Curriculum Vitae
(12 Nov 2026)

RUT PEDROSA PÀMIES, Ph.D.

Assistant Research Investigator
The Ecosystems Center
Marine Biological Laboratory
7 MBL Street Woods Hole, MA 02543-1015, USA
Tel: 508-289-7715
E-mails: rpedrosa@mbl.edu (work); rutpedpam@gmail.com (personal)
Google Scholar: https://scholar.google.com/citations?user=2nMjfA8AAAAJ&hl=en

Research Interests

- Transfer and fate of pollutants and microplastics in the environment.
- Marine biogeochemistry.
- Cycling of elements in the environment, especially the biogeochemistry of carbon.
- Factors regulating the downward particle flux of material and organic matter and its reprocessing in the water column, using elemental, isotopic and organic molecular tracers.
- Impact of mesoscale variability and atmospheric forcing (e.g., extreme weather events) and aerosol deposition on the oceanic carbon cycle and ecosystems.
- Role of microbes in regulating particle fluxes and sedimentation processes in marine ecosystems.

Education

2016 **Ph.D. in Marine Biogeochemistry.** University of Barcelona (Catalonia, Spain). Thesis: *"*Composition, origin and transport of organic matter in continental margins and basins of the Mediterranean Sea". Graded Excellent *Cum Laude.* Supervisors*:* Dr. A. Sanchez-Vidal and Dr. A. Calafat.

2011 **MSc in Marine Sciences: Oceanography and Marine Management**. University of Barcelona (Catalonia, Spain). Thesis*: "*Organic matter and mineral interactions in sediments of the Catalan margin: the influence of extreme events". Graded Excellent with honors. Supervisors*:* Dr. A. Sanchez-Vidal and Dr. A. Calafat.

2010 **BS in Environmental Sciences**. University of Barcelona (Catalonia, Spain). Thesis*: "*Study of variations in the sedimentological parameters in the Blanes Canyon and adjacent slope". Graded Excellent with honors (13 distinctions). Supervisors*:* Dr. A. Sanchez-Vidal and Dr. A. Calafat.

Academic Appointments

2022-present ***Assistant Research Investigator.** The Ecosystems Center, Marine Biological laboratory (Woods Hole, MA, USA). (*equivalent of a tenure-track position)
****Maternity leave (June-Oct 2022)**

2018-2022 **Research Scientist**. The Ecosystems Center, Marine Biological laboratory (Woods Hole, MA, USA).

2016 - 2018 **Postdoctoral Scientist**. The Ecosystems Center, Marine Biological laboratory (Woods Hole, MA, USA). Supervisor: Dr. Maureen H. Conte.

2015 - 2016 **Assistant Researcher**. Research Group on Marine Geoscience, Department of Earth and Ocean Dynamics, Faculty of Earth Science, University of Barcelona (UB).

2014 **Visiting Researcher**. Hellenic Centre for Marine Research, Institute of Oceanography (HCMR) (Anavyssos, Attiki, Greece). Supervisors: Alexandra Gogou and Constantine Parinos. Topic: Geochemical analysis of biomarkers in sediment trap samples and discussion of the results (6 weeks).

2012 **Visiting Researcher**. HCMR (Anavyssos, Attiki, Greece). Supervisors: Dr. Nikolaos Lampadariou and Dr. Alexandra Gogou. Topic: Geochemical analysis of sea surface samples and manuscript writing (3 months).

2011 - 2015 **Pre-doctoral candidate**. Research Group on Marine Geoscience, Department of Earth and Ocean Dynamics, Faculty of Geology, UB. Supervisors*:* Dr. A. Sanchez-Vidal and Dr. A. Calafat.

2010 - 2011 **Research Assistant**. Research Group on Marine Geoscience, Department of Earth and Ocean Dynamics, Faculty of Geology, UB. EU Project: Hotspot Ecosystem Research and Man's Impact on European Seas (HERMIONE, EC contract 226354). Supervisors*:* Dr. A. Sanchez-Vidal and Dr. Miquel Calafat.

2010 **Research Assistant**. Research Group on Marine Geoscience, Department of Earth and Ocean Dynamics, Faculty of Geology, UB. Ministry of Education, Culture and Sports of the Spanish Government. Supervisors*:* Dr. Miquel Canals and Dr. A. Sanchez-Vidal.

2009 **Research Assistant.** Barcelona Scientific Park (PCB) and Research Group on Marine Geoscience, Department of Earth and Ocean Dynamics, Faculty of Geology, UB. Supervisors*:* Dr. Miquel Canals and Dr. A. Sanchez-Vidal.

2009 **Research Assistant.** Meteorological Services of the Catalan Television (TV3, Catalonia, Spain).

Academic Awards and Honors

2016, 2017 **Marie Sklodowska-Curie Seal** of **Excellence** for **two projects** submitted to Horizon 2020 as a **principal Investigator.** Awarded to projects recommended for funding but not funded due to budgetary limits: LEANSEA (2017) “Lead Sources and distribution in the Northern Seas”. LEADSI (2016) “Lead sources and distribution in the Northern Hemisphere Seas–the impact of anthropogenic activities”. Collaborating institutions: MIT USA (Dr. Edward Boyle) and UB (Dr. Leopoldo Pena and Dr. Anna Sanchez Vidal).

2016 **Extraordinary Doctoral Award** for the **PhD Thesis**, University of Barcelona**.**
This prize is awarded to the best PhD theses among those which received the *Cum Laude* distinction every academic year.

2014 **Mobility Fellowship** 2014 (The Montcelimar Foundation, UB)**.**
3 weeks of full financial support for specific research at a foreign institution (Hellenic Centre for Marine Research, Greece).

2012 **Mobility Fellowships** (Euromarine Program 2012)
3 months of full financial support for specific research at a foreign institution (Hellenic Centre for Marine Research, Greece).

2011 - 2015 **PhD fellowship,** “Formación de Profesorado Universitario (FPU)”, Ministry of Education, Spanish Government.
Full salary plus benefits. Grad school tuition, 48 months ($25000/year).

2009-2010 **Undergraduate fellowships** to collaborate with the Research Group on Marine Geoscience from Barcelona Scientific Park and from Ministry of Education, Spanish Government.

Peer-reviewed Publications

Magozzi, S., Trueman, C. N., Cobain, M. R. D., MacKenzie, K. M., St. John Glew, K., Canseco, J. A., Díaz-Delgado, E., Fanelli, E., Rumolo, P., Cartes, J. E., Espinasse, B., Agnetta, D., Albo-Puigserver, M., Alomar, C., Alvisi, F., Badalamenti, F., Bănaru, D., Berto, D., Bonanno, A., Bonaviri, C., Bongiorni, L., Büyükateş, Y., Calafat Frau, A. M., Camatti, E., Cantoni, C., Cardona, L., Carlier, A., Castellano, M., Chaikalis, S., Chiggiato, J., Cibic, T., Conan, P., Conese, I., Coppari, M., Costalago, D., Cresson, P., D'Ambra, I., Dähnke, K., Darnaude, A. M., Deudero, S., Ezgeta-Balić, D., Giani, M., Gogou, A., Grégori, G., Guy-Haim, T., Harmelin-Vivien, M. L., Jennings, S., Karageorgis, A. P., Koppelmann, R., Lampadariou, N., Langone, L., Liénart, C., Mazzocchi, M. G., Mazzola, A., Meador, T. B., Merquiol, L., Metzke, M., Miserocchi, S., Möbius, J., Mostajir, B., Mousseau, L., Navarro, J., Ogrinc, N., Pansera, M., Pantoja-Gutiérrez, S., Papiol, V., Parinos, C., Pasqual, C., Pavlidou, A., **Pedrosa-Pàmies, R.,** Pinnegar, J., Polunin, N. V. C., Protopapa, M., Repeta, D. J., Sabatino, N., Sachs, J. P., Sanchez-Vidal, A., Sarà, G., Savoye, N., Schroeder, A., Skylaki, E., Sigman, D. M., Signa, G., Sisma-Ventura, G., Stavrakaki, I., Struck, U., Tesán-Onrubia, J. A., Tesi, T., Uzundumlu, S., Valls, M., Vizzini, S., Zervoudaki, S., Zgozi, S. W., Zoppini, A., Zorica, B., & Willis, T. J. (2026). Spatial models cannot compensate for sampling designs unstructured relative to isotopic variation: Implications for baseline isoscape development in the Mediterranean Sea. *Progress in Oceanography, 248*, 103794. https://doi.org/10.1016/j.pocean.2026.103794

Schnepper, C., **Pedrosa-Pàmies, R**., Conte, M. H., Weber, J. C., Gruber, N., Haghipour, N., Eglinton, T. I., 2026. Radiocarbon constraints on the sources and fluxes of sinking particulate organic carbon to the deep Sargasso Sea. Deep Sea Research Part I: Oceanographic Research Papers, 104663. doi.org/10.1016/J.DSR.2026.104663

Pedrosa-Pamies, R., Conte, M., Honda, M., Herndl, G., 2025. Editorial: The Oceanic Particle Flux and Its Cycling Within the Deep Water Column – Volume II. *Front. Earth Sci*. https://doi.org/10.3389/FEART.2025.1716510

Hashim, S. M., Conte, M., Salter, M., **Pedrosa-Pamies, R**., Weber, J. C., Hayden, M. G., Wilson, R., Perry, C. P., Crowley, S. F., Dennis, P., F., Bish, D., Subhas, 2025. A. Fish Carbonates in the North Atlantic and Their Potential Role in the Carbon Cycle. Global Biogeochemical Cycles. 30, 6. https://doi.org/10.1029/2024GB008387

**This paper was featured in the BIO-carbon (UK) newsletter.*

Pedrosa-Pàmies, R., Conte, M.H., Weber, J.C., Andersson, A.J., 2025. Hurricane-Driven Transport of Bermuda Reef Carbonate Platform Sediments to the Deep Ocean. J. Geophys. Res. Ocean. 130, e2023JC020500. https://doi.org/10.1029/2023JC020500.

