Curriculum Vitae (Nov 2023)

RUT PEDROSA PÀMIES, Ph.D.

Assistant Research Investigator
The Ecosystems Center
Marine Biological Laboratory
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Google Scholar: https://scholar.google.com/citations?user=2nMjfA8AAAAJ&hl=en

Research Interests

- Marine biogeochemistry
- Cycling of ecosystems in the deep sea
- Role of microbes in regulating particle fluxes and sedimentation processes in marine ecosystems
- Transfer and fate of organic pollu[illegible]

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)
2018-present	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.

2014	Visiting Researcher- Hellenic Centre for Marine Research, Institute 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 se surface samples and manuscript writing (3 months).
2011 - 2015	Pre-

Professional Affiliations

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

Professional Service (Management and committees)

2023-	Advisor PhD Committee Charlotte Schnepper (ETH, Zurich).
2023-	NSF EarthCube-funded Research Coordination Network (MERSCN) 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" (Co-chairs: M. Duhaime, Z. Liu and J.K. Choi)
2023-	Topic Editor in Frontiers in Earth Science for the research topic "The Ocean Particle Flux and its Cycling Within the Deep Water Column".
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 Ocean Particle Flux and its Cycling Within the Deep Water Column".
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), 11 March 2012, Sitges, Barcelona.

Reviewer for proposals for the National Science Foundation.

Review for journals: Progress in Oceanography, Biogeosciences, 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.

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:

Other Participation inother Research Projects

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

Role elemental and isotopic composition analysis, conference presentations and manuscript writing.

Ongoing Research Collaborators list

US national institutions: M. H. Conte (Marine Biological Laboratory (MBL), oceanography, organic geochemistry), E. Ruff (MBL, genomics, plastic research), J. Mark Welch (MBL, genomics/microscopy plastic research), A. Kumar (Marine Biological Laboratory, particles image analysis), J. Lloret and Ivan Valiela (MBL, coastal/estuarine plastic research), A. Subhas, M. Hashim (WHOI, aBL

	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. 12-20 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 a
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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 news papers (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.

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*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 cyclone 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 photod0 Tc 0 Tw 9.W(e)-5 (s)-11.2 (01 Tc 0.02.2 (las)-1.3 (t)-30.6 (h)-23 (t)-)-3 (ic/-7.8 (01t)-)-3.9 (i)1

*PedrosaPàmies, R.,

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 4-year physical and biogeochemical assessment. Annual ReDEco meeting. Athens (Greece). Talk.

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

2014 Lucía Quirós Collazos (Master in Oceanography and Management of Mar 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)

2023 Lillian Cusa (Semester in Environmental Science (SES) student, the Ecosystems Cente Project "

July 2021	Children's book collaboration with Gregory Mone (How our planet works?). Role interview with the writer/illustrator to help them to understand the dynamics