FRST SCIENTIFIC SMPOSIUM Health and Climate Change



Istituto Superiore di Sanità Italian National Institute of Health

Rome | December 3-5 | 2018



Green event

Scientific Programme Overview

	POCCHIARI ROOM	BOVET ROOM	MAROTTA ROOM						
09:00-11:00	Welcome remarks and opening address								
		offee Break	0						
11:30-13:00	Opening Plenary Session								
	-	unch Break							
14:00-16:00	Oral Session 1	Oral Session 2	Poster Session						
	C	offee Break							
16:00-18:00	Oral Session 3	Oral Session 4	Oral Session 5						
Tuesday.	December 4								
,									
09:00-10:45	Oral Session 6	Oral Session 7	Oral Session 8						
	-	offee Break							
11:15-13:00	Oral Session 9	Oral Session 10	Oral Session 11						
		unch Break							
14:00-16:00	Oral Session 12	Oral Session 13	Poster Session						
	C	offee Break	1						
16:30-18:00	Oral Session 14	Oral Session 15	Oral Session 16						
Wednesd	ay, December	5							
09:00-11:00	Oral Session 17	Oral Session 18	Poster Session						
	C	offee Break							
11:30-13.00	Ple	nary Session							
	L	unch Break							
14:00-15:00	Final	Plenary Session							
	С	offee Break							
15:30-17:00	Closing ron	narks+Awards+R	ma Daclaration						

*ISS Museum visit Programme							
Monday	Tuesday	Wednesday					
14:00 Italian language	14:00 English language	09:00 Italian language					
15:00 Italian language	15:00 English language	10:00 Italian language					
*Only for those already booked							

Monday, December 3

- 8:00 Registration
- 9:00 Welcome coffee
- 9.30 Welcome and opening address Walter Ricciardi, President of the Istituto Superiore di Sanità

Institutional Representatives and Special Guests Giulia Grillo, Minister of Health- invited Sergio Costa, Minister of Environment Stefano La Porta, Istituto Superiore per la Protezione e Ricerca Ambientale, Rome, Italy (ISPRA) Salvatore Parlato, Consiglio per la Ricerca e la sperimentazione in Agricoltura - Rome, Italy, (CRA) (invited) Massimo Inguscio, Consiglio Nazionale delle Ricerche Rome, Italy (CNR) (invited) Gaetano Manfredi, Conferenza dei Rettori delle Università italiane Tedros Adhanom Ghebreyesus, World Health Organization Maria P. Neira, World Health Organization Alexander Jones, Food and Agriculture Organization of the United Nations Christopher Wild, International Agency for Research on Cancer Andre Jol, European Environment Agency Tobin Robinson, European Food Safety Agency Monique Eloit, World Organization for Animal Health- OIE President, International Association of National Public Health Institutes Eric Chivian, Director Emeritus Center for Health and the Global Environment Harvard Medical School).

Opening Plenary Session

Chair Walter Ricciardi

- 11.30 The impact of pollution on plenary health Emergence of an Underappreciated Risk Factor Philip J. Landrigan
- 12.00 Climate Change: Through a Planetary Health Lens Howard Frumkin
- 12.30 **Towards climate smart healthcare: paving the way for a low-carbon, resilient health system** Tamer S. Rabie
- 13.00 Lunch Break

Oral Session 1 (POCCHIARI ROOM) ENVIRONMENT AND HEALTH

Chairs: Eugenia Dogliotti and Chris Wild

- 14.15 Interplay of climate change and air pollution on health H. Orru
- 14.45 Children environmental health and climate change I. lavarone
- 15.00 Methods for estimating ingestion exposure to common contaminants: linking land contamination, climate change and ingestion behaviours R. Hams
- 15.15 Does climate change increase toxic cyanobacterial human health risk) M. Manganelli
- 15.30 Contrasting-climate skin temperature gradient effects
- K. Makris
- 15.45 Discussion

Oral Session 2 (BOVET ROOM)

CLIMATE CHANGE AND ZOONOSES Chairs Umberto Agrimi and Romano Marabelli

shans emberte Agrim and Kemane maraben

- 14.15 Climate change impacts on zoonotic diseases
- K. Murray
- 14.45 Systematic and global effects of land use on zoonotic host communities R. Gibb
- 15.00 Early warning for tick-borne encephalitis hazard. climatic variables and host density successfully explain co-feeding tick transmission in northern Italy A. Rizzoli
- 15.15 West nile virus in north-eastern Italy: preliminary results of surveillance activities in 2018 P. Mulatti
- 15.30 Mediterranean spotted fever spatio-temporal distribution, and its association with meteorological factors in Spain
- A.R. Vidal 15.45 Discussion