This paper had a large coverage by the media and was cited in several newspapers (e.g., **The Guardian, etc.).*

Conte, M.H., **Pedrosa-Pàmies, R.,** Weber, J.C., Johnson, R.J., 2025. The climatology of the deep particle flux in the oligotrophic western North Atlantic gyre, 1978–2022. Prog. Oceanogr. 234, 103433. https://doi.org/10.1016/J.POCEAN.2025.103433.

Joern, G.M., **Pedrosa-Pàmies, R.,** Jiang, X., Liu, Z., Bochdansky, A.B., 2025. Characterization of Microbial Biofilms on Marine Plastics: Community Development and Density Implications for Vertical Transport Dynamics. Front. Mar. Sci. 12, 1581727. https://doi.org/10.3389/FMARS.2025.1581727.

Jiang, X., Gallager, S., **Pedrosa-Pàmies, R.,** Ruff, E., Liu, Z., 2024. Laboratory-Simulated Photoirradiation Reveals Strong Resistance of Primary Macroplastics to Weathering. Environmental Science and Technology, doi.org/10.1021/acs.est.3c09891.

Tarrés, M., Cerdà-Domènech, M., **Pedrosa-Pàmies**, R., Baza-Varas, A., Calafat, A., Sanchez-Vidal, A., Canals, M., 2023. Transport and distributions of naturally and anthropogenically sourced trace metals

and arsenic in submarine canyons. Progress in Oceanography, 218, doi.org/10.1016/j.pocean.2023.103122.

Conte, M., **Pedrosa-Pàmies, R.**, Honda, M., Herndl, G., 2022. The oceanic particle flux and its cycling within the deep water column. *Front. Earth Sci*. 10:1020065. doi: 10.3389/feart.2022.1020065.

Tarrés, M., Cerdà-Domènech, M., **Pedrosa-Pàmies**, R., Rumín-Caparrós, A., Calafat, A., Canals, M., Sanchez-Vidal, A., 2022. Particle fluxes in submarine canyons along a sediment-starved continental margin and in the adjacent open slope and basin in the SW Mediterranean Sea. *Progress in Oceanography*, *203*, 102783. doi:10.1016/J.POCEAN.2022.102783

Pedrosa-Pàmies, R., Parinos, C., Sanchez-Vidal, A., Calafat, A., Canals, M., Velaoras, D., Mihalopoulos, N., Kanakidou, M., Lampadariou, N. and Gogou, A., 2021. Atmospheric and oceanographic forcing impact on particle flux and carbon sequestration in the Eastern Mediterranean Sea: a three-year sediment trap time-series study in the deep Ierapetra Basin, *Frontiers in Earth Science*, 9, 25, doi:10.3389/feart.2021.591948.

Lloret, J.*****, **Pedrosa-Pamies, R.***, Vandal, N., Rorty R., Ritchie M., McGuire, C., Chenoweth, K., Valiela, I, 2021. Salt marsh sediments act as sinks for microplastics and reveal effects of current and historical land use changes. Environmental Advances, 4, 100060, doi:10.1016/j.envadv.2021.100060.

****Both authors contributed equally to this***

**This paper had a large coverage by the media and was cited in several newspapers (Popular Science, Standard Times-New Bedford, Cape Cod Times, Falmouth Enterprise, Rhodes College news, etc.) and local radio programs (Local NPR for the Cape, Coast & Islands).*

Bourrin, F., Uusõue, M., Artigas, M. C., Sànchez-Vidal, A., Aubert, D., Menniti, C., Klar, J., Amblás, D., Calafat, A. M., Frigola, J., Iglesias, O., Manea, E., **Pedrosa-Pàmies, R**., Quesada, S., Rayo, X., Rivera, J., Rumín, A., Tangherlini, M. and Tubau, X., 2021. Release of particles and metals into seawater following sediment resuspension of a coastal mine tailings disposal off Portmán Bay, Southern Spain, Environmental Science Pollution Research, 1–18, doi:10.1007/s11356-021-14006-1.

Hayes, C. T., Costa, K. M., Anderson, R. F., Calvo, E., Chase, Z., Demina, L. L., Dutay, J. C., German, C. R., Heimbürger-Boavida, L. E., Jaccard, S. L., Jacobel, A., Kohfeld, K. E., Kravchishina, M. D., Lippold, J., Mekik, F., Missiaen, L., Pavia, F. J., Paytan, A., **Pedrosa-Pàmies, R.,** Petrova, M. V., Rahman, S., Robinson, L. F., Roy-Barman, M., Sanchez-Vidal, A., Shiller, A., Tagliabue, A., Tessin, A. C., van Hulten, M. and Zhang, J., 2021. Global Ocean Sediment Composition and Burial Flux in the Deep Sea, Global Biogeochem. Cycles, 35(4), e2020GB006769, doi:10.1029/2020GB006769.

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., Johnson, R., 2019. Hurricane Nicole enhanced labile carbon export into the deep ocean. *Geophysical Research Letters*, 46, 10484-10494. doi.org/10.1029/2019GL083719.

**This paper had a large coverage by the media and was cited in several newspapers including WIRED, National Science Foundation blog, ScienceDaily, etc.*

de Haan, W. P., Sanchez-Vidal, A., Canals, M., **NUREIEV1 Shipboard Scientific Party** , 2019. Floating microplastics and aggregate formation in the Western Mediterranean Sea. *Marine Pollution Bulletin*, *140*, 523–535. doi.org/10.1016/J.MARPOLBUL.2019.01.053 (*****NUREIEV1 Shipboard Scientific Party includes **Pedrosa-Pàmies, R.).**

Cisneros, M., Cacho, I., Frigola, J., Sanchez-Vidal, A., Calafat, A., **Pedrosa-Pàmies, R.,** Rumín-Caparrós, A. and Canals, M., 2019. Deep-water formation variability in the north-western Mediterranean Sea during the last 2500 yr: A proxy validation with present-day data. Global and Planetary Change, 177, doi:10.1016/j.gloplacha.2019.03.012, 2019.

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., Johnson, R., 2018. Carbon cycling in the Sargasso Sea water column: insights from lipid biomarkers in suspended particles. Progress in Oceanography, 168, 248-278, doi: 10.1016/j.pocean.2018.08.005.

Danovaro, R., Canals, M., Tangherlini, M., Dell'Anno, A., Gambi, C., Lastras, G., Amblas, D., Sanchez-Vidal, A., Frigola, J., Calafat, A.M., **Pedrosa-Pàmies, R.,** Rivera, J., Rayo, X., Corinaldesi, C., 2017. A submarine volcanic eruption leads to a novel microbial habitat. Nature Ecology & Evolution. 1, 0144, doi:10.1038/s41559-017-0144.

Quirós-Collazos, L**.***, **Pedrosa-Pàmies, R**.*****, Sanchez-Vidal, A., Guillén, J., Duran, R., Cabello, P., 2017. Distribution and sources of organic matter in size-fractionated nearshore and inner-shelf sediments of the NW Mediterranean. Estuarine, Coastal and Shelf Science, 189, 267-280., doi: 10.1016/j.ecss.2017.03.004. ***Both authors contributed equally to this work.***

Pedrosa-Pàmies, R., Sanchez-Vidal, A., Canals, M., Lampadariou, N, Dimitris, V., Gogou, A., Parinos, C., Calafat, A., 2016. Enhanced carbon export to the abyssal depths driven by atmosphere dynamics. Geophysical Research Letters, 43 (16), 8626-86-36, doi: 10.1002/2016GL06978.

** This paper had a coverage by the media and was cited in several national and international newspapers including University of Barcelona News, La Vanguardia, El Confidencial, Science and Science Daily.*

Pedrosa-Pàmies, R., Parinos, C., Sanchez-Vidal, A., Gogou, A., Calafat, A., Canals, M., Bouloubassi, I., Lampadariou, N., 2015. Composition and sources of sedimentary organic matter in the deep Eastern Mediterranean Sea. Biogeosciences, 12, 9935-9989, doi: 10.5194/bgd-12-9935-2015.

Pedrosa-Pàmies, R., Sanchez-Vidal, A., Calafat, A., Canals, M. and Durán, R., 2013. Impact of storm-induced remobilization on grain size distribution and organic carbon content in sediments from the Blanes Canyon area, NW Mediterranean Sea. Progress Oceanography, 118, 122-136, doi: 10.1016/j.pocean.2013.07.023.

Durán, R., Canals, M., Lastras, G., Micallef, A., Amblas, D., **Pedrosa-Pàmies, R**. and Sanz, J. L., 2013. Sediment dynamics and post-glacial evolution of the continental shelf around the Blanes submarine canyon head (NW Mediterranean). Progress in Oceanography, 118, 28-46, doi: 10.1016/j.pocean.2013.07.031.

Parinos, C., Gogou, A., Bouloubassi, I., **Pedrosa-Pàmies, R**., Sanchez-Vidal, A., Velaoras, D., Krokos, G., Hatzianestis, I., Lykousis, V., 2013. Distribution and sources of natural and anthropogenic hydrocarbons in surface sediments from deep basins of the open Eastern Mediterranean Sea. Biogeociences ,10, 6069-6089, doi: 10.5194/bg-10-6069-2013.

