



CV Date

09/05/2023

Part A. PERSONAL INFORMATION

First Name	Maria Vittoria		
Family Name	Barbieri		
Sex	Female	Date of Birth	13/03/1992
ID number Social Security, Passport	Y5374942V		
URL Web	https://www.researchgate.net/profile/Maria-Vittoria-Barbieri		
Email Address	maravittoria92@gmail.com		
Open Researcher and Contributor ID (ORCID)	0000-0001-6811-597X		

A.1. Current position

Job Title	Postdoctoral Researcher		
Starting date	2023		
Institution	INSTITUTO DE DIAGNOSTICO AMBIENTAL Y ESTUDIOS DEL AGUA		
Department / Centre			
Country	Spain	Phone Number	
Keywords	Analytic chemistry; Environmental chemistry; Environmental risk assessment; Environmental impacts (environment, fisheries and aquaculture interactions); Food contamination		

A.2. Previous positions (Research Career breaks included)

Period	Job Title / Name of Employer / Country
2022 - 2023	Postdoctoral Researcher / University of Montpellier / France
2021 - 2022	Postdoc - EU-FORA fellow / European Food Safety Authority - Institute of Biochemistry and Cell Biology (IBBC-CNR) / Italy
2017 - 2021	PhD student / Instituto de Diagnóstico Ambiental y Estudios del Agua (IDAEA-CSIC) / Spain
2017 - 2017	Unipharma-graduates fellow / Universitat de Barcelona / Spain
2015 - 2017	Internship training / Italian National Research Council / Italy

A.3. Education

Degree/Master/PhD	University / Country	Year
PhD in Analytical and Environmental Chemistry	Universitat de Barcelona / Spain	2021
Master degree in Biology, Ecology and Applied Anthropology	University of Rome Tor Vergata / Italy	2017
Bachelor degree in Biology	University of Tuscia / Italy	2014

Part B. CV SUMMARY

Maria Vittoria Barbieri holds a PhD cum laude in Analytical Environmental Chemistry by the University of Barcelona and currently works as Postdoctoral Researcher at the IDAEA-CSIC (Spain).

She was working as Postdoctoral Researcher in 2022 at the University of Montpellier (France) and in 2021 at the Institute of Biochemistry and Cell Biology (IBBC) of the Italian National Research Council (CNR) (Naples, Italy), where she was awarded with the European Food Risk Assessment Fellowship (EU-FORA) funded by the European Food Safety Authority (EFSA) to conduct her own research as principal researcher. She developed her doctoral studies between 2017 and 2021 at the Institute of Environmental Assessment and Water Research (IDAEA) of the Spanish Council for Scientific Research (CSIC) in Barcelona. Previous to this, she was granted with the European Unipharma-Graduates fellowship, funded by the Sapienza

University of Rome (Italy), to continue her research career at the University of Barcelona. In 2016, she carried out her master's final work in Rome at the Water Research Institute of the Italian National Research Council (IRSA-CNR).

Her main field of expertise is the environmental analysis of emerging contaminants by analytical methodologies based on separation techniques and mass spectrometry. The scientific interests and objectives of her research focus on the development of new analytical methodologies such as liquid chromatography coupled to mass spectrometry (LC-MS/MS) for the study of the occurrence and fate of currently used pesticides and other anthropogenic contaminants (and their transformation products) in environmental samples (water, sediment, biota) and food samples. She also works on high-resolution mass spectrometry (HRMS) techniques for the identification of non-target pollutants and formation of metabolites, assessing their impact and significance for the environment and human health, and proposing ways to eliminate them via natural processes and bioremediation techniques.

Maria Vittoria Barbieri has participated as principal researcher in one European project funded by EFSA, and as team member in 7 international and 2 national R&D projects financed in public calls, and in 1 contract with external companies. She has published 14 SCI papers, being first author in 8 of them (3 in first coauthorship) (H-index 8, 240 citations) and has presented >20 contributions in national and international conferences. She is member of various national and international societies (SECYTA, SETAC), nets (NORMAN Network, EU-FORA Alumni), and she contributed as peer-reviewer in the scientific journals Scientific Reports, Science of the Total Environment, Journal of Environmental Management, Environmental Pollution, Chemosphere and Sensors. She volunteered and cooperated in the organization of R&D activities (scientific conferences, meetings, workshops) as a member of scientific societies and team member of European and international projects. She was awarded with several grants and/or scholarships for university excellence to carry out her studies and research in national and international programmes.