Poster Session December, 3 (MAROTTA ROOM)

14.00 Poster corner

16.00 Coffee Break

Oral Session 3 (POCCHIARI ROOM) CLIMATE CHANGES SCENARIO

Chairs Antonio Navarra and Vladimir Kendrovski

- 16.35 The challenge of climate science
- A. Navarra
 16.55 Projected health effects of climate change in WHO European Region V. Kendrovski
- 17.15 What may happen when tropical microalgae spread in temperate waters? The case study of Ostreopsis spp. From health impact to chemistry and viceversa C. Dell'Aversano
- 17.25 Impact of mycotoxins on health in climate change scenario P. Battilani
- 17.35 Future health impacts of temperatures and heatwaves considering high resolution climate change scenarios in Italy F. de'Donato
- 17.45 Climate change and river ecosystems: insight from long-term environmental research.
- S. Larsen
- 17.55 Discussion

Oral Session 4 (BOVET ROOM) CLIMATE CHANGE AND CHILDREN HEALTH

Chairs Maurilio Cipparone and Paola Michelozzi

- 16.35 **Parks. gateways to healthy living for people and the planet** D. Allen
- 16.55 Climate Change, environmental exposures, urban green and children health P. Michelozzi
- 17.15 Greeness and air pollution exposure on children health. A cross sectional study in southern Italy S. La Grutta
- 17.25 Effect modification by socio-economic position and green spaces of short-term exposure to heat and air pollutants on preterm-birth risk. A time series study in Rome, 2001-2013. F. Asta
- 17.35 The restorative effects of outdoor environmental education G. Carrus
- 17.45 **Nature: an important ally for children's health** A. Tavone
- 17.55 Discussion

Oral Session 5 (MAROTTA ROOM) HEALTHIER CITIES

Chairs Andrea Lenzi and Maria Rosaria Milana

- 16.40 Latest developments with EU Climate Change Adaptation Policy and links with health J. Milos
- 17.10 Social interventions to limit. the mortality increase during the summer 2017 heat waves in Rome Italy G. Liotta
- 17.20 Reducing urban heat waves risk: heat health adaptation plan in Italy P. Michelozzi
- 17.30 Climate and health in large urban areas of Italy: following the change through a dedicated meteorological network
- C. Ferrari
- 17.40 Discussion

Tuesday, December 4

Oral Session 6 (POCCHIARI ROOM) MENTAL HEALTH AND CLIMATE CHANGE

Chairs Enrico Alleva and Massimo Biondi

- 09.10 Climate change and mental health
- M. Biondi
 09.30 The impact of climate change on persons with mental health conditions

 A. Preti
- 09.50 Mental health care in Italy and the climate change challenge L. La Sala
- 10.10 Extreme weather events on mental health D. Marazziti
- 10.20 Natural, urban and historical-urban environments on children affected by ADHD in Italy F. Di Carmine
- 10.30 Changes in feeding due to climate modulated human mental processes and preferences about food R.I. Rumiati
- 10.40 Discussion

Oral Session 7 (BOVET ROOM) WATER, SANITATION AND CLIMATE CHANGE

Chairs Luca Lucentini and Oliver Schmoll

- 09.15 Water safety planning for climate resilience R. Moses McKeown
- 09.50 The Protocol on Water and Health tools to increase resilience to climate change and water-related disasters. N. Nikiforova
- 10.10 Water and sanitation in extreme weather events. Environment and health risks and vulnerabilities.
 L. Sinisi
- 10.25 Assessment of climate change impacts on groundwaters of semiarid regions. Health-risk for floods. C. Masciopinto
- 10.40 Discussion

Oral Session 8 (MAROTTA ROOM) BLUE AND GREEN SPACE

Chairs Lora Fleming and Camilla Puccinelli

- 09.10 The effects of weather and daylight on current and future nature-based recreational physical activity in England L. Elliot
- 09.45 Healthy Parks Healthy People. Using Europe's network of parks and protected areas as 'Natural Health Centres'
- 09.55 **Labyrinth, a way to integration** S. Panigutti
- 10.05 BlueHealth community level interventions: The case study of Appia Antica Park C. Puccinelli
- 10.15 The Environmental Cultural Center of the Italian Naval League (Lega Navale Italiana) for the propagation of an environmental culture V. Manfrini
- 10.25 Discussion
- 11.00 Coffee Break

