

CURRICULUM VITAE

Part A. PERSONAL INFORMATION

CV date	15/10/2025
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First name	Laura		
Family name	Guerrero Meseguer		
Gender (*)	Female	Birth date (dd/mm/yyyy)	23/02/1987
Social Security, Passport, ID number	48616536X		
e-mail	lguerrero@imedea.uib-csic.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0003-1364-2718	

A.1. Current position

Position	Postdoctoral researcher		
Initial date	31/07/2022		
Institution	Mediterranean Institute of Advanced studies (IMEDEA-UIB-CSIC)		
Department/Center	Marine Research in Ecological and Social Systems (MARES)		
Country	Spain	Teleph. number	695838801
Key words	seagrass, macroalga, marine ecology, restoration		

A.2. Previous positions (research activity interruptions, see call)

Period	Position/Institution/Country/Interruption cause
November 2014 – December 2016	Researcher/University of Murcia/Spain
May 2019 – October 2022	Researcher/ CIIMAR/ Portugal
March 2022 – July 2022	Postdoctoral researcher/ University of Balearic Islands/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Bachelor's in biology (5 years)	University of Murcia (Spain)	2013
Master's degree in management of Aquaculture and Fisheries Resources	University of Murcia (Spain)	2014
PhD in Biodiversity and Environmental Management	University of Murcia (Spain)	2018

Part B. CV SUMMARY

My scientific career is dedicated to advancing knowledge on the ecophysiology and restoration of seagrass meadows, with a special focus on *Posidonia oceanica*. Over the years, my research has evolved from examining the responses of seagrasses to environmental stressors to developing innovative strategies for their restoration. During my PhD and postdoctoral research, I have specialized in investigating the functioning and ecophysiology of the root system of *P. oceanica* transplants (both seedlings and rhizomes), exploring environmental and experimental conditions that enhance root development and improve survival during restoration. Currently, I am leading projects aimed at achieving the micropropagation of *P. oceanica* to produce transplantable material independent of natural populations, thereby enhancing the sustainability and scalability of restoration programs. I have accumulated over 66 months of postdoctoral experience across international institutions, including a 30-month tenure at CIIMAR (Portugal) and my current position at IMEDEA-UIB-CSIC (Spain), supported by *María Zambrano* and *Vicenç Mut* postdoctoral grants. My research has resulted in 16 peer-reviewed papers (13 in Q1 journals, 2 in the first decile), with lead authorship in 11, and participation in 8 research projects (4 EU-funded). I have also trained 14 undergraduate students and supervised 3 MSc theses. Throughout my career, I have worked with six seagrass species (*Posidonia oceanica*, *Cymodocea nodosa*, *Halodule wrightii*, *Ruppia maritima*, *Zostera marina*, *Zostera noltei*). In addition, I have collaborated as co-author on studies addressing

broader aspects of coastal ecosystem ecology, including the biogeography of native and non-indigenous marine macroalgae, marine litter, wrack assemblages, benthic diatoms, and macrofaunal biodiversity.

