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RESEARCH & TEACHING EXPERIENCE

- August 2023. **Invited Professor** at the Joint Summer School 2023 in Tjärno (Sweden), as part of the International Master of Science in Marine Biological Resources (IMBRSea), coordinated by the University of Ghent.
- January 2023 – June 2023. **Invited (Associated) Professor** at University of Algarve (Faro, Portugal).
- March 2019 – present. **Postdoctoral Researcher** at Centro de Ciências do Mar do Algarve (CCMAR; Faro, Portugal), in the laboratory of Environmental Technologies (lead by Prof. Clara Costa).
- June 2018 – August 2018. **Naturalist and Environmental Educator** at the Galápagos Islands (Ecuador). Company name: Operation Wallacea.
- November 2017 – May 2018. **Visiting Scholar** at Heriot-Watt University (Edinburgh, UK). School of Engineering & Physical Sciences. Supervisor: Dr. Jose Antonio Gutierrez.
- 01/12/2012 – 21/07/2017. **Predoctoral Researcher** at Institut de Ciències del Mar (ICM-CSIC; Barcelona, Spain). Department of Marine Biology and Oceanography. Supervisor: Dr. Franz Peters. During this period, three secondments were conducted at three different European research institutions (see “Funding” section below).
- 01/11/2011 – 31/08/2012. **Research Assistant** at Universidad de Zaragoza (Zaragoza, Spain). Department of Chemical Engineering and Environmental Technologies, EINA. Supervisor: Dr. Maria Peña Ormad.

EDUCATION

21/07/2017. **PhD Marine Sciences**. Thesis title: *Effects of atmospheric deposition on microbial dynamics and composition in two anthropogenically-influenced contrasted coastal sites*. Universitat Politècnica de Catalunya, Barcelona (Spain). Supervisor: Dr. Franz Peters

30/09/2011. **MSc Marine Sciences**. Thesis title: *Determination of *Caretta caretta* foraging areas within the Mediterranean Sea based on their isotopic signature*. Universitat de Barcelona – Universitat Politècnica de Catalunya, Barcelona (Spain). Supervisor: Dr. Luis Cardona

30/06/2010. **BSc Marine Sciences**. Specialty in Oceanography and Marine Pollution. Universidad de Cádiz, Cádiz (Spain).

30/09/2007. **BSc Geology (first-stage degree)**. Universidad de Zaragoza, Zaragoza (Spain).

PEER-REVIEWED SCIENTIFIC PUBLICATIONS

Theses dissertation

- I. Marín Beltrán. Effects of atmospheric deposition on microbial dynamics and composition in two anthropogenically-influenced contrasted coastal sites. PhD in Marine Sciences (2017). Universitat Politècnica de Catalunya, Barcelona. 257 pp.
- I. Marín Beltrán. Determination of *Caretta caretta* foraging areas within the Mediterranean Sea based on their isotopic signature. Master in Marine Sciences (2011). Universitat de Barcelona – Universitat Politècnica de Catalunya, Barcelona.

International journals

10. A. Nobahar, A. Bejiga Melka, **I. Marín-Beltrán**, L. Neves, M. C. Costa, J. Carlier, 2022. Zinc Recovery from an Extreme Copper-Free Acid Mine Drainage: Studying the Prior Separation of Ferric Iron by Solvent Extraction using AliCy and/or Alkalinization. *Journal of Sustainable Metallurgy* 8, pages 1509–1531.

