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OBON is a UN Ocean Decade endorsed programme, led by POGO



Our vision is to accelerate informed decision-making to restore the health of our ocean using the universal signatures of life on Earth: biomolecules

OBON: A key component of next-generation ocean observing systems to transform how we sense, protect, utilise, and manage ocean life.

Endorsed projects reflect the demand for large-scale, affordable biological observations, including autonomous capabilities.

OBON Objectives

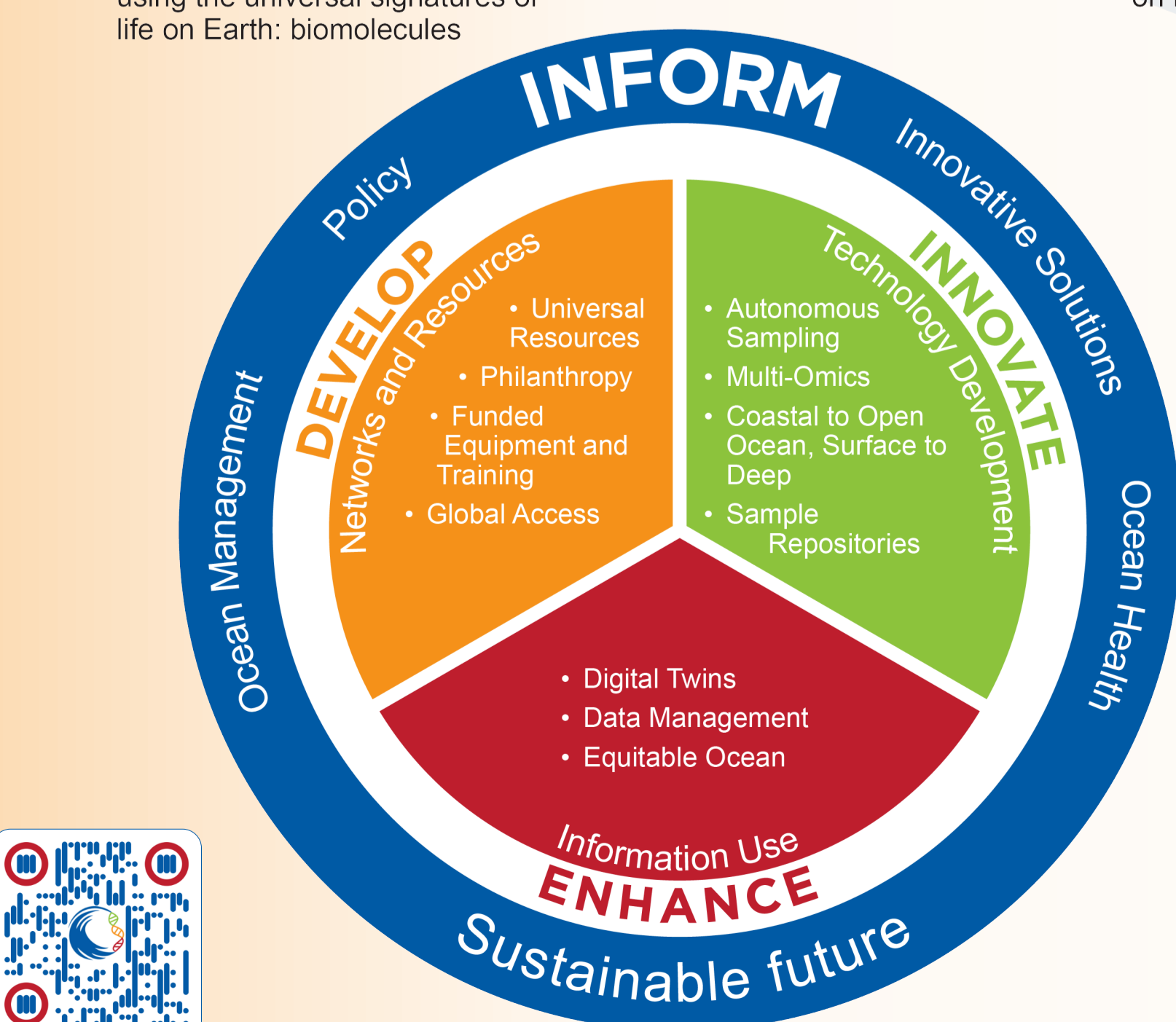
1. Build a coastal-to-open ocean multi-omics biodiversity observing system; develop autonomous sampling and analysis capability; promote methods/technique development
2. Enhance marine 'omics' data systems and enhance ecosystem models by adding biomolecular components
3. Partner with marine conservation and management specialists, policymakers, private sector and to address sustainable development
4. Develop and transfer capacity through training programs combined with funded equipment programs supported by development/aid agencies and philanthropy

