Climate Change and Health:

Risks, Adaptation, Resilience and Co-benefits

5 – 6 December 2019, Congress Centre Basel, Switzerland

SPEAKERS

Welcome

Jürg Utzinger, Swiss TPH, Switzerland

Jürg Utzinger is the Director of the Swiss Tropical and Public Health Institute (Swiss TPH) and Professor of Epidemiology at the University of Basel. He holds an MSc in environmental science, a PhD in epidemiology and pursued several years of postdoctoral research in demography and epidemiology at Princeton University in the USA. His research, teaching and training interests pertain to the epidemiology and integrated control of neglected tropical diseases and health impact assessments of large footprint projects in low- and middle-income countries. He is engaged in trans-national global health research consortia with ongoing projects in China, Côte d'Ivoire, South Africa and Tanzania.

Session PL1 | Setting the Scene

Moderator: Nino Künzli, Swiss TPH, Switzerland

Nino Künzli is the Deputy Director and Department Head of Education and Training at Swiss TPH. With an MD from the University of Basel and a Master of Public Health (MPH) and a PhD from University of California Berkeley (USA), Künzli has a 30 year record of research in environmental epidemiology. His research interests include ambient air pollution and its cardiorespiratory health effects and integrating exposure science and epidemiologic research into health impact assessments to serve policy makers. As a member of the Medical Faculty and Dean of the Swiss School of Public Health,

Künzli leads initiatives to strengthen inter-disciplinary, inter-faculty and inter-university PhD tracks. He regularly serves on policy-relevant committees such as the World Health Organisation or as President of the Swiss Federal Commission on Air Hygiene—the advisory board of the Swiss Government. As of 2020, he is expected to join the Scientific Advisory Board of Climate and Clean Air Coalition.

Guéladio Cissé, Swiss TPH, Switzerland

Guéladio Cissé is Head of the Ecosystem and Health Sciences Unit at Swiss TPH and Professor of Sanitary Engineering & Environmental Epidemiology at the University of Basel. With a PhD in sanitary engineering, Cissé served as the Director of the Swiss Center for Scientific Research in Cote d'Ivoire, the regional coordinator for the NCCR North-South program on syndromes of global change and has worked on pioneering projects that adapt the water and health sectors to climate change in secondary cities in West Africa. With more than 20 years' experience in West Africa (Mauritania, Burkina Faso

and Cote d'Ivoire), Cissé joined Swiss TPH in 2009. His research seeks to understand the effects of insufficient water, sanitation and hygiene (WASH) conditions and environmental pollution and climate change on child health (e.g. diarrhoea, malaria, parasitic infections and malnutrition) With a particular focus on WASH vulnerabilities to climate variability and change and the related risks for water- and vector-borne diseases, he is currently a member of the IPCC Sixth Assessment Report (AR6) Working Group II.

Martin Röösli, Swiss TPH, Switzerland

Martin Röösli is the Head of the Environmental Exposures and Health Unit at Swiss TPH, Professor of Environmental Epidemiology and co-chair of the Joint South African and Swiss Chair in Global Environmental Health at the University of Basel. He holds an MSc in environmental science from the ETH Zürich and a PhD in environmental epidemiology from the University of Basel. His research focuses on environmental epidemiology and includes exposure assessment studies, aetiological research and health risk assessments in the area of ionizing and non-ionizing radiation, transportation noise,

climate change, pesticides, passive smoking and ambient air pollution. Röösli has published numerous scientific papers, reviews and book chapters and is a co-author of the recent report on climate change and health from the European Academies' Science Advisory Council. He is a member of several international and national commissions dealing with environmental health risks including BERENIS (Swiss Expert Group on Non-Ionising Radiation), ICNIRP (International Commission for Non-ionizing Radiation Protection), the Scientific Council on Electromagnetic Fields of the Swedish Radiation Safety Authority and the Federal Commission for Noise Protection.

Erich Fischer, ETH Zürich, Switzerland

Erich Fischer is a senior scientist and lecturer at ETH Zurich. Fischer holds an MS in Natural Sciences from the University of Bern and completed his PhD in 2007 at the Institute for Atmospheric and Climate Science at ETH Zurich. He then worked as a postdoctoral researcher at the National Center for Atmospheric Research (NCAR) in Boulder, Colorado and as a visiting scientist at the University of Reading in the UK before moving back to ETH Zurich. Fisher has been a permanent senior scientist at ETH Zurich since 2016 and currently acts as a lead author of the IPCC AR6.