9. Fernández de Villalobos, M. C. Costa and **I. Marín-Beltrán***, 2022. A community of marine bacteria with potential to biodegrade petroleum-based and biobased microplastics. *Marine Pollution Bulletin*, 185 (Part A): 114251 (OA) <https://doi.org/10.1016/j.marpolbul.2022.114251>
8. **I. Marín-Beltrán***, F. Demaria, C. Ofelio, L. M. Serra, A. Turiel, W. J. Ripple, S. A. Mukul, M. C. Costa. Scientists' Warning Against the Society of Waste, 2022. *Science of the Total Environment* 811: 151359 (pages 1-14). (OA) <https://doi.org/10.1016/j.scitotenv.2021.151359>
7. **I. Marín-Beltrán***, J. B. Logue, A. F. Andersson, F. Peters, 2019. Atmospheric deposition impact on bacterial community composition in the NW Mediterranean. *Frontiers in Microbiology*, 10:858 (pages 1-14). (OA) <https://doi.org/10.3389/fmicb.2019.00858>
6. **I. Marín***, S. Nunes, E. D. Sánchez-Pérez, C. Antequera, M. M. Sala, C. Marrasé, F. Peters, 2017. Coastal bacterioplankton metabolism is stimulated stronger by anthropogenic aerosols than Saharan dust. *Frontiers in Microbiology*, 8: 2215 (pages 1-17). (OA) <https://doi.org/10.3389/fmicb.2017.02215>
5. **I. Marín***, S. Nunes, E. D. Sánchez-Pérez, F. L. Aparicio, M. Estrada, C. Marrasé, T. Moreno, T. Wagener, X. Querol, F. Peters, 2017. Anthropogenic versus mineral aerosols in the stimulation of microbial planktonic communities in coastal waters of the northwestern Mediterranean Sea. *Science of the Total Environment* 574, 553–568. <http://dx.doi.org/10.1016/j.scitotenv.2016.09.005>.
4. E. D. Sánchez-Pérez, **I. Marín**, S. Nunes, L. Fernández-González, F. Peters, M. Pujo-Pay, C. Pascal, C. Marrasé, 2016. Aerosol inputs affect the optical signatures of dissolved organic matter in NW Mediterranean coastal waters. *Scientia Marina* 80 (4), 437–446. <http://dx.doi.org/10.3989/scimar.04318.20B>
3. **I. Marín**, P. Goñi, A.M. Lasheras, M.P. Ormad, 2015. Efficiency of a Spanish Wastewater Treatment Plant for removal potentially pathogens: characterization of bacteria and protozoa along water and sludge treatment lines. *Ecological Engineering* 74, 28–32. <https://doi.org/10.1016/j.ecoleng.2014.09.027>
2. L. Cardona, M. Clusa, E. Eder, A. *et al.*, **I. Marín**, A. Aguilar (AC), 2014. Distribution patterns and foraging ground productivity determine clutch size in Mediterranean loggerhead turtles. *Marine Ecology Progress Series* 497, 229–241. <https://doi.org/10.3354/meps10595>
1. E. Eder, A. Ceballos, S. Martins, H. Pérez-García, **I. Marín**, A. Marco, L. Cardona, 2012. Foraging dichotomy in loggerhead sea turtles *Caretta caretta* off northwestern Africa. *Marine Ecology Progress Series* 470, 113–122. <https://doi.org/10.3354/meps10018>.

* **I was the corresponding author of these publications. OA = Open Access.**

Insights published in the journal *Science* as part of the “Nextgen Voices” series

1. J. H. Ellwanger, M. D. Stanley Lekgoathi, K. Nemani, M. A. Tarselli, A. Al Harraq, A. Uzonyi, K. Dutton-Regester, R.Yoho, S. Srivastava, M. Strong, Y. Li, J. Fu, K. Waiho, **I. Marín-Beltrán**, A. Mukherjee and T. D. P. Brunet. News from a postpandemic world. *Science* 369: 6499, 26-29 (2020). DOI: 10.1126/science.abd1320.
2. **I. Marín-Beltrán** (and others). Social media: Good or evil? *Science* 375: 6581, 608-609 (2020). DOI: 10.1126/science.abo2409

