

Profile of the Participants (in alphabetical order)

Eilon Adar

Director of Zuckerberg Institute for Water Research, Ben Gurion University of the Negev



Prof. Adar's main research activities are associated with quantitative assessment of groundwater flow systems and sources of recharge in complex arid basins with puzzling geology and scarce hydrological information.

Adar has developed the novel transient Mixing Cell Model (MCM_{tr}) approach utilizing hydrochemistry and environmental isotopes coupled with a non steady flow model. Among other research activities, are the initiation and/or involvement in the investigation of:

- (1) the role of water reservoirs and shallow groundwater on top-soil salinization in the Jezreel Valley;
 - (2) the effects of forestation over sand-dune terrain on local groundwater reservoirs;
 - (3) the dynamics of flow and pollutant transport in a fractured chalk aquitard (low permeable yet fractured formation) in the vicinity of the Ramat Hovav Industrial Park;
 - (4) identification and quantification of pollutant sources into ephemeral rivers from various basins with different anthropogenic activities;
 - (5) the effect of industrial effluents on the hydraulic properties of a fractured chalk aquitard;
 - (6) identification of irregular salinization processes in the Coastal Aquifer of Israel;
 - (7) salinization and deterioration of topsoil water quality due to anthropogenic activities;
 - (8) soil and groundwater contamination in the coastal aquifer of Israel (Ramat Hasharon area) by organic industrial pollutants and
 - (9) hydrological aspects of management and policy associated with transboundary water resources in Israel and the Middle East.
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Ahmad Tajuddin Ali

President, Academy of Sciences Malaysia



Dr Ahmad Tajuddin Ali is the President of The Academy of Sciences Malaysia. He is also the Chairman of UEM Group, a Malaysian infrastructure conglomerate involved in property development, toll highways ownership and operation, engineering and construction, asset and facilities management and cement manufacturing.

Earlier in his career, Dr Tajuddin Ali has served as the Director-General of Standards and Industrial Research Institute of Malaysia (SIRIM), then the Executive Chairman of Tenaga Nasional Berhad(TNB), Malaysia's national power company. An Engineer by training, Dr Tajuddin Ali graduated with First Class Honours in Mechanical Engineering from King's College, University of London in 1973 and obtained his doctorate in Nuclear Engineering from Queen Mary College, University of London in 1977. He did post-doctoral work in nuclear engineering at Oregon State University (1977-1978) and at Pennsylvania State University (1978).

Dr Tajuddin Ali is currently a member of the Governing Council of the International Institute of Applied Systems Analysis (IIASA) in Laxenburg, Austria and also a member of APEC Business Advisory Council (ABAC).

Sabah AlMomin

Research Scientist - Biotechnology, Kuwait Institute for Scientific Research (KISR) Kuwait

Dr. Sabah AlMomin is Research Scientist in Biotechnology at Kuwait Institute for Scientific Research (KISR). She is a graduate from University of Surrey, UK specialized in genetic engineering and molecular biology and an elected fellow of TWAS. Dr. AlMomin most notable contribution is the introduction and establishment of the Animal Embryo Transfer and Manipulation Program at KISR. She has lead several research projects in molecular diagnostics, DNA fingerprinting and germplasm management of marine species. Currently Dr. AlMomin is leading the ambitious project to establish the National Centre of Genetic Engineering and biotechnology as a centre of excellence in Kuwait and research projects in fish population genetics and phytoremediation.



She is a main contributor to the advancement of biotechnology particularly in the State of Kuwait and the establishment of a national program on Biotechnology . As a result, the State of Kuwait received its membership of ICGEB and KISR as an affiliated centre, where she is the liaison officer of Kuwait at ICGEB. She is an active member of the International Council of Life Sciences (ICLS) to promote biosafety and biosecurity in the MENA region and has established the National Committee of Biosafety.

Ruth Arnon

President, Israel Academy of Sciences and Humanities

Formerly Vice-President of the Weizmann Institute of Science (1988-1997), Prof. Arnon is a noted immunologist. Prof. Arnon joined the Institute in 1960. Prior to her appointment as Vice-President, she served as Head of the Department of Chemical Immunology, and as Dean of the Faculty of Biology. From 1985 to 1994, she was the Director of the Institute's MacArthur Center for Molecular Biology of



Tropical Diseases. Prof. Arnon has made significant contributions to the fields of vaccine development, cancer research and to the study of parasitic diseases. Along with Prof. Michael Sela, she developed Copaxone® a drug for the treatment of multiple sclerosis which was approved by the U.S. Food and Drug Administration, and is presently marketed in the USA, Canada the EU, Australia and many other countries worldwide.

Prof. Arnon is a member of the Israel Academy of Sciences, and was the Chairperson of its Sciences division from 1995-2001. On the world scene, she is an elected member of the European Molecular Biology Organization (EMBO). She has served as President of the European Federation of Immunological Societies (EFIS), and as Secretary-General of the International Union of Immunological Societies (IUIS), and is presently a member of the European Union Research Advisory Board (EURAB) and served as the Senior Vice-President of the Association of Academies of Sciences in Asia (AASA) and she also served as the President of the Association of Academies of Sciences in Asia (AASA).

Her awards include the Robert Koch Prize in Medical Sciences, Spain's Jiminez Diaz Memorial Prize, France's Legion of Honor, the Hadassah World Organization's Women of Distinction Award, the Wolf Prize for Medicine, the Rothschild Prize for Biology and the Israel Prize, Honorary Doctorate Tel-Hai University; Honorary Doctorate - Ben-Gurion University of the Negev, Honorary Doctorate - Tel-Aviv University, The AESKU Prize for Life Contribution to Autoimmunity by the 6th International Congress on Autoimmunity, Member of the American Philosophical Society; President of the Israel Academy of Sciences and Humanities (Oct 2010).

Akica Bahri

Coordinator of the African Water Facility (AWF), African Development Bank



Akiça Bahri is currently the Coordinator of the African Water Facility (AWF) at the African Development Bank since 2010, an initiative of the African Ministers' Council on Water. She has academic (a Doctor-Engineer degree from the National Polytechnic Institute of Toulouse, France, and a PhD from the Institute of Science and Technology at Lund University, Sweden) and professional experience in water resources management and the agricultural use of marginal waters, sewage sludge and their impacts on the environment.

She has also been involved in policy and legislative issues regarding water reuse and land application of sewage sludge. Her experience includes substantial achievements in research, research management, capacity building, as well as experience as a manager in the water field. She has assisted her country, Tunisia, in supplementing its scarce water resources with reclaimed water, providing an environmentally safe and useful manner of sewage sludge recycling through land application, in addition to seeking solutions for critical challenges to water security and improving urban water and wastewater management in the growing cities around the Mediterranean area, the Middle East as well as in Africa.