Oral Session 9 (POCCHIARI ROOM) COMMUNICABLE DISEASE AND CLIMATE CHANGE

Chairs Giovanni Rezza and Luca Busani

- 11.25 Climate and other drivers of infectious disease threat events in Europe.
- J. Semenza
- 12.00 Risks maps of Aedes albopictus in Spain D. Gómez-Barroso
- 12.15 Quantifying the spatiotemporal spread of mosquito-borne infections in non-endemic areas G. Guzzetta
- 12.30 The second autochthonous Chikungunya outbreak in Italy: lessons learned and future challenges F. Riccardo
- 12.45 Discussion

Oral Session 10 (BOVET ROOM)

HEALTH AND CLIMATE CHANGE. JOINT ACTION FOR SUSTAINABLE DEVELOPMENT

- Chairs Bettina Menne and Rachel Stancliffe
- 11.25 Health, climate change and sustainable development B. Menne
- 11.45 Transforming healthcare for a sustainable future R. Standiffe
- 12.05 A ten year journey in England's NHS: practical steps towards a sustainable health and care system.
- D. Pencheon 12.15 **The WHO UNCCC first Italian Country Profile on Climate and Health**
- L. Lucentini
- 12.25 Improving agriculture sustainability through farm's management optimization; the Water-Energy-Food nexus to reduce inputs requirement in intensive cropping systems S. Fabiani
- 12.35 Water reuse in the context of climate changes and sustainable development. The European Project FRAME M. Carere
- 12.45 Discussion

Oral Session 11 (MAROTTA ROOM) EVERYTHING ELSE ON HEALTH AND CLIMATE CHANGE

Chairs Emanuela Testai and Enzo Funari

- 11.25 **Global warming effects on skeletal anomalies in fish.** C. Boglione
- 11.35 Drought effects on freshwater macroinvertebrate community in the Mediterranean: ecological network analysis as an innovative tool for bioassessment.
 G. Pace
- 11.45 Modelling Aedes albopictus dynamics and related arbovirus outbreaks risk in central Italy M. Manica
- 11.55 A modelling analysis of West Nile virus transmission and human infection risk in Veneto (Italy). G. Marini
- 12.05 Spatial correlations of climatic and eco-environmental factors with incidence of human leishmaniasis in Spain J. Lopez Moreno
- 12.15 The Mediterranean basin like a pathogen's soup. a concern for cetacean species inhabiting the Pelagos Sanctuary and the zoonotic significance of some pathogens involved C. Grattarola
- 12.25 Risk evaluation of malaria reemerging in non-endemic areas with a temperate climate C. Severini
- 12.35 Discussion
- 13.00 Lunch Break

Oral Session 12 (POCCHIARI ROOM) AIR QUALITY, LOW CARBON POLICY HEALTH AND CLIMATIC CHANGE

Chairs Maria P. Neira and Andrew Haines

- 14.10 Addressing Climate Change, a major opportunity for human health
- MP Neira 14.40 **Health in the low-carbon economy** A. Haines
- 15.10 Short-term effects of temperature on mortality and hospital admissions in Italy during 2000-2010. Results from the beep project F. de Donato
- 15.20 Low carbon footprint technologies to recover and reuse safe resources within the urban water cycle F. Fatone
- 15.30 The interactive effect of temperature and air pollution on mortality: a time series analysis in 25 cities M. Scortichini
- 15.40 Respiratory infectious mortality rates in Italy: the climatic indexes as long term prediction instruments
- S. Bonomo
- 15.50 Discussion

Oral Session 13 (BOVET ROOM) ECOSYSTEM AND HEALTH

Chairs Laura Mancini and Damia Barceló Cullerès

- 14.10 The Eu Globaqua project on multiple stressors in rivers under water scarcity and global change. A reconnaissance study in selected European river basins and the water-energy-food nexus D. Barceló Cullerès
- 14.40 Addressing key challenges of water scarcity affecting warm Mediterranean reservoirs MG Antoniou
- 14.55 An Italian network for the detection of eco-genotoxicological effects in a river basin characterized by flooding and water scarcity M. Carere
- 15.10 "Summer Rain" increased risk of gastrointestinal and respiratory infections after urban pluvial flooding in the Netherlands A. Mulder
- 15.25 Evaluation of the ecotoxicological impact of municipal wastewaters on wildlife F. Spina
- 15.40 Soil sealing and urban growth in Italy
- M. Munafò 15.55 **Discussion**