Conference Proceedings

- **I. Marín-Beltrán** and M.C. Costa. Citizens are concerned on plastic pollution, even in pandemic times. Recent Advances in Environmental Science from the Euro-Mediterranean and Surrounding Regions *Proceedings of Euro-Mediterranean Conference for Environmental Integration (EMCEI-1)*. Accepted for publication.
- Carlier JD, Lara-Moreno A, Ngonyani AM, Martins A, V Villagomez AV, Igbodo B, Cox C, El-S Ismail F, **Marín-Beltrán I**, Palma TL, Costa MC, 2023. Selection of bacterial strains to bioaugment granular sludge and improve the removal of recalcitrant pollutants. 18th International Conference on Environmental Science and Technology CEST2023. 30. <https://doi.org/10.30955/gnc2023.00371>

Book chapters

- **I. Marín-Beltrán***, I. Sánchez del Río and Cristina Veiga-Pires, 2023. Os microplásticos à porta do oceano: Microplásticos atmosféricos. In: Moura, D., Mendes, I., Aníbal, J. & Gomes, A., (eds), *Micro e Nanoplásticos: um Macroproblema*;

CIMA/ARNET (Ed). ISBN: 978-989-9127-53-1. DOI: <http://dx.doi.org/10.34623/tz6d-k552>.

- P. Goñi, R. Mosteo, M. T. Fernández, **I. Marín**, A. M. Lasheras, J. Gómez, M. P. Ormad, Microorganisms in Wastewater Purification Processes and Reuse of Water and Sludge. Environmental Sciences and Engineering. Studium Press LLC (USA) 4, 144-163 (2017).

SELECTED PEER-REVIEWED PRESENTATIONS AT INTERNATIONAL SCIENTIFIC CONFERENCES (ALL ORAL AND AS PRESENTING AUTHOR)

- **I. Marín-Beltrán**, N. Fernández de Villalobos and M. C. Costa. *Biodegradación de microplásticos por bacterias marinas*. XII evento internacional. La Universidad en el S. XXI. VI Congreso Internacional: Industria y Desarrollo Sostenible (CIIDS). November 2023, Campus Politécnico Sitio El Limón (Ecuador). **Invited talk**.
- **I. Marín-Beltrán** and M. C. Costa. Citizens are concerned on plastic pollution, even in pandemic times. 5th Euro-Mediterranean Conference for Environmental Integration. October 2023, Rende (Cosenza, Italy).
- **I. Marín-Beltrán**, N. Fernández de Villalobos and M.C. Costa. Bacteria from marine caves with potential to biodegrade petroleum-based and biobased microplastics. 3rd Global Conference on Polymers, Plastics and Composites. September 2023, Hotel Frontair Congress, Barcelona (Spain).
- **I. Marín-Beltrán**, F. Demaria, C. Ofelio, L. M. Serra, A. Turiel, W. J. Ripple, S. A. Mukul, M. C. Costa. The Society of Waste. **Invited talk** at the I International Multidisciplinary Congress Of Innovation and Research in Healthy Habits. May 2022, Faculty of Health Sciences of Ceuta, University of Granada (Spain).
- **I. Marín-Beltrán**, F. Bessa, M. Correia, C. Lourenço and Paula Sobral. Plastic Pirates: Go Europe! Encontro Nacional de Ciência Cidadã. November 2021, Library of Universidade do Algarve, Faro (Portugal).
- **I. Marín-Beltrán**. Monitoring atmospheric microplastics: looking for a standardized methodology. ICYMARE – International Conference for Young Marine Researchers. August 2020, Online Meeting.
- **I. Marín**, F. Peters, R. Gallisai, F. L. Aparicio, C. Marrasé, R. Leardi, X. Querol. Nutrient deposition in coastal waters of the northwestern Mediterranean. XXXII Trobades científiques de la Mediterrània – Planeta Oceà. October 2016, Institut Menorquí d'estudis, Maó (Spain).
- **I. Marín**, S. Nunes, E. D. Sánchez-Pérez, E. Txurruka, C. Marrasé, M. Estrada, T. Moreno, X. Querol, F. Peters. Microbial planktonic communities response to Saharan dust and anthropogenic atmospheric inputs in a low-nutrient low-chlorophyll region. Aquatic Sciences Meeting. American Society of Limnology&Oceanography (ASLO). February 2015, Palacio de Exposiciones y Congresos de Granada (Spain).

