



**Università  
di Genova**

**IANUA**  
SCUOLA SUPERIORE

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**L3 - II e III**

**LMCU5 - II e III**

**LMCU6 - III e IV**

**Indirizzo in Scienze Biomediche - ISB  
a.a.2025/2026**

**LA GENOMICA**

**Alessandra Pulliero DISSAL**

**ESPOSOMA: NUOVI METODI PER L'EPIDEMIOLOGIA  
AMBIENTALE**

**Professor Paolo Vineis**

**Dott. Giovanni Fiorito**

**Chair in Environmental Epidemiology, MRC Centre for Environment and Health,  
School of Public Health, Imperial College London**

**11/04/2026**

**Dalle ore 09:00 alle ore 13:00**

**Aula 5 – Polo Didattico Alberti**

**Via Leon Battista Alberti, 2 – Genova**

**ABSTRACT**

This seminar will provide an overview of the concept of the “exposome” in environmental epidemiology, highlighting the importance of a comprehensive assessment of environmental and lifestyle-related exposures across the life course to improve our understanding of disease risk. Furthermore, the seminar will explore how “omic” molecular markers (epigenomics, transcriptomics, metabolomics, ...) capture biological responses to environmental factors, enabling more precise exposure characterization and disease risk profiling. In addition to the theoretical background, the seminar will include a practical session presenting a real-world example of “omic” data analysis using the R statistical software, showing a simple example of a molecular epidemiology research study. Participants will be guided through key analytical steps, followed by a discussion on the interpretation of results, methodological challenges, and implications for research and public health