Rumín-Caparrós, A., Sanchez-Vidal, A., Calafat, A., Canals, M., Puig, P., Martín, J., **Pedrosa-Pàmies, R**., Amblas, D., Rayo, X., 2013. External forcing, oceanographic processes and mass flux dynamics of Cap de Creus submarine canyon, NW Mediterranean Sea. Biogeociences, 10, 3493-3505, doi: 10.5194/bg-10-3493-2013.

Sanchez-Vidal, A., Canals, M., Calafat, A.M., Lastras, G., **Pedrosa-Pàmies, R**., Menéndez, M., Romero, J., Hereu, B., Alcoverro, T., 2012. Impacts on the deep-sea ecosystem by a severe coastal storm. PLoS ONE 7(1): e30395, doi:10.1371/journal.pone.0030395.

** This paper had a large coverage by the media and was cited in several newspapers including ScienceNow section of the Science Magazine.*

Techio, S, Ramírez-Llodra, E, Sardà, F, Company, J.B. **Pedrosa-Pàmies, R**, Sanchez-Vidal, A., 2011. Environmental drivers of deep Mediterranean megabenthos communities along longitudinal and bathymetric gradients. Marine Ecology Progress Series, 439, 181-192, doi: 10.3354/meps09333.

Papers currently in review:

Schnepper, C., **Pedrosa-Pàmies, R.,** Conte, M., Gruber, N., Haghipour, N., Eglinton, T. Radiocarbon constraints on the seasonal variability in sources and fluxes of sinking particulate organic carbon in the deep Sargasso Sea. *Submitted to Deep Sea Research II.*

Book Publications

De Mol, B., Amblas, D., Alvarez, G., Busquets, P., Calafat, A., Canals, M., Duran, R., Lavoie, C., Acosta, J., Muñoz, *A.,* **HERMESIONE Shipboard Party**, 2012. Cold-Water Coral Distribution in an Erosional Environment: The Strait of Gibraltar Gateway. Seafloor Geomorphology as Benthic Habitat, 635-643, doi: 10.1016/B978-0-12-385140-6.00045-1. (*****HERMESIONE Shipboard Scientific Party includes **Pedrosa-Pàmies, R.).**

De Mol, B., Amblas, D., Calafat, A., Canals, M., Duran, R., Lavoie, Muñoz, A., Rivera, J., **HERMESIONE**, DARWIN CD178, and COBAS **Shipboard Parties**, 2012. Cold-Water Coral Colonization of Alboran Sea Knolls, Western Mediterranean Sea. Seafloor Geomorphology as Benthic Habitat, 819-829, doi: 10.1016/B978-0-12-385140-6.00060-8. (*****HERMESIONE Shipboard Scientific Party includes **Pedrosa-Pàmies, R.).**

Research Grants as PI or co-PI

2024-2027 **Oceanic Flux Program (OFP) Particle Flux Time-Series. Funding National Science Foundation, Chemical Oceanography Program.**
PI: **Rut Pedrosa Pamies** (Marine Biological Laboratory).
$2,550,000

2021 - 2024 **Oceanic Flux Program (OFP) Particle Flux Time-Series. Funding National Science Foundation, Chemical Oceanography Program.**
PI: 2001- Feb 2024 Maureen Conte, Bermuda Institute of Ocean Sciences and MBL Fellow. **Rut Pedrosa Pamies was the PI of the** Marine Biological Laboratory **subaward, and Feb 2024 became the lead PI**
MBL Subaward $1,426,245

2020 - 2024 EAGER: Collaborative Research: **Is plastic degradation occurring in the deep ocean water column?** (**PI: Rut Pedrosa Pamies**. Co-PIs: Zhanfei Liu, UTAustin; Alexander Bochdansky, ODU; Emil Ruff, MBL. Subaward: Scott Gallager, WHOI. Collaborators: Jessica Mark Welch, MBL, and Maureen Conte, MBL/BIOS).
Funding: National Science Foundation. MBL award **$231,808.**

Additional funding I secured for project:
*America Chemistry Council (ACC): **$18,500** for polymer supplies.

*Dow Chemical Company: **extensive in-kind support** from the Application Development Leader/Scientist to produce specific polymer types, and providing polymer samples.

2019 **A first analysis of microplastic particle abundance and blue carbon profiles in Caroni Swamp, Trinidad.** (Co-PIs: Ivan Valiela, Javier Lloret, **Rut Pedrosa Pamies**.) *Funding:* Institute of Marine Affairs, Hilltop Lane, Chaguaramas, Trinidad and Tobago, **$3,000**.

2018 - 2021 **Oceanic Flux Program (OFP) Particle Flux Time-Series. Funding National Science Foundation, Chemical Oceanography Program.**
PI: Maureen Conte, Bermuda Institute of Ocean Sciences and MBL Fellow.
Rut Pedrosa Pamies was the PI of the Marine Biological Laboratory **subaward.**
MBL Subaward $985,366.

Other Participation in other Research Projects

2016 - 2018 **National Science Foundation Oceanic Flux Program (OFP) Particle Flux Time-Series (1978-).** *PI*: Maureen Conte. *Funding:* National Science Foundation. *Rol*es: 2016-2018 Postdoctoral Scientist.

2015 - 2016 **I-MarCat** (Indicators of the environmental status of the Catalan-Balearic Sea). *PI:* Miquel Canals. *Funding:* Institute for Catalan Studies.

Role: environmental data synthesis, data base design, report preparation and scientific communication manager.

2014 - 2016 **NUREIEV** (New challenges on submarine canyon research: indicators of environmental status and spatiotemporal variability - The role of sea storms). *PI:* Miquel Canals and Anna Sànchez Vidal. *Funding:* Ministry of Education and Science.
Role: cruise planning and participant (multicorer sediment collection, mooring preparation and microplastic sampling).

2013 - 2016 **MIDAS** (Managing Impacts of Deep-sea Resource Exploitation). *PI:* Phil Weaver (coord., NOC, UK), Miquel Canals (UB). *Funding:* EC Framework7.
Role: elemental analysis by IPC-MS of mine tailings of Portman Bay (SE Spain) to evaluate impacts of mining on deep-sea ecosystems and cruise participation.

2012 - 2015 **PERSEUS** (Policy-oriented marine Environmental Research for the Southern European Seas). *PI:* Evangelos Papathanassiou (coord, HCMR, Greece), Miquel Canals (UB). *Funding:* EC Framework 7.
Role: cruise planning and participant (**Chief Scientist** for 2 cruises).

2011 **PROMARES – Oasis del Mar.** *PI:* Miquel Canals. *Funding:* European Commission, the Spanish Ministry of Science and Innovation, the "la Caixa" Welfare Projects initiative.
Role: elemental and isotopic composition analysis, cruise planning and participant.

2011 - 2013 **DOSMARES** (Deep- water submarine canyons and slopes in the Mediterranean and. Cantabrian seas: from synchrony of external forcing to living resources). *PI:* Miquel Canals (UB, Spain). *Funding:* Ministry of Economy and Competitiveness.
Role: cruise planning and participant.

2010 - 2013 **REDECO** (Regional Drivers of Ecosystem Change and its Influence on Deep-Sea populations in the Mediterranean). *PI:* Nikolaos Lampadariou (coord., HCMR, Greece), Miquel Canals (UB, Spain). *Funding:* Ministry of Economy and Competitiveness.
Role: elemental, isotopic and organic molecular composition analysis, satellite data analysis, report/manuscripts writing, cruises organizer/participant.

2009 - 2012 **HERMIONE** (Hotspot Ecosystem Research and Man's Impact ON European Seas). *PI:* Phil Weaver (coord., NOC, UK), Miquel Canals (UB). *Funding:* EC Framework 7.
Role: elemental, isotopic and organic molecular composition analysis, conference presentations, cruise participation.

2009 - 2011 **BIOFUN** (BIOdiversity and ecosystem FUNctioning in contrasting southern European deep-sea environments). *PI:* Francesc Sardà (ICM-CSIC, Spain).
Funding: European Science Foundation.
Role: elemental and isotopic composition analysis and manuscript writing.

2009 - 2010 **PROMETEO** (Integrated study of deep western Mediterranean canyons and slopes: an essential habitat). *PI:* Miquel Canals (UB, Spain). *Funding:* Ministry of Education and Science.
Role: elemental and isotopic composition analysis, conference presentations and manuscript writing.

SCIENTIFIC LEADERSHIP

Professional Affiliations

Geochemical Society, American Geophysical Union (AGU), Oceanography Society.

Professional Service (Management and committees)

2025 **Advisor of the Undergraduate Thesis** for the degree of Bachelor of Science with Honors in Environmental Science (**University of Chicago**) for Emma Edwards (Co-

advisors: Linta Reji (UChicago) and Emil Ruff (MBL)): "Genetic Potential for Plastic Degradation in the Deep Ocean Microbial Plastisphere"

2025- **Advisor PhD Committee for** Greg Joern (Old Dominion University, US).

2023- **Advisor PhD Committee for** Charlotte Schnepper (ETH, Zurich).

2023- **NSF EarthCube-funded Research Coordination Network (METS-RCN) steering committee representative** for the long-time series Oceanic Flux Program. Helping to develop FAIR data practices for commonly measured biological and biogeochemical variables in time-series.

2023-2024 **Chair** in the in the International Ocean Science Meeting (New Orleans, February 2024) sessions:
"Time Series Observations of Ocean Biogeochemistry: What We Have Learned and What We Will Learn" (Co-chairs: M. Noguchi Aita, M. Honda and A. E White)

"Behavior, Fate, and Ecosystem Impacts of Aquatic Plastics Debris" (Co-chairs: M. Duhaime, Z. Liu and J. K. Choi)

2023- **Topic Editor** in **Frontiers in Earth Science** for the research topic "The Oceanic Particle Flux and its Cycling Within the Deep Water Column II".