FUNDING AND AWARDS RECEIVED

- January 2024 to June 2025. Project: **Microplastics from Atmospheric Fallout: Impacts at High Altitudes (MAFIHA)**. Host Institution: **CCMAR** (Faro, Portugal). Funder: Fundação para a Ciência e a Tecnologia (FCT), through the RESTART Programme (Grant code: 2023.00192.RESTART). **PI: Isabel Marín Beltrán**. Budget: **40,000 €**.
- January 2020 – present. Funding provided by the CCMAR through national funds from FCT (UID/04326/2020). Budget: **2500 €**.
- March 2019 – present. Project: *Microplastics in the Aquatic environment: Sources and Sinks* (MASS). Host Institution: **CCMAR** (Faro, Portugal). Funder: FCT through the Scientific Employment Stimulus Programme, **Individual postdoctoral fellowship** (Grant code: CEECIND/03072/2017. Advisor: Prof. Clara Costa).
- April 2016 – July 2016. Secondment (as part of PhD project) at **Univeristà degli studi di Genova, Dipartimento di Farmacia**, Genova, Italy. Funder: Spanish *Ministerio de Economía y Competitividad* (MINECO) (Grant code: EEBB-I-16-11380). Budget: **4,222€**. Supervisor: Prof. Riccardo Leardi.

- October 2015 – December 2015. Secondment (as part of PhD project) at **KTH Royal Institute of Technology of Stockholm**, Sweden. Funder: MINECO (Grant code: EEBB-I-15-09845). Budget: **3,866€**. Supervisor: Dr. Anders Andersson.
- September 2014 – November 2014. Secondment (as part of PhD project) at **Institut Méditerranéen d'Océanologie (MIO) of Marseille**, France. Funder: MINECO (Grant code: EEBB-I-14-08612). Supervisor: Dr. Thibaut Wagener. Budget: **4,240€**.
- December 2012 – November 2016. **Pre-doctoral fellowship** at **Institut de Ciències del Mar**, Barcelona, Spain. Funder: MINECO (Grant code: BES-2012-0529). Supervisor: Dr. Franz Peters.
- During the last year of my BSc in Marine Sciences (2009-2010), I received funding from two different sources to complete my degree at international institutions:
 1. 27/01/2010 – 20/06/2010 **Aarhus Universitet** (Aarhus, Denmark) – Erasmus scholarship. Budget: **3,750€**.
 2. 10/08/2009 – 27/12/2009 **Universidad Autónoma de Baja California** (Ensenada, Mexico) – *Bancaja* scholarship in agreement with the Universidad de Cádiz. Budget: **2,500€**.

