The PELAGOS expedition: science beyond the lab

I. Barguilla[1*], A. García-Rodriguez[1], R. Egea[1], L. Rubio-Lorente[1], J. Gutiérrez-García[1], J. Martín-Pérez[1], G. Banaei[1], M. H. Morataya-Reyes[1], A. Rocabert[1], R. Marcos[1], & A. Hernández[1]

[1] Departament de Genètica i Microbiologia, Facultat de Biociències, Universitat Autònoma de Barcelona, Cerdanyola del Vallès (Barcelona), Spain
* irene.barguilla@uab.cat

Science communication strategies are essential for effectively disseminating research findings to diverse audiences, from fellow scientists to the general public. In the context of the H2020 project PLASTICHEAL, which aims to evaluate the health impacts of micro-/nanoplastics, we have tailored communication actions to engage all potential stakeholders. As part of our outreach efforts, we collaborated with the Pelagos Institute in Greece to conduct a unique scientific expedition. This initiative sought to bridge the gap between laboratory research and real-world environmental challenges, fostering interdisciplinary collaboration and public engagement.

During the expedition, PLASTICHEAL scientists, typically focused on laboratory research, engaged in field activities such as monitoring dolphin and whale populations and tracking their migration routes. This hands-on experience allowed us to observe firsthand the impact of human activities on marine life. Concurrently, Pelagos scientists participated in marine water sampling to assess micro/nano-plastic levels in the region, aiming to better understand their potential effects on marine ecosystems.

This collaborative effort not only allowed us to effectively disseminate our research findings to a broader audience but also highlighted the interconnection between different scientific disciplines. It demonstrated that interdisciplinary collaboration and direct engagement with environmental challenges can significantly enhance the impact and relevance of scientific research.

Funding: This work was supported by the European Union's Horizon 2020 research and innovation programme (PlasticHeal, Grant Agreement No. 965196), the Spanish Ministry of Science, Innovation and Universities (PID2023-146489OB-I00), and the Generalitat de Catalunya (2021-SGR-00731). Additional support was provided by the ICREA-Academia programme (grant Ac2232418 to A. Hernández) and the *Projectes Pre-Competitius* of the Universitat Autònoma de Barcelona (PPC2024-36 and PPC2024-28 to A. García-Rodríguez and L. Rubio). A. Rocabert is funded by the Generalitat de Catalunya (2023 FISDU 00288). I. Barguilla holds a Beatriu de Pinós Postdoctoral Program from the Secretariat of Universities and Research of the Department of Business and Knowledge of the Government of Catalunya (2023-BP-00212).