

7<sup>th</sup> Euro-Global Summit on

# Toxicology & Applied Pharmacology

October 24-26, 2016 Rome, Italy

***Stefano Bonassi***

IRCCS San Raffaele Pisana, Italy

## Exposomics and systems medicine, two sides of the same coin

The concept of the exposome, representing the totality of exposures from gestation onwards, has been introduced as a complement to genomic data in the study of disease etiology. The original purpose of such investigations was the discovery of key biomarkers of exposure, to be used in exploring hypotheses about sources of exposure, dose-response relationships, mechanisms of action, disease causality and public health interventions. On the other hands, the implementation of systems approaches in clinical practice, and the development of complex predictive models which – under the 4 P's perspective – include social, psychological, and life-style parameters in the therapeutic process, has determined the inclusion of epidemiologic knowledge into clinical studies. The possibility to model in the same playground the complexity of the exposome and the variety of real clinical practice will help to identify new ontologies and to improve disease recognition and treatment.

## Biography

Stefano Bonassi is a Doctor in Biological Sciences - University of Genova and a Specialist in Medical Statistics and Epidemiology - University of Pavia. He is a Faculty for PhD programs in Human Genetics of the Universidad Autonoma de Barcelona, Barcelona, Spain, and M2E2 International courses of Molecular Epidemiology of Chronic Diseases at the Maastricht University, the Netherlands. He is a reviewer of many journals such as Experimental Research; Mutagenesis; Cancer Epidemiology; Biomarkers & Prevention et al.

[stefano.bonassi@sanraffaele.it](mailto:stefano.bonassi@sanraffaele.it)**Notes:**