

Lorenzo Fabbri

San Marino · San Marino
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Research Interests

Nutritional & Environmental Epidemiology • Environmental Sustainability • Exposomics • Computational Biology • Public & Global Health

Education

Università degli Studi di Trento 2017–2019
Trento, Italy

- M.Sc. in Quantitative and Computational Biology (110/110 With Honors)
- Thesis: *Machine Learning for Predictive Drug-Induced Hepatotoxicity*

Università della Svizzera italiana 2016–2017
Lugano, Switzerland

- Master student in Computational Science

Università degli Studi di Parma 2012–2016
Parma, Italy

- B.Sc. in Biotechnology (103/110)
- Thesis: *Whole-body PBPK Modeling of Valproic Acid*

Continuing Education

Image Analysis and Modeling of Complex Biological Dynamics 2017
Wurzburg, Germany

- University of Wurzburg

Effective High Performance Computing Summer School 2017
Lugano, Switzerland

- CSCS & Università della Svizzera italiana

MARVEL School on Variationally Enhanced Sampling 2017
Lugano, Switzerland

Advanced Course in Alternatives to Animal Experimentation 2015
Genoa, Italy

- Università degli Studi di Genova

Working Experience

Graduate Research June 2019–October 2019
Trento, Italy

- Master thesis at the Bruno Kessler Foundation
- Thesis: *Machine Learning for Predictive Drug-Induced Hepatotoxicity*
- Supervisors: Dr. Cesare Furlanello (FBK), Dr. Marco Chierici (FBK), Prof. Enrico Domenici (UNITN)

Graduate Research March 2019–May 2019
Heidelberg, Germany

- Internship at the Heidelberg Institute for Theoretical Studies
- Research project: *Machine and Deep Learning for Predictive Unbinding Kinetics of Kinases*
- Supervisors: Prof. Rebecca Wade (HITS), Dr. Daria Kokh (HITS), Prof. Raffaello Potestio (UNITN)

Graduate Research

October 2016–May 2017

Lugano, Switzerland

- Student Research Assistant at Università della Svizzera italiana
- Research project: *Investigation by Computational Techniques of Channelopathies related to Sodium Channels*
- Supervisors: Prof. Vittorio Limongelli, Prof. Daniele Di Marino

Undergraduate Research

April 2015–August 2015

Aachen, Germany

- Internship and Bachelor thesis at RWTH Aachen University
- Thesis: *Whole-body PBPK Modeling of Valproic Acid*
- Supervisors: Prof. Elena Maestri (UNIPR), Prof. Lars M. Blank (RWTH), Dr. Henrik Cordes (RWTH)

Volunteer Experience

Italian Society of Vegetarian Nutrition

July 2020–Present

RETE Civic Movement

February 2020–Present

Skills

Languages

- Italian: native
- English: C1 (IELTS 7.0)

Computer Skills

- Programming (basic): R, SAS, C
- Programming (intermediate): MATLAB, Python (Python Scientific Stack)
- Basic knowledge of Scientific Parallel Programming paradigms
- Version Control: GIT
- Machine and Deep learning (basic): Scikit-learn, PyTorch
- Molecular modeling and Cheminformatics (basic): NAMD, RDKit
- Typesetting: L^AT_EX, Markdown

Epidemiology

- Molecular Epidemiology: Omics Data Association Studies (basic)
- Causal Inference: Mendelian Randomization (basic)

Honors & Awards

Fellowships

Student Research Assistant Fellowship

2017

Lugano, Switzerland

- Università della Svizzera italiana

Scholarships

Erasmus+ Traineeship Programme Scholarship

2019

Trento, Italy

- Università degli Studi di Trento

Faculty of Informatics Scholarship

2016–2017

Lugano, Switzerland

- Università della Svizzera italiana

Erasmus Traineeship Programme Scholarship

2015

Parma, Italy

- Università degli Studi di Parma

Publications

- [2] Christoph Thiel et al. “A comparative analysis of drug-induced hepatotoxicity in clinically relevant situations”. In: *PLoS computational biology* 13.2 (2017).

Conference Presentations

- [1] Lorenzo Fabbri et al. “Efficient and Portable MPI Support for Approximate Bayesian Computation”. In: PASC17. 2017.