Part C. RELEVANT MERITS

C.1. Publications

1. **Guerrero-Meseguer, L.**, Encina, C. L., Rubio-Bernal, M., Castejón-Silvo, I., Terrados J. (2025) Disinfection methods to obtain axenic cultures of *Posidonia oceanica* seedlings germinated from beach cast fruits. *Marine Biology* (in press).
2. Marín-Aragón, R., Veiga, P., Sampaio, L., **Guerrero-Meseguer, L.**, Sousa-Pinto, I., Rubal, M. (2024). The role of environment descriptors and seagrass biometrics in shaping macrobenthic assemblages' structure in intertidal *Zostera noltei* meadows. *Marine Environmental Research*, 202, 106756. <https://doi.org/10.1016/j.marenvres.2024.106756>
3. Carreira-Flores, D., Rubal, M., Moreira, J., **Guerrero-Meseguer, L.**, Gomes, P. T., Veiga, P. (2023). Recent changes on the abundance and distribution of non-indigenous macroalgae along the southwest coast of the Bay of Biscay. *Aquatic Botany*, 189, 103685. <https://doi.org/10.1016/j.aquabot.2023.103685>
4. **Guerrero-Meseguer, L.**, Veiga, P., Rubal, M. (2023). Spatio-Temporal Variability of Wrack Along the Northern Portuguese Sandy Beaches. *Estuaries and Coasts*, 46(3), 818-828. **Guerrero-Meseguer, L.**, Veiga, P., & Rubal, M. (2023). <https://doi.org/10.1007/s12237-023-01176-z>
5. **Guerrero-Meseguer, L.**, Veiga, P., Rubal, M. (2022). Flowering effort and reproductive phenology of intertidal colonizing *Zostera marina*. *Estuarine, Coastal and Shelf Science*, 278, 108110. <https://doi.org/10.1016/j.ecss.2022.108110>
6. Sampaio, L., Moreira, J., Rubal, M., **Guerrero-Meseguer, L.**, Veiga, P. (2022). A review of coastal anthropogenic impacts on mytilid mussel beds: effects on mussels and their associated assemblages. *Diversity*, 14(5), 409. <https://doi.org/10.3390/d14050409>
7. Ankel, M., Rubal, M., Veiga, P., Sampaio, L., **Guerrero-Meseguer, L.** (2021). Reproductive Cycle of the Seagrass *Zostera noltei* in the Ria de Aveiro Lagoon. *Plants*, 10(11), 2286. <https://doi.org/10.3390/plants10112286>
8. **Guerrero-Meseguer, L.**, Veiga, P., Sampaio, L., Rubal, M. (2021). Sediment Characteristics Determine the Flowering Effort of *Zostera noltei* Meadows Inhabiting a Human-Dominated Lagoon. *Plants*, 10(7), 1387. <https://doi.org/10.3390/plants10071387>
9. **Guerrero-Meseguer, L.**, Veiga, P., Sampaio, L., & Rubal, M. (2021). Resurgence of *Zostera marina* in the Ria de Aveiro lagoon, Portugal. *Aquatic Botany*, 169, 103338. <https://doi.org/10.1016/j.aquabot.2020.103338>
10. **Guerrero-Meseguer, L.**, Veiga, P., & Rubal, M. (2020). Spatio-temporal variability of anthropogenic and natural wrack accumulations along the driftline: marine litter overcomes wrack in the northern sandy beaches of Portugal. *Journal of Marine Science and Engineering*, 8(12), 966. <https://doi.org/10.3390/jmse8120966>
11. **Guerrero-Meseguer, L.**, Marín, A., Sanz-Lázaro, C. (2020). Heat wave intensity can vary the cumulative effects of multiple environmental stressors on *Posidonia oceanica* seedlings. *Marine Environmental Research* 159:105001. <https://doi.org/10.1016/j.marenvres.2020.105001>
12. **Guerrero-Meseguer, L.**, Cox, T.E., Sanz-Lázaro, C., Schmid, S., Enzor, L.A., Major, K., Gazeau, F., Cebrian, J. (2020). Does Ocean Acidification Benefit Seagrasses in a Mesohaline Environment? A Mesocosm Experiment in the Northern Gulf of Mexico. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-020-00720-5>
13. **Guerrero-Meseguer L.**, Sanz-Lázaro C., Marín A. (2018). Understanding the sexual recruitment of one of the oldest and largest organisms on Earth, the seagrass *Posidonia oceanica*. *PLoS One* 13:e0207345. <https://doi.org/10.1371/journal.pone.0207345>
14. **Guerrero-Meseguer L.**, Marín A., Sanz-Lázaro C. (2017) Future heat waves due to climate change threaten the survival of *Posidonia oceanica* seedlings. *Environmental Pollution* 230:40–45. <https://doi.org/10.1016/j.envpol.2017.06.039>
15. **Guerrero-Meseguer L.**, Sanz-Lázaro C., Suk-ueng K., Marín A. (2017) Influence of substrate and burial on the development of *Posidonia oceanica*: Implications for restoration. *Restoration Ecology* 25:453–458. <https://doi.org/10.1111/rec.12438>
16. Sanz-Lázaro, C., Fodelianakis, S., **Guerrero-Meseguer, L.**, Marín, A., Karakassis, I. (2015). Effects of organic pollution on biological communities of marine biofilm on hard substrata. *Environmental Pollution* 201:17-25. <https://doi.org/10.1016/j.envpol.2015.02.032>