Kristie L. Ebi, University of Washington, USA

Kristie L. Ebi is Professor of Global Health at the University of Washington. She has been conducting research and practice on the health risks of climate variability and change for nearly 25 years, focusing on understanding sources of vulnerability, estimating current and future health risks of climate change, and designing adaptation policies and measures to reduce the risks of climate change in multi-stressor environments. She has supported multiple countries worldwide in assessing their vulnerabilities and implementing adaptation policies and programs. She has edited fours books on aspects of climate change and has more than 200 publications.

Associated Institute of the University of Basel

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Session TS1a | Climate Change and Non-Communicable Diseases

Moderator: Mirko Winkler, Swiss TPH, Switzerland

Mirko Winkler is an Epidemiologist at Swiss TPH, where he is leading the Health Impact Assessment (HIA) research group. His current research has two foci, one being HIA of large infrastructure development projects in low- and middle-income countries, particularly extractive industries, renewable energy projects and water resources developments. The other is exposure pathways and health effects of pesticide use in small-scale farms in tropical contexts. Besides his research activities, Winkler is lecturer in HIA at various universities in Switzerland and abroad.

Martina Ragettli, Swiss TPH, Switzerland

Martina Ragettli is a Senior Scientific Collaborator at Swiss TPH. She holds an MSc in Geography and a PhD in Epidemiology from the University of Basel and was a postdoctoral research fellow at the University of Montreal and the Department of Public Health in Montreal, Canada. Her research focuses on the health effects of environmental exposure to heat, noise and air pollution. Since 2015, she has been working at the Swiss TPH in several climate change and health projects, leading several projects on the health effects of extreme temperatures in Switzerland and on the effects of preventative measures.

Etienne Piguet, University of Neuchâtel, Switzerland

Etienne Piguet is Professor of Geography of the University of Neuchâtel, Switzerland, chairs the Population Geography Commission of the International Geographical Union (IGU) and is Vice-President of the Swiss federal Commission for Migration (CFM/EKM). He holds a PhD from the University of Lausanne and is specialized in migration studies with a specific focus on the migration/climate change nexus. Piguet was Review Editor for the IPCC 5th report (Working Group II) and has published numerous books and papers in scientific journals including the Annals of the American Association

of Geographers, Population Space and Place and many others. His last book, co-edited with Frank Laczko from the International Organization for Migration, is People on the Move in a Changing climate.

Susan Clayton, College of Wooster, USA

Susan Clayton is Whitmore-Williams Professor of Psychology at the College of Wooster in Ohio. She holds a PhD in Social Psychology from Yale University and has written extensively about the implications of climate change for human wellbeing. Her research focuses on the human relationship with nature, how it is socially constructed and how it can be utilised to promote environmental conservation. Clayton is the editor of a Cambridge Elements series in applied social psychology, on the editorial boards of the Journal of Environmental Psychology, Social Justice Research, Sustainability,

and Social Psychological and Personality Science and is a fellow of the American Psychological Association, the Society for Environmental, Population, and Conservation Psychology (SEPCP), the Society for Personality and Social Psychology (SPSP) and the Society for the Psychological Study of Social Issues (SPSSI). She is a past president of both SEPCP and SPSSI. She is a lead author on the upcoming IPCC 6th assessment report. Her most recent book, Psychology and Climate Change, was co-edited with Christie Manning.

Session TS1b | Climate Change and Infectious Diseases

Moderator: Danielle Viennau, Swiss TPH, Switzerland

Danielle Vienneau is a Senior Scientific Collaborator at Swiss TPH and holds a PhD in Exposure Assessment and Environmental Epidemiology from Imperial College London. She has extensive experience in environmental health research, with an emphasis on spatial modelling of environmental pollution sources and human interactions. Working at the interface between environmental exposures and health effects, she has conducted numerous exposure assessment, epidemiological and health risk assessment studies in Switzerland and Europe on topics including transportation noise, air pollution, green space and residential radon.

Peng Bi, University of Adelaide, Australia

Peng Bi is Professor of Public Health Medicine in the School of Public Health at the University of Adelaide, Australia, where he directs the Environmental Change and Population Health Program. His main research areas include the impact of climate change on population health, the burden of diseases and work-related injuries due to climate change, health adaptation strategies to meet climate change challenges and community resilience development. The research findings from his team have been provided to health authorities and local communities for climate change actions. For example,

scientific evidence has been used by South Australian Department of Health and State Emergency Service for the establishment of the state heat and health early warning system, with significant health outcomes.

