



The University of Tokyo Graduate School of Medicine  
We cordially invite students and faculty members to a special talk by

## **Prof. Aurelio Tobías**

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Spanish Council for Scientific Research (CSIC), Barcelona, Spain

### **"Modelling desert dust exposure events for epidemiological short-term health effects studies"**

Evidence on the health effects of desert dust remains unclear. Recently, a systematic review by the World Health Organization reported inconsistent results across different studies and geographical areas. The main sources of heterogeneity being the study settings, the exposure assessment methods and the epidemiological study designs. The, apparently simple, question “does desert dust impact human health?” requires a careful definition of what the relevant exposure of interest is and how health effects can be quantified. When investigating the short-term effects of desert dust on human health, four alternative exposure definitions can be used: 1) dust events as binary exposure; 2) particulate matter (PM) as continuous exposure modified by dust events; 3) independent effects of desert and anthropogenic sources of PM, in two-pollutant models, and; 4) independent effects of desert and anthropogenic PM accounting the effect modification of anthropogenic sources by dust events. Besides the dust exposure definition used, it is also important to consider the different patterns of dust advections across geographic locations and the relative toxicity of different PM sources.

**Date and Time:** 12:10-13:00, March 4<sup>th</sup>, 2019 (Monday)

**Venue:** S102, the 1<sup>st</sup> floor, Faculty of Medicine Bldg. 3, The University of Tokyo Hongo Campus (東京大学本郷キャンパス医学部 3 号館 S102)

He is a statistician and obtained a PhD in Epidemiology and Public health. He has a broad range of research interests with a common theme of applied statistical and epidemiological methods in environmental health studies. In particular, the application of time-series regression models in public health, also the statistical methods for meta-analysis. His current research focus on environmental epidemiology, studying the short-term effects of environmental risk factors, mainly air pollution and on human health. Please access the link to know about his publications. <https://scholar.google.ch/citations?user=Lo3AsZMAAAAJ&hl=en>

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