2021-2022 **Lead chair** in the International Ocean Science Meeting session "Biogeochemistry of marine particles: from coastal to deep ocean", Honolulu, February 2022. (Co-chairs: Z. Liu, A. Bochdansky, A. Engel)

2020 **Editor** of the Ecosystems Center (Marine Biological Laboratory) Annual Report 2018-2019**.**

2019-2021 **Topic Editor** in **Frontiers in Earth Science** for the research topic "The Oceanic Particle Flux and its Cycling Within the Deep Water Column I".

2019 **Co-Chair** in the International Goldschmidt Conference **session** "The Oceanic Particle Flux and its Cycling Within the Deep Water Column", Barcelona, August 2019.

2010 - 2016 **Assistant Secretary, Doctoral Program** in **Marine Science** (University of Barcelona, Coord. Miquel Canals).

2011 - 2016 **Student Representative,** Doctoral Program in Marine Science (University of Barcelona).

2013 **Ad hoc Reviewer, Doctoral Programs** for the Andalusian Agency of Knowledge (AGAE). Assessment tasks for verification and modification of official Doctoral Programs 2012 (member of the **doctoral committee**).

2012 Assistant organizer for the **International conference** "The Deep-Sea & Sub-Seafloor Frontiers Conference" (DS3F) 11-14 March 2012, Sitges, Barcelona.

Reviewer for proposals for the National Science Foundation.

Review for journals: Progress in Oceanography, Biogeoscience, Geochimica et Cosmochimica Acta, Continental Shelf Research, Aquatic Ecology, ACS Earth and Space Chemistry, Remote Sensing, Geosciences Research Letters., Limnology and Oceanography, Global Biogeochemical Cycles.

Oceanographic cruises (* Chief Scientist)

(Highlighted the most relevant role/task)

2016-present **Oceanic Flux Program (OFP) Time-Series**. R/V Atlantic Explorer. Sargasso Sea (Atlantic Ocean). **18cruises**: 27Oct-2Nov 2026*, 15-23 April 2026*, 20-27 Oct 2025*****, 11-19 April 2025*****, 21-29 Oct 2024*****, 6-13 Apr 2024*, 4-10 Oct 2023*, 2-9May 2023* **Lead sci. operations**, 30Oct-6Nov 2021, 12-21 April 2021, 29Oct-

3Nov 2019, 25-30 April 2019, 26-31 Oct 2018, 1-5 Jun 2018, 25-29 Jan 2018, 21-27 Oct 2017, 22-28 Apr 2017, 26 Oct-2 Nov 2016.
About 6/8-day cruises for recovery/turnaround/redeployment of the OFP mooring and additional sampling (particle collection with in-situ pumps, Go-Flo bottles, CTD profiles, Van Veen Grab, etc.).

2016-2011 **Cap de Creus Time-Series** (CC100, PERSEUS and HERMIONE projects). R/V Lluerna. Gulf of Lions (NW Mediterranean Sea). 8 cruises: 15 Jun 2016, 6 Nov 2015, 12 Jun 2015, 19 Jun 2014, 11 Dec 2013, 27 Jun 2012, 27 Jun 2012, 9 Dec 2011.
Recovery/turnaround/redeployment of the mooring and microplastic sampling with manta trawl for microplastic surveys.

2014-2016 **NUREIEV and MIDAS-PORTMAN**. R/V Angeles Alvariño. Porman (NW Mediterranean Sea). 4 cruises: 7-14 May 2016 and 22-29 Apr 2016, 28 Aug - 6 Sep 2015, 12-25 Mar 2015 and 05-18 Aug 2014.
Multicorer sediment sampling and microplastics sampling with manta trawl. **Shift leader** scientist during 2 cruises.

2013-2015 **Menorca short time-series**. PERSEUS project. R/V Socib. NW Mediterranean Sea. 3 cruises: 4-6 Feb 2016, 12-14 Oct 2015, 4-5 Dec 2013.
Recovery/turnaround/redeployment of the mooring. **Chief Scientist** on two cruises.

2014 **MIDAS-HIERRO**. R/V Angeles Alvariño. Canarias Islands. 07-18 Nov 2014.
Remote underwater vehicle (ROV) imaging and multicorer sampling of the el Hierro submarine volcano

PERSEUS. R/V Aegeo. E Mediterranean Sea. 20-25 Mar 2014.
Water column sampling with CTD rosette for organic molecular tracers.

2013 **DOSMARES**. R/V Sarmiento de Gamboa. Cantabrian Sea. 2 cruises: 23-27 Feb 2013 and 23-29 Sep 2012. R/V García del Cid. NW Mediterranean Sea. 10-20 Mar 2012.
Recovery/turnaround/redeployment of 4 moorings, CTD profiling, multicorer sediment trampling and deep sea fishing of bathypelagic species.

2012-2013 **Ierapetra Time-Series REDECO**. R/V. Aegeo. (E Mediterranean Sea). 2 cruises: 6-10 Sep 2013, 9-14 Jun 2012.
Recovery/turnaround/redeployment of a very deep mooring 4400 m and multicorer/boxcorer sediment sampling. **Chief Scientist** of the **University of Barcelona scientific party** on the ship (Responsible for the recovery and redeployment of the mooring).

Other cruise participation

2011 COCAN. 25 Oct -7 Nov 2011. Cantabrian Sea (Atlantic Ocean). R/V Miguel Oliver.
PROMARES. 29 Jun-15 Jul 2011. NW Mediterranean Sea. R/V Sarmiento de Gamboa.
UNIBARNA-2011. 26-28 Feb 2011. Ria de Vigo, Galicia. R/V. Cornide de Saavedra.
2010 HERMIONE. 13-17 Oct 2010. N of Norway (Atlantic Ocean). R/V G. O. Sars.
2009 HERMESIONE. 13-28 Sep 2009. W Mediterranean. R/V BIO Hespérides.

Outreach

2026 Collaborating with the naturalist and artist Tim Musso, who joined the OFP cruise April 2026 cruise. OFP team and T. Musso put together a video of the cruise activities and the OFP goals and research activities.

2025	Participation in the creation of the exhibit "Plankton in Our Midst: The Unseen Citizens of the Sea and Our Breathing Earth" displayed at the Marine Biological Laboratory from May to October 2025.
2025	Starting to develop possible ways of collaboration with Cape Cod Museum of Natural History to highlight ocean particle cycling and plankton dynamics.
2025	Collaboration with filmmaker Giulia Grossman (2025 Villa Albertine residency program) with her project "Ocean Screen: From Surface Research to Abyssal Fiction".
2025	Collaboration with the short documentary: "The Plastic Cycle: Microplastics in the North Atlantic Gyre".
2024, 2025, 2026 (Nov)	Oceanic Flux Program interactive seminar to 20-30 undergraduate students from Massachusetts Maritime Academy.
2019 – present	Collaboration to several public science outreach efforts of writer and illustrator Liz Cunningham , including interviews for a book, providing content for a science and art exhibit entitled "*Plankton in Our Midst: The Unseen Citizens of the Sea and Our Breathing Earth" (e*xhibit run from November 2nd through December 1st 2024 at the Rockport Public Library in Rockport, Maine, and a smaller version at MBL, with the opening during the Ecosystems 50th anniversary), etc.
2023 (Nov)	*Third graders* fun facts seminar about the deep ocean (Springside Chestnut Hill Academy).
2023 (Nov)	*UIC INC's Podcast (Blake Armstrong) –* Experiences as an oceanographer, research cruises, career path, ocean carbon export, pollution, talking about the Oceanic Flux Program, etc.
2023 (Nov)	Participation in the Woods Hole Science and Technology (WHSTEP) family science night meeting, with Oceanic Flux Program exhibits.
2023 (Aug)	*Woods Hole Children's School of Science* – Class to 14-17 years olds about climate change, ocean acidification, export of material to the deep ocean and plastic pollution, and a lab tour.
2024, 2023 (Aug)	*Woods Hole Science Stroll* . Oceanic Flux Program exhibit (posters, microscope, design of a water column sedimentation prototype, slideshow, coloring pages with deep ocean particles and creatures, etc.). Design of "make your own mini-mooring line", "core the seafloor", and a "shaking" model of water column with settling particles to transfer the knowledge of oceanographic instrumentation and particle cycling in the deep ocean to the general public, including young kids.
2022 (Apr)	*Participation in the 2022 UChicago Science as Art contest* with Oceanic Flux Program Photos.
2021 (July)	*Children's book* collaboration with Gregory Mone (How our planet works?). Role: interview with the writer/illustrator to help them to understand the dynamics the carbon cycle in our earth to translate it to a children's book.
2020 (Mar)	*Newspaper* mini article in a local journal from the catalan city Esparreguera: Espavila "Se sumergeix al fons marí per nosaltres".
2019	*Book*: Contribution to middle school science textbook from Christy Peterson "Into the Deep: Science, Technology, and the Quest to Protect the Ocean" (Lerner Publications).
2019 (Aug)	*Newspaper article* in the Cape Cod Times "Tackling microplastic pollution in Waquoit Bay" (by Boris Tsang).
2018 and 2019 (Aug)	*Woods Hole Science Stroll.* Oceanic Flux Program exhibit (posters, microscope, design of a water column sedimentation prototype, slideshow, etc.). (See above for more exhibit description).
2018 (Feb)	*Women in Science*: International day of women and girls in science: production of a short motivational speech video for encouraging Catalan High School students to keep studying (https://www.youtube.com/watch?v=WsmJ4Ffgq-c).
2017 - 2018	*Volunteer*, Mass Audubon/NOAA necropsies of cold-stunned turtles from Cape Cod beaches, coordinated by Robert Prescott (Mass Audubon).

