

## Lecture Series – Children’s Environmental Health in Urban Context

Children’s health is significantly shaped by the environment they grow up in. Ensuring a healthy living environment to prevent childhood diseases is one of the essential tasks of our society. Currently, we observe dramatic changes in social and physical dispositions of our children and adolescents, often later affecting their adult life. From December 2018 to April 2019 monthly lectures with international guests, all leaders in the field, aim for a variety of scientific perspectives and lively discussions, to open up and nourish an important debate.



**Prof. Dr. Konstantinos Makris,**  
**Cyprus International Institute for Environmental and Public Health**

### **The urban exposome framework and its utility to study children’s health in urban settings**

**Date: 12 March 2019, 13:00-15:00**

**Location: UFZ Leipzig, KUBUS, Lecture hall 1 A, first floor**

#### **Abstract**

Global challenges such as climate change or population growth and their manifestations require multidisciplinary research synergies in urban health, such as the human exposome. This concept provides a comprehensive framework for the new generation of urban studies. The urban exposome can be defined as the continuous spatio-temporal monitoring of quantitative and qualitative indicators associated with the urban external and internal domains that shape the quality of life and health of urban population.

This lecture will lay out the theoretical framework of the urban exposome and its application within the design of children’s health studies. Specific case studies will be presented.

#### **Topic related publications**

Andrianou XD, **Makris KC** (2018): The framework of urban exposome: Application of the exposome concept in urban health studies. *Sci Total Environ.* 636: 963-967.

**Makris KC**, Voniatis M (2018): Brain cancer cluster investigation around a factory emitting dichloromethane. *Eur J Public Health.* 28(2): 338-343.

Andra SS, **Makris KC** et al. (2015): Passive exposures of children to volatile trihalomethanes during domestic cleaning activities of their parents. *Env. Res.*, 136: 187-195.

#### **Short Vita**

Dr. Konstantinos Makris is associate professor of Environmental Health at the Cyprus International Institute for Environmental and Public Health within the School of Health Sciences at the Cyprus University of Technology. He has held an appointment as adjunct assistant professor of Environmental Health at the Dept. of Environmental Health, Harvard University, USA (2009-2015). Dr. Makris leads the exposome-based Water and Health Lab which aims to minimize the human health risk associated with chronic exposures to environmental stressors. Towards this goal, his team applies improved exposure assessment protocols that refine the degree of association with metabolic health outcomes, participating in human studies in Cyprus, Greece, France, Kuwait, the Netherlands and Norway. After the Mari tragedy in 2011, Dr. Makris was invited by the Cyprus Parliament Senate Committee on Environment and Health to provide expert testimony about the environmental health consequences for the surrounding population. He has also served as member of the scientific advisory committee for the Ministry of Health concerning arsenic exposures in Cyprus.

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