Poster Session December 4 (MAROTTA ROOM)

14.00 Poster corner

16.00 Conee break

Oral Session 14 (POCCHIARI ROOM) GLOBAL HEALTH AND CLIMATE CHANGE

Chairs Stefano Vella and Maurizio Marceca

- 16.35 Impact of climate change on chronic non-communicable diseases. S. Vella
- 17.05 "One health: the MediLabSecure effort towards integrated surveillance of Arbovirus infections in the context of environmental changes. S. Declich
- 17.15 Perception of change, loss of social capital and mental health in migrants from African countries divided by index of vulnerability to climate change. P. Michielin
- 17.25 Effect of global changes in gene polymorphisms on health protection at workplace P. Chiarella
- 17.35 Climate change, migration and consequences for host Countries O. Punzo
- 17.45 Discussion

Oral Session 15 (BOVET ROOM) TOOLS AND NEEDS

Chairs Denis Sarigiannis and Mark Scrimshaw

- 16.35 The climate exposome. a new tool for addressing the health impacts of climate change D. Sarigiannis
- 17.05 Heavy Metals Detection using Screen printed Carbon electrodes A. Merkoçi
- 17.20 How can smart technologies address measures for human health protection when extreme events happen? The Challenges of INTCATCH project-S. Marcheggiani
- 17.35 Summer work. Prevention of the effects of heat waves (odc) on the health of workers S. Macchiaroli
- 17.50 Discussion

Oral Session 16 (MAROTTA ROOM) FROM THE ENVIRONMENT FRIENDLY GREEN TO THE HEALTHY HOSPITAL

Chairs Giovanni Capobianco and Luigi Bertinato

- 16.35 Hospitals and healthcare system at disaster situations; characteristics and future suggestions N. Bitterman
- 17.05 Communicating the Risk of Adverse Health Outcomes Related to a Changing Climate to Policy Makers and the Public in Maryland, USA
 - S. Soneja

- 17.15 Sustainable and Climate Change Resilient Health Facilities in Europe: The Challenge D. Pedrini
- 17.25 Reduction of inflammatory parameters in asthmatic children in an alpine hospital free from allergens and pollutant. E. Baldo
- 17.35 The short-term effect of pollen on Emergency Room visits in Rome.
- M. De Sario 17.45 Discussion

Wednesday, December 5

Oral Session 17 (POCCHIARI ROOM) FOOD SECURITY - FOOD SAFETY AND CLIMATE CHANGE

Chairs Tobin Robinson and Renata Clarke

- 09.15 **Climate change and emerging risks for food safety** A. Maggiore
- 09.45 Climate changes and "one health". Examples from the safety assessment of primary production. A. Mantovani
- 09.55 Presence of harmful Dinophysis species and okadaic acid toxicity in shellfish bred in Sardinia (Italy) A. Mudadu
- 10.10 Identifying and preventing climate change threats adversely affecting seafood production, nutritional value and safety.
 F. Cubadda
- 10.25 Cyanotoxins and climate change. Any consequences for food safety?
- S. Vichi 10.40 Are ciguatoxin-like producers Gambierdiscus spp. and Fukuyoa spp. spreading in the Mediterranean?
- J. Diogèn 10.55 Discussion

Oral Session 18 (BOVET ROOM)

STAKEHOLDERS Round Table

Chairs Maria Rosaria lardino and Aldo Di Benedetto

09.00 B. Rossi, A. Miozzo, A. Citterio, D. Biagioni, G. Bortone

Poster Session December 5 (MAROTTA ROOM)

Chairs Stefania Marcheggiani, Maura Manganelli, Mario Carere

- 09.00 Poster presentations
- 11.00 Coffee Break

PLENARY Session (POCCHIARI ROOM)

Chair Luca Rosi

- 11.35 **Thinking outside the box. Translating science into innovation for policy, advocacy, and business** T. Bouley
- 12.00 Communication of environmental risks.
- A. Contri
- 12.30 Migration and Climatic Change I. Annesi-Maesano
- 13.00 Lunch Break

FINAL PLENARY Session (POCCHIARI ROOM) Chair Walter Ricciardi

- 14.00 Policy and Science
- A. Bergman
- 14.30 Evidence and economic interests
- G. Negro (CNH Industrial) 15:00 Coffee Break
- 15.30 Closing remarks+Awards+Rome Declaration

