her experience as General Manager of Questacon - the National Science and Technology

Centre; and CEO of Science & Technology Australia Anna-Maria has worked in senior policy roles in both social and economic portfolios. She has worked extensively with

parliamentarians, the business and community sectors, and the media. Anna-Maria was recently a Director of the Board of Spinal Cord Injuries Australia, an organisation committed to creating independence, dignity and unlimited opportunity for people living with spinal cord injury.

She is a passionate advocate for science, social justice and gender equity

Anna-Maria obtained her Bachelor of Science (Hons) from the University of Melbourne and has undertaken medical research in the field of neuroscience both in Australia and abroad

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### **Tateo ARIMOTO**

Professor, Innovation, Science and Technology Program, National Graduate Institute for Policy Studies/Principal Fellow, Japan Science and Technology Agency/ Vice Director General, International Institute for Advanced Studies

Visiting Professor, National Graduate Institute for Policy Studies (GRIPS) Principal Fellow, Japan Science and Technology Agency (JST) and Vice Director General, International Institute for Advanced Studies

Tateo Arimoto is a Professor and Deputy Director, Science, Technology and Innovation Policy Research Center at the National Graduate Institute for Policy Studies (GRIPS). He served as Director General of Science & Technology Policy Bureau of the Ministry of Education and Science and held the position of Executive Research Fellow at the Economic and Social Research Institute of the Cabinet office. He has played an active role in public policy making and implementation in the area of science, technology and innovation in Japan and is a major promoter of science of STI policy with multidisciplinary approach. He has been a co-chair person of the OECD study projects on scientific advice and research funding system. He is a member of the program committee of the International Network for Government Science Advice (INGSA), and the special committee of Science Diplomacy at the Ministry of Foreign Affairs of Japan. He has published several books and numerous papers and given many invited lectures at international conferences such as OECD, INGSA, APEC, EU, WSF, STS Forum and AAAS; "Rebuilding Public Trust in Science for Policy Making" (by T. Arimoto and Y. Sato, Science, vol.337, pp1176-1177, 2012), "Building the Foundations for Scientific Advice in the International Context" (by T. Arimoto et al., Science and Diplomacy, vol.3 No.3, September 2014), "UNESCO Science Report – Towards 2030", Japan Chapter" (by Y. Sato, and T. Arimoto, November 2015), "Five years after Fukushima: scientific advice in Japan" (by Y. Sato and T. Arimoto, Palgrave Communications, 2016). "Science in a changing world" (by T. Arimoto, Physics World, Institute of Physics, UK, 2018)



### Paul Arthur BERKMAN

Director, Science Diplomacy Center Fletcher School of Law and Diplomacy, Tufts University

Professor Paul Arthur Berkman is building connections between science, diplomacy and information technologies to promote cooperation and prevent conflict, balancing national interests and common interests for the benefit of all on Earth across generations. He became a Visiting Professor at the University of California Los Angeles at the age of 23, after wintering the previous year in Antarctica on a SCUBA research expedition with Scripps Institution of Oceanography, leading him to all seven continents before the age of thirty. During the intervening years, Paul received his masters and doctorate as a National Science Foundation graduate fellow at the Graduate School of Oceanography, University of Rhode Island. A decade later, he wrote the textbook on Science Into Policy. As a Fulbright Distinguished Scholar, he chaired the Antarctic Treaty Summit at the Smithsonian Institution in 2009, resulting in the first book on Science Diplomacy. Applying lessons of science diplomacy the following year, as Head of the Arctic Ocean Geopolitics Programme at the University of Cambridge, he co-directed the first formal NATO-Russia dialogue regarding Environmental Security in the Arctic Ocean. He also co-convened the 1st and 2nd International Dialogue on Science and Technology Advice in Foreign Ministries in 2016 and 2017. He currently coordinates the Arctic Options and Pan-Arctic Options projects (involving national science agencies in the United States, Russian Federation, Norway, France, China and Canada from 2013-2020). Prof. Berkman joined the Fletcher School of Law and Diplomacy in 2015 as Professor of Practice in Science Diplomacy and now is Director of the Science Diplomacy Center at Tufts University. For his international, interdisciplinary and inclusive (holistic) contributions to informed decision-making at global-local levels, Prof. Berkman has received awards around the world, including a Japan Society for the Promotion of Science fellowship in 1993. Paul is happily married with two daughters.



### **Pieter Van BOHEEMEN**

Researcher, Rathenau Instituut

Pieter van Boheemen is fascinated by the societal impact of science and technology. In recent work he investigated social and ethical aspects of synthetic biology, open science, blockchain, cyber security and digitalisation of the news. With the aim to inform and involve parliament, policy makers and a wider range of stakeholders, he frequently applies participatory research methods such as co-creation and design thinking. He is a member of the Human Practices Executive Committee of the biotech competition iGEM and the advisory committee of the Creative Industries Fund NL.

Pieter obtained a master's degree in Life Science & Technology at the TU Delft and Leiden University. During his studies he started two companies: one in software and another in e-commerce. After this he worked at Accenture and cofounded biotech startup Amplino. He then turned to social innovation, covering citizen involvement in smart cities and biotech. As manager at Waag Society he led the teams of the Open Wetlab, Open Design Lab and FabLab Amsterdam, which facilitate critical making practices that intersect art, science and technology. The teams created open, fair and inclusive technology in several European FP7, H2020 and Creative Europe projects. The outcomes have been featured in international art, design and science museums and festivals.



**Royston BRAGANZA** 

CEO, Grameen Capital India Pvt. Ltd.

Royston joined Grameen Capital in 2007 to launch the organization as CEO. Grameen Capital, founded by Grameen Foundation USA, IFMR Trust and Citigroup, is a first of its kind social business enabling Microfinance Institutions and Social Enterprises wider access to the capital markets. It is part of the global Grameen family of companies, the flagship being the Nobel Prize-winning Grameen Bank founded by Nobel Laureate Professor Muhammad Yunus. To realise his dream of a "Capital-with-a-Conscience" ecosystem, Grameen Capital recently promoted "Grameen Impact Investments India" a unique vehicle to provide debt financing to social enterprises across sectors such as Affordable Education and Skill Development, Affordable Healthcare, Clean energy & Innovation, Agriculture, Financial Inclusion and Livelihoods. In addition to being the Chair of Sa-Dhan, whose members have over 30 million women micro-entrepreneurs, he serves on many boards and advisory bodies, including Grameen Foundation India, Inclusive Business Action Network (iBAN), FICCI Financial Inclusion Committee, CII National Committee on NBFCs, the United Nations Microfinance Resource Group, Impact Investors Council, Inclusive Business Action Network and Banking & Finance Committee of the Indian Merchant Chambers. He has been invited to address various programs in India and globally, to promote impact investment and blended finance as a sustainable tool to eradicate poverty, and to achieve the Sustainable Development Goals. In September 2018, Royston addressed a high-level side at the 73rd session of the UN General assembly in New York on the SDG's. The London-based Finance Monthly publication named Royston in their 2013 Global CEO Award Winners list as Top 4 CEOs in Asia, and Top 2 in India, the other one being Kumar Mangalam Birla. He has also been awarded the Global CSR Leadership award by World CSR Congress and the Power of One Award by the Archdiocese of Bombay.



### **Tracy BROWN**

Director of Sense About Science

Tracey Brown has been the director of Sense about Science since 2002. Under her leadership, the charity has turned the case for sound science and evidence into popular campaigns to urge scientific thinking among the public and among the organisations that serve the public. It has launched important initiatives including AllTrials, a global campaign for the reporting of all clinical trial outcomes; and the Ask for Evidence campaign, which engages the public in requesting evidence for claims. In 2010, the Times named Tracey as one of the ten most influential figures in science policy in Britain and in 2014 she was recognised by the Science Council for her work on evidence-based policymaking. In June 2017 Tracey was made an OBE for services to science.



### Janusz Marek BUJNICKI

Professor,International Institute of Molecular and Cell Biology in Warsaw/Member of the European Commission's Group of Chief Scientific Advisors,

Janusz Marek Bujnicki is Professor of Biology, and head of a research group in the International Institute of Molecular and Cell Biology in Warsaw, Poland. Born in 1975, he graduated from the Faculty of Biology, University of Warsaw in 1998, defended his Ph.D. in 2001, and obtained the full professor title in 2009. In 2016 he has been elected to the Polish Academy of Sciences. Bujnicki's research combines bioinformatics, structural biology, and synthetic biology. His scientific achievements include the development of methods for computational modeling of protein and RNA 3D structures, discovery and characterization of enzymes involved in RNA metabolism, and engineering of proteins with new functions. He is an author of > 300 publications, which have been cited by other researchers >8000 times. Bujnicki is an executive editor of the scientific journal Nucleic Acids Research. He has also been involved in various scientific organizations and bodies active in the area of science and policy, including the civic movement Citizens of Science, Scientific Policy Committee - an advisory body of the Ministry of Science and Higher Education in Poland, and the Group of Chief Scientific Advisors within the European Commission's Scientific Advice Mechanism.



### Yousuf AL BULUSHI

Head of Science, Knowledge and Technology Transfer Office (SKTT), Ministry of Foreign Affairs, Oman

Yousuf joined the Ministry of Foreign Affairs (MOFA) in May 2015 to lead Oman's Science and Technology Diplomacy, and helps to contribute in developing Oman's transformation process towards innovation-based economy, as well as shaping the national innovation ecosystem through international transfer of advanced science and future technology. Prior to joining MOFA, he was serving as an International Innovation Advisor at the University of Oxford – Oxford University Innovation – since September 2012.

(SKTT) was established in April 2015 at MOFA. The office aims to facilitate access to international technology, and improving the abilities of national institutions and individuals to identify, acquire, adapt and exploit knowledge and technology. SKTT leads the national policies that support improving Oman's absorptive capacities and stimulate its innovation system as well as developing a supportive environment for technology transfer through international cooperation. As a Head of the office, his responsibilities include defining SKTT's strategy, managing science and technology projects, chairing the National Science Advisory Board (soon, Oman Science Academy) as well as leading MOFA's sectorial technical teams.



**Kay FIRTH-BUTTERFIELD** 

Head of AI and Machine Learning at the World Economic Forum

Currently, Global Head of Al and Machine Learning at the World Economic Forum.Barrister-at-Law and former Part-Time Judge, United Kingdom. In the US, has been a Professor of Law and International Relations. Associate Fellow, Centre for the Future of Intelligence, University of Cambridge; Fellow, Robert E. Strauss Center on international Security and Law, University of Texas. Vice-Chair, IEEE Initiative on Ethics of Autonomous and Intelligent Systems. Co-founded Al-Austin, Al-Global and the Consortium for Law and Policy of Artificial Intelligence and Robotics. Named one of the top 25 Women in Robotics, Robohub (2017) and one of 12 Brilliant women in Al and Ethics (2018)

**BIOGRAPHIES** 



Andre Carlos Ponce de Leon Ferreira de CARVALHO

Professor, Institute of Mathmatics and Computer Sciences, University of Sao Paulo

INGSA 2018 Conference Science Advice for a Changing World Tokyo, Japan November 6th and 7th, 2018

André C. P. L. F. de Carvalho is Full Professor in the department of Computer Sciences, University of São Paulo, Brazil. He was Associate Professor in the University of Guelph, Canada. He was visiting researcher in the University of Porto, Portugal and visiting professor in the University of Kent, UK. His main interest areas are Data Science, Data Mining and Machine Learning. He was the founding director of the Center of Data Science, University of São Paulo. He is currently the Deputy Dean of the Institute of Mathematics and Computer Sciences, University of São Paulo. He is a member of the Scientífic Committee of the Applied Mathematics School, Fundação Getúlio Vargás (FGV), of the Advisory Committee in Computer Science of the Brazilian National Council for Scientific and Technological Development (CNPq), of the Steering Committee of the International Network for Government Science Advice (INGSA) Latin American and Caribbean Chapter and of the Brazilian network Science for Education (CpE).



BIOGRAPHIES

### Helen CLARK

Former Administrator of UNDP, Former Prime Minister of New Zealand

Helen Clark was Prime Minister of New Zealand for three successive terms from 1999-2008. She was the first woman to be elected as Prime Minister in New Zealand.

Throughout her tenure as Prime Minister, and as a Member of Parliament over 27 years, Helen Clark engaged widely in policy development and advocacy across the international, economic, social, environmental, and cultural spheres. She advocated strongly for New Zealand's comprehensive program on sustainability and for tackling the problems of climate change. She was an active leader of her country's foreign relations, engaging in a wide range of international issues.

In April 2009, Helen Clark became Administrator of the United Nations Development Programme. She was the first woman to lead the organisation, and served two terms there. At the same time, she was Chair of the United Nations Development Group, a committee consisting of all UN funds, programs, agencies, and departments working on development issues. As Administrator, she led UNDP to be ranked the most transparent global development organisation. She completed her tenure in 2017.

