



# 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**  
Via della Grotta, 31, 47853, Coriano (RN), Italy  
**Contacts**  
 (+39) 3401843088 · [mara.simonazzi2@unibo.it](mailto:mara.simonazzi2@unibo.it)  
<https://www.unibo.it/sitoweb/mara.simonazzi2>

## 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

## Publications

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>  
Simonazzi M., et al. 2019. Bioresource Technology, 292, 121921  
<https://doi.org/10.1016/j.biortech.2019.121921>

## Education

2019 – 2023 **PhD in Earth, Life and Environmental Sciences (35th cycle)**, University of Bologna (Italy) [SSD BIO/01]. Thesis: 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

H-index **3**, total number of citations: **32** (Scopus, accessed on Sep. 18th, 2024)  
Co-authoring **6** publications peer-reviewed journals (**5** as first-author, **3** as co-corresponding author)  
Conferences **3** posters and **10** 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

2019 – 2024 **Teaching tutor**, University of Bologna, Italy. “Plant biology” (B.Sc. students)  
2018 – 2022 **(Co)-Supervisor of 8 M.Sc. and 3 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– **Metabarcoding and metagenomic data processing and analyses: a practical overview**. Stazione Zoologica Anthon Dohrn, Naples, Italy  
07 Feb. 2020  
29 Jul. 2019– **Determination Course of Freshwater and Terrestrial Cyanobacteria**. University of South Bohemia, Czech Republic  
02 Aug. 2019  
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 24<sup>th</sup>-25<sup>th</sup> September 2020 (online).