

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 Research.

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 [Bluesky](#) 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

Research Visits

Visiting PhD Student

Harvard Pilgrim Health Care (Boston, US) 2024 - 2024

Funding

Causal Inference for Environmental Mixtures

Società Unione Mutuo Soccorso (San Marino, SM) 2024

Causal Inference for Environmental Mixtures

ATHLETE (Barcelona, ES) 2024

Causal Inference for Environmental Mixtures

Centro de Investigación Biomédica en Red (Madrid, ES) 2024

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](#).

1. **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](#)
2. Thiel C, Cordes H, **Fabbri L**, et al. A Comparative Analysis of Drug-Induced Hepatotoxicity in Clinically 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 Programming and Toxicity Meeting (online)

2022

Efficient and Portable MPI Support for Approximate Bayesian Computation

Platform for Advanced Scientific Computing Conference, Lugano (CH)

2017

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 Channelopathies related to Sodium Channels. Supervised by: Prof. Vittorio Limongelli, Prof. Daniele Di Marino.

B.Sc. in Biotechnology

University of Parma (Parma, IT)

2012 - 2016

- 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

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)

Nov 2015

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**Languages**

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

Programming Languages

R, Python, MATLAB, C

Markup Languages

LaTeX, RMarkdown

Software Development

git, SLURM, High Performance Scientific Computing