Helen Clark came to the role of Prime Minister after an extensive parliamentary and ministerial career. Prior to entering the New Zealand Parliament, Helen Clark taught in the Political Studies Department of the University of Auckland, from which she earlier graduated with her BA and MA (Hons) degrees.

Helen continues to be a strong voice for sustainable development, climate action, gender equality and women's leadership, peace and justice, and action on non-communicable diseases and on HIV



### **E. William COLGLAZIER**

Editor-in-Chief, Science & Diplomacy

Dr. E. William Colglazier is Editor-in-Chief of Science & Diplomacy and Senior Scholar in the Center for Science Diplomacy at the American Association for Advancement of Science (AAAS). He works there to advance knowledge and practice on science policy and science diplomacy and to support international collaboration and cooperation in science and technology. He served as the fourth Science and Technology Adviser to the Secretary of State from 2011 to 2014. In this non-political position of fixed term, his role was to provide scientific and technical expertise and advice in support of the development and implementation of U.S. foreign policy. From 1994 to 2011, he served as Executive Officer of the U.S. National Academy of Sciences and National Research Council where he helped to oversee the studies that provide independent, objective scientific advice on public policy issues. From January 2016 to January 2018 he co-chaired the 10-Member Group appointed by the United Nations Secretary General to advise on science, technology, and innovation for achieving the 17 Sustainable Development Goals of the 2030 Agenda. He received his Ph.D. in theoretical physics from the California Institute of Technology in 1971, and prior to 1994 worked at the Stanford Linear Accelerator Center, the Institute for Advanced Study in Princeton, the Center for Science and International Affairs at Harvard's Kennedy School of Government, and the University of Tennessee. In 2015 he received the Joseph A. Burton Forum Award of the American Physical Society to recognize "outstanding contributions to the public understanding or resolution of issues involving the interface of physics and society" and the Order of the Rising Sun, Gold Rays with Neck Ribbon, from the Japanese government for "contributing to science and technology exchange and mutual understanding between Japan and the United States."



**Gavin COSTIGAN** 

Director of Public Policy, University of Southampton

Gavin Costigan became the Director of Public Policy at the University of Southampton in March 2016. His work involves brokering relationships between researchers and policy makers, delivering training to academics on how to interact with policymakers, and increasing the policy impact of research at the University. In September 2018, he also became the inaugural chair of the UK's Universities Policy Engagement Network (UPEN), a grouping of around 20 UK universities seeking to increase policy impact from research.

Before his current role, he spent six years as the Director of the Vice-Chancellor's Office at the University of Southampton. Prior to this, he was a civil servant in central government in the UK for just under 17 years, in what is now the Department for Business, Enterprise & Industrial Strategy, as well as in the Foreign & Commonwealth Office. His roles included leading the network of science attachés in UK embassies, managing the Large Facilities Capital Fund within the Science Budget, and reviewing the governance of Research Council Institutes.



### Claire CRAIG

Chief Science Policy Officer, The Royal Society

Dr Claire Craig CBE is Chief Science Policy Officer at the Royal Society. The Royal Society is the independent scientific academy of the UK and the Commonwealth, dedicated to promoting excellence in science, and is a self-governing Fellowship of many of the world's most distinguished researchers drawn from all areas of science, engineering and medicine. Previously Claire was the Director of the UK Government Office for Science which supports the UK Government's Chief Scientific Adviser (GCSA). The GCSA provides science advice to the Prime Minister and the Cabinet; and builds capacity across government to provide and use science evidence. Claire has worked extensively on strategy and science in decision-making. Her career includes periods at McKinsey & Co and the Prime Minister's Delivery Unit, working in the Cabinet Office and the Ministry of Defence. She was awarded a CBE for her part in developing the UK government's science-based strategic futures programme, Foresight, which provided evidence and insights to decisionmakers in areas from flood risk in 2080 to human enhancement and the future of computer-based trading in financial markets. Claire has held Board-level roles at a range of research and teaching institutions including the Council of King's College London; the University of the West of England; and Newnham College, Cambridge. She is also the UK representative on the Governing Body of the EU's Joint Research Centre. Over nearly two decades in government Claire worked in a wide range of policy areas and with three UK Government Chief Scientific Advisors. Her first book "How does government listen to scientists?" was published by Palgrave in August 2018. She trained originally as a geophysicist, and spent two years helping launch a hands-on science centre in her home town of Bristol.



### Jennifer CURTIN

Director, Public Policy Institute, University of Auckland

Professor Jennifer Curtin is Director of the Public Policy Institute at the University of Auckland, New Zealand. She is currently engaged in funded comparative research projects focused on developing sustainable strategies for gender budgeting and wellbeing, the policy impact of women political leaders at the subnational level, and surveying citizens views on complex policy problems. She is the academic director of Auckland's Master of Public Policy Programme and teaches comparative public policy and political science. Jennifer has published widely on politics and public policy in New Zealand and Australia, and regularly engages with government, civil society and the media.



### Myléne DESCHÉNES

Director, Ethics and Legal Affairs, Office of the Chief Scientist, Fonds de Recherche du Quebec

Me Deschênes is a lawyer and the director of ethics and legals affairs at the Fonds de recherche du Québec (Canada). She counsels the Chief Scientist of the province of Quebec and the three Quebec funding agencies on questions related to research ethics, ethics research programs and legal issues related to science and policy. She led the draft of the Quebec's Policy on Responsible Conduct of Research and is currently working on ELSI issues related to artificial

Previoulsy, she was the Executive Director of the P3G Consortium, an international, nonprofit organization aimed at facilitating the emergence, harmonization and collaboration between population-based genomics biobanks projects. She also served as Senior Ethics Policy Advisor at the Ethics Office of the Canadian Institutes of Health Research

She holds law degrees (in common law and civil law) from McGill University and completed a Master degree at University of Montreal in «Law, Biotechnologies and Society» on the commercialisation of genetic testing. Over the years, she served on various ethics committees, including the National Research Council (Canada), and the Montreal Heart Institute



**Meghnath DHIMAL** 

Senior Research Officer and Chief, Health Research Section, Nepal Health Research Council (NHRC)

Dr. Meghnath Dhimal works as a Chief Research Officer at the Nepal Health Research Council (NHRC), Government of Nepal. In his current role as a Chief Research Officer at NHRC, he contributes to research, academics, policy making and capacity building in research process. Currently, he has been leading a number of national level research projects on climate change and health, tropical diseases, SDGs and NCDs in Nepal such as implementation research on NCDs, prevalence survey of major NCDs, national mental health survey and NCD risk factors STEPS surveys. He completed his MSc in Environmental Sciences from Tribhuvan University in 2004 and PhD in Geo-sciences (Environmental Health Sciences) from the Goethe University in 2015. His career objective is to contribute towards global health. His research's primary focus is on the nexus between environmental risk factors including climate change and associated health outcomes (NCDs and NTDs). He has worked as team leader and coordinator in disaster situation including in floods and mega-earthquake of 2015 in Nepal. He has made substantial contributions to developing national health policies, plans, strategies including environmental health and climate change programmes and policies. He has also served the World Health Organization (WHO) in the capacity of Temporary Adviser as well as in the capacity of Climate Change and Health Expert and has been worked in Nepal, Maldives and Timor-Leste. Recognizing his contribution in the field of climate change and health, he was awarded with the "Young Scientists Award of the Year 2015" by the Nepal Academy of Science and Technology in 2015. Based on his proven scientific excellency and contribution to the society, he has been nominated as a member of Global Young Academy since 2017 for five years. He has authored more than 80 peer-reviewed journal papers, essays, technical reports and articles in the popular press.

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### Madiagne DIALLO

General Secretary, the Economic, Social and Environmental Council of Senegal.

Prof. Dr. Madiagne Diallo

Specialist of Optimization, Operational Research and Decision Science, is professor of the Department of Industrial Engineering of the Pontifical Catholic University of Rio de Janeiro (PUC-Rio) in Brazil. Currently, he is the General Secretary of the Economic, Social and Environmental Council of Senegal.

He is former General Consul of Senegal in Sao Paulo, Brazil and former South to South Cooperation Minister Consellor at the Office of the Republic President of Senegal.

He is author and co-author of 3 books and more than 50 international journal papers.

He received Honorary Citizenship of the State of Rio de Janeiro of Brazil after supervising the Rio city Director Plan revision in 2010 for the 2014 FIFA World Cup and 2016 World Olympic Games.

He was distinguished in 2010 Academic Achievement Award by the revue WholsWho in the World. of USA.



BIOGRAPHIES

### Pearl DYKSTRA

Full Professor, Erasmus University, Rotterdam

Pearl Dykstra has a chair in Empirical Sociology and is Director of Research of the Department of Public Administration and Sociology at the Erasmus University Rotterdam. Previously, she had a chair in Kinship Demography at Utrecht University (2002-2009) and was a senior scientist at the Netherlands Interdisciplinary Demographic Institute (NIDI) in The Hague (1990-2009)

Her publications focus on intergenerational solidarity, aging societies, family change, aging and the life course, and late-life well-being. She is an elected member of the Netherlands Royal Academy of Arts and Sciences (KNAW, 2004) and served as Vice-President of the KNAW (2011-2016). She is also an elected Member of the Dutch Social Sciences Council (SWR, 2006), and elected fellow of the Gerontological Society of America (2010). She received an ERC Advanced Investigator Grant in 2012 for the research project "Families in context", which focuses on the ways in which policy, economic, and cultural contexts structure interdependence in families. In 2015 she was appointed as member of the High Level Group of scientists who advise the College of European Commissioners.



### **Elizabeth Silvestre ESPINOZA**

Vicerrector of Research of Universidad Católica Santo Toribio de Mogrovejo

Ph.D in Meteorology, in Numerical Weather Prediction applied in risk management, currently is Vice rector of Research at Universidad Catolica Santo Toribio de Mogrovejo – USAT, was Professor at the national Universities of Peru since 2006 have experience in science and technology at CONCYTEC (Consejo Nacional de Ciencia, Tecnología e Innovación) like a Responsible, Sub director and Director in National Programs and Politics and Programs Direction. Was President of INCLIMA and implemented an Early Warning System for Frosts in Andean Region in Peru. As Scientific Director at National Meteorological and Hydrological Service in Peru developed multidisciplinary projects in climate change and impacts. Was Scientific Coordinator of the international project: Low-latitude Ionospheric Sensor Network (LISN), implemented a networking in South America Jicamarca, in Brazil was a Researcher at Universidad do Vale do Paraiba, coordinating high atmospheric research and in CPTEC Researcher and lead of the Data Assimilation Group for Numerical Weather Prediction. Was Visitor scientist, Global Modelling Assimilation Office to assimilate radiances in numerical weather prediction. Advised many national projects on climate change and disasters in the Environment Ministry; experience in integrating projects of institutional content, science and policy.



### **Xavier ESTICO**

Chief Executive Officer, National Institute of Science Technology and Innovation, Seychelles

Mr. Xavier Estico has been appointed as the Chief Executive Officer of the National Institute of Science Technology and Innovation (NISTI) since 2014. His previous positions have been in different management positions in parastatal organizations, including Air Seychelles. His last position was International Administrative Flight Operations Manager.

His academic background extends from Pedagogy, Agronomical Sciences, Business Administration and Aeronautical Sciences. He is a Masters degree holder in all three disciplines, except for Pedagogy, in which he holds a Certificate in Education. He attended; the Seychelles Teacher Training College, Institute of Higher Agricultural Sciences, Havana, Cuba, University of Southampton, UK, and Embry-Riddle Aeronautical University-Worldwide, USA, where he has recently completed his studies in Aeronautical Sciences at Embry-Riddle Aeronautical University-Worldwide, USA. He wrote his Capstone in "The Impact of NextGen Capabilities and Technologies on Tampa International Airport", Florida, USA, one of the first baseline impact assessments of the Next Generation Technologies and Capabilities on US airspace management.

As the CEO of NISTI, he provides overall policy and strategic leadership for Seychelles transition from an efficiency-driven economy to an innovation-driven knowledge-based economy through the National STI Policy and Strategy 2016 – 2025 framework. This framework is designed for the inclusion and integration of STI across all sectors and programs for the socio-economic transformation of Seychelles as a Small Island Developing State. He sits on the High Level Steering Committee for Knowledge-based Economy, a forum chaired by the Vice-President of the Republic of Seychelles. This committee oversees the progress of the country's transition to a knowledge-based economy. He sat on the Board of Directors of the National Bureau of Statistics and has been lately appointed on the Board of Directors of the Seychelles Bureau of Standards. He is also a member of the



### **Mark FERGUSON**

Chief Scientific Adviser to the Government of Ireland

Professor Mark W.J. Ferguson commenced as Director General of Science Foundation Ireland in January 2012 and as Chief Scientific Adviser to the Government of Ireland in October 2012. Professor Ferguson is a founding member of the Small Advanced Economies Initiative, was Chair of the eHealth Ireland Committee, (2015 – 2017), a member of the EU High Level Expert Group on Horizon 2020 Impact (2017) and has been involved in a number of international reviews of R&D systems, including Hungary and Canada. Previously he was Professor in Life Sciences at the University of Manchester (since 1984) and co-founder, CEO and Chairman of Renovo Group plc (1998-2011).