Sampling of turtle tissues for analysis of lipids and stable isotopes.

2017 - 2022 *Volunteer*, Baywatcher for The Buzzards Bay Coalition. Collection of environmental variables and nutrient samples.

2017 - 2020 *Judge*, Falmouth Public School Science & Engineering Fairs.

2016 - present *Volunteer*, Woods Hole Science and Technology Education Partnership (WHSTEP) Association.

Article "Web Resources for Expanding Science" (WHSTEP 2017 Issue, Volume 27, 1) (Science Teaching resources). WHSTEP Family Science Nights: Thinking Big & Looking Small. Oceanic Flux Program exhibit (October 2016, October 2019, November 2023).

2017 Marine Biological Laboratory/University of Chicago *Thinking Big & Looking Small* microscopic exhibition. Oceanic Flux Program exhibit (posters, slideshow, etc.).

2001 - 2007 Participant in several international exchange and environmental volunteer programs (Catalonia, Spain, Sweden and Poland).

Invasive species removal (*Caulerpa Taxifolia)*, archaeological and paleontological excavations, forest and field restoration, intercultural exchanges, etc.

Conference, Seminars and *Invited talks

(See below selection of the most relevant)

Gadson, O., Hull, P., Weber, J.C., **Pedrosa-Pàmies, R.**, Wostbrock, J.A.G., October 2026. Developing an interpretive framework for triple oxygen isotope analyses of planktic foraminifera through sampling in the Sargasso Sea. GSA Connects 2026, Denver (USA).

Edwards, E., Ruff, S., **Pedrosa-Pàmies, R.**, Moynihan, M., Vidal, E., Weed, R., Greene, E., Glatz, C., August 2026. The new owners of your trash: characterizing the microbial plastisphere in the deep ocean. Poster. 20th International Symposium on Microbial Ecology (ISME20), Auckland (New Zealand).

Gadson, O., Wostbrock, J., Hull, P., Weber, J.C., **Pedrosa-Pàmies, R.**, June 2026. Ground-truthing triple oxygen isotope analyses of planktic foraminifera from the Sargasso Sea. FORAMS 2026, University of Massachusetts Amherst, Amherst (USA).

Edwards, E., Ruff, S., **Pedrosa-Pàmies, R.**, Moynihan, M., Vidal, E., Weed, R., Greene, E., Glatz, C., June 2026. The new owners of your trash: characterizing the microbial plastisphere in the deep ocean. Poster. Australian Society for Microbiology (ASM) National Meeting, Melbourne (Australia).

Pedrosa-Pàmies, R., Weber, J.C., Conte, M.H., February 2026. Examination of sinking particles to the deep sea: Dynamic changes in species contributions with depth and seasonality captured by the Oceanic Flux Program image archive (2004–present). Ocean Sciences Meeting, Glasgow (UK).

Tryby, P., **Pedrosa-Pàmies, R.**, Weber, J.C., Glatz, C., February 2026. *Sargassum* as a vector for carbon export in the North Atlantic: Two decades of observations from the Oceanic Flux Program (OFP). Ocean Sciences Meeting, Glasgow (UK).

Johnston, K., Lethaby, P., **Pedrosa-Pàmies, R.**, Johnson, R., February 2026. Investigation of temporal and mesoscale spatial variability of tropical cyclone induced inertial flows in the North Sargasso Sea. Ocean Sciences Meeting, Glasgow (UK).

Buck, J.J.H., Benway, H.M., Berghoff, C., Blanco-Bercial, L., Cotovicz, L.C., Jr., Currie, K.I., Gerlach, D., Kinkade, D., Lange, N., Mansfield, T., Mickle, A., Miskin-Hymas, C., Montes, E., Morkeski, K., Muller-Karger, F.E., **Pedrosa-Pàmies, R.**, Plueddemann, A.J., Rueda Roa, D., Shepherd, A., Skjelvan, I., van de Velde, S., February 2026. FAIR marine ecology time series data for the global research community – Outcomes of the Marine Ecological Time Series Research Coordination Network (METS-RCN). Ocean Sciences Meeting, Glasgow (UK).

Pedrosa-Pàmies, R., May 2025. The Oceanic Flux Program: Sinking particles reveal interactions between the ocean and climate. The Ecosystems Center 50th Anniversary, Marine Biological Laboratory, Woods Hole (USA).

Edwards, E., Ruff, S., **Pedrosa-Pàmies, R.**, Moynihan, M., Vidal, E., Weed, R., Greene, E., Glatz, C., January 2025. The new owners of your trash: characterizing the microbial plastisphere in the deep ocean. Poster. Society for Integrative and Comparative Biology (SICB) Annual Meeting, Atlanta (USA).

***Pedrosa-Pàmies, R.** May 2025. The Oceanic Flux Program: Sinking particles reveal interactions between the ocean and climate. The Ecosystems Center 50th Anniversary, Marine Biological Laboratory.

Schnepper, C., **Pedrosa-Pàmies, R.,** Conte, M., Gruber, N., Haghipour, N., Eglinton, T., Mar 2024. Temporal variations of sinking particulate organic radiocarbon in the deep Sargasso Sea. EGU 2024.

Pedrosa-Pamies, R., Conte, M., Weber, J.C., February 2024. Influence of hurricanes on the ocean biological carbon pump. Talk. Ocean Science Meeting, New Orleans (USA).

Conte, M., **Pedrosa-Pamies, R**., Weber, J.C., Johnson, R., February 2024. The Oceanic Flux Program (OFP) Particle Flux Time-series: Sensitivity of the Biological Pump and Deep Ocean to Basin-scale Climate Forcing. Talk. Ocean Science Meeting, New Orleans (USA).

Neuer, S., Shurtleff, C., Fontanez Ortiz, M., Nahir Cruz, B., Brenner, A., Weber, JC, **Pedrosa-Pamies, R**., Conte, M., February 2024. Flux of particle bound microbial communities to the deep Sargasso Sea. Talk. Ocean Science Meeting, New Orleans (USA).

Jiang, X., Gallager, S., **Pedrosa-Pàmies, R.,** Ruff, E., Liu, Z., February 2024. Strong Resistance of Primary Macroplastics to Weathering as Revealed by Laboratory-Simulated Photoirradiation. Talk. Ocean Science Meeting, New Orleans (USA).

Hashim, M., Subhas, A., **Pedrosa-Pàmies, R.,** Salter, M., Conte, M., February 2024. Non-traditional sources of calcium carbonate in the deep Sargasso Sea. Talk. Ocean Science Meeting, New Orleans (USA).

Schnepper, C., **Pedrosa-Pàmies, R.,** Conte, M., Gruber, N., Haghipour, N., Eglinton, T., July 2023. Seasonal variations in the bomb radiocarbon signal from sinking particulate organic carbon in the deep Sargasso Sea. Talk/Poster. GRS/GRC chemical oceanography.

Schnepper, C., **Pedrosa-Pàmies, R.,** Conte, M., Gruber, N., Haghipour, N., Eglinton, T., June 2023. Seasonal variations in the bomb radiocarbon signal from sinking particulate organic carbon in the deep Sargasso Sea. Talk. ASLO Aquatic Sciences Meeting 2023.

Joern, G., **Pedrosa-Pàmies, R.,** Bochdansky, B. Marine plastisphere biofilm community progression in a tidal sub-estuary. Poster. ASLO Aquatic Sciences Meeting 2023.

Schnepper, C., **Pedrosa-Pàmies, R.,** Conte, M., Gruber, N., Haghipour, N., Eglinton, T., September 2022. Tracing bomb radiocarbon in sinking particulate organic carbon in the deep Sargasso Sea. Talk. 24th Radiocarbon Conference.

Pedrosa-Pamies, R., Conte, M., Weber, J.C., March 2022. Impact of tropical cyclones on the ocean's biological pump. Talk. Ocean Sciences Meeting 2022 (Web Conferencing).

Conte, M., **Pedrosa-Pamies, R**., Weber, J.C., March 2022. Basin-scale climate forcing of carbon flux to the deep ocean. Talk. Ocean Sciences Meeting 2022 (Web Conferencing).

Joern, G., **Pedrosa-Pamies, R**., Bochdansky, A., March 2022. Marine plastisphere biofilm community progression in a tidal sub-estuary. Poster. Ocean Sciences Meeting 2022 (Web Conferencing).

Jiang, X., Gallager, S., **Pedrosa-Pamies, R**., Ruff, E., Liu, S., March 2022. Tracking the weathering patterns of different types of plastics under long-term UV exposure. Talk. Ocean Sciences Meeting 2022 (Web Conferencing).

***Pedrosa-Pamies, R**., December 2021. Sinking marine particles and tropical storms in the North Atlantic. University of Southern Mississippi, Marine Science Seminar Series Oceans (Web Seminar).

***Pedrosa-Pamies, R**., July 2021. Tropical cylone activity and its impact on marine ecosystems. Seminar talk and discussion. University of Chicago Francis and Rose Yuen Campus Miniseries Oceans (Webinar).

Jiang, X., Gallager, S., **Pedrosa-Pamies, R**., Ruff, R., Bochdansky, A., Liu, Z., June 2021. Evaluation of plastic photodegradation in seawater after long time UV exposure. Talk. Association for the Sciences of Limnology and Oceanography (ASLO) Aquatic Sciences Meeting 2021 (Web Conferencing).

***Pedrosa-Pamies, R**., May 2021. Changing climate changing ocean: the impact to deep ocean communities. Talk and panel discussion. Microbiomes Across Environments, Panel Discussion for Logan Science Journalism Program.

