

Maria Cuenca Cambroneró

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Research experience

Dec 2024 –	Postdoc senior , University of Vic, Aquatic ecology group (GEA). TRANSPONDER project. Functional diversity and environmental factors. Leading contribution and coordination of WP4
March 2021 – Nov 2024	Postdoc senior , University of Vic, Aquatic ecology group (GEA). PONDERFUL project. Biodiversity-Ecosystem function relationship Leading contribution to WP2
March 2019 – Feb 2021	EMBO Postdoc fellowship , Eawag, Department of Fish Ecology and Evolution. Project: Eco-Evolutionary feedback of zooplankton communities after eutrophication periods on artificial ponds. Leading researcher: Dr. Maria Cuenca
August - October 2013	Field assistant , Group of study of cetaceans in the Cotentin, Normandie, France. Project: "Study and preservation of marine mammals in the English Channel".
February- August 2013	Field technician , Department of Evolutionary Ecology of Doñana Biological Station (CSIC), Seville, Spain. Project I: "Communication costs and evolution of begging signals" Project II: "Effects of native and exotic predators on amphibian larvae" Project III: "Effects of habitat alteration on the habitat use of the Red-necked Nightjar"

Education

- April 2014 - July 2018. **PhD** in the Environmental Genomics Group at the University of Birmingham, UK.
 Thesis title: "Documenting long-term impact of eutrophication and Climate Change on the keystone species *Daphnia magna* using resurrection ecology and paleogeomics".
 Supervisors: Dr. Luisa Orsini and Prof. John Colbourne.
- Oct. 2011 - Oct. 2012. **MSc** in Biodiversity and Conservation Biology at Pablo de Olavide University, Seville, Spain.
 Research project: "Inbreeding effects of Iberian Lynx (*Lynx pardinus*) ex situ".
 Supervisor: Dr. Jose A. Godoy. Department of Integrative Ecology (EBD-CSIC).
- Sep. 2008 - Sep. 2009. **International MSc** of Science in Marine Biodiversity and Conservation (EMBC+) at the University of Bremen, Germany. *MSc as part of the Erasmus Fellow*.
- Sep. 2005 - Sep. 2011. **BSc** in Biology at the University of Valencia, Spain.
 Research Project: "Physiology of marine molluscs reproduction (PhyMR)". *Project completed as part of the Erasmus Practical Fellow*.
 Supervisor: Prof. Pascal Sourdain. Department of Biology of Marine Molluscs and Ecosystem Associated. University of Caen, France.

Publications

Accepted:

18. Fehlinger, L., **Cuenca-Cambroneró, M.**, *et al*, (2025) Europe's Mountain ponds under pressure: ecology and management in times of global change. *Inland water* [DOI].
17. Rincon-Palau, K., Badosa, A., **Cuenca-Cambroneró, M.**, Trochine, C., Sgarzi, Serena., Quintana D. X., Boix, D., Brucet, S. (2025) The size structure of zooplankton communities reflects better the trophic status of Mediterranean ponds than the taxonomic structure. *Freshwater biology* [DOI].
16. Bartrons, M., Jang, J., **Cuenca-Cambroneró, M.**, *et al*, (2025) Why ponds concentrate nutrients: the roles of internal features, land use, and climate, *Hidrobiologia* [DOI].
15. Lopez-De Sancha, A., Benejam, L., Boix, D., **Cuenca-Cambroneró, M.**, *et al*, (2025) Drivers of amphibian species richness in European ponds. *Ecography* [DOI].