He is the recipient of numerous international research awards including the 2002 European Science Prize (jointly), and is the author of 327 research papers and book chapters, 60 patent families and author / editor of 8 books.

Mark graduated from the Queens University of Belfast with degrees in Dentistry (BDS 1st class honours), Anatomy and

Mark graduated from the Queens University of Belfast with degrees in Dentistry (BDS 1st class honours), Anatomy and Embryology (BSc 1st class honours, PhD) and Medical Sciences (DMedSc), holds Fellowships from the Royal Colleges of Surgeons in Ireland (FFD), and Edinburgh (FDS) and is a Founding Fellow of the UK Academy of Medical Sciences (FMedSci). He is a member or Fellow of a number of learned Societies, and was made a "Commander of the British Empire" (CBE) by the Queen in 1999 for services to Health and Life Sciences.

http://www.sfi.ie/about/organisation/sfi-directors/prof-mark-ferguson.html



### Wee Kean FONG

Deputy China Country Director and Global Lead for Subnational Climate Strategy, World Resources Institute (WRI).

Dr. Wee Kean Fong is the Deputy China Country Director and Global Lead for Subnational Climate Strategy at World Resources Institute (WRI).

WRI China currently has four major programs – climate change, energy, sustainable cities, and water. As the deputy country director, Dr. Fong plays an important role in strategic planning, fundraising, and communications for these programs while overseeing WRI China's operations. Dr. Fong is also serving as acting director for WRI China Climate Program. He and his team offer support to provinces and cities on emission peaking roadmap analyses, city climate action planning, and greenhouse gas data analysis and tracking. He and his team currently work with more than a dozen of cities and provinces on subnational low carbon transition.

Under his global portfolio, Dr. Fong leads a global initiative on subnational low carbon transition. The initiative focuses on supporting cities and regions to measure greenhouse gas emissions, set emissions reduction targets, and plan and implement actions. The initiative also facilitates integration of subnational and national climate actions.

Among his recent publications are the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC) that provides a standardized framework to enable cities to measure, report, and track greenhouse gas emissions consistently and comprehensively. In 2015, he partnered with UN-HABITAT to develop the Guiding Principles for City Climate Action Planning to guide cities develop and implement credible climate action plans.

Dr. Fong has vast experience around the world. Over the last 20 years, he has been involved in numerous projects in many

Dr. Fong has vast experience around the world. Over the last 20 years, he has been involved in numerous projects in many developing countries, including Brazil, China, Ethiopia, India, Malaysia, Mexico, and others.



### Aidan GILLIGAN

CEO, SciCom

Aidan Gilligan is Founder and CEO of SciCom, an international consulting practice delivering solutions to communicating challenging science. SciCom serves as an educator, leader, spokesperson and hub for like-minded professional groups. He has over 15 years' top-tier experience in communicating international science. His drive is advancing understanding for science around the world. His speciality is spearheading comprehensive campaigns that accentuate facts above perceptions about often difficult to communicate issues. Aidan has project-managed over one hundred press and tailored stakeholder events, plus numerous scientific symposia at the nexus of science and society. In so doing, he works closely with policy-maker teams up to Chief Science Adviser and Ministerial level, while forging strong ties with representatives of global media associations and membership organisations. He is Adviser to governments including Japan & South Africa and is a founder of Science Forum South Africa and the Latin American & Caribbean Open Science



### Peter GLUCKMAN

Chair, INGSA Chair of the International Network for Government Science Advice (INGSA), Former-Chief Science Advisor to the Prime Minister of New Zealand, International Science Council President-elect

Sir Peter Gluckman ONZ FRS is the founding chair of the International Network of Government Science Advice (INGSA) and was the first Chief Science Advisor to the Prime Minister of New Zealand, having been appointed in 2009. He was formerly Science Envoy, Chair of the APEC Chief Science Advisors and Equivalents group and coordinator of the secretariat for the Small Advanced Economies Initiative.

Peter has written and spoken extensively on science-policy and science-diplomacy and science-society interactions.

He trained as a pediatric and biomedical scientist and holds a Distinguished University Professorship at the Liggins

Institute of the University of Auckland. He has published over 700 scientific papers and several technical and popular science books. He has received the highest scientific (Rutherford Medal) and civilian (Order of New Zealand) honours in NZ, and numerous international scientific awards. In 2016 he received the AAAS award in Science Diplomacy. He is a Fellow of the Royal Society of London, a member of the National Academy of Medicine (USA) and a Fellow of the Academy of Medical Sciences (UK).



Tom De GROEVE

Deputy Head of Unit, Joint Research Centre, European Commision

TOM DE GROEVE, Ph. D., is Deputy Head of the Disaster Risk Management Unit at the European Commission Joint Research Centre.
Tom oversees research in support of EU and global policy on disaster risk management and climate change adaptation. He is an expert in science-policy interfaces and knowledge management. He has done research in crisis management and disaster reduction, including earth observation, modelling and ICT.

Tom received his Ph.D. in Ğeomatics from Laval University in Quebec City, Canada, in 1999. His early work addressed near-real time humanitarian impact assessment of disasters globally, with the UN-EC cooperation project Global Disaster Alert and Coordination System and the Global Flood Detection System. He fostered international collaboration among scientists, practitioners and policy makers by starting several international networks such as the Global Flood Partnership. Tom's work on crisis management lead to the creation of the European Crisis Management Laboratory, a facility to test and benchmark tools for situation awareness and collaboration among international and national organisations. His work directly contributed to the opening of the European Emergency Response Coordination Centre in 2013, the central hub for European Civil Protection. In 2013, he became team leader on disaster risk reduction, developing internationally renowned tools such as the Index for Risk Management (INFORM) and the Global Conflict Risk Index (2014). He contributed to various experts groups leading up to the Sendai Framework for Disaster Risk Reduction, in particular on Disaster Loss Data. In 2015, Tom pioneered a new way of working in partnership and was instrumental in the launch of the first knowledge centre of the JRC: the Disaster Risk Management Knowledge Centre (2015). Since 2015, Tom has been managing the work of the Disaster Risk Management Unit, which includes the Copernicus Emergency Management Service, the Global Human Settlement Layer and climate change adaptation.



### Marga GUAL SOLER

Senior Project Director, AAAS Center for Science Diplomacy

MARGA GUAL SOLER, Ph.D., is a Senior Project Director in the Center for Science Diplomacy at AAAS, where she explores the power of science as a universal language to help break down barriers and build bridges between people and nations. She works with governments, universities, non-governmental and international organizations worldwide to connect scientists and engineers with policy and has trained thousands of emerging leaders to engage at the science-diplomacy nexus. Dr. Gual Soler serves on the Research, Innovation, and Science Policy High-Level Advisory Group to the European Commissioner, Carlos Moedas, and on the advisory board of the Horizon 2020 project "Inventing a shared Science Diplomacy for Europe. (InsSciDE)." She has received multiple awards and recognitions, including "100 Spanish Experts in Innovation" by Cotec Foundation, "40 Under 40 Latinos in Foreign Policy" by the Huffington Post, and "10 Latinas Think Big Innovators to Watch in 2016." Before joining AAAS, she was Arizona State University faculty and UNESCO consultant. Her professional activities have taken her to more than 40 countries, where she has spearheaded several initiatives to bridge science, policy and society across political, geographical, disciplinary, and cultural divides. In 2014, she founded the Science Slam Festival, an event combining science communication and the performing arts held in Spain, Mexico, Uruguay and Paraguay under the auspices of UNESCO. Dr. Gual Soler received a Ph.D. in biomedical sciences from the University of Queensland in Australia and a bachelor's and master's from the University of Barcelona in Spain, and is an alumna of the prestigious Global Competitiveness Leadership Program at Georgetown University. In 2019 she will participate in Homeward Bound, the largest-ever all-women expedition to Antarctica, to promote women in science diplomacy. Follow her on Twitter: @margagual.



### Michael HALPERN

Deputy Director, Center for Science and Democracy, Union of Concerned Scientists

Michael has worked at the intersection of science and politics for 15 years, spanning three U.S. presidential administrations. Working closely with policymakers, NGOs, scientific societies, and leading scientists, Michael promotes policies that ensure government decisions are fully informed by independent scientific information and protect government scientists from political interference in their work. He oversees efforts to enable scientists to more effectively collaborate with policymakers and with communities, especially communities that bear disproportionate burdens of pollution. Michael has extensive expertise in defending scientists from harassment and creating conditions that make science and scientists more resilient to political, industry, and ideological influence. He speaks regularly on the use and misuse of science in decision making, ways of promoting or corroding scientific advice to governments, and the forces that drive attacks on science. He has published perspectives on politics and science in leading academic journals including Science and the American Journal of Public Health. Michael appears regularly in major media outlets, including the Associated Press, The Boston Globe, CNN, National Public Radio, The New York Times, and The Washington Post. He holds bachelor's degrees in sociology and communication studies from Macalester College in St. Paul, Minnesota.



Michinari HAMAGUCHI

President, Japan Science and Technology Agency

Michinari Hamaguchi earned his PhD in medicine from Nagoya University. He was appointed Research Associate at the Nagoya University School of Medicine in 1980, and since then, he had been working at Nagoya University, except for the time he pursued his research at the Rockefeller University in the U.S. from 1985-1988. He served as the President of Nagoya University from April 2009 – March 2015 before becoming the President of JST in October 2015. His scholarly interest is Pathological Medical Chemistry. He currently serves as Chairperson of the Council for Science and Technology, Ministry of Education, Culture, Sports, Science and Technology (MEXT) in Japan.



### **ZAKRI Abdul Hamid**

Former Science Advisor to Prime Minister of Malaysia

Zakri was appointed to the Scientific Advisory Boards of both the UN Secretary-General and the President of the Islamic Development Bank (IDB), served for eight years as Science Advisor to the Prime Minister of Malaysia, and is a Vice-Chair of the Governing Council of the UN Technology Bank for Least Developed Countries. He was Joint Chair, Malaysian Industry-Government Group for High Technology (MIGHT). Zakri is a senior fellow of the Academy of Sciences Malaysia; fellow of The World Academy of Sciences, the World Academy of Art and Science, and the Islamic World Academy of Sciences; and Distinguished Fellow of the Global Federation of Competitiveness Council. For decades, Prof Zakri has contributed to the observation, analysis and evaluation of global biodiversity and ecosystem services, encouraging the restoration, protection and sustainability of the natural environment. He has provided strong leadership in discussions of biodiversity in the national and global arenas. From 2000 to 2005, he co-chaired with Sir Robert Watson the Board of the landmark UN Millennium Ecosystem Assessment (MA), one of the world's largest-ever scientific collaborations involving over 2,000 leading scientists in a comprehensive synthesis and analysis of the state of the Earth's ecosystems. Zakri became a driving force behind the creation of the UN-affiliated Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), an independent body established to bridge the gap between scientists and policymakers, providing up to date, accurate, impartial data and scientific information to enable better policy response in managing biodiversity. He was elected as the founding Chair of IPBES in 2013. Recognitions of his contributions to biodiversity have included the national Langkawi Environmental Award (1998) and the Merdeka Award (Environment) (2015). Internationally, he was awarded the Zayed Prize for the Environment (2014), the ASEAN Biodiversity Hero (2017) and the Midori Award for Biodiversity (2018). Three



### Yuko HARAYAMA

Professor Emeritus, Tohoku University

Dr. Yuko Harayama is the former Executive Member of the Council for Science and Technology Policy, Cabinet Office of Japan. She is the former Deputy Director of the Directorate for Science, Technology and Innovation, OECD. She is a Legion D'Honneur recipient (Chevalier), and was awarded honorary doctorate from the University of Neuchâtel. Previously, she was Professor in the Department of Management Science and Technology at the Graduate School of Engineering of Tohoku University. She holds a Ph.D. in education sciences and a Ph.D. in economics, both from the University of Geneva.



### **Alexander Jacob HARRIS**

Head of Global Policy, The Wellcome Trust

Alex Harris is the Head of Global Policy at the Wellcome Trust, where he leads a team of policy and advocacy experts working to create an environment where health research thrives and its benefits reach people across the world quickly. He oversees Wellcome's policy work on access to medicine and medicines quality, epidemic preparedness, emerging technology, data sharing and research uptake.

Alex has over fifteen years' experience in global policy and advocacy, advising and influencing a wide range of healthcare organisations in the governmental, not for profit, and private sectors. Prior to joining Wellcome, he led an international NGO focused on access to medicine, advocating for greater collaboration between funders, governments and the private sector.



