



Mara Simonazzi

Post-doc (1st Mar 2024 – present)

University of Bologna (Italy)

Dep. Biological, Geological and Environmental Sciences

(BiGEA), Via Sant'Alberto, 163, 48123, Ravenna (RA)



ORCID

Place and date of birth

Rimini (Italy), 1st October 1992

Address

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Contacts

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Research interests

Microalgae and cyanobacteria · Toxins ·
Drinking water monitoring · Water
treatment · Biotechnology applications ·
Microalgal cultivation · Bioactive
compounds · Phytodepuration

Language knowledge

Italian

Native

English

Proficient (B2/C1)

Finnish

Basic (A1)

Norwegian (Nynorsk)

Basic (A1)

Spanish

Basic (A1)

Common EU Reference for Languages

Technical skills

Identification and isolation of microalgae
and cyanobacteria; culturing techniques
PAM fluorimetry

Biomass characterization (lipids, protein,
polysaccharides, pigments, organic C and
N) with spectrophotometric methods,
GC-MS/MS and CHN analyser

Ion chromatography for nutrient
analyses (N, P, S)

Ecotoxicity bioassays

Toxins determination LC-MS/MS

Molecular techniques (DNA extraction,
PCR, cloning, genome data analysis)

Statistical data analysis and processing

IT skills

Advance user:

Office © suite, Windows operating
system, Mendeley Ltd, PAST 3.0

Basic knowledge:

UNIX shell command, R, OriginLab,
ArcGIS/QGIS, MEGA, antiSMASH

Relevant publications

Simonazzi M. et al. 2025. Bioresource
Technology, 435, 132869
<https://doi.org/10.1016/j.biortech.2025.132869>

Simonazzi M. et al. 2024. Chemosphere,
364, 142976
<https://doi.org/10.1016/j.chemosphere.2024.142976>

Simonazzi M. et al. 2024. Algal Res, 82,
103648
<https://doi.org/10.1016/j.algal.2024.103648>

Pezzolesi L. et al. 2023. Algal Res, 74,
103196
<https://doi.org/10.1016/j.algal.2023.103196>

Simonazzi M. et al. 2022. Int. J. Environ.
Res. Public Health, 19(21), 14075
<https://doi.org/10.3390/ijerph192114075>

Simonazzi M. et al. 2021. International
Journal of Biological Macromolecules,
191 (2021) 92-99
<https://doi.org/10.1016/j.ijbiomac.2021.09.054>

Education

2019 – 2023 **PhD in Earth, Life and Environmental Sciences (35th cycle)**, University of Bologna (Italy) [SSD BIO/01]. Toxic cyanobacteria in water intended for drinking purpose: improvement of cells and toxins' analyses and of treatments for their removal.

2014 – 2017 **M.Sc. Marine Biology**, University of Bologna, Italy. 110/110 cum laude

2011 – 2014 **B.Sc. Biological Sciences**, University of Urbino, Italy. 109/110

2006 – 2011 **State Scientific Highschool**, Liceo Scientifico G. Marconi Pesaro, Italy. 100/100

Scientific production

H-index 4, total number of citations: 73 (Scopus, accessed on Nov. 20th, 2025)

Co-authoring 9 publications peer-reviewed journals (6 as first-author, 3 as co-corresponding author)

Conferences 4 posters and 14 oral communications at national and international conferences

Research experience

01 Mar 2024–
PRESENT **Post-doc research fellow**, University of Bologna, Italy. Project: Cyanotoxins oxidation by atmospheric plasma, a green technology for water decontamination – PLASMADETOX, 2022EFEEKR - CUP J53D23008640 006.

01 Mar 2023–
29 Feb. 2024 **Post-doc research fellow**, University of Bologna, Italy. Project: Microalgae as circular ingredients to reduce the carbon footprint in aquaculture feeds. CN Biodiversity Spoke2 Activity3 “Action 3.1 Circular feeds for carbon neutrality” – PNNR Project

01 Nov. 2021–
01 Mar. 2022 **Research mobility**, University of Helsinki, Finland. Discovery of new secondary metabolites from cyanobacteria through bioinformatics. Erasmus+ Mobility for Traineeship.

01 Nov. 2019–
01 Jan. 2023 **PhD candidate**, University of Bologna, Italy. Project: Distribution of cyanobacteria and their toxins in Emilia Romagna freshwater reservoirs and evaluation of the effectiveness of drinking water treatments

06 May 2019–
31 Oct. 2019 **Post-graduate scholarship**, University of Bologna, Italy. Inter-laboratories procedures for calibration of fluorometric tools used in microalgae and cyanobacteria detection in drinking water

11 Jun. 2018–
11 Dec. 2018 **Post-graduate scholarship**, University of Bologna, Italy. Spectrophotometric methods and fluorometric probes for cyanobacteria monitoring in drinking water

30 Nov. 2016–
14 Dec. 2017 **Trainee graduating student**, University of Bologna and Micoperi Blue Growth, Ravenna, Italy. (M.Sc. Thesis preparation)

18 Jan. 2016–
18 Apr. 2016 **Trainee**, Fjordforsk A/S, Norway. Evaluation of marine fish population decline along Norwegian coasts due to local pollution. Erasmus+ Mobility for Traineeship.

Teaching activities

2025 **Adjunct professor (22 h)**, University of Bologna, Italy. “Experimental Marine Laboratory (Module 2)” (M.Sc. students)

2019 – 2025 **Teaching tutor (20 h)**, University of Bologna, Italy. “Plant biology” (B.Sc. students)

2018 – 2022 **(Co)-Supervisor of 11 M.Sc. and 5 B.Sc. thesis**. University of Bologna

Third mission

22 May 2024 **Unione Bolognese Naturalisti**, Bologna, Italy. Seminar (2 h). Lecture's title: Cianobatteri nelle acque destinate alla potabilizzazione: rischi e vantaggi per l'uomo.

2020 – present **Notte Europea dei Ricercatori**, University of Bologna, Italy. Dissemination activities on microalgal and cyanobacterial research; mixed audience (age 5-99)

13 Apr. 2021 **Career counselling seminar for high school students (2 h)**, online. Lecture's title: From environment to industry: blue biotechnologies for the production of natural compounds from microorganisms. ISCOM-ER (Istituto per lo Sviluppo del Commercio e del Turismo dell'Emilia-Romagna, Ente di formazione di Confcommercio Emilia-Romagna)

Training courses

03 Feb. 2020–
07 Feb. 2020 **Metabarcoding and metagenomic data processing and analyses: a practical overview**. Stazione Zoologica Anton Dohrn, Naples, Italy

29 Jul. 2019–
02 Aug. 2019 **Determination Course of Freshwater and Terrestrial Cyanobacteria**. University of South Bohemia, Czech Republic

19-22
Feb. 2018 **Theoretical-practical course of Multi-techniques for the study of the ecology of phytoplankton**. Società Italiana di Biologia Marina (SIBM), University of Naples Federico II, Italy

Awards

2022 **Best Talk Award**. VIII International Plant Science Conference (IPSC). € 150 book voucher for Koeltz Botanical Books

2020 **Best Poster Award**, NaToxAq-Natural Toxins: Environmental Fate and Safe Water Supply. International conference 24th-25th September 2020 (online).