

## Pre-conference workshop

**Title:** Healthy-Polis: Harnessing opportunities for improving urban health and wellbeing through environmental sustainability

**Date:** 25 September 2017 | 9:00am- 12:30pm

### Names, titles and organizational affiliations of the organizers:

Co-organised by:

Dr Sotiris Vardoulakis (Director of Research, Institute of Occupational Medicine, and Co-Chair of Healthy-Polis International Consortium for Urban Environmental Health & Sustainability)

Prof Thomas Krafft (Faculty of Health, Medicine and Life Sciences, School for Public Health and Primary Care, Maastricht University, and Co-Chair of IGU Commission on Health and the Environment)

### Background:

Single environmental hazards, such as air pollution, noise and extreme weather, affecting urban populations are increasingly well-understood. However, the combined and/or cumulative health effects of co-exposure to multiple hazards are less well understood. Episodes of hot or cold weather coinciding with poor air quality, particularly in the context of climate change, are one example. Furthermore, multiple environmental exposures over the life course, mediated by residential and workplace characteristics, activity patterns and lifestyle choices, challenge simplified biomedical models of disease causation. Multi-disciplinary life course approaches are therefore critical for characterising environmental health risks, and identifying effective urban interventions that improve health and health equity. These approaches may involve the exposure framework, big data, environmental public health tracking, citizen science, integrated impact assessment, and system based participatory techniques.

This is the 4<sup>th</sup> international workshop organised by Healthy-Polis International Consortium for Urban Environmental Health and Sustainability ([www.healthy-polis.org](http://www.healthy-polis.org)). Previous workshops were organised in Manchester, UK (2014), Kunshan, China (2015), and Rome, Italy (2016).

### Objectives:

1. To identify and discuss innovation and standardisation of epidemiological, exposure and health impact assessment methods based on big data analyses, smart sensors, citizen science, integrated modelling, and system based participatory approaches.
2. To provide a forum for international, multi-disciplinary research collaboration on urban environmental health, health equity and sustainability, leading to one or more multi-centre funding applications
3. To evaluate and promote environmental interventions, focusing on urban life-course approaches in response to environmental change, bridging the gap between research and practice.
4. Promote integration of public health research and practice into urban research and data collection agendas, to address UN Sustainable Development Goal 11: Make cities inclusive, safe, resilient and sustainable.

These objectives address ISUH goals and ICUH themes on health equity and healthy sustainable urbanization.

### Brief description:

**Main themes:**

1. Research & innovation: Explore links and interactions between urban health, ecological public health, climate change and sustainable development, with specific examples for integrated life-course solutions.
2. Achieving impact: Going beyond established public and policy engagement and dissemination to the more comprehensive exploration of challenges and opportunities with agents from the public and private sectors.

**Programme**

9:00 Registrations

9:15 Welcome and introduction to Healthy-Polis  
Sotiris Vardoulakis (IOM) and Thomas Krafft (Maastricht University)

9:30 Research & Innovation I: Environmental Change, Urban Health and Sustainable Development  
- Harnessing complexity for urban health and wellbeing  
Dr Franz Gatzweiler, Executive Programme Director, Urban Health and Wellbeing, ICSU-IAP-UNU, China  
- The Urban Heat Island: health impacts in relation to environmental change  
Dr Clare Heaviside, Principal Environmental Scientist, Public Health England  
- The role of trees on city breathability and urban heat Island: a process approach  
Prof Silvana Di Sabatino, University of Bologna, Italy

10:30 Coffee break

10:50 Research & Innovation II: Urban Air Quality and Citizen Science  
- Citizen science for urban air quality and health: opportunities and challenges.  
Dr Alena Bartonova, Research Director, NILU, UAE  
- The emergence of low-cost sensor technologies: will they help to improve urban air quality?  
Prof Lidia Morawska, Director, International Laboratory for Air Quality and Health, Queensland University of Technology, Australia.

11:30 Achieving impact  
- Impact and health & wellbeing in urban development: evidence, economics, influence and systems - a UK study  
Daniel Black, Director, db+a, UK

11:50 Panel discussion and opportunities for collaboration  
Thomas Krafft (Maastricht University) and Sotiris Vardoulakis (IOM)

12:30 Lunch

**Target audience:**

Public health practitioners, urban planners and developers, environmental scientists, air quality managers, exposure scientists, epidemiologist, toxicologists, city directors.

Number of participants: 30-40

**Venue:** Information will be sent to the registered participants by email.

**Registration fee:**

Free of charge. The registration to the International Conference on Urban Health is mandatory to be enabled to attend the pre-conference.