**Haruo HAYASHI** 

President, National Research Institute for Earth Science and Disaster Resilience

Researchers at National Research Institute for Earth Science and Disaster Resilience (hereafter NIED) will be now deployed to the impacted site immediately when major natural disasters occur as the member of our national Information Support Team (ISUT). ISUT is a function of the disaster reconnaissance team of our national government which was established this summer. Since its establishment, ISUT has been deployed to Osaka earthquake in June, Western Japan Heavy Rain in July, and Hokkaido earthquake in September in addition to several exercises. This arrangement made possible as a result of recent achievements by NIED on the information sharing among emergency management organizations at disaster response phase to create a common operational picture by making use of Shared Information Platform for Disaster Management (we call SIP4D). SIP4D was developed by NIED as a web-based mechanism aimed at emergency management organizations to share information which is necessary for effective emergency response efficiently through the lessons from 2016 Kumamoto earthquake and 2017 North Kyusyu heavy rain. Some information comes from NIED information products using MOWLAS network such as shaking intensity distribution and estimated housing damage, and others were mashed up information created by various entities along with their emergency response activities such as road closure and shelter locations and the number of the people at each shelters.





**Emily HAYTER** 

Programme Specialist & Acting Head, Evidence for Policy, INASP

As Programme Specialist and Acting Head of Evidence for Policy at INASP, Emily focuses on designing and managing capacity development projects to enhance the use of evidence in policy making. Most recently, she has been involved in pilots of the Context Matters Framework with public agencies in Ghana and Peru, a participatory diagnostic process to identify entry points for organisational change around evidence use. She was Programme Manager for INASP's 3-year DfID-funded Building Capacity to Use Research Evidence (BCURE) programme, VakaYiko, which was active in three Parliaments, three ministries/departments and a civil service training centre in Ghana, Uganda, South Africa and Zimbabwe. As part of this she worked with country partners on the design and implementation of capacity building programmes, co-authored a report on evidence use in African parliaments and led on the piloting, adaptation and implementation of the VakaYiko Evidence-Informed Policy Making Toolkit. Emily has also completed consultancy projects for organisations including OECD, UNDP, IPU and Mott Macdonald in research uptake in HIV prevention policy in southern Africa, evidence use in parliaments, and peer learning for institutional reform.

Emily has ten years' experience in the research and higher education sector in Africa, working with policymakers, researchers and civil society organisations. She holds a Masters in African Studies from the University of London's School of Oriental and African Studies (SOAS), focusing on African politics and political economy of development.

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Eeva HELLSTRÖM

Senior Lead, The Finnish Innovation Fund - Sitra

Eeva Hellström is Senior Lead in Foresight and Strategy at the Finnish Innovation Fund Sitra, which is an independent and future oriented public think-and-do tank. Eeva is leading Sitra's Knowledge in Decision-Making project, which focuses on identifying changes needed in the knowledge-policy interface when dealing with increasingly complex social phenomena in a rapidly changing, digitalizing and volatile information environment. The Knowledge in Decision-Making project seeks to introduce new perspectives to the topic via societal analyses and dialogue. It also aims at competence building and exchange of experiences through a developer network. New interactive models where decision-making is infused by collective intelligence and interpretation are also developed and tried out in practice. Eeva has extensive experience in working in the knowledge-policy interface throughout her career, and on both sides of the interface. On several occasions she has, for example, chaired research and expert institutions, prepared policy reports for the government, acted as a knowledge broker and expert panel facilitator, and launched training programs for top-level decision-makers throughout the Finnish society. Eeva's personal development interests include the knowledge-policy interface, natural resources policy, sustainable economy, public governance and policy leadership, and societal change and transitions. Eeva Hellström is M.Sc in land use economics and D.Sc. in environmental economics from the University of Helsinki. Being also a forester by professional training, Eeva is still active in many positions of trust within the Finnish forest sector.



**Pierre JAFFRE** 

President, AIRBUS Group Asia Pacific

Pierre Jaffre graduated from Ecole Nationale Supérieure de l'Aéronautique et de l'Espace (Sup'Aero) in 1988 and spent two years at the California Institute of Technology, Pasadena – California, as Visiting Professor to perform researches on Hypersonic Combustion (program X30). In 1990, Pierre Jaffre entered the Délégation Générale pour l'Armement (DGA) / Istres Flight Test Center, where he eventually became test engineer in charge of tests & evaluations of new prototypes such as Tiger Combat Helicopter, NH90 Transport Helicopter, Mirage 2000-5 & Rafale multirole fighters. Pierre Jaffre then joined the International Directorate of DGA (DRI) in 1995 where he was given the position of US/Canada desk officer before becoming Deputy Director "Asia – America – Africa". During this period, Pierre Jaffre was also appointed Executive Secretary of the inter-ministerial group on the Future Large Aircraft "European airlift programme" (known today as A400M). Pierre Jaffre was then posted to the French Embassy in Bangkok from January 1998 to January 2001 as DGA Regional Attaché for South East Asia. In February 2001, Pierre Jaffre joined the EADS Group as Managing Director of the EADS office in Malaysia. Pierre Jaffre was also appointed, in 2002, Chairman of Eurocopter Malaysia Sdn Bhd. In November 2005, Pierre Jaffre was appointed Vice President ASEAN and became President Asia Pacific in January 2014. Pierre Jaffre is Conseiller du Commerce Exterieur since 2003 and received the "Chevalier de l'Ordre National du Merite" Award from the French Government in December 2005. Pierre Jaffre is married to the former Florence Van Assche and they have two children, Eliot (24) and Daphne (20).



**Matthias KAISER** 

Director, Centre for the Study of the Sciences and Humanities (SVT), University of Bergen

Prof. Matthias Kaiser is Director of the Centre for the Study of the Sciences and Humanities (SVT) at the University of Bergen, having studied at the Universities of Munich, Oslo, Stanford and Frankfurt. He is a Scientific Fellow at the European Academy of Technology and Innovation Assessment, Ahrweiler in Germany, and an elected member of the Humanistic Class of the oldest scientific academy in Norway: Det Kongelige Norske Videnskabers Selskab (Royal Norwegian Society of Sciences and Letters). His areas of expertise include: philosophy of science (Dr.phil.), ethics of science, and technology assessment. His areas of competence include social studies of science and technology, history of science, ethics, logic, and history of philosophy. His topics of interest include but are not restricted to: food ethics, risk, the precautionary principle, aquaculture, integrity in science, uncertainty & complexity, governance, value studies, energy, public participation, gm-organisms. During 1996-2002 he was Chair of ICSU's Standing Committee on Responsibility and Ethics in Science (SCRES). He has been involved in, and sometimes leading more than15 EU funded projects. Kaiser is an internationally recognized specialist in all fields relating to ethics of science and technology, food ethics, and integrity of science. Kaiser is also Co-Editor-in-Chief of the scientific journal Food Ethics (Springer), and he is the past President of the European Society for Agricultural and Food Ethics (www.eursafe.org), as well as currently being actively engaged in international activities / projects concerning scientific integrity (e.g. the RINO project). He has been involved in science advice to the EU commission (through the SAPEA/SAM mechanism), to the Council of Europe, as well as several previous national functions. Kaiser has published widely, more than 180 articles. Google Scholar (Oct 2018) gives him: h-index = 20, i10-index = 29; citations > 1418.



Motoko KAKUBAYASHI

Press Officer, Kavli IPMU, The University of Tokyo

Motoko Kakubayashi is a press officer at the Kavli Institute for the Physics and Mathematics of the Universe (Kavli IPMU), University of Tokyo. After graduating from Massey University, New Zealand, with a MSc in Physics in 2008, she found she was better at speaking up for science than doing it, and went on to obtain a Graduate Diploma in Journalism. She joined the founding team of the Science Media Centre of Japan (SMCJ) at Waseda University, Japan, in 2010. Soon, she was faced with the difficult task of helping scientific evidence find a way to the public in the aftermath of the 2011 Great East Japan earthquake, tsunami, and Fukushima Dai-ichi accident. Since then, Kakubayashi has worked as an investigator at the Center for Science Communication in the Japan Science and Technology Agency, looking at science communication from a policymaking perspective, before becoming an advocate for fundamental research at the Kavli IPMU since 2015. She continues to be a speaker and advisor at international science communication seminars and programs within Japan.



Mitsunobu KANO

Vice Executive Director, Chair of the SDGs Initiative Planning Committee/Professor, Okayama University

Dr. Kano has experienced clinical medicine including gerontology, research in medical engineering and pharmaceutical sciences, and public services including academy activities and governmental commitments. The public services led him to efforts in developing education for general sciences, including implementation of achieving the United Nation's Sustainable Development Goals (SDGs) into university administration in Okayama University, where he works now. Dr. Kano graduated from and started research activity in University of Tokyo, did his clinical residency in St. Luke's International Hospital, and is now Professor and a Vice Executive Director in Okayama University. As the latter role he led the university to be awarded by the Japanese government for achieving the SDGs in 2017. Meanwhile he led to establish a new interdisciplinary graduate school focusing on the health care systems in the university including faculties from medical sciences, engineering, social sciences, and humanities, started in April 2018. Dr. Kano is in parallel the former Deputy Chair of the Young Academy Japan, and a former Executive Committee member of the Global Young Academy (GYA). He represented the GYA in the InterAcademy Partnership in 2016.



Anders KARLSSON

Vice President, Global Strategic Networks, Elsevier

Anders Karlsson, PhD, joined in 2012 Elsevier as Vice President for Global Strategic Networks, to support Elsevier's relations with key stakeholders in the Asia-Pacific region. Before joining Elsevier, he was for five years Counselor for Science and Innovation at the Embassy of Sweden in Tokyo (Japan), with a regional responsibility for Japan and South Korea.

Before serving as Science Counselor, he was for 10 years Professor in Quantum Photonics at the Royal Institute of Technology - KTH, Stockholm, Sweden. In year 2000 he was one of 20 researchers to receive the first Future Research Leader grant from the Swedish Foundation for Strategic Research. He also held a special research fellow position 2001-2007 with the Swedish Research Council. His work, leading a consortium on advanced information technology, was awarded the EU René Descartes Research Prize in 2004 for excellence in collaborative research. He has been Visiting Scientist/Teacher at NTT Basic Research Labs, Stanford University as a Fulbright Visiting Scholar, École Polytechnique Paris, Zhejiang University and Advisor at Osaka University. He has a Ph.D. in Electrical Engineering and a M.Sc. in Engineering Physics, both from the Royal Institute of Technology - KTH, Stockholm, Sweden.

He has a strong interest in science communication and is a frequent speaker on topics such as research management, science and innovation policy, and in how results from science translate into societal impact.



Teruo KISHI

Science and Technology Advisor to the Minister for Foreign Affairs of Japan

Teruo Kishi is Science and Technology Advisor to the Minister for Foreign Affairs from September 2015. Concurrently, he is the President of Innovative Structural Materials Association (ISMA). He is also the Program Director for SIP (Cross-ministerial Strategic Innovation Promotion Program) at Cabinet Office, Government of Japan. He is NIMS Advisor Emeritus of the National Institute for Materials Science (NIMS) after serving as the first President of NIMS from April 2001 till June 2009 and Professor Emeritus, the University of Tokyo. Teruo Kishi received the degree of Doctor of Engineering from the University of Tokyo in 1969. His expertise is materials science, especially fracture mechanics and nondestructive testing of metal, ceramics and composite materials. He was Associate Professor, the Institute of Space and Aeronautical Science (ISAS), the University of Tokyo in 1974, Professor, the Research Center for Advanced Science and Technology (RCAST), the University of Tokyo in 1988, Director General of RCAST in 1995, and Director General of the National Institute for Advanced Interdisciplinary Research, Ministry of International Trade and Industry (MITI) in 1997. He was Vice President of the Science Council of Japan in 2003 and the President of the Japan Federation of Strategic International Program of Japan Science and Technology Agency (JST), Management Council Member of the University of Tokyo, Tohoku University and University of Tsukuba. At present, Teruo Kishi devotes to the research and development of structural materials such as steels, nonferrous metals, composite materials for automobiles and aircrafts at ISMA and SIP program, respectively. Teruo Kishi received the following awards: Fellow of the Society, the American Ceramic Society (1996), Officer de l'Ordre National du Merite, France (2004), Honda Memorial Award, Honda Foundation (2006), Barkhausen Award, Dresden, Germany (2017), Carl-von-Bach-Medal Award, Germany (2009), Distinguished Life Membership, ASM, USA (2010), Ostwald Fellowship, BAM, German



### Akihiro KISHIMURA

Associate Professor, Department of Applied Chemistry, Faculty of Engineering, Kyushu University / Chair of the Young Academy of Japan / Member of the Global Young Academy

Akihiro Kishimura received his B.S. degree under the supervision of Prof. M. Hidai from the University of Tokyo in 2000, and his PhD degree of engineering under the supervision of Prof. T. Aida from the University of Tokyo in 2005. He joined the research group of Prof. K. Kataoka in 2005 as a postdoctoral researcher, and became an assistant professor in Department of Materials Engineering, Graduate School of Engineering, The University of Tokyo in 2006. Then, he moved to Kyushu University as an associate professor in 2013. He joined Science Council of Japan in 2016, and has worked as the chair of Young Ácademy of Japan since 2017. He is a member of the Global Young Academy from 2017. The present research focuses on the synthesis and structural analysis of polymeric nano-/micro-structures especially in aqueous media based on supramolecular approaches. The novel materials have been designed and developed particularly for biomedical applications, such as biocompatible nano-carriers for targeted drug delivery system (DDS), advanced nanosystems for nano-pathophysiology, novel nano-structured microcapsules and so on. Very recently, his group has developed new strategy of protein delivery system and enzyme-driven nano-reactors for therapeutic applications, and cytosol-mimic liquid matrix for full utilization of biomolecules in the industrial and medical context.



