# Lorenzo Fabbri

## Summary

I am a PhD student at the Barcelona Institute for Global Health (ISGlobal). I work under the supervision of Prof. Martine Vrijheid. My main topic of interest is the use of modern Causal Inference methods to answer questions in the broad field of Environmental Neuroepidemiology. I am also profoundly interested in Open Science and Reproducible

I received my Bachelor's degree in Biotechnology and my Master's degree in Quantitative and Computational Biology. My personal webpage can be found here. You can also find me on Twitter, Bluesky, Mastodon, and GitHub.

Working Experience		
PhD Student Barcelona Institute for Global Health (Barcelona, ES)	2021 - Present	
Student Research Assistant Fellowship Università della Svizzera italiana (Lugano, CH)	2017 - 2017	
Funding		
Meritatamente 2022 Società Unione Mutuo Soccorso (San Marino, SM)	2022	
Erasmus+ Traineeship Programme Scholarship University of Trento (Trento, IT)	2019	
Faculty of Informatics Scholarship Università della Svizzera italiana (Lugano, CH)	2016	
Erasmus Traineeship Programme Scholarship University of Parma (Parma, IT)	2015	
Honors and Awards		
Outstanding Abstract by a Student International Society for Environmental Epidemiology	2022	

## **Publications**

My ORCiD is 0000-0003-3031-322X.

- Fabbri L, Garlantézec R, Audouze K, et al. Childhood exposure to non-persistent endocrine disrupting chemicals and multi-omic profiles: A panel study. Environment International. Published online February 26, 2023:107856. doi:10.1016/j.envint.2023.107856
- Thiel C, Cordes H, Fabbri L, et al. A Comparative Analysis of Drug-Induced Hepatotoxicity in Clinically 2. Relevant Situations. PLOS Computational Biology. 2017;13(2):e1005280. doi:10.1371/journal.pcbi.1005280

## **Conference Presentations**

The posters can be found here.

Childhood exposure to non-persistent endocrine disrupting chemicals and multi-omic profiles: a panel study ISEE Annual Conference, Athens (GR)	2022
Childhood exposure to non-persistent endocrine disrupting chemicals and multi-omic markers in a population-based child cohort EURION Cluster Annual Meeting (online)	2022
Childhood exposure to non-persistent endocrine disrupting chemicals and multi-omic markers in a population-based child cohort International Prenatal Programing and Toxicity Meeting (online)	2022

Platform for Advanced Scientific Computing Conference, Lugano (CH)

#### Education

#### PhD Programme in Biomedicine

Universitat Pompeu Fabra (Barcelona, ES)

2021 - Present

- Supervisor: Prof. Martine Vrijheid.

#### M.Sc. in Quantitative and Computational Biology

Università degli Studi di Trento (Trento, IT)

2017 - 2019

- Thesis (FBK, Trento (IT)): Machine Learning for Predictive Drug Induced Hepatotoxicity. Supervised by: Dr. Cesare Furlanello, Dr. Marco Chierici, Prof. Enrico Domenici.
- Internship (HITS, Heidelberg (DE)): Machine and Deep Learning for Predictive Unbinding Kinetics of Kinases. Supervised by: Prof. Rebecca Wade, Dr. Daria Kokh, Prof. Raffaello Potestio.
- Final mark: 110/110 With Honors.

### M.Sc. Student in Computational Science

Università della Svizzera italiana (Lugano, CH)

2016 - 2017

- Project (USI, Lugano (CH)): Investigation by Computational Techniques of Channelopaties related to Sodium Channels. Supervised by: Prof. Vittorio Limongelli, Prof. Daniele Di Marino.

#### B.Sc. in Biotechnology

University of Parma (Parma, IT)

2012 - 2016

Nov 2015

- Thesis (RWTH, Aachen (DE)): Whole Body PBPK Modeling of Valproic Acid. Supervised by: Prof. Elena Maestri, Prof. Lars M. Blank, Dr. Henrik Cordes.
- Final mark: 103/110.

# **Continuing Education**

Continuing Education	
Spring School in Causal Inference with Observational Data Causal Insights, Leeds (UK)	Apr 2022
Computational Bayesian methods using brms in R Physalia Courses, online	Feb 2022
ELIXIR Omics Integration and Systems Biology National Bioinformatics Infrastructure Sweden, online	Sep 2021
Fundamentals of Epidemiology (EPM101) LSHTM, online	Sep 2021
Advanced Statistics: Statistical Modelling Swiss Institute of Bioinformatics, online	Aug 2021
Alpine Exposome Summer School Inserm and ATHLETE, online	Jun 2021
Metabolomics Data Processing and Data Analysis University of Birmingham, online	Feb 2021
Mendelian Randomisation Imperial College London, online	May 2020
Image Analysis and Modeling of Complex Biological Dynamics University of Wurzburg, Wurzburg (DE)	Sep 2017
Effective High Performance Computing Summer School CSCS and University of Lugano, Lugano (CH)	Jul 2017
MARVEL School on Variationally Enhanced Sampling University of Lugano, Lugano (CH)	Feb 2017

Advanced Course in Alternatives to Animal Experimentation

University of Genova, Genoa (IT)

## Service

## Students and New Researchers Network

International Society for Environmental Epidemiology

2022 - 2023

## Early Career Scientist Working Group

COnsortium of METabolomics Studies

2022 - 2022

## Skills

Italian (native), English (C1, IELTS 7.0), Spanish Languages

(basic)

R, Python, MATLAB, C Programming Languages

LaTeX, RMarkdown Markup Languages

Software Development git, SLURM, High Performance Scientific Computing