14. King, R.L., Courtney-Mustaphi, J.C., **Cuenca-Cambroneró, M.**, Heiri, O., Seehausen, O., and Matthews, Blake. (2024) Past food web dynamics of Lake Victoria examined using sedimentary invertebrate remains. *Freshwater Biology* [DOI].
13. Ngoepe, N., Wienhues, G., Temoltzin-Loranca, Y., Grosjean, M., King, L., Mathews, B., **Cuenca-Cambroneró, M.**, *et al*, (2023) A continuous 17Ka fossil record from Lake Victoria reveals key insights into the process of adaptive radiation. *Nature* [DOI].
12. Chaturvedi, A., Dhandapani, V., Li, X., Marshall, M., Kissane, S., Jackson, C., Mirbahai, L., **Cuenca-Cambroneró, M.**, *et al*, (2023) The hologenome of *Daphnia magna*: challenges at genome, transcriptome, and epigenome levels. *Nucleic Acid Research* [DOI].
11. Hudson, H.C., **Cuenca-Cambroneró, M.**, Moosmann, M., Narwini, A., Spaak, P., Seehausen, O., Matthews, B. (2023) Environmentally independent selection for hybrids between divergent freshwater stickleback lineages in semi-natural ponds. *Journal of Experimental Biology* [DOI].
10. **Cuenca-Cambroneró, M.**, *et al*, (2023) Changes and opportunities in the use of ponds and pondscapes and Nature-based Solutions. Contribution to the Special Issue, *Hydrobiologia* [DOI].
9. **Cuenca-Cambroneró, M.**, *et al*, (2022) An integrative paleolimnological approach for studying evolutionary processes. *Trends in Ecology and Evolution* [DOI].
8. Moosmann, M., **Cuenca-Cambroneró, M.**, De Lisle S., Greenway, R., Lürig, D.M., Hudson, H.C., Matthews, B. (2021) On the evolution of trophic position. *Ecology letter.* [DOI].
7. **Cuenca-Cambroneró, M.**, Pantel, H.J., H., Marshall, Nguyen, T.T.T., Tomero-Sanz, H., Orsini, L. (2021) Evolutionary mechanisms underpinning fitness response to multiple anthropogenic stressors in *Daphnia*. Invited contribution to the Special Issue of *Evolutionary Applications* [DOI].
6. Toyota, K., **Cuenca-Cambroneró, M.**, *et al*, (2019) Transgenerational plasticity in response to earlier spring warming in *Daphnia*. *Scientific reports* [DOI].
5. **Cuenca-Cambroneró, M.**, *et al*, (2018), Predictability of the impact of multiple stressors on the keystone species *Daphnia*. *Scientific reports* [DOI].
4. **Cuenca-Cambroneró, M.**, Beasley, J., Kissane, K., and Orsini, L. (2018) Evolution of thermal tolerance in multifarious environments. *Mol Ecol.* [DOI].
3. **Cuenca-Cambroneró, M.**, Zeis, B., and Orsini, L. (2017) Haemoglobin-mediated response to hyper-thermal stress in the keystone species *Daphnia magna*. Invited contribution to the Special Issue of *Evolutionary Applications*. [DOI].
2. **Cuenca-Cambroneró, M.**, and Orsini, L. (2017), Resurrection of dormant *Daphnia*: protocol and applications. *JoVE* [DOI].
1. Orsini, L., Marshall, H., **Cuenca-Cambroneró, M.**, Chaturvedi, A., Thomas, K.W., Pfrender, M. E., Spanier, K.I. and De Meester, L. (2016) Temporal genetic stability in natural populations of the waterflea *Daphnia magna* in response to strong selection pressure. *Mol Ecol.* [DOI].

Book Chapters

- Cuenca-Cambroneró, M.**, Niamh and Orsini, L. 2025 Resurrection ecology reimaged: leveraging *Daphnia* for evolutionary insights, environmental monitoring, and bioremediation. *Published by the Royal Society of Chemistry (Under review)*.

