

Briefing and alignment event on European Regional Genomic Observatories: operationalizing omics & eDNA in regional ocean observation.

Conveners:

- Alfred-Wegener-Institut Helmholtz-Zentrum für Polar- und Meeresforschung (AWI): Raïssa Meyer, Pier Luigi Buttigieg
- European Marine Biological Resource Centre European Research Infrastructure Consortium (EMBRC):
 Nicolas Pade
- Stazione Zoologica Anton Dohrn Napoli (SZN): Raffaella Casotti, Daniele Iudicone

Introduction

In the framework of the <u>EuroSea project</u>, AWI, EMBRC and SZN are organising a public consultation on "European Regional Genomic Observatories: operationalizing omics & eDNA in regional ocean observation" which will be a virtual event held on 16th and 17th of November 2020.

Ocean health is inextricably linked to the integrity of its constituent ecosystems, and their potential to provide trillions of Euros in services to humankind. Recent advances in molecular methods such as genomic, transcriptomic, and related "omic" approaches show great promise in reporting on the state of, and change in, the omnipresent microbial foundations of marine ecosystems, which are intimately tied to ocean biogeochemistry. Marine omic observation has already detected responses to both anthropogenic and natural stressors and emerging networks of long-term, omically enabled observatories are beginning to realize the full potential of omic observation by global coordination of best practices, FAIR data products, and calibration actions with existing ocean observing infrastructures.

The aim of this consultation event is to solicit international feedback on marine omics observatories, their networks and to shape international standards to the needs of marine omics observatories. The objectives of the event are to:

- 1) Co-create a joint briefing on the key activities related to networks of omically augmented observatories and initiatives at the European level
- 2) Develop pathway to align activities through a Programme Action under the <u>UN Decade of Ocean Science</u> for <u>Sustainable Development</u> (UNDOS)
- 3) Plan future collaboration towards a sustained network of observatories and developing the UNDOS proposal

Each session will provide an opportunity to have an open discussion and develop content based on the feedback of participants to be included in a report on the state of the art of Biodiversity Observation Networks around the world, with a focus on propositions for future European initiatives. The contributions to this report can be made live or asynchronously - participants will have access to the draft briefing sections in advance and one week after the event.







Programme

Day 1 [session 1: 9.00-11:00 CET, session 2: 18.00-20:00 CET]

- 1. What approaches do we want to take into the Ocean Decade?
 - a. Plenary
 - 1. Introduction (10 min)
 - 2. Decade motivation (5 min)
 - b. Moderated breakouts (2*4 breakouts, 25 min each, 10 min break to allow participants to switch between breakout groups)
 - 1. Funding & management models
 - 2. Sampling
 - 3. Data Management
 - 4. Science and Society
- 2. Vision synthesis and setting (45 min)

Day 2 [session 3: 9.00-11:00 CET, session 4: 18.00-20:00 CET]

- 1. Consolidating and finalisation: What approaches do we want to take into the Ocean Decade?
 - a. Debriefing from Day 1 (15 min)
 - b. Consolidation moderated breakouts (2*4 breakouts, 25 min each, 10 min break to allow participants to switch between breakout groups)
 - 1. Funding & management models
 - 2. Sampling
 - 3. Data Management
 - 4. Science and Society
- 2. Final round of vision synthesis and setting (30 min)
- 3. Closing and next steps (15 min)

Participant briefing

The purpose of this event is to come together and share our perspectives on omics/eDNA ocean observation in Europe.

Through short, roundtable sessions, we will co-create a briefing on European activities in this space to align and prepare for an international programme proposal to the UN Ocean Decade.

All participants are invited to contribute to the event background materials with documents, slides, recorded presentations (formal or informal recordings), or other material of their choice which will be made available to other participants during and after the event.

Contributions can be submitted through the registration form.

Registration

Register for the event