Sokhna Thiam, Swiss TPH, Senegal

Sokhna Thiam is an Associate Postdoctoral Researcher at Swiss TPH in Basel, Switzerland and at the Institute for Health Research, Epidemiological Surveillance and Training (IRESSEF) in Dakar, Senegal. Trained in Health Geography (MSc) and Environmental Epidemiology (PhD), she holds a PhD in Epidemiology and Public Health from Swiss TPH and the Swiss School of Public Health+ (SSPH+) sponsored by the Swiss Government Excellence Scholarships for Foreign Scholars (ESKAS). Her PhD thesis co-assessed diarrhoeal diseases and environmental risk factors in Mbour, Senegal applying an

interdisciplinary and participatory approach. Her main fields of interest include public health, environmental epidemiology, global change and health, including challenges related to water, sanitation and hygiene (WASH) in urban areas, urbanization and urban health, climate change and waterborne diseases, GIS and spatial analysis. She has been involved in various consultancy assignments and projects in national and international settings. Among her personal achievements, she designed and led several first authors' scientific publications in peer-review journals. She is working currently on two projects on climate change and diarrhoeal diseases in Senegal and Côte d'Ivoire.

















Richard Mbra Koussi, Swiss TPH, Côte d'Ivoire

Kouassi Richard M'Bra is a Scientific Collaborator at Swiss TPH, a Lecturer and Researcher at Peleforo Gon Coulibaly University in Korhogo and an Associate Researcher in the Department of Environment and Health at Centre Suisse de Recherches Scientifiques (CSRS) in Côte d'Ivoire. He completed his PhD in Hydrogeology at Félix Houphouët-Boigny University, Abidjan Côte d'Ivoire in 2017 in collaboration with CSRS, the University of Basel and Swiss TPH. His research work Water, sanitation and climate change: integrated analysis of risk factors for malaria and schistosomiasis in Korhogo

(Northern Côte d'Ivoire) and Kaedi (Southern Mauritania) was funded by the Special Programme for Research and Training in Tropical Diseases (TDR) of the World Health Organization (WHO). M'Bra is currently a grantee of the post-doctoral fellowship of the Climate Research for Development (CR4D) programme funded by the African Academy of Sciences (AAS). His main research interests are climate change, water, sanitation and Hygiene (WASH), vector borne diseases and Geographical Information Systems (GIS). M'Bra has presented is research findings at several international conferences and workshops and has co-authored six peer-reviewed articles in reputable academic journals.

Session TS2a | Physical and Spatial Vulnerabilities

Moderator: Sonja Merten, Swiss TPH, Switzerland

Sonja Merten is head of the research unit Society, Gender and Health in the Department of Epidemiology and Public Health at the Swiss TPH. Over the past 16 years she conducted research with a focus on equity in access to health services, in interdisciplinary and transdisciplinary teams. She has worked in different African contexts on food security and child health, with a focus on gender dynamics.

Guéladio Cissé, Swiss TPH, Switzerland, See above.

Bernd Wilke, SwissRe, Switzerland

Bernd Wilke is Senior Emerging Risk Manager at Swiss Re looking future risks for the insurance industry and beyond. He holds a Master's Degree in Physical Geography from the University of Basel in Switzerland and a Certificate in Science Journalism from the Swiss Journalism School in Luzern. He is an expert on environmental issues, the human factor and sustainability and is currently one in a team of four looking at the top sustainability risks in Swiss Re. He worked as a Risk Engineer for more than twelve years before becoming Top Topic Manager for Swiss Re in communications for five years.

In these functions he developed risk assessment methodologies for different industries, including the oil and chemical sectors, assisted in the environmental liability area of emerging risk, was part of the team that developed forward looking modelling in casualty and provided support to the company's claims units. In addition he worked extensively on sustainability issues worldwide, combining his experience with science journalism and risk communication.

Penelope Vounatsou, Swiss TPH, Switzerland

Penelope Vounatsou holds MSc degrees in Environmental Sciences and Statistics and a PhD in Statistics. She heads the Biostatistics unit at the Department of Epidemiology and Public Health at Swiss TPH. Vounatsou and her group pursue disease risk mapping and prediction, using state-of-the art Bayesian approaches with particular emphasis on the analysis of very large, space-time data arising in the areas of malaria, neglected tropical diseases, chronic diseases and environmental exposure epidemiology. Her applications involve estimation of disease burden and environmental

exposures at high spatial resolution (within small areas, countries or continents), assessment of the effectiveness of health interventions and policies in space and over time, assessment of the impact of climate change on disease burden, forecasting future trends in disease morbidity/mortality and disease surveillance. Results of her research have been disseminated in over 230 peer-reviewed publications. She currently holds a European Research Council Advanced Grant.