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Most important publications in national or international peer-reviewed journals, books and conferences

AC: corresponding author. (nº x / nº y): position / total authors. If applicable, indicate the number of citations

- 1 **Scientific paper.** Peris A.; Barbieri M.V.; Postigo C.; Rambla-Alegre M.; Lopez de Alda M.; Eljarrat E.2022. Pesticides in sediments of the Ebro River Delta cultivated area (NE Spain): Occurrence and risk assessment for aquatic organisms. Environmental Pollution. 305, pp.119239.
- 2 **Scientific paper.** Rodrigues A.C.M.; Barbieri M.V.; Febbraio F.2022. Monitoring of pesticide amount in fruit and vegetables by a fluorescence-based sensor. EFSA Journal. 20-S1, pp.200419.
- 3 **Scientific paper.** Barbieri M.V.; Rodrigues A.C.M.; Febbraio F.2022. Monitoring of pesticide amount in water and drinkable food by a fluorescence-based biosensor. EFSA Journal. 20-S1, pp.200403.
- 4 **Scientific paper.** Rodrigues A.C.M.; Barbieri M.V.; Chino M.; Manco G.; Febbraio F.2022. A 3D printable adapter for solid-state fluorescence measurements: the case of an immobilized enzymatic bioreceptor for organophosphate pesticides detection. Analytical and Bioanalytical Chemistry. 414, pp.1999-2008.
- 5 **Scientific paper.** Rodrigues A.C.M.; Barbieri M.V.; Chino M.; Manco G.; Febbraio F.2022. A FRET Approach to Detect Paraoxon among Organophosphate Pesticides Using a Fluorescent Biosensor. Sensors. 22(2)-561.
- 6 **Scientific paper.** Palma P.; Fialho S.; Lina A.; López de Alda M.(6/9). 2021. Occurrence and risk assessment of pesticides in a Mediterranean Basin with strong agricultural pressure (Guadiana Basin: Southern of Portugal). Science of the Total Environment. 794-148703.

- 7 **Scientific paper.** Hu K.; Barbieri M.V.; Lopez-Garcia E.; Postigo C.; López de Alda M.; Caminal G.; Sarrà M.2021. Fungal degradation of selected medium to highly polar pesticides by *Trametes versicolor*: kinetics, biodegradation pathways, and ecotoxicity of treated waters. *Analytical and Bioanalytical Chemistry*. 414, pp.439-449.
- 8 **Scientific paper.** Barbieri M.V.; Peris A.; Postigo C.; Moya-Garcés A.; Monllor-Alcaraz L.S.; Rambla-Algere M.; Eljarrat E.; López de Alda M.2021. Evaluation of the occurrence and fate of pesticides in a typical Mediterranean delta ecosystem (EBRO RIVER delta) and risk assessment for aquatic organisms. *Environmental Pollution*. 274-115813.
- 9 **Scientific paper.** Postigo C.; Ginebreda A.; Barbieri M.V.; López de Alda M.(3/15). 2021. Investigative monitoring of pesticide and nitrogen pollution sources in a complex multi-stressed catchment: The lower Llobregat River basin case study (Barcelona, Spain). *Science of the Total Environment*. 755-142377.
- 10 **Scientific paper.** Barbieri M.V.; Monllor-Alcaraz S.; Postigo C.; López de Alda M.2020. Improved fully automated method for the determination of medium to highly polar pesticides in surface and groundwater and application in two distinct agriculture-impacted areas. *Science of the Total Environment*. 745-140650.
- 11 **Scientific paper.** Hu K.; Torán J.; López-García E.; Blánquez P.(4/9). 2020. Fungal bioremediation of diuron-contaminated waters: Evaluation of its degradation and the effect of amendable factors on its removal in a trickle-bed reactor under non-sterile conditions. *Science of the Total Environment*. 743-140628.
- 12 **Scientific paper.** Urbina A.; Llor N.; Barbieri M.V.; Bosch J.; Amat M.2020. Enantioselective formal synthesis of the marine macrolide (-)-callyspongiolide. *Chemical Communications*. 56-41, pp.5536-5539.
- 13 **Scientific paper.** Barbieri M.V.; Postigo C.; Monllor-Alcaraz S.; Barceló D.; López de Alda M.2019. A reliable LC-MS/MS-based method for trace level determination of 50 medium to highly polar pesticide residues in sediments and ecological risk assessment. *Analytical and Bioanalytical Chemistry*. 411-30, pp.7981-7996.
- 14 **Scientific paper.** Barbieri M.V.; Postigo C.; Guillem-Argiles N.; Monllor-Alcaraz S.; Izabelle-Simionato J.; Stella E.; Barceló D.; López de Alda M.2019. Analysis of 52 pesticides in fresh fish muscle by QuEChERS extraction followed by LC-MS/MS determination. *Science of the Total Environment*. 653, pp.958-967.