**BIOGRAPHIES** 

### Johannes KLUMPERS

Head of Unit "Scientific Advice Mechanism", European Commssion

Johannes Klumpers leads the recently created Scientific Advice Mechanism Unit (SAM) in the European Commission.

The Unit supports the Commission's Group of Chief Scientific Advisors who, as their name suggests, give science advice to the European Commissioners. The Group of Advisors- with support by the Unit- collaborates in this endeavour with five European Science Academy Networks.

The Unit also supports the European Group on Ethics in Science and New Technologies (EGE), which also advises the Commissioners. Finally, the Unit develops policies on research integrity and assesses Horizon 2020 applications and projects according to their ethical and some legal characteristics.

A German National, born in Geneva in 1964, he studied forestry and wood technology and obtained his PhD from the French Ecole Nationale du Génie Rural, des Eaux et Forêts (ENGREF). After several years of industrial research in Sweden, he joined the European Commission's Directorate-General for Research & Innovation in 1998 and has worked there on a variety of topics, from renewable raw materials and industrial processes to gender, science in society, finance and budget. He has been in his current post since its establishment, 1 October 2015.



### **Bart KOLODZIEJCZYK**

Chief Technology Officer, H2SG Energy

Bart Kolodziejczyk is a nanoscientist whose portfolio includes three technology companies and three not-for-profit organizations. Kolodziejczyk is a Chief Technology Officer of Singapore-based H2SG Energy, which manufactures electrolysers and drives transition towards hydrogen economy. He is also a founder of Melbourne-based Scientists in Residence, which aims at providing science advice to local governments and community groups. Bart holds two PhDs in nanotechnology and bioelectronics along with three masters. He is known for his advocacy in issues related to synthetic biology and nanowaste. He has advised the United Nations, NATO, OECD, G20, European Commission and more on science, technology, innovation, and policy and was named one of MIT Technology Review's Innovators Under 35 for his conductive polymers, which can be applied in medicine and bio-sensing. Dr. Kolodziejczyk was featured as one of 100 Visionary Leaders by Real Leaders Magazine together with Malala Yousafzai. Bart has appeared in numerous publications, including Forbes Magazine, Business Insider, MIT Technology Review and Science Magazine, as well as many newspapers and radio stations in the US, Australia, Poland and abroad. Kolodziejczyk is an active Member of the Global Young Academy and IUCN, Fellow of the Royal Society of Arts and Fellow of the Linnean Society of London. In addition, Bart sits on advisory boards of several listed companies in the Asia Pacific. In his free time, Kolodziejczyk enjoys traveling and scuba diving



Dalia KREIVIENE

Deputy Director, External Economic Relations and Economic Security Policy Department, Lithuanian Ministry of Foreign Affairs

Dalia Kreivien is Deputy Director of External Economic Relations and Economic Security Policy Department at Lithuanian Ministry of Foreign Affairs (MFA). Prior to this position, she served as Deputy Head of Mission at the Embassy of Lithuania in France (2012-2015) and in various positions within the MFA. She has more than 20 years professional experience within the MFA in field relevant to external economic relations and economic security policy, last five years of which in field relevant to cooperation with the OECD and bilateral economic diplomacy, encompassing also science diplomacy aspects. She received her Master of Business Administration and Management at the Vilnius University; currently she is studying for her Executive MBA at the Baltic Management Institute. Since the beginning of her professional carrier at the MFA, she attended various professional training and courses related to international relations at National School of Public Administration (ENA, France), Korea Development Institute, Institute for European studies at Université Libre de Bruxelles



### Tahu Hera KUKUTAI

Professor, National Institute of Demographic and Economic Analysis at the University of Waikato, NZ

Tahu Kukutai is Professor of Demography at the National Institute of Demographic and Economic Analysis at The University of Waikato, New Zealand. She specialises in M ori and indigenous demographic research and has written extensively on issues of population change, identity, wellbeing and official statistics. Tahu is a founding member of the M ori Data Sovereignty Network Te Mana Raraunga that advocates for M ori rights and interests in data to be protected in an increasingly open data environment. In 2016 she co-edited (with John Taylor) Indigenous Data Sovereignty: Toward an Agenda (free download: https://press.anu.edu.au) and is Co-Chair of the Research Data Alliance Internationa Indigenous Data Sovereignty Interest Group. Tahu has undertaken research for numerous indigenous communities and Government agencies, and provided strategic advice across a range of sectors. Most recently she was appointed to the Census 2018 External Data Quality Panel and the Child Wellbeing Strategy Reference Group that is informing the development of the New Zealand Government's first child wellbeing strategy. Tahu was previously a journalist.



### David MAIR

Head of Unit, Joint Research Centre, European Commission

David has worked for the European Commission since 1995 and in the Joint Research Centre (the Commission's science and knowledge service) since 2011.

He is since July 2016 Head of one of the Knowledge Management Units, responsible for research and training on evidence for policymaking and for managing geographic knowledge.

Between 2011 and 2016 he was responsible variously for the JRC work programme, science advice to policy and for foresight. From April 2015 to December 2015 he was Acting Director for Policy Support Coordination.

From 1998 to 2011 he worked in DG Health and Consumers, involved in policy strategy, enforcement issues and consumer research, data and statistics. From 2007 to 2011 he was Head of Unit for consumer market monitoring and analysis, responsible for the Consumer Markets Scoreboard and work on consumer behaviour. Before the Commission he worked for the UK Treasury in Brussels and London and has also worked in the City of London as a corporate financier and in the British Army. He studied History at Cambridge University. He is married with two daughters.



### Jacquie MCGLADE

Professor, University College London

Jacqueline McGlade is Professor in the Institute for Global Prosperity and Engineering at University College London, UK Professor and Director of the Sekenani Space and Resilience Research Centre, Maasai Mara University, Kenya and the Gresham Professor of the Environment. Her current research ranges from developing traditional medicines to combat malnutrition, how to improve diets in sub-Saharan Africa in the face of climate change, Natural Prosperity, creating citizen science co-laboratories amongst the farmers and pastoralists, and designing the African Regional Data Cube. Previously she was UN Environment fs Chief Scientist, Director of Science and Chief Statistician, leading on environmental indicators, data and assessments for the 2030 Agenda on Sustainable Development. And before that, Executive Director of the European Environment Agency, Director of the UK Centre for Coastal and Marine Sciences, Professor of Biological Sciences at the University of Warwick, Director of Theoretical Ecology at the FZ Julich and Senior Scientist at the Bedford Institute of Oceanography in the Federal Government of Canada. She holds a number of key advisory roles including for the European Bank for Reconstruction and Development, China Council and the European Space Agency. She is recognized as a leading expert in ecosystem dynamics, sustainable development, environmental informatics, early warning systems and citizen science using sensor web enabled monitoring systems and applications for web intelligence and decision-making under high uncertainty. She has published more than 200 research publications and produced award winning films and radio series. In 2017 she gave a TEDx talk on Building Resilience to Climate Change and recently featured as the guest in BBC series The Life Scientific. Her Gresham public lectures can be watched online.



**Apollonia MIOLA** 

Project Leader, European Commission - Joint Research Centre

Apollonia Miola is senior scientist at the Sustainable Resources Directorate of European Union - Joint Research Centre. She leads the EU JRC research project on knowledge management for Sustainable Development Goals. She has been researching and developing climate change and sustainable development policy evaluation for more than 20 years. Presently the key focus of her research activity ison building a science policy interface on Policy coherence for Sustainable Development.

Before joining the EU Commission she was a senior researcher at the "Luigi Bocconi" University of Milan. She is author of many reports and peer reviewed papers in the field of climate change and sustainable development

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### Rob MOORE

Executive Director, The Gauteng City-Region Observatory(GCRO), South Africa

Dr Rob Moore was appointed as Executive Director of the GCRO in 2016. Previously he was a Deputy Vice Chancellor at Wits University, a post he held for seven years. His work included responsibility for the advancement of the University's strategic purposes in partnership with other institutions in society. Among other things, he assisted in developing the relationships between Wits and partners in government, industry, civil society and other universities. He was project director for South Africa's Ministerial Review Committee on the National System of Innovation, a study conducted in 2010 and 2011 and published in 2012.

Prior to joining Wits, he spent twelve years (1992 – 2004) at the University of Cape Town researching and teaching in higher education studies. His research interests there focused on issues of higher education policy and institutional adaptation. In particular, he has published on issues of institutional responsiveness to policy, on curriculum reform, and (more recently) on the governance of knowledge partnerships.

He sits on the Boards of the Southern African Liaison Office (SALO), The Conversation Africa (TCA), the Centre for Sustainability in Mining and Industry (CSMI), and the Cradle of Humankind Trust (CoHT).



### Jan Marco MÜLLER

Coordinator for Science to Policy and Science Diplomacy, IIASA

Following his PhD in Geography from the University of Marburg (Germany) in the year 2000, Jan Marco Müller's career included assignments as Assistant to the Scientific CEO of the Helmholtz Centre for Environmental Research (UFZ) in Leipzig (Germany), Research Programme and Communications Manager of the JRC Institute for Environment and Sustainability in Ispra (Italy), and Head of Business Development & Public Relations of the Centre for Ecology & Hydrology (CEH) in Wallingford (UK). During these years he also served as first Secretary of the Partnership for European Environmental Research (PEER), the network of Europe's largest environmental research centres which he co-founded.

In 2009 he broadened his experience at the science-policy interface by becoming the Assistant to the Director-General of the European Commission's Joint Research Centre (JRC) in Brussels until 2012, when he was asked to join the recently appointed Chief Scientific Adviser to the President of the European Commission. He served as Dame Anne Glover's Chief of Staff throughout her tenure, playing a key role in shaping the profile of the office. Following a 5-month fellowship with US science policy expert Roger Pielke jr. at the University of Colorado at Boulder, he helped between January 2016 and March 2017 to set up the European Commission's new Scientific Advice Mechanism (SAM) and its Group of Chief Scientific Advisors. In April 2017 he joined the International Institute for Applied Systems Analysis (IIASA) near Vienna (Austria) as Head of the Directorate Office and coordinator of IIASA's science to policy and science diplomacy activities.



### Fabrice MURTIN

Head of Section, the Households Statistics and Progress Measurement Division, OECD

Dr. Fabrice Murtin is a Head of Section at the Organisation for Economic Co-operation and Development (OECD) in the Households Statistics and Progress Measurement Division. He is also an Associate Researcher at Sciences Po Paris. A French national, he holds a PhD from Paris School of Economics, and was a Mellon Postdoctoral Fellow at Stanford University prior to joining the OECD. His research has focused on well-being measurement, the long-term dynamics of economic development and economic policy. He published numerous articles in peer-reviewed journals such as the Journal of Economic Growth, Economic Policy, European Economic Review or the Review of Economics and Statistics.



**Eugene MUTIMURA** 

Minister of Education, Republic of Rwanda

Hon. Dr. Eugene Mutimura is the Minister of Education in the Republic of Rwanda, and ensures that the Ministry of Education develops and implements policies that provide equal opportunities to Rwandans to access high quality education through world class learning facilities and renowned learning institutions. Dr. Mutimura previously worked at the Inter-University Council of East Africa, where he Coordinated the Eastern and Southern African Centers of Excellence project funded by the World Bank in 8 countries, to support research and education in 16 Universities. With substantial pedagogical and research experience, Dr. Mutimura oversees the Ministry of Education policies that underpin national agenda to collaborate with African colleagues to utilize technology to transform education and research, and advance scientific discovery to leverage national and regional labour market opportunities. Dr. Mutimura believes that the most valuable investment lies in education, and nurturing of talents for young scientists. With the support from the Government of Rwanda, and in collaboration with various partners, the Ministry of Education will continue to contribute and advocate for improved commitment and investments in science and research to advance policies that underpin Rwanda's vision to become a knowledge-based economy. In his role as Minister of Education, Dr Mutimura has national council for Science and Technology, he directly supports the needed research studies, related to specific issues facing the country, to facilitate evidence based science policy advice.



### Michiharu NAKAMURA

Counseller to the President, Japan Science and Technology Agency

Dr. Nakamura served as Executive Vice President and CTO of Hitachi Ltd., and then assumed a position of Board of Director. Since October 2011, he was President of Japan Science and Technology Agency(JST). Currently, he is serving as the Counsellor to the President of JST. He is Deputy President of Engineering Academy of Japan and a member of the UN 10 Member Group supporting Technology Facilitation Mechanism for SDGs.