Pedrosa-Pamies, R., Parinos, C., Sanchez-Vidal, A., Calafat, A., Canals, M., Velaoras, D., Mihalopoulos, N., Kanakidou, M., Lampadariou, N., Gogou, A., April 2021. Atmospheric and oceanographic forcing impact on particle flux composition and carbon sequestration in the Eastern Mediterranean Sea: a three-year time-series study in the deep Ierapetra Basin. Talk. European Geosciences Union (EGU) General Assembly Conference (Web Conferencing).

Pedrosa-Pamies, R., Parinos, C., Sanchez-Vidal, A., Calafat, A., Canals, M., Velaoras, D., Mihalopoulos, N., Kanakidou, M., Lampadariou, N., Gogou, A., October 2020. New insights into the impact of atmosphere-sea interactions on carbon sequestration in the Eastern Mediterranean Sea: a three-year time-series study in the deep Ierapetra Basin. Talk. Second Scientific Conference PANACEA (Web Conferencing).

Tarrés, M., Cerdà-Domènech, M., Sanchez-Vidal, A., **Pedrosa-Pàmies, R.,** Rumín-Caparrós, A., Calafat, A., Canals, M., May 2020. Particle fluxes and trace metal dispersal in the Gulf of Vera, SW Mediterranean Sea. Poster. EGU General Assembly Conference (Web Conferencing).

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., Johnson, R., February 2020. Hurricanes enhance the ocean's biological carbon pump. Poster. Ocean Sciences Meeting, San Diego (USA).

Hilditch, J., Conte, M. H., Johnson, R., Pacheco, F., **Pedrosa-Pàmies, R.,** February 2020. Investigation of Eddy - Storm Induced Near Inertial Wave Motions in the Northern Sargasso Sea. Poster. Ocean Sciences Meeting, San Diego (USA).

Conte, M. H., Hopkins, B., Karagiannis, M., Weber, J.C., **Pedrosa-Pàmies, R**., February 2020. Organic Carbon Production and Remineralization in the Oligotrophic Water Column Assessed Using Compound-specific Stable Isotopic Composition of Particulate Fatty Acids. Poster. Ocean Sciences Meeting, San Diego (USA).

Pedrosa-Pamies, R., Javier Lloret J., Vandal, N., McGuire, C., Chenoweth, K., Valiela, I., October 2019. Poster. Microplastics in Cape Cod salt marsh sediments: history and abundances. Microplastic International Workshop, Woods Hole (USA).

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., Johnson, R., August 2019. Impact of major hurricanes on the deep ocean. Talk. Goldschmidt Conference, Barcelona (Spain).

***Pedrosa-Pàmies, R.,** September 2018. Microbiome of the deep ocean: combination of molecular geochemistry and metagenomics. Talk. MBL Micro-Eco Discussion Group.

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., Johnson, R, June 2018. Impact of Hurricane Nicole on carbon cycling in the Sargasso Sea water column: Insights from lipid biomarkers in suspended and

sinking particles. 3 min flash talk and poster. Ocean Carbon & Biogeochemistry OCB Meeting, Woods Hole, Massachusetts (USA).

***Pedrosa-Pàmies, R.,** Conte, M. H., Weber, J.C., April 2018. The Oceanic Flux Program: tracing extreme weather events using lipid biomarkers. Talk. Flash talk session in the Marine Biological Laboratory, Massachusetts (USA).

DeFelippis E, Conte, M. H., Weber, J.C., **Pedrosa-Pàmies, R.,** March 2018. Lipid and stable isotopes profiles in cold-stunned sea turtles of Cape Cod. Talk. Cape Cod Natural History Conference 2018, Barnstable (USA).

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., Johnson, R., February 2018. Impact of Hurricane Nicole on particle cycling in the Sargasso Sea traced using lipid biomarkers (IS12A-06). Talk. Ocean Science Meeting, Portland, Oregon (USA).

Conte, M. H., Weber, J.C., **Pedrosa-Pàmies, R.**, February 2018. IS12A-03: The Oceanic Flux Program (OFP) time-series turns 40. Talk. Ocean Science Meeting, Portland, Oregon (USA).

Conte, M. H., **Pedrosa-Pàmies, R.*,** Weber, J.C., December 2017. Organic matter diagenesis within the water column and surface sediments of the northern Sargasso Sea revealed by lipid biomarkers (B31G-02). ***Talk. American Geophysical Union AGU Fall Meeting, New Orleans (USA).

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., December 2017. Insights into particle cycling in the Sargasso Sea from lipid biomarkers in suspended particles: Seasonality and physical forcing (B33A-2081). Talk. American Geophysical Union AGU Fall Meeting, New Orleans (USA).

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., August 2017. Particle cycling in the Sargasso Sea water column revealed by lipid biomarkers in suspended particles: Seasonality and physical forcing. 2 min. talk and poster. Gordon Research Conference, New Hampshire, Main (USA).

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., June 2017. Particle cycling in the Sargasso Sea water column revealed by lipid biomarkers in suspended particles: Seasonality and physical forcing. Poster. Ocean Carbon & Biogeochemistry OCB Meeting, Woods Hole, Massachusetts (USA).

Pedrosa-Pàmies, R., Conte, M. H., Weber, J.C., April 2017. Lipid biomarker composition of suspended particles in the Sargasso Sea water column: Changes with seasonality and physical forcing. Poster. Trustee Meeting Bermuda Institute of Ocean Sciences, Bermuda (UK).

Peadar de Hann, W, Sanchez-Vidal, A., Amblas, D., Aymà, A., Calafat, A., Canals, M., Cerdà- Domenech, M., **Pedrosa-Pàmies, R.,** Rayo, X., Rumin-Caparrós, A., September 2016. Monitoring floating microplastic debris in the western Mediterranean Sea. Poster. CIESM Congress, Kiel, Germany.

Pedrosa-Pàmies, R., Sanchez-Vidal, A., Calafat, A., Parinos, C., Gogou, A., Canals M., Lampadariou, N., February 2015. Atmospheric forcing of carbon export to the deep eastern Mediterranean Sea. Talk. ASLO Aquatic Science Meeting, Granada (Spain).

Pedrosa-Pàmies, R., Sanchez-Vidal, A., Calafat, A., Parinos, C., Gogou, A., Canals M., Lampadariou, N., November 2014.Three-year assessment of particulate fluxes in the deep eastern Mediterranean Sea: the Ierapetra Basin. Talk. International Ocean Research Conference, Barcelona (Spain).

Quirós, L., **Pedrosa-Pàmies, R.**, Sanchez-Vidal, A., Guillén, J., Durán, R., November 2014. Carbon and nitrogen contents and their isotopic composition in size-fractionated near-shore sediments off Barcelona. Poster. International Ocean Research Conference, Barcelona (Spain).

Pedrosa-Pàmies, R., Gogou, A**.,** Sanchez-Vidal, A., Parinos, C., Calafat, A., Canals, M., Bouloubassi, I., Lampadariou, N., April 2014. Composition and sources of sedimentary organic matter in deep basins of the North-Eastern Mediterranean Sea (10069). Poster. EGU (European Geosciences Union) General Assembly. Vienna (Austria).

Sanchez-Vidal, A., Calafat, A., Canals, M., **Pedrosa-Pàmies, R.**, February 2014. The relevance of atmosphere-driven oceanographic processes in submarine canyons for the carbon cycle in the NW Mediterranean Sea. Talk. Ocean Science Meting ASLO-AGU (Hawaii).

Pedrosa-Pàmies, R., Sanchez-Vidal, A., Calafat, A., Canals, M., Parinos, C., Gogou, A., Lampadariou, N., February 2013. The deep basins of the Eastern Mediterranean Sea: results of a two-year physical and biogeochemical assessment. Annual ReDEco meeting. Talk. Athens (Greece).

Pedrosa-Pàmies, R.*, Veres, O. *, Rumín-Caparrós, A.*, February 2013. Marine sedimentary particles as drivers of the deep marine ecosystem. Talk. Conference on Interdisciplinary Doctoral Researchers (JIPI, University of Barcelona), Barcelona (Spain). (*equally contributed)

Canals, M., Sanchez-Vidal, A., Calafat, A., **Pedrosa-Pàmies, R**., Lastras, G., April 2013. Extreme event impacts on seafloor ecosystems. Talk. EGU (European Geosciences Union) General Assembly. Vienna (Austria).

Durán, R., Canals, M., Lastras, G., Sanchez-Vidal, A., Micallef, A., Amblas, D., **Pedrosa-Pàmies, R.,** September 2012. Seafloor impact of episodic events in the neighbourhood of Blanes submarine canyon head, NW Mediterranean Sea. Poster. 3rd Annual Hermione Meeting. Faro (Portugal).

Rumín-Caparrós, A., Sanchez-Vidal, A., Calafat, A., Canals, M., Puig, P., Martín, J., **Pedrosa-Pàmies, R**., Amblas, D., Rayo, X., September 2012. 2009-10 and 2010-11 winter dense shelf water formation in the Gulf of Lion and its consequences in Cap de Creus submarine canyon. Talk. 3rd Annual Hermione Meeting. Faro (Portugal).

Pedrosa-Pàmies, R., Sanchez-Vidal, A., Calafat, A., Canals, M., Lampadariou, N., September 2012. The deepest ecosystem in the Eastern Mediterranean Sea: results of a two-year physical and biogeochemical assessment. Talk. 3rd Annual Hermione Meeting. Faro (Portugal).

Sanchez-Vidal, A., Calafat, A., Canals, M., **Pedrosa-Pàmies, R.,** López-Fernández, P., Lastras, G. March 2012. Extreme Event impacts on Seafloor Ecosystems. Poster. Deep-Sea and Sub-Seafloor Frontiers Conference. Sitges (Catalonia, Spain).