Session TS2b | Socio-Economic Vulnerabilities

Moderator: Kaspar Wyss, Swiss TPH, Switzerland

Kaspar Wyss, is Head of the Swiss Centre for International Health (SCIH) at Swiss TPH and Professor at the University of Basel. He has extensive management and leadership experience and is in charge of a team of over 50 people in Basel focusing on health systems development, primarily in low- and middle income countries. His activities relate to research and health system monitoring and performance assessment, with a specific interest in the role and importance of human resources for health. He directs a number of research and implementation projects in Africa, Eastern Europe and Asia and advises a broad range of institutions, such as the World Bank, WHO and UNICEF. Wyss lectures on health systems for the University of Basel (MSc and medical students) and the Swiss Inter-University Master of Public Health Program.

Ibrahima Sy, Centre de Suivi Ecologique, Senegal

Ibrahima Sy is a Senior Lecturer in the Department of Geography at the University of Cheikh Anta Diop (UCAD) and an Associated Researcher for the Research for Development Department at the Centre for Ecological Monitoring (CSE) in Dakar, Senegal. He completed his PhD in Health Geography at the University of Strasbourg, France. He has worked at the University of, the Swiss Centre for Scientific Research in Côte d'Ivoire (CSRS) and Swiss-TPH. His research interests are Environmental Sanitation, Spatial Epidemiology, climate change and Urban Health. Sy has coordinated several research projects tackling the challenges of water, environmental sanitation, spatial epidemiology, climate change and health in Mauritania, Senegal and Côte d'Ivoire in collaboration with several national institutions.











Filippo Lechthaler, Bern University of Applied Sciences, Switzerland

Filippo Lechthaler is a development economist specialized in natural resources, climate change adaptation, and public health in low-income settings. Among his research activities, he has investigated impacts of public health interventions in Africa, environmental constraints on economic growth and development as well as socio-economic variabilities in the exposure to climate risks among small holder farmers in Latin America.

David Bresch, Swiss Federal Institute of Technology Zürich, Switzerland

David N. Bresch is Professor of Weather and Climate Risks at ETH Zürich and MeteoSwiss. His research focuses on the impacts of weather and climate on socio-economic systems. Combining numerical, open-source modelling of weather and climate risks with the engagement of decision makers and end-users, his research aims to explore ways to strengthen resilience and create a shared understanding of weather and climate susceptibility. Such an integrated view along the

chain of impacts also opens new perspectives and approaches to the treatment of uncertainty in decision-making. He has conducted many case studies across the globe, applying a worldwide consistent, yet locally specific, methodology to strengthen climate resilience while integrating adaptation with economic development and sustainable growth.

Session TS3 | Mitigation and Health Co-Benefits

Moderator: Martin Röösli, Swiss TPH, Switzerland - See above.

Andrew Haines, London School of Hygiene and Tropical Medicine, UK

Andy Haines was Director of the London School of Hygiene and Tropical Medicine from 2001–2010. He has worked internationally in a number of countries and chaired the Scientific Advisory Panel for the 2013 WHO World Health Report. He was a member of the UN Intergovernmental Panel on Climate Change for the 2nd and 3rd assessment exercises and review editor for the health chapter in the 5th assessment. He was chair of the Rockefeller/Lancet Commission on Planetary Health which published its report in 2015. He has led a number of Lancet series and is a member of several

international committees including the Rockefeller Economic Council on Planetary Health. He has published many papers in high impact journals on topics such as the effects of environmental change on health and the health co-benefits of low carbon policies. He is currently engaged on a number of research projects which focus on sustainable healthy food systems, complex urban systems for sustainability and health and the effects of climate change on health. He co-chaired the European Academies Science Advisory Council working group on the need for urgent action on climate change to protect health which recently issued its report.

Nino Künzli, Swiss TPH, Switzerland - See above.

Jeremy Hess, University of Washington, USA

Jeremy Hess is a board-certified emergency medicine physician trained in global environmental health. He studied at Deep Springs College and Brown University and did his medical, residency and public health training at Emory University. He joined the University of Washington (UW) in 2015 and is Director of the UW Center for Health and the Global Environment (CHanGE). He was the Senior Medical Advisor to the Climate and Health Program at the US Centers for Disease Control and Prevention (CDC) from 2006 to 2015. He has had grants from CDC, NIH and NASA and is currently

leading a deep investigation of associations between climate, weather, pollen and allergic disease. His other research focuses on the health co-benefits of climate change mitigation and on interventions to reduce risks from extreme weather. He is an author on the Lancet Countdown on Health and Climate Change and a contributor to the Global Burden of Disease project. He served as a Lead Author on the last US National Climate Assessment and the IPCC's Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. He is a lead author in the upcoming IPCC Sixth Assessment Report.

