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 and Google Scholar is QbPv1H0AAAAJ.

Journal Articles

Code for my PhD research output can be found here.

- [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. 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. 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. 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*
- $\hbox{3. Diet among European children and its association with adiposity-related outcomes: a multi-country study. } \\ \textit{Co-author}$

Software Packages

My GitHub profile can be found here.

causaleffects: Estimating causal effects

https://github.com/Causality-Bites/causaleffects

2024

myphd: A easy to use package for common tasks in epidemiology and causal inference research projects

https://github.com/isglobal-cep/myphd

2024

replicating-papers: Replicating papers from the epidemiology and causal inference literature

https://github.com/lorenzoFabbri/replicating-papers

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 Programing 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

Graduate Certificate in Theoretical Statistics and Probability

The Open University (Milton Keynes, GB)

2024 - Present

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)

- 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

- 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

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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