### Toyoaki NISHIDA

Professor, The Graduate School of Informatics, Kyoto Universuty

Toyoaki Nishida is Professor at Department of Intelligence Science and Technology, Graduate School of Informatics, Kyoto University. He received the B.E., the M.E., and the Doctor of Engineering degrees from Kyoto University in 1977, 1979, and 1984, respectively. His research centers on artificial intelligence and human computer interaction. He opened up a new field of research called conversational informatics in 2003. He edited and co-authored three books on conversational informatics and related topics from Wiley and Springer. Currently, he leads the Human-Al communication (HAIC) team at RIKEN Center for Advanced Intelligence Project (AIP). He is an associate editor the Al & Society journal. He serves as a senior member of the Conference Toward Al Network Society, Ministry of Internal Affairs and Communications (MIC), Japan.



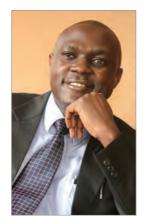
### **Connie NSHEMEREIRWE**

Co-Chair, Global Young Academy

Dr. Connie Nshemereirwe is an independent science and policy facilitator, and acts at the science-policy interface as a trainer, writer and speaker. She is the current Co-Chair of the Global Young Academy, as well as the Secretary General of the Uganda National Young Academy. She also sits on the steering committee of the Africa Science Leadership Programme (ASLP) based at the University of Pretoria in South Africa. Part of her other engagements involve working with the Partnership for African Social and Governance Research (PASGR) based in Nairobi, Kenya, delivering the bi-annual Pan-African Advanced Research Design Programme that is aimed at increasing the capacity of African Academics to carry out policy-engaged research.

Her undergraduate studies were in Civil Engineering, but in later years she made the shift to Education by completing a master's degree in the design of education and training systems at the University of Twente in the Netherlands in 2004, later followed by a PhD in Educational Measurement at the same University in 2014. Over most of this period she also had a dual appointment as a member of the academic staff in the Faculty of Education as well as the Faculty of the Built Environment at the Uganda Martyrs University, where she spent a total of 15 years.

She is also active in Civil Society through the Ugandan Think Tank, Kigo Thinkers, and in this capacity speaks at and attends various public engagement activities on the subject of adequacy and relevance of formal education in Uganda.



### Mobolaji Oladoyin ODUBANJO

Executive Secretary, The Nigerian Academy of Science

Dr Oladoyin Odubanjo is the Executive Secretary of the Nigerian Academy of Science. He is also the Chairman of the Association of Public Health Physicians of Nigeria (Lagos Chapter). Dr Odubanjo is an Adviser to the Centre for Palliative Care Nigeria (CPCN) and the Chairman of the Steering Committee of the African chapter of the International Network for Government Science Advice (INGSA). He also serves on the board of the West African office of The Conversation Africa.

Before working for the Nigerian Academy of Science, Dr Odubanjo worked as a physician for the Nigerian government. He worked at various public healthcare facilities in both rural and urban areas and was in charge of a general hospital with additional supervision of two primary health care facilities. In addition, Dr Odubanjo served on the board of some family-owned businesses. His experience also includes voluntary services for non-profit organisations in Nigeria and the United Kingdom.

Dr Odubanjo, as part of a newly recruited team, was instrumental to a successful transition of the Nigerian Academy of Science from a largely honorific organization to one that provides evidence-informed advice to government and other stakeholders. In the last eight years, he has collaborated with various African academies and the Network of African Science Academies (NASAC) on diverse projects aimed at informing policy. He has also been a facilitator at training workshops for staff of African science academies on bridging the evidence to policy gap.



Takashi OGUCHI

Professor, Institute of Industrial Science, The University of Tokyo

Dr. Takashi Oguchi is a professor and Director of Advanced Mobility Research Center (ITS center), in Institute of Industrial Sciences, the University of Tokyo. He is also a member of Mobility Innovation Collaborative Research Organization (UTmobl) started on July 1st, 2018 in the university, which is aimed for interdisciplinary collaboration among different faculties in the university for wide range like engineering, law, social system, economy, psychology and so forth. He is in charge of education for the department of civil engineering, graduate school of engineering of the university. After receiving the PhD from the University of Tokyo in 1993, he joined the Nissan Motor Co. Ltd. He started to work in Tokyo Metropolitan University in 1995 and promoted to professor in 2007. He moved to the University of Tokyo in 2011 to join ITS center. His major research interests are Highway and Street/Avenue Planning and Desing, Traffic Behavior Analysis, Traffic Operation Evaluation, Mobility Systems. He is also working as a head of Next Generation Urban Transport Working Group of Japanese national project SIP-adus (Cross-Ministerial Strategic Innovation Promotion Program in the Innovation of Automated Driving for Universal Services) since April in 2016.



BIOGRAPHIES

Satoru OHTAKE

Adjunct Fellow, CRDS, JST/Visiting Professor, Policy Alternative Research Institute, The University of Tokyo

Satoru OHTAKE joined science and technology administration in the Government of Japan in1984, just after graduating the Graduate School of the University of Tokyo where he was conferred Master Degree of Science in high energy physics. In his public service career in science administrations, he engaged in the policy planning and R&D management; establishment of Government's Science and Technology Basic Plans (in 1996, 2001 and 2011), establishing and running research programs and projects in photonics, mathematical science; engaging International Human Frontier Science Program in the HFSP Organization in Strasbourg in France between 1990 and 1992. He used to work in international collaborations, both bilateral and multilateral programs like Global Science Forum of OECD, Future Earth, Group of Earth Observation (GEO) and Global Earth Observation System of Systems (GEOSS). In Japan Science and Technology Agency (JST), he is in charge of management of international affairs, science and technology information exchange and dissemination, and science communication programs, in addition to overall management of JST as a deputy to the president from 2013 to 2015. After working as Executive Research Fellow in the Economic and Social Research Institute (ESRI) in the Cabinet Office where he studied the relation between science and society, he works as a visiting professor of Policy Alternative Research Institute of the University of Tokyo as well as Adjunct Fellow in Center for R&D Strategy of JST. In recent years he is working for with United Nations Sustainable Development Goals and emerging technology.



**David Budtz PEDERSEN** 

Professor of Science Studies, Aalborg University

David Budtz Pedersen is Professor of Science Communication and Director of the Humanomics Research Centre in Copenhagen, Denmark. His research focuses on science and higher education policy, impact assessment, and evidence-informed policy-making. Dr. Pedersen is Strategic Adviser to the Danish Ministry of Higher Education and Science, as well as European institutions and research foundations. He has about 150 entries on his list of publications ranging from research papers, research monographs, edited volumes, policy reports, op-ed columns and newspaper articles. He has an international public presence with outreach activities in science policy, speaking frequently on the topic of knowledge mobilisation, knowledge exchange, and the use of metrics. He is the recipient of competitive grants from the Danish Council for Independent Research, The Velux Foundation, The Danish Ministry of Higher Education and Science, The European Commission Horizon 2020 and The Obel Family Foundation.



Roger PIELKE

Professor, the Center for Science and Technology Research, the University of Colorado, Boulder

Roger Pielke, Jr. has been on the faculty of the University of Colorado since 2001, where he teaches and writes on a diverse range of policy and governance issues related to science, innovation, sports. Roger holds degrees in mathematics, public policy and political science, all from the University of Colorado. In 2012 Roger was awarded an honorary doctorate from Linköping University in Sweden and was awarded the Public Service Award of the Geological Society of America. In 2006, Roger received the Eduard Brückner Prize in Munich, Germany in 2006 for outstanding achievement in interdisciplinary climate research. Roger served as a Senior Fellow of The Breakthrough Institute from 2008 to 2018. He has been a Distinguished Fellow of the Institute of Energy Economics, Japan since 2016. Before poining the faculty of the University of Colorado, from 1993 to 2001 Roger was a Scientist at the National Center for Atmospheric Research. His books include The Honest Broker: Making Sense of Science in Policy and Politics published by Cambridge University Press (2007), The Climate Fix: What Scientists and Politicians Won't Tell you About Global Warming(2010, Basic Books) and The Edge: The War Against Cheating and Corruption in the Cutthroat World of Elite Sports (Roaring Forties Press, 2016). His most recent book is The Rightful Place of Science: Disasters and Climate Change (2nd edition, 2018, Consortium for Science, Policy & Outcomes).



### **Richie POULTON**

Professor; Director of Dunedin Multidiciplinary Health & Development Research Unit (DMHDRU), University of Otago

Professor Richie Poulton is Director of the Dunedin Multidisciplinary Health and Development Research Unit which conducts the Dunedin longitudinal study, one of the most detailed studies of human health and development ever undertaken.

In 2007, he established and became a Co-Director of the National Centre for Lifecourse Research, a research centre based at the University of Otago in Dunedin, but with partners located at universities across New Zealand and internationally.

He has also held a part-time position as the inaugural Chief Science Advisor to the NZ Ministry of Social Development since October 2014

He has published 250+ peer-reviewed scientific papers, with many appearing in leading international journals. His research interests include: mental health, nature-nurture interplay, and psychosocial determinants of chronic physical disease. In 2014, he was named as a Highly Cited Researcher by Thomson-Reuters (one of only four New Zealanders so designated) and was listed in 2015 World's Most Influential Scientific Minds, Thomson-Reuters.



### Rémi QUIRION

Chief Scientist of Quebec

Professor Rémi Quirion is the inaugural Chief Scientist of Quebec and the President of the three Board of Directors of the Fonds de recherche du Québec since July 1st, 2011. A McGill Full Professor, Psychiatry and outgoing Scientific Director at the Douglas Mental Health University Institute. He served as Vice-Dean, Faculty of Medicine at McGill University, as well as Senior University Advisor (Health Sciences Research) in addition to being the CIHR Executive Director, for Alzheimer's Diseases, from 2009 to 2011. Prof. Quirion was the inaugural Scientific Director of the Institute of Neurosciences, Mental Health and Addiction (INMHA) until March 2009.

In addition to being on the Advisory Board of over 15 journals in Psychiatry, Pharmacology, and Neurosciences, he has published 5 books, more than 650 scientific papers and articles.

He received many awards and recognitions as: the Médaille de l'Assemblée nationale du Québec; Fellow of the Royal Society of Canada; and was appointed Fellow of the Canadian Academy of Health Sciences. In 2007 Prof. Quirion became a Member of the Order of Canada (O.C.).



### Sujatha RAMAN

Associate Professor/Reader & Director of Research, Australian National University

Sujatha Raman is Reader/Associate Professor and Director of Research at the Australian National Centre for Public Awareness of Science (CPAS), The Australian National University (ANU), Canberra. She is interested in transdisciplinary approaches to the question of how we respond to global challenges in the face of diverse forms of knowledge, practice, and valuation. To this conversation, she brings expertise in studies of science policy, the use of scientific knowledge in policymaking, technology assessment, responsible research and innovation, and public engagement around science and technology. Her collaborations span the global North and South, and a range of domains including energy transitions, environmental change and sustainability, and health and antimicrobial resistance (AMR).

At CPAS-ANU, Raman is exploring collaborations for building capacity across the research, innovation, and policy ecosystem to facilitate democratic engagement around science, its impacts, and its futures. She is CPAS-ANU's lead in the Virtual Institute for Responsible Innovation (VIRI). Prior to joining ANU in July 2018, Raman was co-director of research at the Institute for Science and Society (ISS), University of Nottingham, United Kingdom. At Nottingham, she was deputy director (2012-16) and then director (2016-18) of the Leverhulme Research Programme, 'Making Science Public: Challenges and Opportunities', co-editing a book arising from this work (Science and the Politics of Openness, 2018, Manchester University Press). Other recent work has appeared in Environmental Science and Policy, Sociologia Ruralis, Environmental Communication, Journal of Rural Studies, Journal of Responsible Innovation, Policy Sciences, Energy Policy, Biomass and Bioenergy, Journal of Cleaner Production, World Development and Science as Culture. She tweets as @Sujatha Raman.



### Vardit RAVITSKY

Associate Professor, University of Montreal

Vardit Ravitsky, PhD, is Associate Professor in the Bioethics Program at the School of Public Health, University de Montreal and Director of Ethics and Health at the Center for Research on Ethics (CRÉ). Dr. Ravitsky is Vice-President of the International Association of Bioethics, member of the Standing Committee on Ethics of the Canadian Institutes of Health Research (CIHR) and of the Institute Advisory Board of CIHR's Institute of Genetics. She is also member of the National Human Genome Research Institute's (NHGRI) Genomics & Society Working Group. Previously, she was faculty at the Department of Medical Ethics at the University of Pennsylvania.