OBON Strategy Framework

OBON's core pillars are to **Innovate** technology and methodologies, delivering frameworks to advance biomolecular observations from the coastal to the open ocean, thus enabling broad-scale interpretations and scientific discovery; to **Develop** capacity globally, to advance observations and analyses while ensuring equitable access to ocean knowledge and resources; and to **Enhance** the use and interpretation of these data through agreed data practices and model integration, and the creation of ocean knowledge. Together, this work **Informs** ocean users and managers, ensuring sustainable interactions in support of a healthy ocean.

VISION
To accelerate informed decision-making to restore the health of our ocean using the universal signatures of life on Earth: biomolecules

MISSION
To create a hub for biomolecular measurement of marine life on Earth.



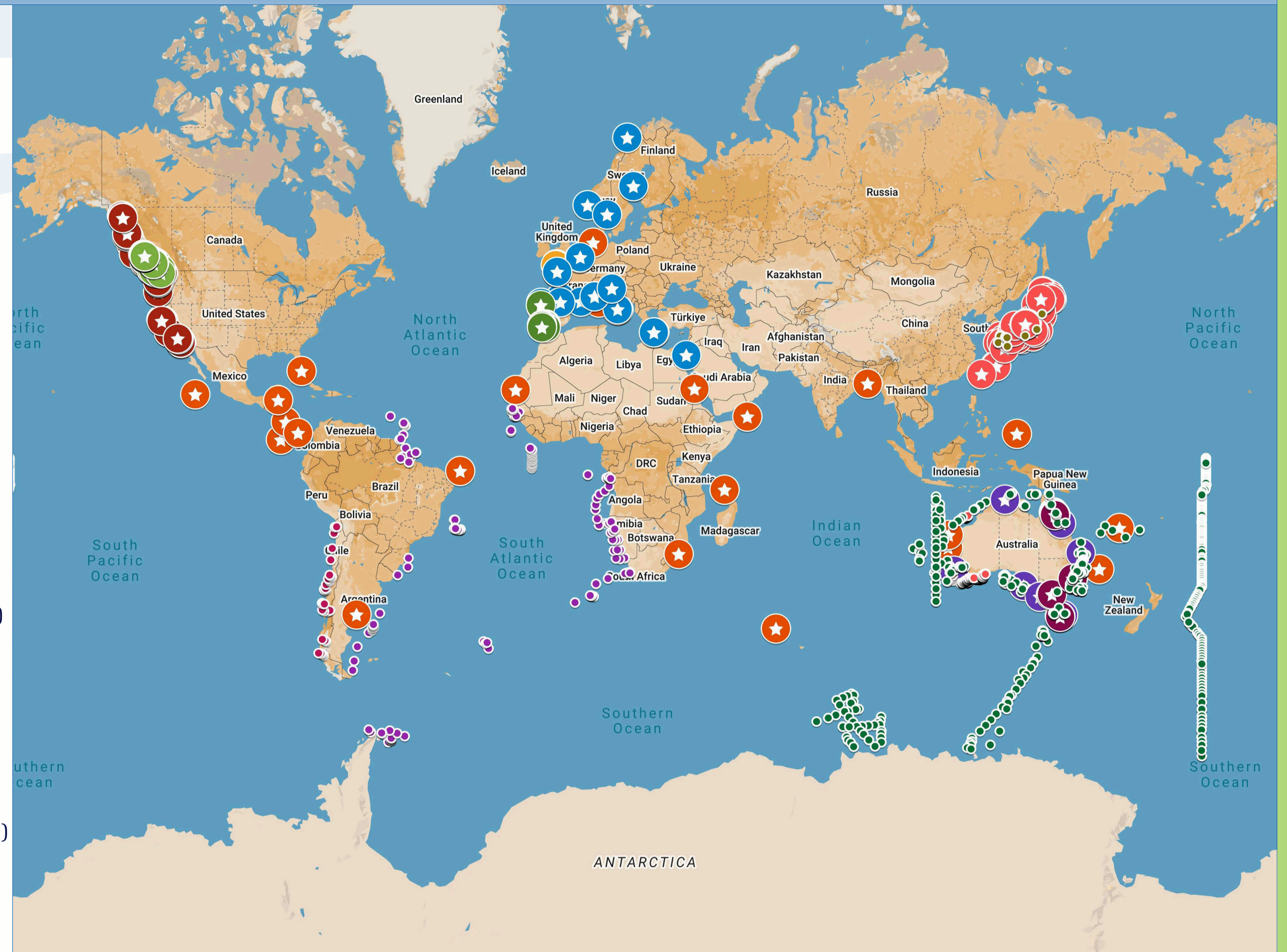
OBON Sampling Locations

Long-term monitoring locations by project

- Pacific eDNA Coastal Observatory
- Hakai Institute Biomolecular Observing Network
- EMOBON
- UNESCO eDNA Expeditions
- UMinho-Portugal / A-FISH-DNA-SCAN
- Naples Ecological REsearch Augmented observatory
- WCO BON
- ANEMONE Global
- Scripps Ecological Observatory
- Australian Microbiome (IMOS NRS)
- Australian Microbiome

One-off/occasional sample sites by project

- OceanOmics