C.3. Research projects and contracts

- 1 **Project.** INWAT- develop new and improved methods to support the management of temporary waterways and aquifers in Mediterranean river basins. PRIMA programme (Horizon2020). (University of Montpellier - HydroSciences Group). 01/07/2019-30/06/2023. Team member.
- 2 **Project.** GP/EFSA/ENCO/2018/05, Monitoring of pesticide amount in water and drinkable food by a fluorescence-based biosensor and food risk assessment. European Food Safety Authority (EFSA). (Institute of Biochemistry and Cell Biology (IBBC-CNR)). 01/02/2021-31/01/2022. Principal investigator.
- 3 **Project.** 727450, WATERPROTECT - Innovative tools enabling drinking water protection in rural and urban environments. European Union (Horizon 2020). (INSTITUTO DE DIAGNOSTICO AMBIENTAL Y ESTUDIOS DEL AGUA). 01/06/2017-30/05/2020. 4.997.006,5 €. Team member.
- 4 **Project.** CMT2016-75587-C2-2-R, BECAS - Desarrollo de metodologías analíticas para la determinación de plaguicidas en aguas y suelos y su aplicación en la evaluación de nuevos procesos de bioremedición ambiental. Ministerio de Economía y Competitividad. (INSTITUTO DE DIAGNOSTICO AMBIENTAL Y ESTUDIOS DEL AGUA). 01/01/2017-31/12/2019. 100.000 €. Team member.
- 5 **Project.** FP7-ENV-2014, GLOBAQUA - Managing the effects of multiple stressors on aquatic ecosystems under water scarcity. European Union. (INSTITUTO DE DIAGNOSTICO AMBIENTAL Y ESTUDIOS DEL AGUA). 01/02/2014-31/12/2019. 899.177 €. Team member.
- 6 **Project.** CM1407, NATCHEMDRUGS - Challenging organic syntheses inspired by nature - from natural products chemistry to drug discovery. European Union. (Universitat de Barcelona). 16/03/2015-15/03/2019. 657.908,19 €. Team member.

- 7 Project.** 603437, SOLUTIONS-Solutions for present and future emerging pollutants inland and water resources management. European Union. (INSTITUTO DE DIAGNOSTICO AMBIENTAL Y ESTUDIOS DEL AGUA). 01/11/2013-31/10/2018. 349.944 €. Team member.
- 8 Project.** ALT20-03- 0145-FEDER- 000004, ALOP - ALentejo Observation and Prediction systems: analysis de pesticidas y farmacos. Instituto Politécnico de Beja. (INSTITUTO DE DIAGNOSTICO AMBIENTAL Y ESTUDIOS DEL AGUA). 01/01/2018-31/01/2018. 21.128,21 €. Team member.
- 9 Project.** 600407, RITMARE- Support integrated policies for the safeguard of the environment (the health of the sea); Enable sustainable use of resources (the sea as a system of production); Implement a strategy of prevention and mitigation of natural impacts (the sea as a risk factor). Italian Ministry. (Institute of Water Research (IRSA-CNR)). 2012-2016. 250.000.000 €. Team member.
- 10 Contract.** Directiva Marco del Agua - Análisis de compuestos plaguicidas polares en la red de control de les aguas subterráneas Institut Català de Recerca de l'Aigua (ICRA). (INSTITUTO DE DIAGNOSTICO AMBIENTAL Y ESTUDIOS DEL AGUA). 01/01/2017-01/01/2018. 71.464 €.