She has been working for the National Research Institute for Agricultural Engineering, Water and Forestry in Tunisia where she was in charge of research management in the field of agricultural water use and has managed, as Director for Research, a research laboratory from 2000 to 2005. She has been a member of the International Water Management Institute's (IWMI) Board of Governors from 2003-2004 before becoming the IWMI Director for Africa where she was in charge of the management of the Africa research program from 2005-2010.

She is a member of different international scientific committees and has received international honors from the Guinness Foundation (1984), the International Foundation for Science (1993), the Kuwait Foundation for the Advancement of Sciences (1996), and the 2009 "Prof. C.N.R. Rao Prize for Scientific Research". She was a Fulbright Scholar at the University of California at Davis from January to June

2005.

Jo Ivey Boufford

Co-chair, IAMP

Jo Ivey Boufford, MD, is President of The New York Academy of Medicine. Dr. Boufford is Professor of Public Service, Health Policy and Management at the Robert F. Wagner Graduate School of Public Service and Clinical Professor of Pediatrics at New York University School of Medicine. She served as Dean of the Robert F. Wagner Graduate School of Public Service at New York University from June 1997 to November 2002. Prior to that, she served as Principal Deputy Assistant Secretary for Health in the U.S. Department of Health and Human Services (HHS) from November 1993 to January 1997, and as Acting Assistant Secretary from January 1997 to May 1997. While at HHS, she served as the U.S. representative on the Executive Board of the World Health Organization (WHO) from 1994-1997.



From May 1991 to September 1993, Dr. Boufford served as Director of the King's Fund College, London England. The King's Fund is a royal charity dedicated to the support of health and social services in London and the United Kingdom. She served as President of the New York City Health and Hospitals Corporation (HHC), the largest municipal system in the United States, from December 1985 until October 1989.

Dr. Boufford was awarded a Robert Wood Johnson Health Policy Fellowship at the Institute of Medicine in Washington, DC for 1979-1980. She served as a member of the National Council on Graduate Medical Education and the National Advisory Council for the Agency for Healthcare Research and Quality from 1997-2002. She currently serves on the boards of the United Hospital Fund, the New York City Health and Hospitals Corporation (HHC), and Public Health Solutions formerly MHRA and the Council for Health Research and Development (COHRED) She was President of the National Association of Schools of Public Affairs and Administration in 2002-2003. She was elected to membership in the Institute of Medicine (IOM) in 1992 and is a

member of its Executive Council, Board on Global Health and Board on African Science Academy Development. She was elected to serve a second four year term as the Foreign Secretary of the IOM beginning July 1, 2010. She was appointed to the New York State Public Health and Health Planning Council by Governor Cuomo in 2011. She received an Honorary Doctorate of Science degree from the State University of New York, Brooklyn, in May 1992 and the New York Medical College in May 2007. She was elected a Fellow of the National Academy of Public Administration in 2005. She has been a Fellow of The New York Academy of Medicine since 1988 and a Trustee since 2004.

Dr. Boufford attended Wellesley College for two years and received her BA (Psychology) magna cum laude from the University of Michigan, and her MD, with distinction, from the University of Michigan Medical School. She is Board Certified in pediatrics.

Steven Buchsbaum

Deputy Director, Bill & Melinda Gates Foundation

Dr. Buchsbaum received a Ph.D. in Physics and a Master of Pacific International Affairs from the Graduate School of International Relations and Pacific Studies at the University of California, San Diego. Dr. Buchsbaum has held positions at the Marine Physical Laboratory of the Scripps Institute of Oceanography; the Institute for Nonlinear Science at University of California, San Diego; the University of California, Santa Cruz; the Center for Material Science at Los Alamos National Laboratory; the Science Applications International Corporation; Bermuda Associates; and Draper Laboratory.



Dr. Buchsbaum has served in the U.S. State Department as the Science and Technology Officer for South Asia as a Program Manager in the Defense Advanced Research Projects Agency. Dr. Buchsbaum was the Founding Director of the Office of Chemical, Biological, Radiological, Nuclear and Explosive Defense in the Homeland Security Advance Research Projects Agency of the Department of Homeland Security.

Dr. Buchsbaum was selected and served as a Science and Diplomacy

Fellow at the American Association for the Advancement of Science. He was also selected as an American Physical Society Congressional Fellow, and has been registered into the U.S. Foreign Service. Dr. Buchsbaum is currently a Deputy Director for Discovery and Translational Sciences team at the Bill & Melinda Gates Foundation.

Philip Campbell

Editor-in-Chief, Nature Publishing Group

Dr. Philip Campbell is Editor-in-Chief of Nature and of the Nature Publishing Group. His areas of responsibility include the editorial content and management of Nature, and assuring the long-term quality of all Nature publications. He is based in London.



He has a BSc in aeronautical engineering, an MSc in astrophysics and a PhD and postdoctoral research in upper atmospheric physics.

Following his research, he became the Physical Sciences Editor of Nature and then, in 1988, the founding editor of Physics World, the international magazine of the UK Institute of Physics. He returned to Nature to take on his current role in 1995.

He has worked with the UK Office of Science and Innovation, the European Commission and the US National Institutes of Health on issues relating to science and its impacts in society. He is a trustee of Cancer Research UK. He is an elected Fellow of the Royal Astronomical Society and a Fellow of the Institute of Physics, and was awarded an honorary DSc by Leicester University and Bristol University, and an Honorary Professorship by the Peking Union Medical College. He is an Associate of Clare Hall, Cambridge University.

Jorge Chediek

*Resident Representative in Brazil / Resident Coordinator in Brazil,
United Nations Development Program (UNDP)*

Jorge Chediek is UN Resident Coordinator and UNDP Resident Representative in Brazil since April 2010. He is also in charge of the International Policy Centre for Inclusive Growth (IPC-IG), UNDP's global forum for policy dialogue and South-South learning on social development innovations.



He has a long career in the UN system of almost 20 years, notably as UN Resident Coordinator and UNDP Resident Representative in Peru and Nicaragua, among other positions at UNDP. He obtained his Master in Economics in Foreign Service from the University of Georgetown

(USA) and his Bachelor's Degree in Political Science from the Universidad Católica of Argentina.

Michael T. Clegg

Foreign Secretary, US NAS , and Co-Chair IANAS

Michael T. Clegg received his BS and PhD degrees in agricultural genetics and genetics respectively at the University of California, Davis. In 1972 he joined the faculty of Brown University moving from there to the University of Georgia in 1976. In 1984, he became Professor of Genetics at the University of California, Riverside. He also served as Dean of the College of Natural and Agricultural Sciences at UC Riverside from 1994 to 2000 and he was the founding Director of the Genomics Institute at UC Riverside, serving from 2000 to 2004. In 2004 he assumed his present position as Donald Bren Professor of Biological at the University of California, Irvine.



During an academic career of more than 40 years Clegg has published approximately 170 research articles and book chapters and he has coauthored or edited nine books. Clegg's research specialty is population genetics and molecular evolution. His current work focuses on the molecular evolution of genes that determine flower color in plants, the genetic history of crop plant domestication and the application of molecular markers to avocado improvement.