Pedrosa-Pàmies, R., Sanchez-Vidal, A., Calafat, A., Canals, M., Parinos, C., Gogou, A., Lampadariou, N., December 2011. Regional Drivers of Ecosystem Change and its Influence on Deep-Sea Populations in the Mediterranean. Talk. Annual ReDEco meeting. Barcelona (Spain).

Sanchez-Vidal, A., Calafat, A., **Pedrosa**, **R**., López, P., Canals, M., November 2011. Particulate organic carbon export during eastern storms in the Catalan sea. Poster. SESAME (Southern European Seas: Assessing and Modelling Ecosystem Changes) Final Meeting. Athens (Greece).

Sanchez-Vidal, A., **Pedrosa, R.**, López, P., Pasqual, C., Calafat, A., Canals, M., Cateura, J., Flexas, M., April 2011. Offshore transport of organic matter during storms. Poster. EGU (European Geosciences Union) General Assembly 2011. Vienna (Austria).

Pedrosa-Pàmies, R., Sanchez-Vidal, A., Calafat, A., Canals, M., April 2011. Organic-mineral interactions in sediments of the Catalan margin: the influence of extreme events. Poster. HERMIONE, Second Annual Meeting. Estepona (Spain).

Pedrosa-Pàmies, R., Sanchez-Vidal, A., Calafat, A., Canals, M., May 2010. Estudio de las variaciones geoquímicas y sedimentológicas en los sedimentos del cañón de Blanes y talud adyacente. Anual Meeting PROMETEO. Talk. Barcelona (Spain).

Educational Activities

Teaching

2026 **Undergraduate Semester in Environmental Science (Marine Biological Laboratory). Methods in Oceanography Module Course** (Instructors: **Rut Pedrosa Pamies** and Kristin Gribble)

2025 **Undergraduate Semester in Environmental Science (Marine Biological Laboratory).** Creation of syllabus for a new elective: Methods and Concepts in Oceanography.

2025, 2024, 2023 **Undergraduate University of Chicago / Marine Biological Laboratory: Microbiomes Across Environments.** Lecture in carbon cycle in the ocean, use of metabolomics to trace ecosystem processes, and plastic pollution in the ocean (2.5h/year).

Undergraduate Semester in Environmental Science (Marine Biological Laboratory). 2 Lectures about C cycle in the ocean, climate change, extreme weather events and plastic pollution (4h/year). And final exam preparation and grading.

2022 **Boston University- Undergraduate/Graduate Marine Biogeochemistry.** Guest Lecture about carbon cycle in the ocean, particle cycling, tropical cyclones, and lipid biomarkers as tracers for ecosystem processes (1.5h).

2021 **Boston University- Undergraduate Marine Biogeochemistry.** Guest Lecture in carbon cycle in the ocean, particle cycling, tropical cyclones, and lipid biomarkers as tracers for ecosystem processes (1.5h).
Undergraduate University of Chicago / Marine Biological Laboratory: Microbiomes Across Environments. Lecture in carbon cycle in the ocean, lipid biomarkers as tracers for ecosystem processes, and plastic pollution in the ocean (1.5h)

Undergraduate Semester in Environmental Science (Marine Biological Laboratory). Lecture ”Particle cycling in the ocean: carbon cycle and extreme weather events” (1.5h).

2020 **Undergraduate University of Chicago / Marine Biological Laboratory: Microbiomes Across Environments.** Lecture in carbon cycle in the ocean, and lipid biomarkers as tracers for ecosystem processes (1.5h)

Undergraduate Semester in Environmental Science (Marine Biological Laboratory) Webinar Lecture ”A Changing Climate, A Changing Ocean” (1h) (Rut Pedrosa Pamies/ Maureen Conte).

2019 **Undergraduate Course University of Chicago / Marine Biological Laboratory: Microbiomes Across Environments.** Lecture in carbon cycle in the ocean, and lipid biomarkers as tracers for ecosystem processes (1.5h)

2015-2016 **Masters Program in Science and Integrated Management of Water (**University of Barcelona). Lecture in Marine Waters.
Topic: “Sedimentology laboratory: techniques and instruments“

2013-2015 **Masters Program in Marine Science** (University of Barcelona)
Lectures in Geology of the Oceans:
Topic: “**“**Hydro-sedimentary study of a submarine canyon” (TA, 1.5h 2015).
Topic: “Sedimentology laboratory: techniques and instruments” (1.5h 2013-14, 1.5h 2014-15, 1.5h 2015-16).

Lecture in Biogeochemistry.
Topic: “Biogeochemistry of the ocean: GEOTRACES program and Ocean Data View” (TA, 1h 2015-16).

2009 **Bachelors Program in Environmental Science** (University of Barcelona).
Lecture in Environmental Geochemistry
Topic: “Analytical techniques in Sedimentology”.

Student Advising and Mentoring

Supervising, and co-supervising, training laboratory techniques, data interpretation, scientific manuscript writing and science communication:

Master students (University of Barcelona/ Marine Biological Laboratory)

2023 *Christine Martinec Vlahides.* (Master in Marine Science, Unity College) MsC thesis: "Field Guide to the Deep: Decades of Oceanic Flux Collection." Co-supervisors: Maureen Conte.

2016 *Jaume Serra Pareras*. (Master in Oceanography and Management of Marine Environment, Univ. of Barcelona). MsC thesis: "Comparison of particle dynamics in two submarine canyons located in the South of Spain." Co-supervisors: Antoni Calafat Frau and Aitor Rumín Caparrós.

2014 *Lucía Quirós Collazos*. (Master in Oceanography and Management of Marine Environment, Univ. of Barcelona). MsC thesis: "Carbon composition and isotopic characterization in near-shore sediments of the NW Mediterranean". Co-supervisor: Anna Sanchez Vidal.

Undergraduate students (Marine Biological Laboratory)

2026 *Peter Tryby (OFP NSF REU, Amherst College)* Project "Quantifying Sargassum-Derived Carbon Export to the Deep: The Role of Epiphytic Carbonates"

2025 *Kell Johnston* (UK Cawthorn Cambridge Internship- Bermuda Institute of Ocean Sciences) Project "Evaluation of mesoscale physical and biogeochemical features linked with extreme episodic weather events at the Bermuda time series site" (co-supervisor: Rod Johnson, BIOS)

Peter Tryby (OFP NSF REU, Amherst College) Project "Quantification of the export of *Sargassum* to the deep Sargasso Sea".

Chiara Cohen (University of Vermont) Project "Microplastic and nitrogen supply alter chlorophyll concentration in Southeast Massachusetts salt marsh vegetation". (*Main supervisor was I. Valiela (MBL), I supervised lab activities related to organic matter digestion for microplastic analysis)

2024 *Angelina Lopez Peinado* (Semester in Environmental Science (SES) student, the Ecosystems Center, MBL). Project "Characterization of Grain Size Distribution and Carbon Content of Deep-Sea Floor Sediments in the Deep Sargasso Sea".

Konoka Uematsu (SES student, MBL). Project "Identification of lipid biomarkers for temperature stress in Sargassum (*S. filipendula*)".

Sophia Williams (SES student, MBL). Project "Evaluation of microbial colonization and degradation of coastal macroplastics". Co-supervisor: E. Ruff.

Alena Maes-Polan (SES student, MBL). Project "Identification of microbial species on macro-plastics in freshwater aquatic systems" Co-supervisor: E. Ruff.

Emma Edwards (University of Chicago, Metcalf Undergraduate Fellow, summer 2024). Project "The New Owners of Your Trash: Characterizing the Microbial Plastisphere in the Deep Ocean". Co-supervisor: E. Ruff.

Nora Penni (OFP NSF REU, Harvard University, summer 2024). Project "Grain Size Distributions of Sinking Particles in the deep Sargasso Sea: Insight into Sources through Seasonality, Interannual Variability, and Depth Comparisons".

2023 *Lillian Cusa* (SES student, MBL). Project "Bioaccumulation of pharmaceutical and personal care products (PPCPs) in *Astrangia poculata* from ingested PPCP-incubated brine shrimp and microplastics"

Samantha Smith (SES student, MBL). Project "Project Concept: Impact of Microplastics on Coral Feeding Behavior and Oxygen Consumption". Co-supervisor: Loretta Roberson.

David Wang (University of Chicago, Metcalf Undergraduate Fellow, summer 2023). Project " Growing on Garbage: Characterizing Biofilms on Plastics in the Deep Ocean"

2022 *Ashlley Flores (*Blue Economy Internship Program Marine Biological Laboratory/ Massachusetts Maritime Academy, Jan.-Feb 2022). "Field guide to the deep". Co-supervisor: Maureen Conte.

2021 *Briana Stevens* (SES student, MBL). Project "Biofilm Formation on Five Different Plastic Types in Contrasting Environments of Siders Pond Water Column".

Nora O´Keeve (SES student, MBL). Project "The Abundance and Composition of Plastics Found in and Nearby Coral Ecosystems of Cape Cod".

Sunniva Sheffield (SES student, MBL). Project "The Interaction of Pharmaceutical & Personal Care Products (PPCPs) with Plastics & Associated Aquatic Biofilms Grown in Different Environments of Sider's Pond, Falmouth MA". Co-supervisor: Maureen Conte, JC Weber.

Alice Ball (SES student, MBL). Project "Investigating Feeding Rates of the Northern Star Coral, Astrangia poculata, on Microplastics". Main-supervisor: Loretta Roberson. Co-supervisors: Javier Lloret, Rut Pedrosa Pamies.

Sydney Russo (SES student, MBL). Project "Physiological impacts on *Astrangia poculata*: Stresses of microplastics on the Northern Star Coral". Main-supervisor: Loretta Roberson. Co-supervisors: Javier Lloret, Rut Pedrosa Pamies.

