

# Lorenzo Fabbri

## 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](https://orcid.org/0000-0003-3031-322X).

## Journal Articles

- [1] Nuria Güil-Oumrait et al. “Prenatal Exposure to Chemical Mixtures and Metabolic Syndrome Risk in Children”. In: *JAMA Network Open* 7.5 (May 23, 2024), e2412040. ISSN: 2574-3805. DOI: [10.1001/jamanetworkopen.2024.12040](https://doi.org/10.1001/jamanetworkopen.2024.12040). URL: <https://doi.org/10.1001/jamanetworkopen.2024.12040> (visited on 07/16/2024).
- [2] Lorenzo Fabbri et al. “Childhood Exposure to Non-Persistent Endocrine Disrupting Chemicals and Multi-Omic Profiles: A Panel Study”. In: *Environment International* (Feb. 26, 2023), p. 107856. ISSN: 0160-4120. DOI: [10.1016/j.envint.2023.107856](https://doi.org/10.1016/j.envint.2023.107856). URL: <https://www.sciencedirect.com/science/article/pii/S0160412023001290> (visited on 02/27/2023).
- [3] Christoph Thiel et al. “A Comparative Analysis of Drug-Induced Hepatotoxicity in Clinically Relevant Situations”. In: *PLOS Computational Biology* 13.2 (Feb. 2, 2017), e1005280. ISSN: 1553-7358. DOI: [10.1371/journal.pcbi.1005280](https://doi.org/10.1371/journal.pcbi.1005280). URL: <https://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1005280> (visited on 09/20/2023).

## Articles under review and revising

1. Childhood exposure to non-persistent endocrine disruptors, glucocorticosteroids, and attentional function: A study based on the parametric g-formula. *First author*
2. Multi-omics architecture of obesity and metabolic dysfunction in childhood: identifying biological pathways and prenatal determinants. *Co-author*

3. Diet among European children and its association with adiposity-related outcomes: a multi-country study.  
*Co-author*

## Software Packages

**myphd: R package for "my" PhD.**  
<https://github.com/isglobal-cep/myphd>

2024

## 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

**Postgraduate Diploma in Global Health Policy**

London School of Hygiene and Tropical Medicine (London, GB)

2024 - Present

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**Graduate Certificate in Theoretical Statistics and Probability**

The Open University (Milton Keynes, GB)

2024 - Present

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**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