W. Ricciardi/ E. Dogliotti/A. Haines/Philip J. Landrigan/ Maria Gracheva (Invited) /Maria P. Neira

Poster exhibition (Marotta ROOM)

	Monitor number							Monitor number							
	hours	1	2	3	4	5	6		hours	1	2	3	4	5	6
	14:00	P01							14:00	P14					
	14.30	P02							14:20	P15					
	15:00	P03							14:40	P45					
	15:30	P05							15:00	P46					
	14:00		P04						15:20	P47					
	14.30		P06						15:40	P22					
m	15:00		P41						14:00		P16				
	15:30		P42						14:20		P17				
e	14:00			P07					14:40		P18				
<u> </u>	14.30			P08					15:00		P19				
E	15:00			P09					15:20		P20				
e	15:30			P10					15:40		P21				
December	14:00				P11			4	14:00			P28			
\square	14.30				P12			December 4	14:20			P29			
	15:00				P64				14:40			P30			
-	15:30				P43				15:00			P31			
	14:00					P13			15:20			P48			
	14.30					P44			15:40			P52			
	15:00					P50			14:00				P32		
	15:30					P66			14:20				P33		
	14:00						P35		14:40				P34		
	14.30						P49		15:00				P36		
	15:00						P51		15:20				P37		
	15:30						P23		15:40				P54		
								14:00					P24		
								14:20					P55		
									14:40					P56	
		N	lonito	rnum	hor				15:00					P57	
/		IV	Ionito	mum	DEI				15:20					P67	
e	hours	1	2	3	4	5	6		15:40					P68	
q	09:00	P39							14:00						P25
3	09:00		P40						14:20						P26
e	09:00			P60					14:40						P53
	09:00				P61				15:00						P58
December 5	09:00					P62			15:20						P63
	09:00						P27		15:40						P65

INTERNATIONAL SCIENTIFIC COMMITTEE

Walter Ricciardi Istituto Superiore di Sanità, Rome, Italy Eugenia Dogliotti Istituto Superiore di Sanità, Rome Italy Antonio Navarra Euro-Mediterranean Center on Climate Change, Bologna, Italy Chistopher P. Wild World Health Organization, Lyon, FR Denis Sarigiannis Aristotle University of Thessaloniki, Thessaloniki, Greece Lora Fleming University of Exeter Medical School, Truro, United Kingdom Andrew P. Haines London School of Hygiene and Tropical Medicine, London, United Kingdom Timothy Bouley Former World Bank, Washington, USA Eric Chivian Former Harvard University, USA. Philip J. Landrigan Boston College, Boston, USA Mauricio H. Avila Former National Institute of Public Health, Mexico City, Mexico





Observers

Maria P. Neira World Health Organisation, Geneva, Switzerland Bettina Menne World Health Organisation, Copenaghen, Denmark

LOCAL SCIENTIFIC COMMITTEE

Laura Mancini Department of Environment and Health, Istituto Superiore di Sanità, Rome Italy Umberto Agrimi Department of Food Safety, Nutrition and Veterinary Public Health Istituto Superiore di Sanità, Rome Italy Enrico Alleva former Behavioural Science and Mental Health Centre, Istituto Superiore di Sanità, Rome, Italy Luca Busani Department Infectious Diseases, Istituto Superiore di Sanità, Rome, Italy Mario Carere Department of Environment and Health Istituto Superiore di Sanità, Rome, Italy Paola De Castro Scientific Knowledge and Communication Superiore di Sanità, Rome, Italy Simona Gaudi Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Stefania Marcheggiani Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Stefania Marcheggiani Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Giovanni Rezza Department of Epidemiology Lazio Regional Health Service, Rome, Italy Giavanni Rezza Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Giavanni Rezza Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Giavanni Rezza Department of Environment and Health Istituto Superiore di Sanità, Rome, Italy Camilla Puccinelli Department of Environment and Health Istituto Superiore di Sanità, Rome, Italy Stefano Vella National Center for Global Health, Istituto Superiore di Sanità, Rome, Italy

LOCAL ORGANIZING COMMITEE

Fabiola Giuliano Office of the President Istituto Superiore di Sanità, Rome, Italy Tonino Sofia Office of the President Istituto Superiore di Sanità, Rome, Italy Maria Mosetti Department of Environment and Health - Istituto Superiore di Sanità, Rome, Italy Alessia Borzi Department of Environment and Health - Istituto Superiore di Sanità, Rome, Italy Stefania Bocci External Relations Service Istituto Superiore di Sanità, Rome, Italy Silvia Stacchini External Relations Service Istituto Superiore di Sanità, Rome, Italy