Session PL2 | Paving the Way Forward

Moderator: Guéladio Cissé, Swiss TPH, Switzerland - See above.

Rainer Sauerborn, University of Heidelberg, Germany

Rainer Sauerborn, has been Head of the Institute of Global Health at the Heidelberg University Hospital from 1997 until 2016. He is also a guest professor for "Global Health and Climate Change" at Umeå University in Sweden. He trained as a physician in Bonn, Heidelberg and London; then he did research at the Harvard School of Public Health and at Tufts University in Boston. In the early 1980s Rainer Sauerborn spent three years as a "District Medical Officer" in Nouna (Burkina Faso). Since then, numerous research projects have linked him to the country. He is also a member of the Intergovernmental Panel on Climate Change.

Janine Kuriger, Swiss Agency for Development and Cooperation, Switzerland

Janine Kuriger is Head of Division of the Global Programme Climate Change and Environment at the Swiss Agency for Development and Cooperation (SDC) of the Federal Department of Foreign Affairs. She has a longstanding experience in development cooperation and previously served as the Head of the SDC office in India where she was in charge of the climate change programme. Since joining the Swiss development cooperation, she has held various positions at SDC's headquarter in Bern, the SDC cooperation office in Peru and the State Secretariat for Economic Affairs in Bern, working

mostly on environmental and climate change issues. She has extensive knowledge both in climate change adaptation and mitigation. Ms. Kuriger is well connected with the civil society, academia, private sector as well as international organizations. She holds a MA in Political Science and an Executive Master in Business Administration.













Session TS4a | Adaptations Plans

Moderator: Jana Gerold, Swiss TPH, Switzerland

Jana Gerold is a medical anthropologist and public health specialist at the Swiss Centre for International Health (SCIH) at Swiss TPH. Her technical focus is on implementation research, evaluations and strengthening health management. As project manager she is supporting the implementation of accessible quality healthcare in Kosovo. As researcher, she is principle investigator for several larger public health mandates within Switzerland.

Gerardo Sanchez, United Nations Environmental Program, Denmark

Gerardo Sanchez is a Senior Adviser in Public Health at the UNEP-DTU Partnership in Copenhagen. He holds a PhD in Economics, a Master in Public Health, and an MSc in Environmental Risk Assessment. His work focuses on the health impacts of the drivers and exposures of climate variability and change, health adaptation and climate-resilient development globally. On the climate impacts side, Sanchez specializes on the health impacts of heat waves and their prevention in the context of heat-health action plans and climate change health adaptation. From the emissions and air

pollution perspective, his research focus has been on the health impact assessment of urban air pollutants (specifically fine particles) as well as the economic evaluation thereof in developed and developing country settings. Prior to joining UNEP-DTU, he worked for the World Health Organization Regional Office for Europe, the Kobe Centre for Health and Development and the World Bank.

Maxine Whittaker, James Cook University, Australia

Maxine A. Whittaker is the Dean of the College of Public Health, Medical and Veterinary Sciences and Co-Director of the WHO Collaborating Centre for Vector Borne and Neglected Tropical Diseases at James Cook University. A major academic focus is One Health-the animal/human/environment interface-in the fields of zoonotic infections, food security and animal and human health systems. She is a founding member of Expandnet focusing on scaling-up pilot programmes and research into policy and practice, a member of the Australian Government's Technical Reference Group on Indo-Pacific

Centre for Health Security and Section Editor for several international infectious disease and public health journals. Whittaker has lived and worked in Bangladesh, Zambia, Zimbabwe and PNG and worked extensively in China, Fiji, Indonesia, Kenya, Philippines, Samoa, Solomon Islands, Tanzania, Thailand, Tonga, Vanuatu, and Vietnam. She has published more than 100 peer reviewed publications and several project documents for development partners and countries, policy briefings, briefing papers, book chapters and commissioned papers. In 2017 she was awarded the Royal Australasian College of Physicians International Medal in recognition of outstanding service in developing countries.