C.2. Congress

1. Poster presentation - Evaluating the effects of auxin application on the transplantation of rhizome fragments of *Posidonia oceanica* in the marine environment. **Guerrero-Meseguer, L.**, Castejón-Silvo, I., Rubio-Bernal, M., Fansa, D., Tribulato, A., Terrados J. 2024 World Seagrass Conference & 15th International Seagrass Biology, Naples (Italy), 17-21 June 2024.
2. Oral presentation - Translocation and nutrient acquisition in a restored *Posidonia oceanica* meadow. Rubio-Bernal, M., **Guerrero-Meseguer, L.**, Rodríguez-Ruiz, Á., Castejón-Silvo, I., Terrados, J. 2024 World Seagrass Conference & 15th International Seagrass Biology, Naples (Italy), 17-21 June 2024.
3. Oral presentation - Diversity and Abundance Patterns of Benthic Invertebrate Assemblages on Intertidal Estuarine Seagrass Beds in Aveiro (Portugal). Aragón, R. M.; Sampaio, L.; **Guerrero-Meseguer, L.**; Veiga, P.; Rubal, M. *2nd International Electronic Conference on Diversity (IECD 2022)*, 1 - 15 March 2022
4. Poster presentation - Abundance and distribution of the non-indigenous macroalgae *Grateloupia turuturu* twenty years after its first record in North Portugal. Marín-Aragón R., **Guerrero-Meseguer L.**, Veiga P., Rubal M. *20º Encontro Nacional De Ecologia*, Ponte de Lima (Portugal), 1-4 December 2021
5. Oral presentation - Changes in the abundance and distribution of non-indigenous macroalgae after seven years. Growing pains in the intertidal. M. Rubal, D. Carreira-Flores, J. Moreira, **L. Guerrero-Meseguer, P. Veiga**. *XVII International Symposium on Oceanography of the Bay of Biscay*. Online, (Spain), 1- 4 June 2021
6. Oral presentation - Sexual reproduction of *Zostera marina* in a human dominated environment, the Ria de Aveiro lagoon. **Guerrero-Meseguer L.**, Veiga P., Rubal M. *XIX Encontro Nacional de Ecologia e Celebração dos 25 anos da SPECO*. Ponte do Lima, Portugal. 9-12 December, 2020.
7. Poster presentation - Sexual reproduction of the seagrass *Zostera noltei* in the Ria de Aveiro lagoon. Ankel M., **Guerrero-Meseguer L.**, Veiga P., Rubal M. *XIX Encontro Nacional de Ecologia e Celebração dos 25 anos da SPECO*. Ponte do Lima (Portugal), 9-12 December, 2020.
8. Porter presentation - Spatio-temporal variability of wrack abundance and composition along the north Portuguese sandy beaches. **Guerrero-Meseguer L.**, Torres C., Veiga P., Rubal M. *XX 20th Iberian Symposium on Marine Biology Studies (SIEBM, Braga, Portugal. 9-12 September 2019*.
9. Poster presentation - Effects of ocean acidification on single and mixed seagrass-species meadows in estuarine waters of the Northern Gulf of Mexico. **Guerrero-Meseguer L.**, Cox T.E., Sanz-Lázaro C., Schmid S., Enzor L.A., Major K., Gazeau F., Cebrian J. *ISBW13 13th International Seagrass Biology Workshop*, Singapore. 11-17 June 2018.
10. Poster presentation - Extreme temperature events may cause severe negative effects in the early stages of the coastal seagrass *Posidonia oceanica*. Guerrero-Meseguer L, Sanz-Lázaro C, Marín A. *ECCA2013 3rd European Climate Change Adaptation Conference*, Glasgow (United Kingdom), 5-8 June 2017.

C.3. Research projects

1. Establecimiento de una plataforma de colaboración para el avance y mejora de las técnicas de replantación de pradera de posidonia oceánica a gran escala en la cuenca del Mediterráneo, Acción Posidonia. IMEDEA, Fundación Ecomar, FDAS, Federación Nacional de Pescadores. Funding: Fundación Biodiversidad. 2024-2026. 807339.29€ (IMEDEA 225861.63€). Part of the scientific team from the IMEDEA.
2. Climate Change and Future Marine Ecosystem Services and Biodiversity, FutureMARES. Comisión Europea. University of Hamburg and 32 more entities, among them CSIC (desde: 1/9/2020 hasta: 31/8/2024).139.836 € (IMEDEA). *Collaborator researcher from March 2022*
3. *Posidonia oceanica* Genome Project, Posigenome. IMEDEA-CSIC, Center for Research in Agricultural Genomics of Barcelona (CRAG) and the University of Oslo (UiO). Funding: IBEROSTAR Foundation. 2021-2022. *Collaborator researcher from March 2022*.
4. Val-Wrack (POCI-01-0145-FEDER-029818) - Wrack as a high value resource in a global warming scenario. Is it worthy to invest on it?. European Union; CIIMAR and University of Porto. Funding: Portugal 2020 & Foundation for Science and Technology (FCT / MCTES). 2018-2021. *Hired researcher From 2019-2021*.
5. ECOS (PTDC / CTA-AMB / 30181/2017) - New tools to evaluate the ecological status of rocky shores and its relationship with ecosystem services. European Union; CIIMAR. Funding: Portugal 2020 & Foundation for Science and Technology (FCT / MCTES). 2018-2021. *Collaborator researcher From 2019-2021*.
6. NEREIDAS (2012-ES-92177) - Implementation of environmental restoration techniques for diminishing the environmental impact of ports: steps towards a new certification. ATISAE; C&C Medio Ambiente;