INSTITUTIONAL REPRESENTATIVES AND SPECIAL GUESTS

Giulia Grillo Minister of Health- invited, Rome Italy Sergio Costa Minister of Environment, Rome Italy Stefano La Porta Istituto Superiore per la Protezione e Ricerca Ambientale, Rome, Italy (invited) Salvatore Parlato Consiglio per la Ricerca e la sperimentazione in Agricoltura – Rome, Italy (invited), Massimo Inguscio Consiglio Nazionale delle Ricerche Rome, Italy (invited), Gaetano Manfredi Conferenza dei Rettori delle Università italiane, Rome Italy (invited) Monique Eloit World Organization for Animal Health, Paris, France Tedros Adhanom Ghebreyesus World Health Organization, Geneva, Switzerland Alexander Jones Food and Agriculture Organization of the United Nations, Rome Italy Andre Jol European Environment Agency, Cophenagen, Dennmark Christopher P. Wild International Agency for Research on Cancer,Lyon, France

INVITED SPEAKERS AND CHAIR PERSON

Umberto Agrimi Department of Food Safety, Nutrition and Veterinary public health Istituto Superiore di Sanità, Rome Italy Diana B. Allen Healthy Parks Healthy People-National Park Service-Office of Public Health, Washington DC, USA Enrico Alleva Centre for Behavioural Science and Mental Health Istituto Superiore di Sanità, Rome, Italy Isabella Annesi -Maesano Epidemiology of Allergic and Respiratory Diseases Department , Institute Pierre Louis of Epidemiology and Public Health, Medical School St Antoine, Paris, France Damia Barcelo Institute of Environmental Assessment and Water Research, Barcelona, Spain Ake Bergman Environmental Chemistry, Stockholm University, Stockholm, Sweden Luigi Bertinato Clinical Governance Unit, Istituto Superiore di Sanità, Rome Italy Massimo Biondi Neurosciences and Mental Health Department, Sapienza University of Rome, Italy Noemi Bitterman Industrial Design, Technion, Israel Institute of Technology, Haifa, Israel Timothy Bouley former World Bank, Washington DC, USA Luca Busani Department of Infectious Diseases, Istituto Superiore di Sanità, Rome Italy Giovanni Capobianco Sant Eugenio Hospital, Rome, Italy Mario Carere Department of Environment and Health, Istituto Superiore di Sanità, Rome Italy Eric Chivian Director of the Center for Health and the Global Environment Harvard Medical School, Boston, USA. Maurilio Cipparone DNA Network, Consorzio Universitario CURSA, Rome, Italy Renata Clarke Food Safety and Quality Officer, Food and Agriculture Organization of the United Nations, Rome, Italy Alberto Contri Pubblicità Progresso Milan, Italy Aldo Di Benedetto General Directorate for Health Prevention, Ministry of Health, Rome Italy Eugenia Dogliotti Department of Environment and Health, Istituto Superiore di Sanità, Rome Italy Lewis Elliot European Centre for Environment and Human Health, University of Exeter Medical School, Truro, UK Lora Fleming European Centre for Environment and Human Health, University of Exeter Medical School, Truro, UK Howard Frumkin Head, Our Planet, Our Health, Wellcome Trust. London, UK Enzo Funari former Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Andrew P. Haines London School of Hygiene and Tropical Medicine, London, UK Rosaria lardino Fondazione the Bridge, Milan, Italy Vladimir Kendrovski European Centre for Environment and Health, World Health Organization (WHO), Bonn, Germany Liliana La Sala Prevention of Addiction, Doping and Mental Health Office, Ministry of Health, Rome Italy Philip J. Landrigan Schiller Institute for Integrated Science and Society, Boston College, Boston, USA. Andrea Lenzi Health City Institute, Rome, Italy Luca Lucentini Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Angelo Maggiore European Food Safety Authority, Parma, Italy Laura Mancini Department of Environment and Health, Istituto Superiore di Sanità, Rome Italy Maura Manganelli Department of Environment and Health, Istituto Superiore di Sanità, Rome Italy Romano Marabelli World Organization for Animal Health, Paris, France Maurizio Marceca Public Health and Infectious Diseases Department, Sapienza University of Rome, Italy Rory Moses McKeown World Health Organization, Geneva, Switzerland Bettina Mancheggiani Department of Environment and Health, Istituto Superiore di Sanità, Rome Italy Rory Moses McKeown World Health Organization, Geneva, Switzerland Bettina Menne Health and Development WHO Regional Office for Europe, Copenaghen, Denmark Paola Michelozzi Epidemiology Department of the Regional Health Service - Lazio, Rome, Italy Maria R. Milana Department of Environment and Health, Istituto Superiore di Sanità, Rome Italy Jelena Milos Climate Action DG, European Commission, Brussels, Belgium Kris Murray Faculty of Medicine Grantham Institute - Climate Change and the Environment Imperial College, London, UK Antonio Navarra Euro-Mediterranean Center on Climate Change, Bologna, Italy Maria P. Neira Public Health and the Environment Department, World Health Organisation, Geneva, Switzerland Giorgina Negro CNH Industrial, Torino, Italy Hans Orru Department of Public Health-University of Tartu, Estonia Antonio Preti Center for Consultation-Liaison Psychiatry and Psychosomatics University Hospital, University of Cagliari Camilla Puccinelli Department of Environment and Health, Istituto Superiore di Sanità, Rome Italy Tamer S. Rabie, World Bank, Washington, USA Giovanni Rezza Department of Infectious Diseases, Istituto Superiore di Sanità, Rome Italy Tobin Robinson Scientific Committee and Emerging Risks Unit, European Food Safety Authority, Parma, Italy