Dr. Ravitáky's research is funded by CIHR, FRQSC, SSHRC, and Genome Canada and she has published over 120 articles and commentaries on bioethical issues. Her research focuses on the responsible implementation of emerging genomics and reproductive technologies in terms of public policy. In her capacity as member of national and international advisory groups, she is heavily involved in strategic planning regarding research funding and research ethics. She is also heavily invested in and passionate about knowledge translation, having organized numerous cafés scientifiques and other public events to disseminate research findings. In 2017 she won the Researcher Knowledge Mobilization Award from the Québec Reproduction Network (RQR), granted "for knowledge translation activities designed to demonstrate the importance of research to the general public and to knowledge users".

Born and raised in Jerusalem, Ravitsky brings international perspectives to her research and teaching. She holds a BA from the Sorbonne University in Paris, an MA from the University of New Mexico in the US, and a PhD from Bar-llan University in Israel.



**Daya REDDY** 

President, International Science Counsil

Daya Reddy was born in Port Elizabeth, South Africa. After completing bachelor's and doctoral degrees in engineering at the Universities of Cape Town and Cambridge respectively, he pursued postdoctoral study at University College London, then returned to Cape Town, where he migrated eventually from joint appointments in engineering and mathematics to a chair in applied mathematics. He currently holds the South African Research Chair in Computational Mechanics. Much of his work is concerned with mathematical analysis and computational simulation in solid and fluid mechanics, and is motivated by applications in areas such as materials science and biomechanics. His many publications include two graduate-level texts and a monograph, now in its second edition, on plasticity theory. Daya Reddy was a founder member in 2003 of AIMS, the African Institute for Mathematical Sciences (AIMS), a pan-African network with centres for graduate education, research and outreach currently in five African countries. He currently serves as the chair of the AIMS South Africa Council.

Daya Reddy served a term as President of the Academy of Science of South Africa. He also serves as co-chair of the Research arm of the InterAcademy Partnership (IAP). In July of this year he was elected the first president of the International Science Council, the largest non-governmental science organization, which has resulted from the merger of the International Council for Science (ICSU) and the International Social Science Council.

He is a recipient of the Award for Research Distinction of the South African Mathematical Society, the Order of Mapungubwe, awarded by the President of South Africa for distinguished contributions to science, and of the Georg Forster Research Award from the Alexander von Humboldt Foundation in Germany.



Marc SANER

Full Professor and Chair, Department of Geography, Environment and Geomatics, University of Ottawa

Marc Saner is Full Professor and Chair, Department of Geography, Environment and Geomatics at the University of Ottawa, Canada (cross-appointed at the Graduate School of Public and International Affairs and the Institute for Science, Society and Policy).

His interests are the science/policy interface, the governance of emerging technologies, and environmental risk, ethics and governance. He was the Inaugural Director of the Institute for Science, Society and Policy at the University of Ottawa and formerly held managing positions at the Council of Canadian Academies, Carleton University's Regulatory Governance Initiative and Ethics and Policy Issues Centre as well as the independent Institute on Governance.

He retains appointments as Adjunct Professor at Carleton University's Department of Philosophy and Fellow at the Balsillie School of International Affairs, University of Waterloo. Marc Saner holds a doctorate in applied ecology from the University of Basel, Switzerland (1991) as well as a masters in applied ethics from Carleton University, Canada (1999).



### Marcelo Garcia SILVA

Adviser, Directorate of Energy, Science & Technology and Innovation (DECYTI), Ministry of Foreign Relations of Chile

Professor Marcelo García Silva, Chilean lawyer from the Catholic University, with postgraduate studies in Philosophy and Political Science at the La Sorbonne University in Paris. Professor García taught courses in International Politics at the University of Chile, in Santiago and at the Catholic University of Valparaíso. During the Military Dictatorship of General Pinochet, Marcelo García left the country, occupying various academic positions abroad. First, as a guest researcher at the Max-Planck-Institut zur Erforschung der Lebensbedingungen der Wissenschaftlich-technischen Welt, (today, Max-Planck-Institut für Sozialwissenschaften), in München, Federal Republic of Germany. Later he moved to Mexico City, where he worked as a research professor at the Center for Teaching and Economic Research (CIDE). With the return of democracy in Chile, Professor García returned to his country, where he worked as a teacher and entered as an Adviser at the Minestry of Foreign Affairs, on different topics of politics and economics, at the Directorate of Strategic Planning (DIPLANE). Professor García was Representative of Chile at the Organization for Economic Cooperation and Development, (OECD, 2001-2006); Chief of the OECD Department at the Directorate of International Economic Relations (2006-2010), and Negotiator for the Chilean Accession of Chile to the OECD. Since 2014, García is Senior Adviser at the Directorate for Energy, Science, Technology and Innovation (DECYTI) at the Foreign Ministry of Chile. Marcelo García has also participated as editor and author of various publications and reports, both in Mexico and Chile, on issues of Institutionality and International Cooperation Policy, Agro-Industry in the context of regional cooperation, OECD and Chile, Petroleum and alternative energy in Latin America, and Chille Insertion in the World Economy.



**Alice SIRAGUSA** 

Project Officer, Joint Research Centre, European Commission

Alice Siragusa is project officer Joint Research Centre of the European Commission where she supports the extension of the LUISA territorial model to Africa and the production and dissemination of urban indicators. In the past, she has been collaborating with the Italian National Planning Institute (INU) on activities related to the SDGs and public space. She co-led the Habitat III Policy Unit 6 on Urban Spatial Strategies: Land Market and Segregation. She has been consulting the Italian Ministry of Infrastructures and Transport, visitor scholar at the Columbia University, and she had been a TA in Planning and Urban Design at University of Roma Tre. She holds a PhD in Regional and Urban Planning from Sapienza University of Rome.



### Hema SRIDHAR

Chief Advisor - C4ISR. Ministry of Defence

Hema Sridhar is the Chief Advisor, Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) at the Ministry of Defence as part of the Capability Delivery Division. The Capability Delivery Division has primary responsibility to procure major military capability and manage major capability upgrades for the New Zealand Defence Force.

Hema has over ten years of experience in defence science and technology and expertise across the C4ISR domain with a focus on emerging and disruptive technologies. Hema has developed expertise in technology assessment and made a significant contribution to furthering several key acquisition projects.

Hema joined the Ministry of Defence in 2016 and in her role as Chief Advisor, supports a range of capabilities particularly with a technology focus and is a member on several project governance boards. Prior to joining the Ministry of Defence, Hema worked at the Defence Technology Agency.

Hema received a Master of Science in Physics and a Bachelor of Technology in Opto-electronics from the University of Auckland.



### **Anne-Sophie STEVANCE**

Science Officer, International Science Counsil

Anne Sophie is managing international science policy activities related to the Sustainable Developments Goals, the Sendai Framework for Disaster Risk Reduction and Biodiversity (IPBES). Within these processes, she coordinates inputs from the international scientific community and supports stronger interface between scientists and policy makers, in particular through the Science and Technology Major Group at the United Nations. Anne-Sophie has been leading at ISC the completion of policy-oriented reports on the SDGs. Following a 2015 Review of the SDG targets and a report on SDG interactions in 2017, she is currently involved with INGSA, IIASA and SEI in applying a framework for describing interactions to the national level in different country contexts to support the coherent implementation of the SDGs. Anne-Sophie is also currently coordinating the external review of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).



### Vladimir ŠUCHA

Director-General, Joint Research Center, European Commission

Vladimir Šucha is Director-General of the Joint Research Centre of the European Commission, its in-house scientific service. He was Deputy Director-General of the JRC between 2012 and 2013. Prior to that, he spent 6 years in the position of director for culture and media in the Directorate-General for Education and Culture of the European Commission. Before joining the European Commission, he held various positions in the area of European and international affairs. Between 2005 and 2006, he was director of the Slovak Research and Development Agency, national body responsible for funding research. He was principal advisor for European affairs to the minister of education of the Slovak Republic (2004-2005). He worked at the Slovak Representation to the EU in Brussels as research, education and culture counselor (2000-2004). In parallel, he has followed a long-term academic and research career, being a full professor in Slovakia and visiting professor/scientist at different academic institutions in many countries. He published more than 100 scientific papers in peer reviewed journals.



### Atsushi SUNAMI

Vice-President, National Graduate Institute for Policy Studies/ Exective Director, The Sasakawa Peace Foundation

Professor Sunami holds BSFS from Georgetown University. He obtained MIA and PhD in Political Science from Columbia University. He is currently Professor, and Vice President at National Graduate Institute for Policy Studies, Japan. He is serving as Special Advisor, Cabinet Office responsible for Science and Technology and Innovation and President and Executive Director. the Ocean Policy Research Institute . the Sasakawa Peace Foundation.

Executive Director, the Ocean Policy Research Institute, the Sasakawa Peace Foundation.

Before joining GRIPS, he was a Fellow at Research Institute of Economy, Trade and Industry established by the Ministry of Economy, Trade and Industry, Japan between 2001 and 2003. He also worked as a researcher in the Department of Policy Research at Nomura Research Institute, Ltd. from 1989 to 1991. He was a visiting researcher at Science Policy Research Unit, University of Sussex, and Tsinghua University, China. He is also a members of the Advisory Board for the Promotion of Science and Technology Diplomacy in Ministry of Foreign Affairs of Japan, the Council for Science and Technology in Ministry of Education, Culture, Sports, Science and Technology and the Expert Panel on Basic Policy in Council for Science, Technology and Innovation of Cabinet office.



**Haruo TAKEDA** 

Corporate Chief Engineer, Hitachi, Ltd.

Dr. Haruo Takeda is Corporate Chief Engineer of Hitachi, Ltd. He works also for 1) CAO (Cabinet Office, Govenment of Japan) as a member of artificial intelligence meetings, (2) MOFA (Ministry of Foreign Affairs) for SDGs (the Sustainable Devlepment Goals), (3) METI (Ministry of Economy, Trade and Industry) where he chairs an adoption board for artificial intelligence in NEDO (New Energy and Industrial Technology Development Organization), (4) MEXT (Ministry of Education, Culture, Sports, Science and Technology) as a program officer for intelligent infrastructure for JST (Japan Science and Technology Agency), (5) MAFF (Ministry of Agriculture, Forestry and Fisheries) as a reviewer for all the research and development activities there. His lectures in 2018 include ones in (6) MIC (Ministry of Internal Affairs and Communications) on Information and Communication Technologies, and (7) FSA (Financial Services Agency) on Financial SDGs. He assumes himself playing a transdisciplinary role in the government.

Financial SDGs. He assumes himself playing a transdisciplinary role in the government. He got his Doctoral Degree in mathematical engineering from the University of Tokyo where he wrote a machine learning program for the neural network for the game of go in 1980 when he was an undergraduate student. After joining Hitachi, he was the head of the R&D strategy center, the head of the Advanced Research Center and the head of the Technology Strategy Office prior to the current position. For other institutions, he is the leader of the SDGs project in the Engineering Academy of Japan, an adisory board member of RIKEN, an advisory board member of the Future Society Initiative of the University of Tokyo, a strategy board member of IEC (International Electrotechnical Commission) for international standardization, was the chairman of the strategy board of the Japan Electrical Manufacturers' Association. He won the silver medal in Kanagawa prefecture (the first round) in the senior division of the international Chopin piano competition in Asia in 2017.



Akihiko TANAKA

President, National Graduate Institute for Policy Studies

Akihiko Tanaka is President of the National Graduate Institute for Policy Studies (GRIPS). Before assuming the current position, he had been Professor of International Politics at the Institute for Advanced Studies on Asia, The University of Tokyo, for many years. He served as President of Japan International Cooperation Agency (JICA) from April, 2012 to September, 2015. Mr. Tanaka was also Executive Vice President of The University of Tokyo (2009-2011). He obtained his bachelor's degree in International Relations at the University of Tokyo in 1977 and Ph.D. in Political Science at the Massachusetts Institute of Technology in 1981. He has numerous books and articles on world politics and security issues in Japanese and English including The New Middle Ages: The World System in the 21st Century (Tokyo: The International House of Japan, 2002) and Japan in Asia: Post-Cold-War Diplomacy (Tokyo: Japan Publishing Industry Foundation for Culture, 2017). He received the Medal with Purple Ribbon in 2012 for his academic achievements.



Klaus TILMES

Senior Advisor, Science, Technology and Innovation, World Bank

Klaus works with the Office of the President to develop the Bank Group's corporate vision on disruptive technologies and their implications for development and to identify opportunities for scaling their adoption through lending operations, policy advice, and partnerships. In this capacity, he works closely with the UN Science Technology and Innovation (STI) Forum.

Most recently, Klaus served as Director of the Trade & Competitiveness Global Practice at the World Bank Group until December 2017. In this capacity, Klaus oversaw the delivery of solutions in Sub-Saharan Africa and the Middle East as well as the global teams on Trade & Competition Policy and Innovation & Entrepreneurship. Prior to this, Klaus held positions as Director of the Financial and Private Sector Development (FPD) Network; Knowledge Strategy Advisor; and Manager at the Independent Evaluation Group.

Klaus holds a Master's degree in Public Administration from Harvard University, and a Master's in Economics from the University of Mannheim.