In review / in preparation

6. **Cuenca-Cambroneró, M.**, *et al*, (2025) Biodiversity enhances pond ecosystem multifunctionality across Europe. *Nature Ecology and Evolution (Under review)*
5. Rincon-Palau, K., Badosa, bartrons, M., Beklioglu, M., **Cuenca-Cambroneró, M.**, *et al*, Zooplankton size structure reflects the trophic status of ponds along a latitudinal gradient (2025) *Limnology and Oceanography (Under review)*
4. Rincon-Palau, K., Badosa, A., Boissezon, Boix, D., **Cuenca-Cambroneró, M.**, *et al*, (2025) Zooplankton size structure in European ponds: Local factors override latitudinal differences. *Hydrobiology (Under review)*.
3. Wigns, R., Fajenblat, M., Lemmens, P., **Cuenca-Cambroneró, M.**, *et al*, Climate and land use as key drivers of biodiversity in European Ponds (2025) (*in prep*).
2. Mehner, T., Bartrons, M., Lotian, M., Hasnain, S., Trochine, C., Meerhoff, M., Wijns, R., Von Plüskow, L.M., **Cuenca-Cambroneró, M.**, Rincon-Palau, K., Beklioglu, M., Brucet, S., Lemmens, P. (2025). Effect of land use on community assemblage of European Ponds (*in prep*).
1. Shahzadi, I., Brucet, S., **Cuenca-Cambroneró, M.** (2026). Zooplankton functional traits and its importance for pond ecosystem functions: a systematic review (*in prep*).

Approved research projects and funding

Period	Grant name	Role	Value
2023-2026	Biodiversa+2022 and Spanish Ministry of Science.	Co-leading	115.000€
2022-2023	UVic-UCC - outreach activities grant.	Co-leading	1000€
2021-2022	UVic-UCC- outreach activities grant.	Leading	1750€
2019-2021	EASI-genomics grant.	Leading	10.000€
2019-2021	EMBO - Long term postdoctoral fellowship.	Leading	140.000€

Awards and travel grants

Period	Travel grants and awards	Value
2024	University of Vic stay grant .	570€
2023, 2024 & 2025	University of Vic travel grant	200€
2021	Third best talk prize of Society of wetland Scientific, European Meeting	100€
2017	Best talk prize at Bioscience Graduate Research Symposium, Birmingham	200€
2017	Spanish Research United Kingdom travel grant	500£
2015, 2017 & 2018	University of Birmingham travel grant	500€

Research expeditions

Feb 2025	Internship in Prof Manuel Delgado-Baquerizo's lab. Statistical analysis with SEM, species networking and EMF. IRNAS-CSIC, Seville, Spain
March 2016	Internship in Dr. Andrew Beckerman's laboratory. Statistical analyses in R. University of Sheffield, UK.
April-May 2014	Internship in Prof. Luc De Meester's laboratory. Resurrection ecology techniques. KU Leuven, Belgium.

Supervision and mentoring

PhD	Irum Shahzadi	Main supervisor	Jul 2025 - present
	Katterine J. Rincon-Palau	Third supervisor	Jan-Aug 2022
BSc final project	Tien Nguyen & Louisa Hampson	Co-supervisor	Oct 2016 - Mar 2017
	Eliot Jones	Co-supervisor	Oct - Dec 2015
MSc project	Hollie Marshall	Co-supervisor	Oct 2014 - May 2015
	Alberto Valdivieso & Beatriz Garcia	Co-supervisor	Feb - Jul 2016
Erasmus student	Clara Zambrana	Co-supervisor	Oct - Dec 2015
	Julian Garcia & Camino Ruano	Co-supervisor	Jun - Aug 2015
	Hannah Tilley	Co-supervisor	Oct 2014 - Feb 2015
Summer student	Zoe Stroud	Co-supervisor	Jun - Sep 2014

Teaching activities

Module	Level	Period
Evolution – UVic, Spain	3 rd yr BSc	Dec 2022, 2023 & 2024
Scientific communication skills – UVic, Spain	1 st yr BSc	Nov 2024
Global change - UVic, Spain	4 th yr BSc	Feb-May 2023 & 2024
Applied biostatistics I - U. Bern, Switzerland	1 st yr BSc	Sep-Dec 2020
Practical in aquatic ecology and evolution - U. Bern	1 st yr BSc	April 2019
Bioinformatics and basic programming in R - UofB, UK	MSc	Nov 2017
Evolution of humans and other animals - UofB, UK	1 st yr BSc	Oct 2016 & 2017
Plant Science: From cells to environment - UofB, UK	2 nd yr BSc	Oct 2016 & 2017
Animal Biology - UofB, UK	1 st yr BSc	Feb 2016
Molecular biology and its applications - UofB, UK	2 nd yr BSc	Oct-Nov 2015
Skills for Biosciences (Focus - microbiology) - UofB, UK	1 st yr BSc	Oct 2015 & 2016
Introduction to Evolution and Animal biology - UofB, UK	1 st yr BSc	Nov 2014, 2015 & 2016
Practical on Daphnia - UofB, UK	1 st yr BSc	Oct 2014, 2015, 2016 & 2017