Universitat Politècnica de Catalunya; Puerto de Melilla; Universidad de Murcia. Funding: European Union & Trans-European Transport Network (TENT-T). 2014-2015. *Hired Researcher from 2014-2015.*

7. POSIPLANT (CTM2011-27377) - Restoration of the seagrass *Posidonia oceanica* with seedlings. Influence of light, nutrients and grazing; IMEDEA and University of Murcia. Funding: Ministry of Science and Innovation. 2011-2014. *Collaborator researcher in 2014.*
8. Improvement in the quality and useful life of sea bream (*Sparus aurata*) through the inclusion in the diet of preservatives from aromatic-medicinal plants” (RTA2009-00145-00-00). IMIDA. Funding: National Institute of Agricultural and Food Research and Technology. 2012-2012. *Internship student from July to September 2012.*

C.4. Contracts, technological or transfer merits

1. Restauración de pradera de *Posidonia oceanica*. Red Eléctrica de España, S.A.U. IP: Jorge Terrados Muñoz, IMEDEA (CSIC-UIB). 2017-2021. 250.128 €. 2022-2025. *Collaborator researcher.*

C.5. Organization of R&D activities

1. Organization of the 3rd Conference of Doctorate of the University of Murcia. 06/30/2017 - 06/01/2017
2. Coordinator of the cycle of scientific seminars of the Doctorate Program in Biodiversity and Environmental Management of the Doctoral School of the University of Murcia (EIDUM). 09/01/2014 - 08/01/2015
3. Organization of the 1st Conference of Doctorate of the University of Murcia. 04/28/2015 - 04/29/2015

C.6. Stays in public or private R&D centres

1. April 2022 and November 2022 – December 2022. Plant Tissue Culture and Biotechnology Laboratory of the "La Mayora" Subtropical and Mediterranean Horticulture Institute (IHSM, CSIC-UMA, Málaga, Spain). Objectives of the stay: experimental research studies on the establishment and in vitro culture of seeds and rhizomes of *Posidonia oceanica*.
2. May 2019 - October 2021. CIIMAR, Porto, Portugal. Objectives of the stay: Postdoctoral training and carry out 2 tasks of the European Val-Wrack project. Tasks performed: Research on seagrass meadows, ecology, and distribution of marine macroalgae, benthic macrofauna and environmental impact of marine litter.
3. February 2017 - May 2017. Dauphin Island Sea Lab (DISL). Alabama, USA. Objectives of the stay: PhD stay. Tasks performed: mesocosm studies on the influence of ocean acidification on seagrass meadows of the Gulf of Mexico: *Halodule wrightii* and *Ruppia maritima*.
4. September 2014. CONTESMA & COMPROTEC S.L.P. Cartagena (Murcia), Spain. Objectives of the stay: laboratory technician to fulfil tasks of the European NEREIDAS project. Tasks performed: Germination and culture of seeds and seedlings of the seagrass *Cymodocea nodosa*.
5. July 2012-September 2012. Aquaculture Center of the Murcian Institute for Agricultural and Food Research and Development (IMIDA). Murcia, Spain. Objectives of the stay: curricular practices in aquaculture. Tasks performed: Collaboration in the INIA project "Improvement in the quality and useful life of sea bream (*Sparus aurata*) through the inclusion in the diet of preservatives from aromatic-medicinal plants" (RTA2009-00145-00-00).

C.7. Supervision of research

Students: 14; Thesis: 3 master's degree, 1 in progress.

Participation as a thesis panel: 1 (vocal member)

C.8. Editorial councils

Guest editor of the journal Sustainability (ISSN 2071-1050, IF: 2.576) for the special issue: “Marine Benthic Ecology and Climate Change Biodiversity of Macroalgae”, 2020

C.9. Prizes, mentions and distinctions

Cum Laude and International mentions in the PhD. Extraordinary Doctorate Award in Biodiversity and Environmental Management, Universidad de Murcia, 27/01/2020