Clegg was elected to membership in the US National Academy of Sciences in 1990; elected a Fellow of the American Academy of Arts and Sciences in 1992 and elected a Member of the American Philosophical Society in 2012. He was elected associate Fellow of the Academy of Sciences of the Developing World (TWAS) in 2006. He is a corresponding Member of the National Academy of Exact Physical and Natural Sciences of Argentina, the Academia de Agronomía and Veterinaria of Argentina, the Academia Mexicana de Ciencias, the Cuban Academy of Sciences and he is an Honorary Fellow of the Palestinian Academy of Sciences. He was elected Foreign Secretary of the US National Academy of Sciences in 2002 and reelected in 2006 and in 2010. He has also served as President of the American Genetic

Association (1987), President of the International Society for Molecular Biology & Evolution (2002) and Chair of the Section on Agriculture, Food and Natural Resources of the American Association for the Advancement of Science (2003).

Robin Michael Crewe

Acting Senior Vice-Principal, University of Pretoria



Born on 18 February 1946 in Johannesburg, South Africa.

Crewe is the acting Senior Vice-Principal of the University of Pretoria, the former President of the Academy of Science of South Africa and President of the Network of African Science Academies (NASAC). He obtained his bachelors and masters degrees at the University of Natal in Pietermaritzburg and his Ph.D in 1971 at the University of Georgia. He was Director of the Communication Biology Research Group at the University of the Witwaterstrand and is currently the leader of the Social Insects Research Group at the University of Pretoria. He is a Fellow of the Royal Entomological Society of London, a Fellow of the Royal Society of South Africa, a founding member of the Academy of Science of South Africa, and received the Gold Medal of the Zoological Society of South Africa and the Ordre National du Mérite with the rank of Chevalier in 2006 from the French Government. Fellow of the Academy of Science of the Developing World (TWAS), elected 2009 - Section - Biological Systems and Organisms.

His research interests are in Behavioural ecology, social behaviour, chemical ecology, social organization in honey bees.

Ricardo Paes de Barros

Undersecretary of the Secretariat of Strategic Affairs of the Presidency of the Republic - SAE/PR

Dr. Ricardo Paes de Barros graduated in Electronic Engineering from the Technological Institute of Aeronautics - ITA in 1977. He concluded his masters in statistics at the Institute of Pure and Applied Mathematics - IMPA in 1982 and his PhD in Economy from the University of Chicago in 1987. He has two postdoctoral degrees, one from the Research Center in Economics, of the University of Chicago (1988) and another one from the Center of Economic Growth, of the Yale University (1989).



Since 1979 he has been working as a researcher at the National Institute for Applied Economic Research (IPEA), conducting researches in the fields of social inequalities, education, poverty and labor opportunities in Brazil and in Latin America.

Between the years of 1990 and 1996, he was a visiting professor at Yale University. Between the years of 1999 and 2002 he was IPEA's director of Social Studies. In the years of 1995 and 2000, he was awarded the Haralampos Simedionis prize. In 2000 he won the Mario Henrique Simonsen prize. In 2005 he was admitted to the National Order of Scientific Merit, as a Knight, and in 2009 he was elected as a Full Member of the Brazilian Academy of Sciences. Currently he is the Undersecretary of the Secretariat of Strategic Affairs of the Presidency of the Republic - SAE/PR.

Roseanne Diab

Executive Secretary, Academy of Science of South Africa (ASSAf)

Prof. ROSEANNE DIAB is the full-time Executive Officer of the Academy of Science of South Africa (ASSAf) and Emeritus Professor in the School of Environmental Sciences, University of KwaZulu-Natal. She is a Member of ASSAf and is recognised for her research contributions in the field of atmospheric sciences, particularly air quality, climate change and tropospheric ozone variability. She is a



Fellow of the University of KwaZulu-Natal and of the South African Geographical Society. She has been a Fulbright senior research scholar, and has been a member of a number of international bodies such as the International Ozone Commission (IOC) and the Commission on Atmospheric Chemistry and Global Pollution (CACGP). She currently serves on the Scientific Steering Group of the Stratospheric Processes and Research in Climate Committee, a committee of the World Climate Research Programme (WCRP). Prof Diab served as Co-Chair of the InterAcademy Council panel that reviewed the Intergovernmental Panel on Climate Change (IPCC).

Sherien Elagroudy

Assistant Professor of Environmental Engineering, Cairo, Egypt

Dr. Elagroudy is an Assistant Professor of Environmental Engineering at Ain Shams University, Cairo, Egypt. She has won the National Graduate Student Paper Award for her Ph.D., conducted at Ryerson University, Toronto, Canada, from Canadian Geotechnical Society.



Dr. Elagroudy has recently won the best young scientist award from Ain Shams University. She is a member of the Global Young Academy as well as a steering committee member of the Egyptian Young Academy of Sciences. She has been selected as a Young Scientist at the World Economic Forum 2012 and also serves on the Editorial Board of Enhanced Research Publications.

She is leading some research projects in the fields of biowaste digestion, production of solid recovered fuel, bioenergy production and sludge treatment and disposal. She is also involved in low cost technologies for wastewater treatment. She has conducted short term fellowships at Yale University, USA and at CIRAD, France. Dr. Elagroudy is also involved in several EU-funded TEMPUS projects to establish new curricula in Environmental studies and solid waste management.

For 12 years, Dr. Elagroudy has coupled research experience with

industrial work with National and International Counterparts (e.g. UNICEF/UN-Habitat, UNDP, EEAA, GTZ, etc). She serves as the head of the Solid Waste Unit at Chemonics Egypt Consultants and has been involved in several projects in solid waste and hazardous waste management and wastewater treatment. She

David Ferguson

Deputy Director - Office of Science and Technology, USAID

David Ferguson is Deputy Director of USAID's Science and Technology office with a particular emphasis on open innovations and the Grand Challenges for Development program. Before joining USAID, he worked on international development at the nexus of development, technology, and the private sector. His first career was 27 years at AT&T where he created and ran AT&T's Professional Services Division, developing it into a US\$200M profitable entity. He was based in Hong Kong for seven years and focused on the developing markets of China, India, and Indonesia, for telecommunications investment opportunities. He built seven joint ventures during this period.



His technical expertise includes ICT for development, economic growth through private sector engagement, and government technology and telecommunications policy and regulation.

Mr. Ferguson holds a Master of Science Degree in Electrical Engineering and Computer Science from Stanford University and a Bachelor of Science Degree in Electrical Engineering from the University of Massachusetts.

Carlos Gadelha

Economist, Institute of Economics of the Federal University of Rio de Janeiro (UFRJ)



Carlos Augusto Grabois Gadelha is Economist and PhD in Economics from the Institute of Economics of the Federal University of Rio de Janeiro (UFRJ), Secretary of Science, Technology and Strategic Inputs of the Ministry of Health, Coordinator of the Research Group on Industrial Complex and Innovation in Health (GIS) and Coordinator-General of the Professional Master in Policy and Management of Science, Technology and Innovation in Health at Sergio Arouca National School of Public Health - Oswaldo Cruz Foundation (ENSP/Fiocruz).