- Mission Microbiomes CEODOS (2021)
- Mission Microbiomes AtlantECO (2021-2022)
- Australian Microbiome
- ANEMONE Global



OBON Projects

- Mission Ocean Microbiomes (Tara Microbiomes)
- WCO Biomolecular Observing Network (WCO-BON)
- Naples Ecological REsearch Augmented observatory (NEREA)
- Hakai Institute Biomolecular Observing Network (HI-BON)
- Better Biomolecular Ocean Practices (BeBOP)
- Pacific Islands Marine Bioinvasions Alert Network (PacMAN)
- E-DNA expeditions in marine World Heritage sites
- Pacific eDNA Coastal Observatory (PECO)
- Scripps Ecological Observatory (SEO)
- European Marine Omics Biodiversity Observation Net (EMOBON)
- Observing and Promoting Atlantic Microbiomes
- DNA-based approaches for fisheries monitoring
- National Biodiversity DNA Library (NBDL)
- OceanOmics: Monitoring & Protecting Ocean Life
- Guidance on Optimal Timing for eDNA (GOTeDNA)
- Marine Biodiversity Library & MPA eDNA monitoring
- Making Environmental DNA FAIR
- AMT-omics: Atlantic Meridional Transect 'omics network
- ATLASea: Atlas of Marine Genomes
- West Coast Ocean Biomolecular Observing Network (WC-OBON)
- ANEMONE Global: Advancing eDNA-Based Biodiversity Monitoring
- Australian Microbiome
- Present and past climate change impacts on Norwegian fjord ecosystems (PASTIME)
- Novel perspectives on non-invasive cetacean research using microRNA biomarkers in the exhaled breath (BLOW)