Other academic merits and activities

ANECA accreditation of scientific trajectory - Sexennial	Sep 2025
ANECA Spanish accredited as contracted professor doctor	Mar 2024
Expert researcher at BECA (Bank of Collaborating Experts at AEI , Spain)	Oct 2024 -
Editor of the Special issue of Hydrobiologia	Sep 2024 -
Member of the Education Committee of SIL	May 2024 -
Member at the societies of: SIL, SIBECOL and BES	Feb 2024, Jan 2023, and Mar 2021
Secretary of the Spanish Researchers in UK (SRUK)	Apr 2015 - Apr 2017
Reviewer for journals: Freshwater biology, Global Change Biology, Science of Total Environment Journal, Wetlands, The Proceedings the Royal Society B, Knowledge and Management of Aquatic Ecosystems, Evolutionary Ecology, Evolution, Ecology and Evolution, Hydrobiologia, Evolutionary Applications, and Annals of the Brazilian Academy of Sciences	<i>A total of 27 revisions in 12 journals</i>

Invited seminars

- 21/02/2025: **Invited speaker** at the University of Leuven, Belgium.
- 15/11/2018: **Invited speaker** at the Biological Station of Doñana (CSIC). Seville, Spain
- 19/11/2018: **Invited speaker** in the “Ecological seminar and discussion Series: Science Chat” at Bremen University (Germany).

Most relevant conferences and symposiums (Last 5 years):

May 2025 - Huelva, Spain	Workshop: Conserving and restoring temporary ponds landscapes in Europe - Invited speaker
Jun 2025 - Pontevedra, Spain	SIBECOL-AEET Congress - Symposium convener
May 2024 - Foz Do Iguaço, Brazil	SIL: International Society of Limnology - Symposium convener and speaker
Sep 2023 - Lancaster, UK	BESAG: British Ecology Society Aquatic Group - Invited speaker
Aug 2022 - Davos, CH	WBF: World Biodiversity forum - Symposium convener
Jun 2022 - Geneve, CH	IntEcol: International Ecology conference - Symposium convener and speaker
Jun 2021 - Online	SWS: Society of Wetlands scientific: 16 th SWS Europe Chapter Meeting. Speaker with third best talk prize

Outreach

- 16/02/2024. Woman and girls in science. School Bonifacio Sotos (Albacete).
- 27/09/2023. Invited speaker at the European night of science.
- 03/05/2023 and 13/03/2023. Article in the UVic newspaper, L'Apunt ([link](#) & [link](#))
- 11/03/2022. Article in the local newspaper of Osona, El9Nou ([Pdf](#))

Training and development

- **March 2022. EMBO Communication research:** paper writing and short presentation. Online
- 6 workshops days/2020. Connecting **Women's career in Academy and Industry**. Switzerland
- Nov 2020. **EMBO laboratory leadership**. Online course
- Jan 2017. **Population Genomics Workshop**. University of Sheffield, UK.
- Mar 2015. **Environmental genomics** course. University of Birmingham, UK
- April 2013. Course of **ArcGIS**. EBD-CSIC, Seville, Spain
- Feb 2013. Course on advance **statistic in R**. EBD-CSIC, Seville, Spain.

Languages skills

Native Language: Spanish

Language	Reading	Speaking	Writing
English	Advanced	Advanced	Advanced
French	Intermediate	Intermediate	Intermediate
German	Basic	Basic	Basic