Recently, he coordinated the study;Industrial Economic Complex of Health; for the project "Investment Outlook in Brazil; (IE/UFRJ- IE / UNICAMP-BNDES) and the Project "Development and Health; (PAHO/WHO-MoH). He served as Vice President of Production and Innovation in Health of Fiocruz from 2007 to 2010. He also served as the National Secretary of the Regional Development Program of the Ministry of National Integration from 2003.

Patricia Garcia

Dean of the School of Public Health, Cayetano Heredia University (UPCH) Peru



Patricia J. García, MD, MPH, PhD is the Dean of the School of Public Health at Cayetano Heredia University (UPCH) in Lima-Peru, and former Chief of the Peruvian National Institute of Health (INS). She is recognized as a leader in Global Health and has been a member of the Commission for the Education of Health Professionals of the New Century.

Dr. García graduated from medical school in Peru, and trained in internal medicine, infectious diseases, and public health at the University of Washington. She has worked at the Peruvian National STD/AIDS Program, has been Director of the Epidemiology, STD/HIV

Unit at UPCH, and Vice Dean of Research at UPCH. She has been member of the Senior Technical Advisor Group of the Reproductive Health Department at the WHO and Chair of the WHO HPV Expert Advisory Group.

Now she is the Latin America Regional Director of the International Union Against STI (IUSTI) and Affiliate Professor of the Department of Global Health, at University of Washington and of the School of Public Health at Tulane University. Recently elected President of the Latin American Association Against STI (ALACITS). She is actively involved in research and training on STI/HIV, Global health and biomedical informatics, implementation research related to point of care diagnostics, specially related to maternal health, now funded through a grant from Grand Challenges Canada.

Josephine M. Hill

Professor and Canada Research Chair, University of Calgary Canada

Dr. Josephine Hill is a Professor and Canada Research Chair in Hydrogen and Catalysis in the Department of Chemical and Petroleum Engineering of the Schulich School of Engineering at the University of Calgary. She received her education and training at the University of Waterloo (BASc and MASc) and the University of Wisconsin-Madison (PhD) and worked for two years at Surface Science Western at the University of Western Ontario between her graduate degrees.



Dr. Hill's research is in the area of catalysis with applications to fuel cells, hydrotreating, gasification, and the conversion of solid waste materials, such as petroleum coke and biomass, into catalysts supports and activated carbon, which can be used to clean up gas and liquid exhaust streams. The spent activated carbon can then be gasified to produce gaseous products, including hydrogen that can be used for hydrotreating and in fuel cells.

She has worked with many companies and serves on the Executive of the Canadian Catalysis Division of the Chemical Institute of Canada (CIC) and on the Board of Directors of the Canadian Society of

Chemical Engineering (CSChE).

Her technical and mentoring achievements have been recognized through the Syncrude Canada Innovation Award from the CIC, the Minerva Mentoring Award from the Alberta Women's Science Network, and most recently by the APEGA (Association of Professional Engineers and Geoscientists of Alberta) Women in Engineering & Geoscience Champion Award. Dr. Hill is a member of APEGA, CIC (CSChE), ACS and AIChE.

Jorge A. Huete-Pérez

Founding President, Nicaraguan Academy of Sciences

Jorge received his Ph.D. in Biochemistry/Molecular Biology through a joint program at the University of Sao Paulo, School of Medicine, Brazil, and the University of California San Francisco, School of Medicine, USA. Jorge has received numerous scholarships, fellowships and awards from diverse organizations including the WHO, McArthur Foundation, and Rockefeller Foundation. He also won a Pew Latin American Fellowship for postdoctoral research in molecular parasitology at the University of California. In 1999 he founded the Molecular Biology Center at the University of Central America, the first molecular biology research and training laboratory in Nicaragua. For over 14 years, Jorge has been the Director and Principal Investigator of the MBC-UCA. For a period of 4 years he was head of Research at UCA. Jorge was a postdoctoral fellow at Harvard University and a Research Fellow at the Sandler Molecular Parasitology Center of UC San Francisco.



His lab currently performs research on molecular parasitology, forensic DNA typing and bio-prospecting for industrial enzymes. His lab has a collaborative program with New England Biolabs on endonucleases and is currently a visiting scientist at the Ocean Genome Legacy and New England Biolabs, MA., USA. He is a consultant to numerous governmental and non-governmental organizations, and

has been an outspoken advocate for improving science education and the appropriate use of biotechnology for development. In 2009 Jorge became the Founding President of the Nicaraguan Academy of Sciences.

Asma Ismail

Vice-Chancellor, Universiti Sains Islam, Malaysia

Professor Dr. Asma Ismail is currently the Vice-Chancellor at Universiti Sains Islam Malaysia. She is also the Founding Director and Professor at the Institute for Research in Molecular Medicine (INFORMM), Universiti Sains Malaysia (USM). She graduated from the University of Nevada, Reno, USA with distinction in biology in 1980, received her MA in Microbiology in 1983 from Indiana University, Bloomington, USA and obtained her PhD in the field of Cellular and Molecular Biology at the School of Medicine, University of Nevada, Reno, USA in 1986.



Asma specializes in Medical Microbiology, Clinical Microbiology and Medical biotechnology. Her research emphasis is in the scientific discovery of biomarkers and development of rapid diagnostics of infectious diseases especially typhoid and paratyphoid fever for low resource settings.

Fumiko Kasuga

Vice President, Science Council of Japan (SCJ)

Dr. Fumiko Kasuga received a Ph.D. degree in agricultural science from The University of Tokyo in 1988. She is specialized in the field of food safety, particularly in microbiological risk assessment of foodborne diseases and epidemiology. In 1989, she started her career as a researcher expertized in food safety at National Institute of Infectious Diseases, and currently is the director at National Institute



of Health Sciences. She joined Science Council of Japan (SCJ) in 2005 as a Council Member. Since then, she has been engaged in the SCJ activities regarding Food Safety, Infectious Diseases, and Public Health; and also in international aspects, she has participated in those for International Union of Microbiological Society (IUMS), Science Council of Asia (SCA), and G8 Academies' Meetings.

Besides those, she has been taking part in deliberations for policy recommendations and reports of SCJ, including "Japan Perspective-Proposals: Safety and Risks". With such a background, in October 2011, she was appointed as Vice-President in charge of international activities of SCJ. Her zealous activities cover not only scientific researches, but also the international involvements through organizations such as FAO, WHO, ICMSF (The International Commission on Microbiological Specification for Food) and JICA (Japan International Cooperation Agency) , through which she has been contributing to practical applications of science for society, regulatory science, and policies for science and technology.