Luca Rosi International Affairs Office, Istituto Superiore di Sanità, Rome Italy Denis Sarigiannis Aristotle University of Thessaloniki, Thessaloniki, Greece Oliver Schmoll European Centre for Environment and Health World Health Organization, Bonn, Germany Mark Scrimshaw Institute of Environment, Health and Societies, Brunel University London Jan Semenza European Centre for Disease Prevention and Control, Solna, Sweden Rachel Stancliffe The Centre for Sustainable Healthcare, Oxford, UK Emanuela Testai Department of Environment and Health, Istituto Superiore di Sanità, Rome Italy Stefano Vella National Center for Global Health, Istituto Superiore di Sanità, Rome Italy Cristopher P. Wild International Agency for Research on Cancer World Health Organization, Lyon, France SPEAKERS Maria Grazia Antoniou Department Environmental Science and Technology, University of Technology, Cyprus, Limassol Federica Asta Department of Epidemiology, Lazio Regional Health Service ASL Roma 1, Rome, Italy Ermanno Baldo Istituto Pio XII, Misurina (BL), Italy Paola Battilani Department of Sustainable Crop Protection, Università Cattolica del Sacro Cuore, Piacenza, Italy Daniele Biagioni, Coordinatore Rete Città Sane, Comune di Modena, Modena, Italy Clara Boglione Department of Biology, University of Rome Tor Vergata, Rome, Italy Sergio Bonomo Institute of Biomedicine and Molecular Immunology "Alberto Monroy", National Research Council, Palermo, Italy Giuseppe Bortone, Arpa Emilia Romagna, Bologna, Italy Mario Carere Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Giuseppe Carrus Roma Tre University, Department of Education, Rome, Italy Carles Castell Commission of Health and Protected Areas. EUROPARC Federation, Regensburg, Germany Pieranna Chiarella Department of Occupational and Environmental Medicine, Epidemiology and Hygiene. Rome, Italy Annalisa Citterio, CNH Industrial N.V. Turin, Italy Francesco Cubadda Department of Food Safety, Nutrition and Veterinary Public Health, Istituto Superiore di Sanità, Rome, Italy Silvia Declich National Centre for Global Health, Istituto Superiore di Sanità, Rome, Italy Francesca De Donato Dipartimento di Epidemiologia Regione Lazio, Rome, Italy Carmela Dell'Aversano Department of Pharmacy. University of Napoli Federico II, Napoli, Italy Manuela De Sario Dipartimento di Epidemiologia Regione Lazio, Rome, Italy Francesca Di Carmine Department of Developmental and Socialization Processes Psychology Sapienza University of Rome, Italy Jorge Diogene, IRTA, Ctra. Poble Nou, Sant Carles de la Ràpita, Spain Laura Fabiani University of Rome Tor Vergata, Rome, Italy Francesco Fatone Università Politecnica delle Marche, Ancona, Italy Rory Gibb Centre for Biodiversity and Environment Research, University College London, London, UK Diana Gomez-Barroso, National Center for Epidemiology. Instituto de Salud Carlos III. Madrid, Spain. Carla Grattarola Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta, Turin, Italy Giorgio Guzzetta Fondazione Bruno Ressler, Trento, Italy Rebecca Hams Field Epidemiology Training Programme, Public Health England, London UK Ivano lavarone Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Stefania La Grutta National Research Council of Italy, Institute of Biomedicine and Molecular Immunology, Palermo, Italy Cinzia Ferrari Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Stefano Larsen Department of Civil, Environmental and Mechanical Engineering, University of Trento. Trento, Italy Giuseppe Liotta Biomedicine and Prevention Dept. University of Rome "Tor Vergata", Rome, Italy Jorge J. Lopez-Moreno Medical