Andrea Rother, University of Cape Town, South Africa

Hanna-Andrea Rother is Head of the Environmental Health Division in the School of Public Health and Family Medicine at the University of Cape Town (UCT), South Africa and an environmental health specialist with over 25 years of research, teaching and policy analysis experience. Her expertise and focus areas, particularly related to Low- and Middle-Income Countries (LMIC) and Africa specifically, include: chemical/pesticide risk management/governance, the impact of climate change on health, developing and evaluating research translation and risk communication mechanisms, understanding

risk perceptions, children's environmental health, human rights and environmental health, building a sustainable medical curriculum including diagnostic environmental histories, and innovative capacity building. Rother developed and is the convenor of UCT's Master of Public Health Environmental Health Track and the postgraduate Diploma in Pesticide Risk Management. She is a WHO expert advisor and current chair of the FAO/WHO Joint Meeting on Pesticide Management and has published extensively, including on climate change and health in LMIC, as well as chemicals and health. She has also developed over 40 risk communication materials aimed at policy makers nationally, regionally and globally, as well as the public focusing on low-literate populations.

Session TS4b | Prediction and Monitoring for Impact

Moderator: Nakul Chitnis, Swiss TPH, Switzerland

Nakul Chitnis is a Group Leader in mathematical epidemiology at Swiss TPH. His main areas of activities lie in developing and analysing mathematical models to answer questions of public health relevance. He has used various types of models ranging from population-based difference and differential equations to stochastic individual based models to analyse the dynamics of malaria and neglected tropical diseases, including opisthorchiasis, rabies, sleeping sickness and lymphatic filariasis.

Ana Vicedo, University of Bern, Switzerland

Ana Vicedo is an early-career researcher at the Institute of Social and Preventive Medicine of the University of Bern (Switzerland), where she leads the new "Climate Change and Health" research group. She holds an MSc in Environmental Toxicology (University of Valencia, Spain) and in Epidemiology (University of Turin). Since the completion of her PhD studies (University of Valencia) in 2014, she has joined different research institutions in Sweden (Umea University), Switzerland (Swiss Tropical and Public Health Institute) and the UK (London School of Hygiene and Tropical Medicine).

Vicedo's research addresses the impacts of climate change on health, with particular focus on the evaluation of adaptation strategies, mitigation policies and air pollution co-benefits. I have led and collaborated in several large epidemiological studies on temperature-related health impacts and participated in several international projects on climate change and health.













Guojing Yang, Swiss TPH, Switzerland

Guojing Yang is a Senior Scientific Collaborator at Swiss TPH. She obtained a Medical Doctor title from Tongji Medical University in 1996, a master degree in Pathogenic Biology in 2001 and a PhD in Epidemiology and Public Health from the University of Basel in 2006. She was a post-doctoral research fellow at Charles Darwin University and the University of Adelaide, Australia, working on mosquito population dynamics modeling. Before joining in the unit of Biostatistics in 2014 and later in the unit of Infectious Disease Modeling in 2017, she was engaged in tropical diseases prevention and control in mainland China, such as schistosomiasis and malaria.

Pie Müller, Swiss TPH, Switzerland

Pie Müller is a Group Leader at Swiss TPH and a medical entomologist with an interest in the biology of disease vectors, insecticide resistance, entomological surveillance and the development of novel vector control products. He has a broad background in developing new methods for the surveillance of mosquitoes and substantially contributed to the discovery of molecular insecticide resistance markers. More recently he has focused on the development of new tools for the surveillance and control of mosquitoes and the biology of invasive mosquitoes in Europe.

Session 5a Frameworks for Resilience and Disaster Risk Reduction

Moderator: Helen Prytherch, Swiss TPH, Switzerland

Helen Prytherch is Head of the Health Systems Support Unit of the SCIH at Swiss TPH. She has 20 years' work experience gained at all levels of the health system across a variety of countries in Latin America, sub-Saharan Africa, Asia (India, Cambodia, Tajikistan) and more recently Eastern Europe. Her main areas of expertise comprise primary health care development, health financing, quality management, as well as human resources and capacity building. Prytherch has consolidated management experience, overseeing a team of 20 staff working from Basel. She has an extensive track

record of successfully handling complex mandates, including those involving multiple stakeholder consultation and evidence based policymaking for a range of clients such as the European Union, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Swiss Agency for Development and Cooperation, RBM End Malaria Partnership and World Health Organization.

Virginia Murray, Public Health England, UK

Virginia Murray is Consultant in Global Disaster Risk Reduction with Public Health England. This appointment is to take forward her work as vice-chair of the UN International Strategy for Disaster Reduction (ISDR) Scientific and Technical Advisory Group and as the Chair of the Science & Technology Organising Committee for the UNISDR Science and Technology Conference on the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, in January 27-29 2016. Prior to this she was Head of Extreme Events and Health Protection, Public Health England. With the

Extreme Events team, she helped to develop evidence based information and advice on flooding, heat, cold, volcanic ash, and other extreme weather and natural hazards events. Appointed as Visiting Professor in Health Protection, MRC-HPA Centre for Environment and Health, Imperial College and King's College, London (2004) and Honorary Professor at University College London (2013), she has published widely.