Maggie Koerth Baker

Columnist for The New York Times Magazine. Science editor at BoingBoing.net, BoingBoing.net

Maggie Koerth-Baker is a columnist for The New York Times Magazine and the science editor at BoingBoing.net, one of the most widely read blogs in the United States. She is the author of *Before the Lights Go Out*, a book about electricity, infrastructure, and the future of energy. A member of the board for the Council for the Advancement of Science Writing, her work has appeared in a wide variety of magazines and websites, including *Scientific American*, *National Geographic News*, and *Popular Science*.



Shoji Komai

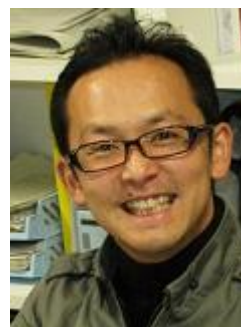
Associate Professor, Graduate Nara Institute of Science and Technology (NAIST) Japan

Since 2008 Associate Professor at the Graduate School of Biological Sciences of the Nara Institute of Science and Technology (NAIST).

He graduated from Sophia University in 1993 (Bachelor of Art in Psychology), in 1997 he received his Master Degree from the Nara Institute for Science and Technology (NAIST), in 2000 he received his PhD (Doctor of Philosophy in Biological Science) from NAIST. In the meantime, he had worked at Kyoto University, Osaka University and Osaka Bioscience Institute. From 2000 to 2003 he was associated as a post-doctoral fellow with the School of Medicine of Kobe University; from 2003 to 2005 he was a Max-Planck-fellow at the Max-Planck-Institute of Medical Research in Heidelberg (Germany).

Since November 2011, he is a chair of the national young academy committee of Science Council of Japan after 1.5 years preparing period.

His current research interest is: studying the information processing in the real brain, and the minimum local circuit where particular information working in the real brain as a basic element. Therefore he is focusing on various aspects of differences of the brain by using of neuronal and behavioural imagings, e.g. sex differences, diseases, sensory modalities.



Doulaye Kone

Senior Program Officer, Bill & Melinda Gates Foundation

Dr Doulaye Koné was born in Côte d'Ivoire. He holds a Ph.D. and MAS in sanitary and environmental engineering; a certificate in environmental communication; MSc. and BSc in Physics and Chemistry. He is currently working as Senior Program Officer, on the Water, Sanitation & Hygiene Program (Global Development) at the Bill & Melinda Gates Foundation. In this capacity, his investment (grant



making) portfolio focuses on innovation in science and technology to reinvent the Toilet and its associated business models for sustainable sanitation service delivery.

Prior to joining the Foundation, Dr Kone worked for the African Water Association (AfWA) as Program Coordinator Africa Water Operators Partnerships' (WOP-Africa). An initiative of the United Nations Secretary-General's Advisory Board on Water and Sanitation (UNSGAB) jointly implemented in Africa by AfWA and its partners (IWA, AfDB/AWF, USAID, AQUAFED...) under the Global WOPs alliance framework coordinated by UN-Habitat. In this capacity Dr Kone was engaged in fund raising activities and deep project management to promote partnership for systematic knowledge exchange and capacity building among water and sanitation professionals to speed up progress towards the achievement of the MDGs.

Dr Doulaye Koné has more than 15 years experience as water and sanitation specialist in developing countries (excreta and wastewater management). Prior to AfWA, he worked as Senior Programme Officer and Group leader coordinating an international research and development portfolio at Eawag, the Swiss Federal Institute of Aquatic Science and Technology, Department of Water and Sanitation in Developing Countries (Sandec). He was lecturing at the Swiss Federal institutes of Technology, Lausanne (EPFL) and Zurich (ETHZ), and guest lecturer at the International Institute for Water and Environmental Engineering (2iE) in Burkina Faso and UNESCO-IHE (Delft). He was scientific advisor for CREPA headquarters and Latrines Togo.

He worked as a research scientist in Belgium at the Department of Environmental Management (University of Liège) on natural wastewater treatment systems. These investigations continued later in Burkina Faso with 2iE, where he was involved in sanitation planning projects in West Africa, and research projects aiming at linking sanitation infrastructure development to business opportunities. Dr Koné has authored several technical, scientific and policy publications. He has mentored several PhD and MSc students in Africa, Asia and Europe.

Eduardo Moacyr Krieger

Former President, Brazilian Academy of Sciences

After graduation in Medicine in 1953, he was scientifically trained in physiology by the group of Bernardo Houssay (Nobel Laureate in 1947) with Eduardo Braun Menendez, who discovered the angiotensin. He worked at the Department of Physiology of the Medical School of Ribeirão Preto, USP (1957-1985), where he became Emeritus Professor. At the Medical School of the University of São Paulo, he was the Head of the Hypertension Unit at the Heart Institute-InCor.HCFMUSP (1985-2010), having under his direction a multidisciplinary research group, including molecular biologists, physiologists and clinical doctors. He currently coordinates a Translational Cardiology Programme. From 1993 to 2007, he was the President of the Brazilian Academy of Sciences.



He was also the Chairman of the Committee on Science and Technology in Developing Countries (COSTED) of the International Council of Science- from 1998 until 2002. He was elected co-chairman of the InterAcademy Panel-IAP (2000-2003), representing Brazil at the Executive Committee of the InterAcademy Council-IAC (2000-2010), and the Inter-Academy Medical Panel (2010-2013). He is currently the director for International Relations of the Medical School of the University of São Paulo, member of the National Council of Science and Technology, and the Vice-President of São Paulo Research Foundation - FAPESP.

Kiyoshi Kurokawa

Academic Fellow, National Graduate Institute for Policy Studies. Chairman, Health and Global Policy Institute Chair. Co-Founder, IMPACT Japan, National Graduate Institute for Policy Studies

A graduate of University of Tokyo Faculty of Medicine; in the US, 1969-84, was professor of medicine, departments of medicine of UCLA School of Medicine (1979-84), of University of Tokyo (1989-96), Dean of the Medical School at Tokai University (1996-2002), President of Science Council of Japan (2003-06), Science Advisor to the Prime



Minister (2006-08).

He served as an executive member of many national and international professional societies of his disciplines, Commissioner of WHO (2005-09), serve(d) as Board members of Alexandria Library (Egypt), A*STAR (Singapore), Khalifa University (Abu Dhabi), OIST (Okinawa, <http://www.oist.jp/>), Advisory Board to the Prime Minister of Malaysia; elected member of various scientific societies including Institute of Medicine of the National Academies of Sciences of USA, Master of American College of Physicians and Founding Governor of ACP Japan Chapter, 2003-2011.

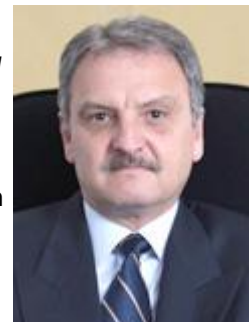
Served and serves in many committees of the Government of Japan.

He was the Chairman of the National Diet of Japan Fukushima Nuclear Accident Independent Investigation Commission (NAIIC: 2011.12-2012.7). He was received “2012 Scientific Freedom and Responsibility Award” of AAAS (American Academy for the Advancement of Science) and “100 Top Global Thinkers 2012” of Foreign Policy (December, 2012) for his leadership in NAIIC.