Resident in Public Health. National School of Public Health. Instituto de Salud Carlos III Madrid, Spain Stefania Macchiaroli Dipartimento di Prevenzione, Regione Lazio, ASL ROMA 6, Rome, Italy Konstantinos C. Makris Cyprus International Institute for Environmental and Public Health, Limassol, Cyprus Valerio Manfrini Technical-Scientific Committee of Environmental Cultural Center, Sperlonga, Latina Italy Maura Manganelli Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Mattia Manica Department Biodiversity Molecular Ecology. Fondazione Edmund Mach, San Michele all'Adige, Trento, Italy Alberto Mantovani Department of Food Safety, Nutrition and Veterinary public health, Istituto Superiore di Sanità, Rome, Italy Daniela Marazziti Dipartimento di Medicina Clínica e Sperimentale, Section of Psychiatry, University of Pisa, Pisa, Italy Stefania Marcheggiani Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Giovanni Marini Department of Biodiversity and Molecular Ecology, Research and Innovation Centre, Fondazione Edmund Mach, San Michele all'Adige, Trento, Italy Costantino Masciopinto CNR IRSA, Bari, Italy Arben Merkoci Catalan Institute of Nanoscience and Nanotechnology and The Barcelona Institute of Science and Technology, Barcelona, Spain Paolo Michielin Department of General Psychology, University of Padua, Padua, Italy Agostino Miozzo Protezione Civile, Rome Italy Alessandro Mudadu Istituto Zooprofilattico Sperimentale della Sardegna, Sassari, Italy Paolo Mulatti Istituto Zooprofilattico Sperimentale delle Venezie, Legnaro Padua, Italy Annemieke Mulder Centre for Infectious Disease Control, National Institute for Public Health and the Environment. Bilthoven, Netherlands Michele Munafò Italian Institute for Environmental Protection and Research,, Rome, Italy Nataliya Nikiforova Environmental Affairs Officer United Nations Economic Commission for Europe Joint UNECE, Geneva, Switzerland Giorgio Pace Centre of Molecular and Environmental Biology Department of Biology, University of Minho, Braga, Portugal Stefano Panigutti IC XII Circolo Borgo Faiti, Latina, Italy Daniela Pedrini Italian Society of Architecture and Engineering for Healthcare, Bologna, Italy David Pencheon Public Health England Sustainable.Development Unit SDU, Fulbourn, Cambridge, UK Camilla Puccinelli Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Ornella Punzo Office of the President Istituto Superiore di Sanità, Rome, Italy Flavia Riccardo Department of Infectious Diseases, Istituto Superiore di Sanità, Rome, Italy Annapaola Rizzoli Department of Biodiversity and Molecular Ecology, Research and Innovation Centre, Fondazione Edmund Mach, San Michele all'Adige, Trento, Italy Benedetta Rossi, Clima e Salute, Italian Climate Network, Brescia Italy Raffaella Rumiati Scuola Internazionale Superiore di Studi Avanzati, Trieste, Italy Matteo Scortichini Department of Epidemiology of the Lazio Region Health Service ASL Roma 1, Rome, Italy Francesco Severini Department of Infectious Diseases, Istituto Superiore di Sanità, Rome, Italy Luciana Sinisi Italian National Institute for Environmental Research and Protection, Italy, Rome Sutyajeet Soneja World Health Organization, Geneva, Switzerland Federica Spina Mycotheca Universitatis Taurinensis, University of Turin, Turin, Italy Angela Tavone Consorzio Universitario per la Ricerca Socioeconomica e per l'Ambiente, Dipartimento Rete DNA, Rome, Italy Susanna Vichi Department of Environment and Health, Istituto Superiore di Sanità, Rome, Italy Adriana Romani Vidal Preventive Medicine and Public Health at Ramón y Cajal Hospital, Madrid, Spain