

# Marco Anteghini, PhD

## Contact

### Address

Via Domenico Zampieri 28  
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Italy, 40129

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### Personal email address

marcoanteghini@gmail.com

### Company email address

m.anteghini@ngbgenetics.com

### Links

Linkedin  
GitHub  
NVO Bioinformatika - Bioinform  
Google Scholar

## Languages

**Italian:** mother tongue

**English** C1 (International MSc)

**German** A2

## Programming

♥ Python, Bash, R, LaTeX

## Other skills

- Statistical analysis
- Scientific writing
- Grant writing
- AI for biomolecules and biomedicine
- NGS data analysis

## Awards / Grants

Marie Skłodowska-Curie ITN  
(H2020-MSCA-ITN-2018)  
LifeGlimmer, Sep 2019

Erasmus+ Study grant  
(2018-1-IT02-KA103-047045)  
University of Bologna, Mar 2018

Experienced and dynamic bioinformatician with a track record of handling complex projects in both academic and corporate settings. I excel in team environments, contributing my expertise to help achieve our common goals, and I am equally adept at managing and executing projects individually. My adaptability and broad skill set are demonstrated by my contributions in various research areas related to bioinformatics and education. With a solid educational background and practical experience in bioinformatics since earning my Master's Degree, I combine theoretical knowledge with hands-on application to make a tangible impact.

## Education

2019-2023

**PhD** in Bioinformatics

Wageningen University and Research

Thesis: Revealing function, interactions, and localization of peroxisomal proteins using Deep Learning-based approaches

2017-2019

**M.Sc.** in Bioinformatics

University of Bologna

Thesis: Building MSMs and HMMs from MD data of the A- $\beta$ 40

2013-2017

**B.Sc.** in Biological sciences

University of Ferrara

Thesis: Dietary indications for triathletes

## Research and Development experience

Oct 2023-ongoing

**NGB Genetics**

Bologna, Italy

*Bioinformatician*

Developing advanced bioinformatics pipelines for the analysis of nutrigenomic and microbiota data. My role involves designing and implementing robust and efficient workflows to process and interpret complex biological datasets, contributing to innovative research in personalized nutrition and gut microbiome health. This work entails close collaboration with interdisciplinary teams to translate data-driven insights into actionable health and dietary recommendations.

Oct 2023-Apr 2024

**LifeGlimmer GmbH**

Berlin, Germany

*Bioinformatician and Operational Manager*

Leading bioinformatics research in Decision Support Systems and AI, driving innovations in data analysis and predictive modeling. Assisting in the coordination of European projects, managing cross-functional teams, and overseeing project logistics and compliance. Contributing to research initiatives and grant proposals and optimizing operational processes.

Dec 2022-Sep 2023

**Zuse Institut Berlin**

Berlin, Germany

*Data Scientist and Data Engineer at the Medical Bioinformatics group*

The position was funded by the project 'Data and AI-supported early warning system to stabilize the German economy' (DAKI).

The main tasks centered around the creation of a platform for data sharing, visualization, and analysis that enables researchers to execute AI workflows. The data are mainly biomedical.

Oct 2019-Sep 2023

**LifeGlimmer GmbH**

Berlin, Germany

*PhD Student and Employee in association with the System and Synthetic Biology Group, Wageningen University, The Netherlands.*

This project was part of an Innovative Training Network funded by the Marie Skłodowska-Curie Actions. In this industrial setting, I had the opportunity to develop projects both independently and in teams, interact with customers and stakeholders, and develop transversal skills and competencies such as familiarity with proposal writing and experience in business development. Moreover, the main research topic of my PhD was to explore the flexibility and applicability of deep learning-based protein sequence embedding in performing various prediction tasks.

# Marco Anteghini

## Interests

### Professional

Co-founder of "Bioinform", an NGO that organise training schools in bioinformatics and AI.

### Personal

Sport (Triathlon and Hiking)  
Music (guitar player and singer)

## References

Prof. Dr Conrad Tim  
(PI and employer at Z.I.B)  
Department of Visual and  
Data-Centric Computing, Zuse  
Institute Berlin,  
Takustraße 7  
14195 Berlin, Germany  
conrad@zib.de

Prof.dr.ir. VM. dos Santos  
(PhD supervisor and employer)  
WUR University,  
System and Synthetic Biology,  
6708 WE Wageningen, The  
Netherlands  
vitor.martinsdossantos@wur.nl

## Most relevant publications

**PortPred: exploiting deep learning embeddings of amino acid sequences for the identification of transporter proteins and their substrates**

Marco Anteghini, Vitor AP Martins dos Santos, Edoardo Saccenti.

**Insights Into the Peroxisomal Protein Inventory of Zebrafish**

Maki Kamoshita, Rechal Kumar, Marco Anteghini, Markus Kunze, Markus Islinger, Vitor Martins dos Santos and Michael Schrader.

**Easy sematification of bioassays**

Marco Anteghini, Jennider D'Souza, Vitor Martins dos Santos, Soeren Auer.

**SciBERT-based Semantification of Bioassays in the Open Research Knowledge Graph**

Marco Anteghini, Jennider D'Souza, Vitor Martins dos Santos, Soeren Auer.

**In-Pero: Exploiting deep learning embeddings of protein sequences to predict the localisation of peroxisomal proteins**

Marco Anteghini, Vitor Martins dos Santos, Edoardo Saccenti

**Thermodynamics and kinetics of the amyloid- $\beta$  peptide revealed by Markov state models based on MD data in agreement with experiment**

Arghadwip Paul, Suman Samantray, Marco Anteghini, Birgit Strodel

## Relevant advanced courses

1. Training School by PerICo consortium (attendee and organizer): "Career perspective", Career development", "Grant writing". Apr. 2022.
2. Online writing course by Wageningen University and Research: "Popular writing". Mar. 2021.
3. BioBusiness winter school (online) by Academic Medical Center Amsterdam Feb. 3-5 2021.
4. Online workshop by Biofaction GmbH: "Increase science impact trough video making and press release" Sep. 1-4 2020.
5. Training School by PerICo consortium: "Introduction to system Biology", "Scientific writing", "Ethics as a Design Principle" Groningen, The Netherlands, Jun. 18-21 2019.
6. Training School by PerICo consortium: "Advanced Microscopy", "Gender imbalance in science", "Presenting a great progress report" Weizman Institute, Rehovot, Israel, Oct. 27-30 2019
7. Workshop: Computer Tutorial in Markov Modeling (PyEMMA) WS Berlin, Germany, Feb. 18-22 2019.
8. Special advanced course by CINECA: "High Performance Bioinformatics" Rome, Italy, Dec. 10-12 2018.

## Other experience

2020-ongoing	<b>NVO Bioinformatika - Bioinform</b> <i>Co-founder of NVO Bioinformatika - Bioinform</i> Trainer in bioinformatics. President and co-administrator of the NGO.	Herceg Novi, Montenegro
2017-2020	<b>Self-employed</b> <i>Guitar teacher</i> Guitar teacher for individuals	Bologna, Italy/ Berlin, Germany
2012-2018	<b>C.U.S. Salvataggio</b> <i>Lifeguard</i> Rescuer and supervisor for the safety of swimmers at the seaside.	Comacchio (FE), Italy
2011-2016	<b>Self-employed</b> <i>Private swimming instructor</i> Swimming instructor for individuals or small groups, especially for children.	Comacchio (FE), Italy
2010-2012	<b>PCompany</b> <i>Lifeguard</i> Rescuer and supervisor for the safety of swimmers in private swimming pools and swimming pool maintenance technician.	Comacchio (FE), Italy