Juan Pedro Laclette

Co-Chair, IANAS, and Inst. de Investigaciones Biomédicas, Universidad Nacional Autónoma de México

Juan Pedro Laclette, Professor at the Institute of Biomedical Research of the National University of Mexico (UNAM). He obtained his PhD at UNAM and did a postdoctoral stay at Harvard University. His research has been focused on human parasite diseases. Prof. Laclette has produced over 150 publications including international articles, book chapters, publications for the general public and patents; he has also co-edited five books on biomedical topics and coordinated the edition of over 60 more books related to the evaluation of Mexico’s scientific development.



Dr. Laclette was appointed Head of the Department of Immunology (1991-1995), Dean of a PhD Program in Biomedical Sciences (1995-1999) and Director of the Institute for Biomedical Research from 1999

to 2007. He is a member of the National Academy of Medicine (Mexico) and was elected Vice-president (2004-2006) and Past President (2006-2008) of the Mexican Academy of Sciences. He is currently Co-Chair of the Inter American Network of Academies of Sciences (IANAS) and was Coordinator General of the Mexican Scientific and Technological Consultative Forum during four years.

Javier Garcia Martinez

University of Alicante, Spain

Javier Garcia-Martinez is the Director of the Molecular Nanotechnology Lab at the University of Alicante, Spain. He has published extensively in the areas of nanomaterials and energy and is the author of more than twenty five patents. His latest books are "Nanotechnology for the Energy Challenge" (Wiley, 2010) and "The Chemical Element: Chemistry's Contribution to Our Global Future" (Wiley, 2011). Javier is co-founder of Rive Technology Inc (Boston, MA), a VC-funded MIT spin-off commercializing advanced nanomaterials for energy applications.

Javier has been recognized as a leader in nanotechnology and materials science. He has received the Europe Medal in 2005, the Silver Medal of the European Young Chemist Award in 2006, the TR 35 Award from MIT's Technology Review magazine, and in 2009 Javier was selected as a Young Global Leader. Since 2010, he is member of the World Economic Forum Council on Emerging Technologies. Javier is Fellow of the Royal Society of Chemistry, member of the Global Young Academy and Bureau member of the IUPAC.



Carlos Nobre

National Secretary for R&D Policy, Ministry of Science, Technology & Innovation of Brazil



Electronics Engineering - (1974) Aeronautics Technological Institute (Electronics) - São José dos Campos, Brazil; Ph.D in Meteorology - (1983) Massachusetts Institute of Technology (Meteorology); visiting scientist at the University of Maryland, USA, 1988.

He is National Secretary for R&D Policy in the Ministry of Science, Technology & Innovation of Brazil, since February of 2011; He was Chair of the International Geosphere-Biosphere Programme (IGBP) (2006-2011), Director of the Center for Earth System Science (2208-2010) and of the Center for Weather and Climate Forecasting (CPTEC-INPE) (1991-2003).

His scientific carrier was dedicated to the Amazon region, where he developed pioneer research on the climate impacts of deforestation. He is Member of the Brazilian Academy of Sciences and Member of the Academy of Sciences for the Developing Nations-TWAS. He is co-author of over 140 scientific articles, books and book chapters.

Won Hoon Park

President, AASSA, c/o Korean Academy of Science and Technology (KAST)



Since recruited by Korea Institute of Science and Technology (KIST) in 1972, for which he eventually served as the president (1996-1999), Won Hoon Park has played the leading role in enhancing Korea's R&D capabilities for industry, academia and government research institutes with his pioneering research activities especially in energy and environment. He served also as chairman and CEO of Korea Research Council for Industrial Science and Technology, which oversees nine Government Research Institutes (2002-2005). He has been also a perennial member of Korea's Presidential Council on Science and Technology' and National Science and Technology Council.

He has been presidents of numerous academic and social societies of Korea; Korean Academy of Environmental Science and Technology, Korean Institute of Chemical Engineers, Korean Solar Energy Society, Korean Society of Clean Technology, etc. Internationally he served as president of International Union of Air Pollution *Prevention and Environmental Protection Associations (IUAPPA)*, and now he is the president of the Association of Academies and Societies of Sciences in Asia (AASSA).

Shelley Peers

Australian Academy of Science

Shelley Peers is Director of the Australian Academy of Science primary school program '*Primary Connections: linking science with literacy*'. She is a qualified medical biochemist and primary school teacher, and holds a Master of Education (Research), her thesis focussing on teacher professional growth. She has also held roles as a syllabus writer, university lecturer, and curriculum developer.



Shelley is a Churchill Fellow; a Fellow of the International Society for Design and Development in Education (ISDDE); 2010 Outstanding Alumni for Education for QUT, Australia; 2012 Purkwa Laureate, a Grand Prize of the French Academy of Sciences; and a finalist in The Australian Innovation Challenge Awards 2012. She has made presentations at Inter Academy Panel meetings and other events in Indonesia, Finland, South Africa, France, UK, USA and Chile.

Primary Connections consists of a professional learning program and curriculum resources. and has won The Australian Awards for Excellence in Educational Publishing. It was funded by the Australian Government (2004 - 2012). Nobel physics laureate Brian Schmidt donated \$ 100,000 of his prize money to the program in 2011

Ricardo Rapallo

Food Security Officer, Food and Agriculture Organization of the United Nations (FAO)



Dr. Ricardo Rapallo is Food Security Officer at Food and Agriculture Organization of the United Nations (FAO). He is an Agricultural Engineer and he has a PhD from the Universidad Politécnica de Madrid. Since more than 10 years his research experience is focused on food security and rural development in Latin American and the European Union issues, with emphasis on the designing, implementing and monitoring food security and nutrition public policies and programmes.

He joined FAO in 2004 as consultant in the FAO Representation in Guatemala, where he supported the Special Program for Food Security (SPFS). Since 2009 he has worked in the Sub-regional Office of FAO for Central America as Associated Professional Officer of Policy Assistance. Shortly afterwards he started as Food Security Officer in the Management of Agricultural Development Economics Division (ESA) in Rome working in topics related to the right to food and food security good governance.

At present he is the Coordinator of the Hunger-Free Latin American and the Caribbean Initiative Support Project in the FAO Regional Office for Latin America and The Caribbean based on Chile.

Elibio Rech

EMBRAPA Recursos Genéticos e Biotecnologia, Brazil

Rech's research group began improving physical capability to direct introduce genetic information into a living cell and in vitro cell culture technologies to produce proteins for basic and applied research. His group has pioneered studies on understanding of the process of selecting germ line-transformed leguminous plants and have developed. He has awarded the title of "Comendador" in the Order of Scientific Merit in 2002. Elected Fellow of the Brazilian Academy of Sciences and Fellow of the Academy of Sciences for the Developing World (TWAS).