Diarmid Campbell, World Health Organization, Switzerland

Diarmid Campbell-Lendrum leads the Climate Change and Health team within the Department of Public Health, Environmental and Social Determinants of Health at WHO Headquarters in Geneva. He has played key roles in the development of the first quantitative estimates of the overall health impacts of climate change, the 2008 World Health Assembly Resolution, and the first three WHO global conferences on health and climate. He also leads the implementation of the WHO workplan on climate change, including a series of projects to pilot health adaptation in

vulnerable countries. Campbell-Lendrum is an author of multiple journal papers, book chapters and reports on the ecology and control of infectious disease, and on the health implications of global environmental change. He is a lead author of the recent Intergovernmental Panel on Climate Change (IPCC) Special Report on Extreme Events, and of the health chapter of the 5th Assessment Report of the IPCC.

Mirko Winkler, Swiss TPH, Switzerland

See above.

Brama Koné, Swiss Centre for Scientific Research, Côte d'Ivoire

Brama Koné is Associate Professor in Environmental Epidemiology. He obtained a Diploma of Sanitary Engineering in 1999 and a PhD in Environmental Epidemiology from the University Abobo-Adjame in Abidjan (Côte d'Ivoire) in 2008. He is currently Lecturer-Researcher at the university Peleforo Gon Coulibaly of Korhogo in northern Côte d'Ivoire, Associate Researcher at the Swiss Centre for Scientific Research and Deputy Director in charge of research programs development, monitoring and evaluation at the Ministry of Higher Education and Scientific Research of Côte d'Ivoire. Koné's scientific interest is related to Water, Sanitation and Hygiene (WaSH) associated health risks and adaptation to climate change. He has authored and co-authored nearby 30 peer reviewed papers and books chapters.

Session 5b| Health Systems for Resilience and Disaster Risk Reduction

Moderator: Christian Lengeler, Swiss TPH, Switzerland

Christian Lengeler is a Unit Head at the Swiss TPH and a Professor of Epidemiology at the University of Basel (Switzerland). For the past 30 years he has worked on the epidemiology and control of tropical diseases, with a strong focus on malaria. He was involved in developing insecticide treated nets (ITNs) as a malaria control tool in the 1990s, and has pioneered many developments in large-scale vector control in sub-Saharan Africa. Since 1999 he has been involved in the establishment and running of the national malaria control programme in Tanzania. His current research













interests are: understanding and improving access to malaria treatment in malaria-endemic countries, improving the quality of basic health care, the introduction of improved diagnostic strategies, the basic science of non-malarial illnesses and the treatment of severe malaria in challenging settings. His focus is on operational research and the process of generating, packaging and disseminating evidence on health interventions for communicable diseases.

Maria-Cristina Tirado, UCLAI, USA

Maria-Cristina Tirado works at the interface between science and policy related to climate change, health, food and sustainable development with the University, WHO, UNEP, UNFCCC, governments, and NGOs worldwide. She is Director of International Climate Initiatives at the LMU Center for Urban Resilience and serves as Secretariat of the Mediterranean Cities Climate Change Consortium. She is member of the UNFCCC Research constituency and adviser on Climate and Health for several UN organizations. Tirado's research focuses on the co-benefits to health of climate policies and the

analysis of the integration of health around the UNFCCC work and the Sustainable Development Agenda 2030. She contributed to the High-Level consultations for the Sustainable Development Goals (SDGs) and currently, to the HL Political Forum on Sustainable Development. Tirado is lead author of the Intergovernmental Panel on Climate Change Assessment Report Health Chapter and the Cross Chapter Paper on Desertification to be published in 2021. She is president of the Sustainability Health and Education (SHE) Foundation, and is constructing a Climate-Resilient School for a Maasai community in the Rift Valley Semi-Arid Lands in Kenya in collaboration with the Kenyan Red Cross Society. She is a DVM, and a Fulbright Scholar with MS/PhD degrees in Environmental Sciences from Cornell University and has authored numerous research and policy publications and books.

Deepali Patel, GAVI, the Vaccine Alliance, Switzerland

Deepali Patel, is a Senior Project Officer at GAVI, the Vaccine Alliance. She develops and reviews policies and facilitates transitions from policy to implementation. Patel also oversee analysis of immunisation, health system, economic and demographic data relevant to the policies under review. She monitors and shapes global policy dialogues on vaccines, immunisation, global health and other areas relevant to Gavi's operations. Patel also designs and leads process to collect constituency and stakeholder input to policy development and policy review processes, including analysing results from

consultations, and serves as focal point for inquiries regarding the interpretation and application of GAVI policies. Patel received her MPH from Johns Hopkins University, and her BSFS in International Environmental Policy from Georgetown University, USA.

