



BME PARIS
BioMedical Engineering
MASTER'S PROGRAM

The exposome: a useful concept?

Open Your Mind Seminar

Friday, Sept 27 2019
1 pm – 2.30 pm

Université Paris Descartes
45, rue des Saints Pères, 75006 Paris
GIROUD Amphitheater

Toxicology in the era of the exposome

Toxicology studies the hazards related to the interaction of a stressor with a living organism. Assessment of environmental chemicals toxicity has traditionally focused on the properties and toxic effects of each substance taken individually. During the last decades, more consideration was given to the properties of the target (molecular, cellular and the organism itself) and to the context of the exposure (other environmental, nutritional or behavioral conditions). Based on these recent developments and on the framework given by the exposome concept, a new vision of toxicology has emerged highlighting the importance of integrating different stressors, taking into consideration the target, the context in a broad sense, the time and pattern of exposure and relying on a variety of new technologies. Many examples illustrate the relevance of the exposome framework for toxicity assessment. Among them, the integration of toxicity studies with environmental, epidemiological and modeling studies, the analysis of mixture effects. These developments in toxicology are expected to have regulatory implications and impacts in public health.

Robert BAROUKI

INSERM Unit 1124
University of Paris, Paris, France