Currently, his group is focusing in accumulation and expression of recombinant molecules in plants; Expression and Production functional of cyanovirin, a potent HIV inhibitor, in soybean seeds; Genomics of spider silk glands of *Actinopus* sp. *Parawixia bistrata*, *Nephilengys cruentata*, *Avicularia* sp, *Gasterachanta* sp.; Design and production of synthetic recombinant spider silk-like proteins; metabolic engineering of soybean seeds fatty acids and glycosilation pathways; Metabolic engineering of *E. coli* pathway, aiming production proteins larger than 200 KDa; Metabolomics of *Lafoensia pacari*, *Bertholletia excelsa*, *Acrocomia* sp, *Caryocar* sp, *Elaeis guinnensis*, *Jatropha* sp, *Ricinus communis*; Genomics of oil seed plants, *Acrocomia* sp, *Caryocar* sp, *Elaeis guinnensis*, *Jatropha* sp, *Ricinus communis*; Design and construction of synthetic chromosomes; Genomes editing.

His group has had a fundamental role in coordinating the development of Cultivance® soybeans (product derived from BASF and Embrapa's partnership). Soybean seeds are carrying genes conferring herbicide tolerance. A worldwide option for soybean growers and an effective contribution towards reducing GHG emissions. To develop the genetically modified soybean plants Rech utilized his patented invention of an innovative process to produce leguminous plants at high-frequency.

Karlee Silver

Program Officer, Grand Challenges Canada

Karlee Silver is a Program Officer with Grand Challenges Canada. Dr. Silver leads the Women's and Children's Health programs including Saving Brains and the multi-partner program Saving Lives at Birth. She is a member of the Knowledge Exchange Working Group for the Canadian Network for Maternal, Newborn and Child Health.



Prior to joining Grand Challenges Canada, Dr. Silver trained in the laboratory of Dr. Kevin Kain at the Sandra Rotman Centre for Global Health in Toronto, first as a Canadian Institutes of Health Research postdoctoral fellow then a MITACS Elevate postdoctoral fellow, where she helped to identify host responses of malaria infection in pregnant women to harness for diagnostic and therapeutic purposes.

Dr. Silver received her doctorate in 2006 from the University of Oxford, where she attended as a Rhodes Scholar and trained in genetics and immunology under the supervision of Professor Richard

Cornall and Professor Sir John Bell. An accumulation of inspirations, including travelling through southern Africa after Oxford, led to a refocus towards global health. Witnessing both the strength of women to sustain their families and communities, and the vulnerability of these same women to the consequences of poverty inspired Karlee to apply herself to health issues of women in developing countries.

Peter Singer

Chief Executive Officer, Grand Challenges Canada

Peter A. Singer has dedicated the last decade to bringing science and innovation to tackle the health challenges of the world's poorest people. He is well known around the world for his creative solutions to some of the most pressing global health problems.



Dr. Singer is Chief Executive Officer of Grand Challenges Canada and Director at the Sandra Rotman Centre (University Health Network and University of Toronto). He is also Professor of Medicine at University of Toronto, and the Foreign Secretary of the Canadian Academy of Health Sciences.

Dr. Singer chaired the Canadian Academy of Health Sciences' new assessment on Canada's Strategic Role in Global Health. He has advised the Bill & Melinda Gates Foundation, the UN Secretary General's office, the Government of Canada, Pepsico, BioVeda China Venture Capital Fund, and several African Governments on global health.

Dr. Singer was appointed an Officer of the Order of Canada in 2011 for his contributions to health research and bioethics, and for his dedication to improving the health of people in developing countries. In 2007, Dr. Singer received the Michael Smith Prize as Canada's Health Researcher of the Year in Population Health and Health Services. He is a Fellow of the Royal Society of Canada, the Canadian Academy of Health Sciences, the U.S. Institute of Medicine of the National Academies, and The Academy of Sciences for the Developing World (TWAS).

Dr. Singer has published over 300 research articles, received over \$50 million in research grants, and mentored hundreds of university students. He recently co-authored, along with Dr. Abdallah Daar, *The Grandest Challenge: Taking Life-Saving Science from Lab to Village*. He studied internal medicine at University of Toronto, medical ethics at University of Chicago, public health at Yale University, and management at Harvard Business School. He lives in Toronto with his wife, Dr. Heather Gilley, and his family, and has served his community as Board Chair of Branksome Hall, an acclaimed and internationally-minded school for girls.

Follow Peter A. Singer on Twitter @PeterASinger

Petra Skiebe Correte

Freie Universität Berlin

Petra Skiebe-Corrette holds a doctorate in neurobiology and completed her habilitation (German equivalent of associate professor) in 2002. She is director of NatLab, an informal science laboratory at the Freie Universität Berlin which offers both primary school pupils and high school students the opportunity to perform up-to-date inquiry-based experiments in biology and chemistry which have been conceived by scientists.



She also initiated a network of the informal science laboratories in the German states Berlin and Brandenburg (“GenaU”). She has been the German representative for three European Union grants: “Scienceduc” in 2003, “POLLEN” in 2004 and “Fibonacci” in 2010, all of which promote inquiry-based science and/or math education within Europe. In order to support inquiry-based science education within primary schools on a long term basis, “TuWaS!” (Technik und Naturwissenschaften an Schulen, Technology and Science in Schools) was founded in 2007 as a cooperation between the Freie Universität Berlin and the Berlin Brandenburg Academy of Sciences and Humanities.

Currently, TuWaS! is serving over 140 schools in four different German states. Within the “Fibonacci” project, TuWaS! cooperates with three countries: Luxembourg, Austria and Turkey. Prof. Skiebe-Corrette also served on the advisory boards of the National Science Resources Center in Washington, D.C., and of the LernortLabor Bundesverband der Schülerlabore e.V., an association supporting informal science laboratories within Germany.

Bernard Slippers

Associate Professor, University of Pretoria



Bernard Slippers is a Professor in Genetics at the University of Pretoria. He is a research leader of the Tree Protection Co-operative Programme and Centre of Excellence in Tree Health Biotechnology at the Forestry and Agricultural Biotechnology Institute (FABI).

Bernard's research focus is on the molecular ecology and evolution of insects and micro-organisms that affect tree health, with a particular focus on anthropogenic influences on these dynamics. He has received wide recognition for his research, including a President's Award from the National Research Foundation and the Southern African Association for the Advancement of Science, British Association Medal (Silver). He has published more than 110 papers, one edited book and number of chapters in books. He regularly contributes popular scientific articles to journals, newspapers and radio.

Bernard is predominantly involved in science education at the postgraduate level and has been, or is currently, involved as supervisor of a number of postdoctoral researchers, more than 30 PhD and MSc students, as well as numerous BSc honours students. He also regularly contributes to national and international congresses, as participant and organizer. Bernard broadly reviews papers for key journals in his field and served on advisory teams on forestry pests and diseases in South Africa and abroad.