MENTORING AND MEMBER OF EVALUATION BOARDS

- Inés de la Parra Muñoz (September 2023 – present). Title: *Fuentes y sumideros de microplásticos en entornos naturales de Aragón: la Laguna de Gallocanta como caso de estudio particular*. Role: **Co-supervisor**. PhD thesis in progress.
- Richard D. Redil (on-going). *Characterization of aerosol deposition in Bolinao, Pangasinan, and its effects on Alexandrium minutum batch cultures*. Master in Marine Sciences. Marine Science Institute of the University of the Philippines Diliman. Role: **External advisor**.
- Adriana González, 2023. *Degradation of microplastics in bioreactors with granular sludge*. Erasmus Mundus Master in Chemical Innovation and Regulation (ChIR), University of Algarve. Role: **Main supervisor**.
- Alois Ngonyani, 2023. *Marine bacteria and their role in polyethylene terephthalate biodeterioration and biofragmentation*. Erasmus Mundus Master in Quality in Analytical Laboratories (EMQAL), University of Algarve. Role: **Main supervisor**.
- Charlotte Van den Auweland, 2022. *Tracking microplastic accumulation in sediments of coastal marine vegetated habitats*. International Master of Science in Marine Biological Resources (IMBRSea), Ghent University. Host institution: CCMAR. Role: **Co-supervisor**.
- Ines Sánchez del Río, 2022. *Atmospheric deposition as a potential source of microplastics in the coastal waters of the Ria Formosa Natural Park, Southern Portugal*. International Master of Science in Marine Biological Resources (IMBRSea), Ghent University. Host institution: CCMAR. Role: **Promotor and main supervisor**.
- Ines Sánchez del Río (May – June 2021). Professional practice on *Monitorization of microplastics in the Ria Formosa Natural Park*: <https://sites.google.com/view/inessanchezdelrio/home>. IMBRSea, Ghent University. Host institution: CCMAR. Role: **Supervisor**.
- Nuria Fernández, 2021. *Degradation of conventional and biodegradable microplastics by a consortium of marine bacteria*. IMBRSea, Ghent University. Host institution: CCMAR. Role: **Promotor and main supervisor**.
- Inês Filipa Cabral Leal, 2021. *Absorbance-A tool in bioremediation*. MSc Molecular and Microbial Biology. Faculdade de Ciências e Tecnologia da Universidade do Algarve. Role: **Co-supervisor**.
- Hemilly Marquez (December 2019 – January 2020). Internship at Laboratory of Environmental Technologies, CCMAR. Role: **Supervisor**.

I have reviewed the memoir of 3 master theses, and participated as **member of the evaluation panel of 3 master** (one in the quality of arguer, and 2 in the quality of supervisor) **and 1 PhD thesis** (Daniel Menéndez Fernández, 2023, Universidad de Oviedo).

REVIEWING SERVICE

I have peer-reviewed 8 scientific articles for the following journals: Deep Sea Research Part I; Environmental Science and Pollution Research; Environmental Science and Technology; FEMS Microbiology Ecology; Journal of Geophysical Research (Biogeosciences); Marine Pollution Bulletin and Science of the Total Environment. I was invited to review a report prepared by the Instituto Português do Mar e da Atmosfera (IPMA) as part of the EU Marine Strategy Framework Directive, as an **expert in marine litter** (IPMA, 2021. *Programa de Monitorização da Diretiva-Quadro “Estratégia Marinha” subdivisão do Continente*).

OUTREACH VIDEOS AND ACTIVITIES

I am keen to advocate that science should be a tool to improve social being and to achieve ecological and socio-economical sustainability. For this, science needs to be adequately disseminated to the broad society. On this regard, I have organised and participated in several events (talks, workshops and hands-on sessions) aimed to promote environmental awareness and the careful use of natural resources among the broad society. This includes the production of **5 videos available at my Youtube channel** (@isabelmarin2848). I have been invited by local entities/NGOs to participate in public discussions and events, such as a public debate on marine debris (https://www.youtube.com/watch?v=YeFB_NILX2A&t=3s) or a fishbowl conversation on the topic “Waste, Sufficiency and Justice” (https://www.youtube.com/watch?v=dOymy19P_Io). My commitment to promote environmental awareness has focused primarily on the youngest, with **> 20 talks or events organised at schools across Spain and Portugal** during e.g. the International Day Of Women and Girls in Science or the Science Week, but also as part of projects such as “**Científicamente Provável**” (2020 – 2022), organised by CCMAR Communication Department, or the European citizen project “Plastic Pirates: Go Europe!” (<https://www.plastic-pirates.eu/en>), for which I was one of the 4 scientific advisors from Portugal from September 2021 to June 2023. During the school year 2021/2022, I was scientific advisor of the project “Alimentando Vocaciones”, carried out at the IES Sierra Palomera, coordinated by the Instituto Agroalimentario de Aragón (IA2). Additionally, I am frequent advisor for the online journal Maldita.es, more particularly to the section “Maldita Ciencia”.