2020 *Shazheb Khalib* (Blue Economy Internship Program MBL, May 2020) "Identification and characterization of Sargassum in sinking particles in the deep Sargasso Sea off Bermuda – Image Learning*".* Co-supervisor: Maureen Conte, JC Weber, Abhishek Kumar, Anthony Mautino.

2019 *Olivia Shao* (SES student, MBL). Project" How does the chemistry of pharmaceuticals and personal care products (PPCPs) affect bioaccumulation in the estuarine blue mussel Mytilus edulis?".

Miriam Ritchie (SES student, MBL). Project" Do Microplastic Concentrations in Estuarine Salt Marshes Increase with Human Population Density?".

Becky Hopkins (OFP REU Conte Lab student, summer 2019). Project "Assessment of particle cycling processes in the deep ocean using the carbon isotopic". Co-supervisors: Maureen Conte and JC Weber.

Annagh Devitt (University of Chicago, Metcalf Undergraduate Fellow, summer 2019). Project "The influence of Hurricane Igor on the deep ocean carbon flux". Co-supervisors: Maureen Conte.

Nicole Vandal (NSF REU). Project "Microplastics everywhere: The history of microplastic pollution in Cape Cod salt marsh". Co-supervisors: Javier Lloret and Ivan Valiella.

Ruby Rorty (University of Chicago, Metcalf Undergraduate Fellow, summer 2019). Project "Population and Plastic Pollution: Abundance, Sources, and Composition of Microplastics in Cape Cod Salt Marshes". Co-supervisors: Javier Lloret and Ivan Valiella.

2018 *Claire McGuire* (SES student, MBL). Project" Plastic Marsh (The Tenacity). A look back at the varying anthropogenic impacts on estuary systems through microplastic pollution and stable isotopes".

Casey Beidelman (SES student, MBL). Project:" Plastic Beach (The Spread): Microplastic distribution and composition across the tidal range of Cape Cod beaches".

Hector Salazar (SES student, MBL). Project:" Plastic Beach (The Arrival)

Spatial heterogeneity of microplastic pollution on Cape Cod beaches and the impacts of different hydrographic sources".

Emily DeFelippis (OFP REU Conte Lab student, summer 2018). Project "Particulate Carbon cycling in the Sargasso Sea water column: insights from lipid biomarkers to evaluate seasonality".

Marianna Karagiannis (University of Chicago, Metcalf Undergraduate Fellow, summer 2018). Project "Origins of Deep Sea Polyunsaturated Fatty Acids Assessed Using Compound Specific Stable Isotopes". Co-supervisors: Maureen Conte.

2017 *Emily DeFelippis* (SES student, MBL). Project: "Fatty acid and stable isotope profile in juvenile sea turtles of Cape Cod in relation to diet". Co-supervisors: Maureen Conte.

Johanna Holo (University of Chicago, Metcalf Undergraduate Fellow, summer 2017). Project: "Understanding particle cycling in the deep Sargasso Sea through the use of lipid biomarkers". Co-supervisor: Maureen Conte.

Franklina Yeboah (Woods Hole Partnership in Education Program (PEP) Student, summer 2017). Project: "Assessing juvenile sea turtle habitat and nutritional history in Cape Cod waters using stable isotopes". Co-supervisors: Maureen Conte and J.C. Weber.

Michael Callahan (OFP REU Conte Lab student, summer 2017). Project: "Carbonate in the sinking and suspended particles in the Sargasso Sea". Co-supervisors: Maureen Conte and J.C. Weber.

2016 *Michael Daugherty* (SES student, MBL). Project: "Adsorption of organic pollutants to microplastics: The effects of dissolved organic matter". Co-supervisors: Maureen Conte and J.C. Weber.

High school students (Marine Biological Laboratory)

2026 *Kira Duvall* (Mashpee High School).

2025 *Mikayla Noonan* (Bourne High School).

2024 *Peter Tryby* (Falmouth High School). Project "Estimation of Biomass From Image Area & Elemental Characterization of Sargassum: Unlocking the Potential of the OFP Image Archive"

2023 *Peter Tryby* (Falmouth High School).

2022 *Quinn Schwefler* (Bourne High School). Co-supervisors: Maureen Conte and J.C. Weber.

2020 *Robert Grinnell* from Upper Cape Tech (Blue Economy Internship Program MBL, Jan-Mar 2020). "Field Guide to the Deep" guide to the deep ocean particle flux". Co-supervisor: Maureen Conte, JC Weber.

2018-2019 *Jack Daigneault* (Mashpee High School), *Geovanna Pereira* (Mashpee High School), and *Deshawn Adler* (Mashpee High School). Spring and summer 2018-2019. Co-supervisors: Maureen Conte, J.C. Weber and Alana Thurston.

2016 *Michael Callahan* (Bourne High School). Co-supervisors: Maureen Conte and J.C. Weber.

Scientific expertise

Analytical chemistry: analysis of lipid biomarkers (GC-MS and GC-IRMS), elemental composition (C, OC, TN and $CaCO_3$), stable isotopic composition ($\delta^{13}C$ and $\delta^{15}N$), grain size, elemental analysis (ICP-MS and ICP-OES), imaging (SEM/EDS).

Oceanographic instrumentation: sediment traps (PPS3 and McLane), in situ pumps, GO-FLO bottles, manta trawl, CTDs, multicorer, boxcorer, Van Veen grabs, gravity corers, acoustic releases and release units (Benthos and IXBLUE Acoustic), current meters (Anderaa RCM8/9 and Aquadopp), SBE 37-SM MicroCAT, Acoustic Doppler Current Profiler (ADCP).

Analytical software: GC/MSD ChemStation and ChromPerfect (GC-MS data acquisition and instrument control).

Oceanographic instrumentation software: Sedtrans 05, Piege (motor sediment trap), Tera Term, Data Reading Program (software RCM8/9 current meter and ADCP), Nortek software (Aquadopp current meter), SBE Data Processing, Seave and Seaterm.

Mapping, statistics and illustration software: Ocean Data View, ArcGis, Statgraphics, R, Photoshop, Corel, Grapher.

Other expertise

Languages: Fluent in Catalan, Spanish and English. Basic knowledge of French.

Photography (studies: initiation, intermediate, advanced and Adobe Photoshop).
2014-16 Photographer of the musical "Fang i Setge".

Illustrations (design of diagrams, T-shirts, logotypes, etc.).

Diving: Open water diver certificate (PADI).

Some of the Recent/Ongoing Research Collaborators list

US national institutions: M. Prakash (U. Standford, particle cycling, imaging), M. H. Conte (Marine Biological Laboratory (MBL), oceanography, organic geochemistry), E. Ruff (MBL, genomics, plastic research, I. Valiela (MBL, coastal/estuarine plastic research), B. Paul (MBL, genomics, initiating collab. with deep ocean particle cycling), A. Subhas/M. Hashim (WHOI, carbonate chemistry), S. Gallagher (Coastal Ocean Vision/ former WHOI, microplastics research and image learning), D. McGillicuddy (WHOI, Sargassum dynamics), A. Bochdansky (ODU, microbiology and optics, plastic research), S. Neuer (ASU, genomics), Z. Liu (Univ. Texas, organic geochemistry/ plastic research), G. Foltz (NOAA, physical oceanography hurricanes), B. Monteleone (UNC Wilmington, ocean plastic pollution), G. Skomal (MA Marine Fisheries), J. Stone (U. South Carolina, plankton ecology), L. Trueblood (La Sierra University, salp dynamics), R. Johnson (BIOS, time-series data comparison).

Other international institutions: T. Eglinton/C. Schnepper (ETH, ^{14}C measurements), F. Martínez Ruiz (Univ. Granada, Ba elemental composition), Blanca Ausin Gonzalez (Univ. Salamanca, RPP advice with open ocean/mooring operations).

Specialized training

Mar. 2018	UNOLS **Chief Scientist Training**. University of Rode Island Graduate School of Oceanography. *Duration*: 9 h.
Nov. 2017	Writing About Science for the Public: A Workshop for Scientist. Marine Biological Laboratory. *Duration*: 16 h.
April 2017	IT Security Awareness and Preventing Workplace: Harassment. *Duration*: 5 h.
Jan. 2017	Sea turtle necropsy training. Helping Wellfleet Bay Wildlife Sanctuary. *Duration*: theory 1 hour, sampling 12 h.
Dec. 2015	Workshop “Biological and climatic impacts of ocean trace element chemistry”. Royal Society, London, England. *Duration*: 16h.
Apr. 2015	FixO3 Network – Workshop D8.11 “An Introduction and practical use of European marine data infrastructures”. Bremen, Germany. *Duration:* 15h.
Jul. 2014.	Course Introduction to ArcGIS: Marine Geosciences Applied. University of Barcelona. *Duration:* 12h.
Jan. 2014	MATLAB course. Basic tools for analysis of geophysical variables. University of Barcelona. *Duration:* 21h.
Jun. 2013	Course of centrifuges and centrifuge processes. Company Steriltech, University of Barcelona. *Duration:* 3h.
May. 2013	Theorical/practical course ICP-MS. Department of Graduate and Specialization - ICTJA-CSIC (Barcelona). *Duration:* 23h.
Jun. 2012	Course “Are your GEOTRACES data reliable?” A 3-day essential training school on data quality of marine trace elements and isotopes. Geel&Leuven, Belgium. *Duration:* 20h.
May. 2011	Course “Modern mass transport and turbidite systems: Importance for hazards and resources”. Dr. Hans Nelson. University of Barcelona. *Duration:* 13h.
Mar. 2010	Seminar on Prevention of Hazards Research Laboratories (OSSMA). University of Barcelona. *Duration:* 4 h.