Bernard is passionate about science development and the role of science in broader society. In this regard he has been deeply involved in the global Young Academy movement, being a founding member of the Global Young Academy (GYA) in 2010 and the South African Young Academy of Science (SAYAS) in 2011. He current serves a second term as co-chair of the GYA and as ad-hoc member of the executive committee of SAYAS. Bernard is also a Young Affiliate of Academy of Science of the Developing World (TWAS), from whom he received the

AU-TWAS Young Scientist national prize in 2011.

Bernard is also the head of the Boekenhout mens' residence at the University of Pretoria, where he lives with his two daughters and wife, Dr. Jana Slippers.

Volker ter Meulen

Immediate Past President, German Academy of Sciences Leopoldina

Volker ter Meulen qualified as MD in 1960. He received his post-doctoral training in virology in the USA, at the Children's Hospital of Philadelphia. On returning to Germany in 1966 he specialised in paediatrics and was subsequently Visiting Scientist at the Wistar Institute for Anatomy and Biology in Philadelphia and at the Viral and Rickettsial Disease Laboratory in Berkeley, from 1969-1970. In 1975 he became a full professor and Chairman of the Institute of Virology and Immunobiology at the University of Würzburg.



He retired in 2002, having twice been elected Dean of the Faculty of Medicine of Würzburg University. During his research career, ter Meulen worked on molecular and pathogenic aspects of viral infections in man and animals, in particular on infections of the central nervous system. Due to the recognition of his research achievements and his experience in heading a Medical Faculty, ter Meulen has on numerous occasions been invited to give policy advice on research matters to German research organisations and to state and federal ministries of science in Germany.

Internationally, ter Meulen has served on a number of committees of organisations and scientific societies/unions in the area of virology and infectious diseases, covering a broad spectrum of important issues connected to human and animal pathogens. From 2003-2010, ter Meulen was President of the German Academy of Sciences Leopoldina. Under his leadership, the Leopoldina strengthened its international commitments in different inter-academic councils and was appointed National Academy of Sciences in 2008. From 2007-2010, he was President of the European Academies Science Advisory Council (EASAC), the association of the National Science Academies of the European Union, which is the IAP associated regional network for

Europe.

Marie-Anne Van Sluys

University of São Paulo

Marie-Anne Van Sluys received a bachelor's degree in biological sciences from the Rio de Janeiro State University in 1983 and a doctoral degree from the Université Paris-Sud 11 (Paris XI, University of Paris-Sud 11) in 1989.



Dr. Van Sluys is an associate professor in the Botany Department of the University of São Paulo. She is the head of the Genomic and Transposable Elements (GaTE) Laboratory, operated under the auspices of the USP Laboratório de Biologia Molecular de Plantas (LBMP, Laboratory of Plant Molecular Biology), the central focus of which is to study the impact of transposable elements in the structure, function, and diversification of bacterial genomes and plants.

Dr. Van Sluys has considerable experience in the field of genetics, with an emphasis on the molecular biology of plants. Her research is primarily concerned with the following themes: genomics; DNA repair in plants; and transposable elements in bacteria and plants.

Carolina Vera

Director, Center for Atmosphere and Ocean Sciences (CIMA) and UMI/IFAECI Buenos Aires

Carolina Vera is the Director of the Center for Atmosphere and Ocean Sciences (CIMA) and UMI/IFAECI, joint institute between the University of Buenos Aires (UBA), Argentina National Council of Sciences (CONICET) and CNRS (France). Also she is Full Professor of the School of Exact and Natural Sciences of the University of Buenos Aires (UBA) and Principal Researcher (CONICET).



She obtained her Ph.D. in atmospheric sciences at the University of Buenos Aires in 1992, under Prof. Eugenia Kalnay. Her current research interests focus on climate variability and change over South America. She has authored or co-authored several peer-reviewed

scientific journal articles and book chapters, as well as many other planning documents and workshop papers. She has also organized many international workshops and conferences.

She is currently Officer Member of the World Climate Research Program (WCRP) Joint Scientific Committee. She is also member of the Scientific Advisory Committee of the Inter-American Institute for Global Change (IAI), and she has been the Co-Chair of the WCRP/CLIVAR Panel for the Variability of the American Monsoon Systems (VAMOS), Chair of the American Meteorological Society STAC Committee for Meteorology and Oceanography of the Southern Hemisphere, and Chair of the Scientific Committee of the South American Low-Level Jet experiment (SALLJEX). She has been Lead Author of the IPCC Special Report on "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation" (SREX).

Gregory A. Weiss

Professor of Chemistry, Molecular Biology and Biochemistry, Former Co-Chair of the Global Young Academy, University of California

Gregory Weiss earned undergraduate and graduate degrees from the University of California, Berkeley and Harvard University, respectively. Awarded a NIH Ruth Kirschstein National Research Service Award from the NIH, he pursued post-doctoral studies at Genentech, a biotech company in South San Francisco, California. In 2000, he joined the faculty at the University of California, Irvine where his laboratory focuses on the interface between chemistry and biology, including the study of membrane proteins, anti-viral drug resistance, and bioelectronics.



Tenured in 2006, he is currently a full Professor and Vice Chair of the Department of Chemistry. His awards include Outstanding Professor in the School of Physical Sciences at UC Irvine (elected by the graduating students) and Beckman Foundation Young Investigator. Selected by the US National Academy of Sciences to represent young scientists from the US at two World Economic Forum "Summer Davos" meetings in Dalian, China, he was elected in 2010 and 2011 to be Co-Chair of

the Global Young Academy, which includes >170 top young scientists from 54 countries.

Linxiu Zhang

Professor and Deputy Director, Chinese Academy of Sciences

Linxiu Zhang is a professor and deputy director at the Center for Chinese Agricultural Policy (CCAP), Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences (CAS). She obtained her PhD from Reading University in the U.K. In 2003 she was awarded the Outstanding Young Scientist Award by China National Natural Sciences Foundation (NSFC).



In 2007 she won the Chinese Academy of Sciences “100 Talents” award. She oversees a research programme on “Integrated Rural Urban Development Strategy and Policy” at CCAP. She is also the Co-director of a program named Rural Education Action Programme (REAP). REAP is an umbrella programme initiated by a group of scholars from Stanford University, the Chinese Academy of Sciences, Northwest University in Xi’an, Tsinghua University among others to address rural-urban gaps in the areas of healthcare and education.

Her own research focus is on poverty alleviation, rural land and labor market development, community governance, public investments and social protection in rural areas, and the economics of rural education and healthcare.

Christiane Diehl

Executive Director of EASAC

She is the Executive Director of EASAC (the European Academies’ Science

Advisory Council), the body through which the national science academies of EU member states jointly provide science-based policy advice to the institutions of the EU. She works at the German National Academy of Sciences Leopoldina where the EASAC Secretariat is based. She did her M.A. at the University of Mainz and her doctorate at Oxford University (Oriel College) with a thesis in ethics. She has worked in academia and the charity and public sectors, with an emphasis on science communication.