Vaughan TUREKIAN

Executive Director of Policy and Global Affairs, US National Academies of Sciences, Engineering and Medicine

Executive Director of the Policy and Global Affairs (PGA) Division at the US National Academies of Sciences, Engineering, and Medicine

Dr Vaughan Turekian is Executive Director of the Policy and Global Affairs (PGA) Division at the US National Academies of Sciences, Engineering, and Medicine. Previously he served as Senior Director of the Program on Science and Technology for Sustainability within the PGA Division and prior to that, as the fifth Science and Technology Advisor to the U.S. Secretary of State. In this capacity, he advised the Secretary of State and other senior State Department officials on international environment, science, technology, and health matters affecting the foreign policy of the United States. From 2016 to 2017, he served as a country co-chair, along with the Kenyan Ambassador to the United Nations, for the Multi-stakeholder Forum on Science, Technology, and Innovation for the Sustainable Development Goals, a high-level discussion at the United Nations designed to accelerate progress toward globally agreed upon development targets. In 2018, Dr. Turekian was appointed by the U.N. Secretary General as one of the ten international members to promote the role of science, technology, and innovation for achieving for the 17 SDGs



**Hiroshi UEDA** 

Director & Senior Managing Executive Officer, Sumitomo Chemical Company, Limited.

Hiroshi Ueda is currently a member of the Board of Director & Senior Managing Executive Officer at Sumitomo Chemical. He is in charge of Research and Development, Process & Production Technology & Safety Planning, Intellectual Property, and Responsible Care. He previously was in charge of Energy and Functional Materials Sector. He is a Senior Professional Chemical Engineer.

He serves as the Committee member, COCN (Council on Competitiveness-Nippon) Working Committee.

He completed the first half of the Ph.D. program at the Graduate School of engineering, Kyoto University.



### Abhimanyu VEERAKUMARASIVAM

Professor/Doctor, Department of Biotechnology, School of Science and Technology, Sunway University

Professor Dr. Abhi Veerakumarasivam is a University of Cambridge-trained educator, science communicator and geneticist. His research in cancer genetics involves the elucidation of components of the regulatory pathways that drive tumour recurrence and invasion as well as dissecting Asian genetic variations that confer differences in disease-risk and response to therapy. In recognition of his achievements, he has been awarded multiple awards including the National Cancer Council Malaysia Cancer Research Award and the Merdeka Award Grant. He was crowned the Best Science Communicator at the 2016 International Famelab Finals in the UK. He is currently the Chairman of the Young Scientists Network-Academy of Sciences Malaysia (YSN-ASM) that represents top young Malaysian scientists who not only demonstrate academic excellence but also contribute towards nation-building through STEM promotion and advocacy. He is also currently the Chair of INGSA Asia Steering Committee and a member of the Global Young Academy; where he co-chairs the DIY Biology Working Group. Abhi truly believes that the greatest healthcare challenges facing us in the 21st century can only be addressed through an interdisciplinary approach that promotes effective communication and the translation of scientific discoveries and enabling technologies that improve the quality of life and promote social justice.



Matthew WALLACE

Senior Program Office, International Development Research Centre (IDRC)

Dr. Matthew Wallace is currently a Senior Program Officer at International Development Research Centre (IDRC), in Ottawa. He works in the Foundations for Innovation program, where he manages a portfolio of projects in Latin America and Africa on issues such as science advice, multilateral and industrial research collaborations, the role and capacity of granting councils, and science careers, particularly among marginalized groups. Matthew has Masters' degrees in Physics and in Science and Technology Studies, as well as a Ph.D. in the History of Science. He has been a researcher and practitioner in the field of science policy for over a decade. Much of his research has focused on qualitative and quantitative tools for research evaluation and agenda-setting, tracing the development of new fields of research, and the politics of public research management, particularly in government settings. He has also previously worked as a science policy advisor and a senior evaluator at a federal ministry and at a granting agency in Canada.



Carla Leanne WASHBOURNE

Lecturer in Environmental Science and Policy,

Department of Environment Science, Technology, Engineering, and Public Policy, University College London

Carla is an interdisciplinary researcher and practitioner working at the interface of science and public policy. Her work seeks to understand how decision-making and planning in urban settings is influenced by prevailing knowledge systems, centred on urban environment and sustainability topics. Carla is a Lecturer in Environmental Science and Policy at University College London (UCL), in the department of Science, Technology, Engineering and Public Policy (STEaPP) a member of the UCL City Leadership Laboratory and a Co-Director (Green Infrastructure) of the UCL Engineering Exchange (https://www.ucl.ac.uk/engineering-exchange), which works to proactively match local community needs with UCL research expertise. She is a Research Associate at the Gauteng City-Region Observatory (GCRO), Johannesburg. Carla has previously worked in the UK Parliamentary Office of Science and Technology as a Physical Sciences Advisor and in the Scottish Parliament Information Centre, engaging directly with legislative decision-makers, developing expertise and personal interest in science advice and science communication for policy. Carla is engaged in GCRO core project 'Knowledge partnerships for urban futures: policy-oriented research alliances', investigating global and local practice in forging university knowledge alliances for policy making. A collaboration with GCRO, the University of Melbourne and UN-Habitat is developing theoretical and practical understanding of the role of urban observatories as a component of urban knowledge systems. Other current projects include an investigation of the knowledge and skills landscape in the design, development and management of urban green spaces and mechanisms for improving planning and policy implementation. Carla completed a PhD in Geosciences and MSc in Engineering Geology at the University of Newcastle (UK) and a BSc (hons) in Natural Sciences at Durham University.



### Christine WEIDENSLAUFER

Attorney at Law/ Legislative Advisor, the Library of Chile's National Congress

Christine Weidenslaufer is an attorney at law and legislative advisor on Comparative Law, as full time staff of the Parliamentary Technical Advisory section at the Library of Chile's National Congress, since 2007. Ms. Weidenslaufer received her law degree from the University of Valparaiso, Chile, in 2003. She has an LLM on International and Comparative Law from St. Mary's University, San Antonio, Texas (2005), and an LLM in Advanced Legislative Studies from the University of London (2018), specializing in legislative drafting in common law countries and, in general, in the United States, Australia, Canada, and the United Kingdom legal systems. In her role as legislative advisor, Ms. Weidenslaufer has been strongly involved in the understanding and adoption of foreign legal transplants in the legislative process, through constant delivery of written reports and verbal assessment to members of Congress, legislative committees, Congress' officers and member's staff. Additionally, during the past few years, Ms. Weidenslaufer has worked in collaboration with her colleague, scientific journalist Raimundo Roberts, on science, technology and communications assessment in legislation. Aiming to improve the drafting law process and the adequate use of legal transplants, Ms. Weidenslaufer presented her paper "Research and Law Drafting Best Practices for Connected and Cooperative Parliamentary libraries", at the 2016 Annual Conference of the International Federation of Library Associations and Institutions (IFLA) in Columbus, Ohio, where she proposes creating an electronic information search tool, of a collaborative nature, among parliamentary researchers from different jurisdictions. While proficient in English, Spanish and Portuguese, and honoring her ancestry, Ms. Weidenslaufer is embarking on a new challenge: learning German! She currently resides in Santiago, Chile, with her husband and their three daughters. You can reach her at cweidenslaufer@bcn.cl or christy.weidens@gmail.com



BIOGRAPHIES

### Rebekah WIDDOWFIELD

Chief Executive, Royal Society of Edinburgh

Rebekah has been Chief Executive of Scotland's National Academy, the Royal Society of Edinburgh, since September 2017. Following a geography degree at the University of Oxford and PhD at the University of Newcastle, Rebekah worked for a number of years at the Universities of Bristol and Cardiff before deciding to leave academia to pursue a more applied research career. Rebekah joined the Scottish Government as a senior researcher in 2001, working in various roles before becoming a senior civil servant in 2008 in which capacity she served as Head of Rural and Environmental Science and Analysis (RESAS) and as Chief Researcher with responsibility for social research in Government.

As Head of RESAS, Rebekah was at the interface between science and policy with responsibility for enhancing the impact and value for money of the Government's £60 million strategic scientific research programme delivered by Scotland's four research institutes. This included helping establish the Centre of Expertise on Climate Change – a collaboration of 19 institutions aimed at enhancing evidence for policy – and ensuring delivery of integrated, high quality analysis (drawing on both natural and social sciences produced in-house and externally) in support of rural and environmental policy including reform of the Common Agricultural Policy and transition to a low carbon economy.

Rebekah moved to a policy role within the Scottish Government in 2013 becoming a commissioner and user of evidence, as Head of Higher Education and Science and, most recently, as Head of Better Homes with a wide-range of responsibilities including housing welfare reform, regulation of the private and social rented sector, fuel poverty and homelessness. As CEO of the RSE, Rebekah is committed to effective delivery of RSE's mission of 'knowledge made useful'



### James WILSDON

Vice-Chair, INGSA/ Professor of Research Policy, University of Sheffield

James Wilsdon is Professor of Research Policy at the University of Sheffield and vice-chair of the International Network for Government Science Advice (INGSA). From 2013 to 2017, he chaired the UK's Campaign for Social Science, and led an independent review of the role of metrics in the management of the UK's research system, which published its final report as The Metric Tide. Previously, he worked as Professor of Science and Democracy at the Science Policy Research Unit, University of Sussex (2011-2015); Director of Science Policy at the Royal Society, the UK national academy of science (2008-2011); and Head of Science and Innovation at the think tank Demos (2001-2008). His research interests include the role of evidence & experts in policymaking; interdisciplinarity; research policy in the UK and Europe; the impact agenda; and public engagement in research. In 2015, he was elected a Fellow of the UK's Academy of Social Sciences and he now chairs its Policy Working Group, He is on twitter @jameswilsdon.



### Kenichiro YAMAGUCHI

Senior Manager, CDP Worldwide-Japan

Kenichiro Yamaguchi is Senior Manager at CDP Worldwide-Japan, responsible for promoting Supply Chain Programme in Japan. Ken is also serving as partner of "Megawatt-X", which is an internet platform venture to intermediate trades of secondary renewable assets. Before entering to the current career path, Ken had developed long term, strong careers in

commodity and energy trading business in investment banking arena.

After graduating from Keio University (BA Economics) in 1982, Ken started professional career at the Bank of Tokyo Ltd (Name at that time). In 1991, Ken moved to J.P. Morgan in Tokyo and was promoted as head of commodity business to cover Asia & Pacific region at Singapore office in 1996.

In 1998, Ken was invited by Tokyo-Mitsubishi International PLC (Name at that time) in London to run global commodity business as Executive Director. Ken ran the business for 5 years and established a small-sized efficient trading group. In 2003, having full supports from Mitsubishi Corporation, Ken established an energy derivatives trading company named "Petro-Diamond Risk Management Ltd" and managed the company as President & COO for 6 years in London. The company has become highly efficient and profitable trading company. In 2010, Ken moved to Deutsche Bank and engaged in commodity structuring and emission trading. He worked for Deutsche Bank as Director until 2014
Through learning about emission trading, Ken wanted to pursue his expertise in environment area and enrolled master to

study Environment and Sustainability at Birkbeck College, University of London, and completed MSc in 2016. Then his current career path in environment has started.

### **Rapporteurs**

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**Shaheen Motala-Timol** Mirabbos Hojamberdiev **Oscar Reyes** Farah Atiqah Awang Ismail

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**FLOOR MAP** 

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Teruo KISHI, Science and Technology Advisor to the Minister for Foreign Affairs of Japan

Yuko HARAYAMA, Former Executive Member of the Council for Science and Technology Policy

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### **Organizing Team**

International Network for Government Science Advice (INGSA)

**Kristian ALLEN** Lara COWEN **Grant MILLS** 

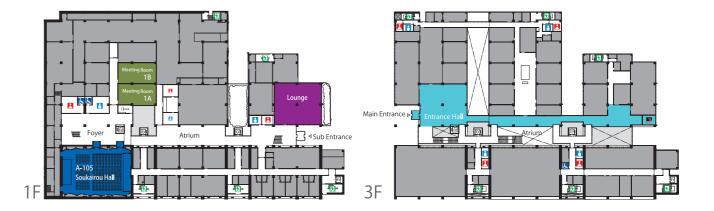
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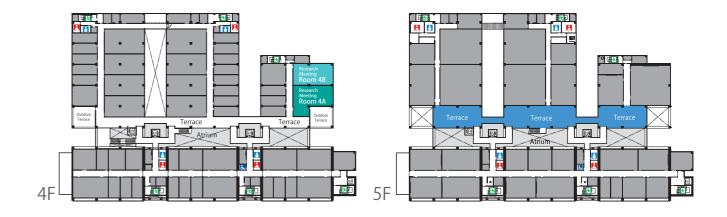
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■ Eating Space
■ Eating Space
■ No Food or Drink



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	Room 4B	Parallel Sessions & Eating Space	Eating Space
5F	Terrace	Eating Space	■ Eating Space





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