Song Liang, University of Florida, USA

Song Liang is a University of Florida Term Professor, an Associate Professor at the Department of Environmental and Global Health and Emerging Pathogens Institute, University of Florida and a researcher at Florida Climate Institute. Liang received a BS in Biology and MS in Zoology at Southwest University in China, and a PhD in environmental health sciences at University of California at Berkeley. His research areas include environmental epidemiology, ecology, risk assessment of environmentally-mediated infectious diseases, human health impact of environmental changes and disease burden.

Over the past 12 years, he has received funding from NIH, NSF, USEPA, USDA and USAID to conduct research work along thess lines. He has authored and co-authored more than 100 peer-reviewed research articles in journals including the Lancet, PNAS, BWHO, PLoS Medicine and Nature Climate Change.

Jakob Zinsstag, Swiss TPH, Switzerland

Jakob Zinsstag is Deputy Head of the Epidemiology and Public Health Department and Head of the Human and Animal Health Unit at Swiss TPH. He is a veterinarian with a PhD in tropical animal health. He spent eight years in West Africa at the International Trypanotolerance Centre in The Gambia and four years as the director of the Centre Suisse de Recherches Scientifiques in Côte d'Ivoire. Zinsstag focuses on the control of zoonoses in developing countries and the provision of health care to mobile pastoralists using a One Health approach. He was previously president of the

International Association for Ecology and Health and president of the scientific board of the Transdisciplinary network of the Swiss Academies.

Session PL3 | From Research to Policy Change

Moderator: Nicole Probst-Hensch, Swiss TPH, Switzerland

Nicole Probst-Hensch is Head of the Department of Epidemiology and Public Health and the Chronic Disease Epidemiology Unit at Swiss TPH. She is also Professor of Epidemiology and Public Health at the University of Basel Medical School (Switzerland). Probst-Hensch has been trained in both Pharmaceutical Sciences (ETH Zürich) and Epidemiology (UCLA Los Angeles) and holds doctorates in both fields. She has broad research experience covering several chronic diseases including cancer, respiratory and cardiovascular diseases and covering multiple domains related to NCD risks (genetic and

molecular epidemiology; environmental epidemiology; nutrition and physical activity; dual disease burden NCDs-Infectious diseases). In her research she applies biomarkers in the context of Exposome and Mendelian Randomisation approaches to improve mechanistic and causal understanding modifiable disease risks. Her research group has broad expertise in developing, implementing and scientifically exploiting longitudinal cohorts and biobanks, both nationally and internationally.

Andreas Fischlin, ETH Zürich, Switzerland

Andreas Fischlin has a background Biology and Systems Theory, has researched ecosystems in a changing climate and has published numerous scientific works. He was Professor of Systems Ecology and Computer Science at ETH Zürich and played a leading role in the design and formation of the novel Department of Environmental Systems Science at ETH Zurich. He worked for the IPCC in various roles, which made him a co-recipient of the Nobel Peace Prize as awarded to IPCC in 2007. Representing the science community he has participated for 17 years in all UNFCCC negotiations and served

recently as Co-Facilitator of the Structured Expert Dialogue, hereby contributing to a new science-policy interface. As IPCC Vice-chair WGII he is currently busy in preparing the next IPCC Assessment Reports.















Kris Murray, Imperial College London, UK

Kris Murray's research interests fall at the interface between environmental, animal and human health. He gained his PhD in wildlife disease ecology in Queensland, Australia, where he worked on chytridiomycosis—the most impactful disease of biodiversity in history. Work in Murray's 'Ecological Health' research group at Imperial College generally focuses on understanding the ways in which global change processes (climate, land-use, biodiversity loss, human migration) mediate infectious disease risks in wildlife and people. Lately research has mostly focused on the biogeography



Roland Hohmann, Federal Office for the Environment, Switzerland

Roland Hohmann has worked with the Federal Office for the Environment since 2008. He is head of the Climate Reporting and Adaptation section, which is responsible for the implementation and further development of the Federal Council's strategy "Adaptation to climate chance in Switzerland". Roland Hohmann studied environmental sciences at ETH Zürich and got his PhD at the Swiss Federal Institute of Aquatic Science and Technology (Eawag).

Mirko Winkler and Martin Röösli, Swiss TPH, Switzerland - See above.

Closing Words: Nicole Probst-Hensch, Swiss TPH, Switzerland - See above.