OBON Scientific Advisory Committee

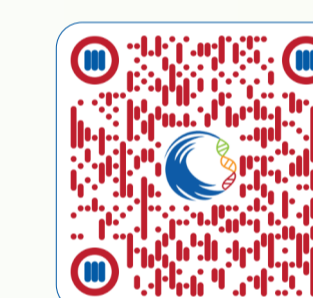
- Pier Luigi Buttigieg, GEOMAR, Germany
- Francisco Chavez, MBARI, USA
- Neil Davies, Gump Station, Moorea, French Polynesia
- Annette Govindarajan, WHOI, USA
- Kazi Ahsan Habib, Sher-e-Bangla Agricultural Univ, Bangladesh
- Sophie von der Heyden, U Stellenbosch, South Africa
- Tadashi Kajita, U Ryukyus, Japan
- Margaret Leinen, Scripps Institution of Oceanography, USA
- Matt Lemay, Hakai Institute, Canada
- Christopher Meyer, Smithsonian Inst, USA (ML2030 liaison)
- Raissa Meyer, Alfred Wegener Institute, Germany
- Hassan Moustahfid, NOAA, USA
- Nicolas Pade, EMBRC, France
- Katie Pitz, MBARI, USA
- Alejandra Prieto Davó, UNAM, Mexico
- Eric Raes, Minderoo Foundation, Australia
- Julie Robidart, National Oceanography Centre, UK
- Sophie Seeyave, POGO, UK (ex officio)
- Aileen Tan Shau Hwai, U Sains Malaysia, Malaysia
- Jodie van de Kamp, CSIRO, Australia
- Kim Shan (Alison) Wee, Univ of Nottingham Malaysia, Malaysia
- Willie Wilson, Marine Biological Association, UK
- Vanessa Yepes Narvaez, INVEMAR, Colombia
- Xiaowei Zheng, Nanjing University, China

Current & Upcoming Activity

The OBON Newsletter is published quarterly, in February, May, August and November.



Join our mailing list to receive it directly to your in-box, or keep an eye on our social media channels (see below).

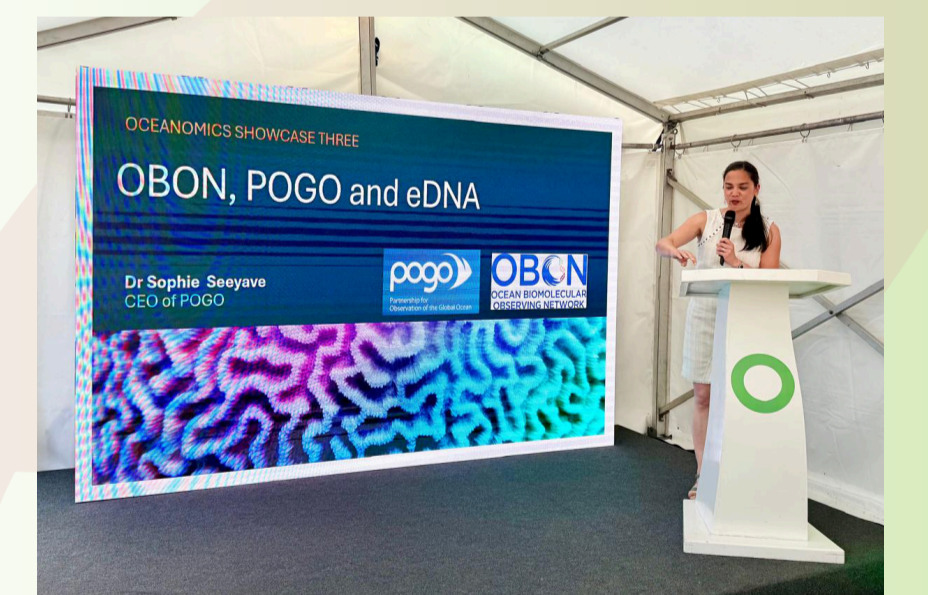


Check the Events Page on the OBON website for the most up-to-date information about upcoming activities.

Recent Activity

OBON at UNOC3 and OOSC in Nice

The third United Nations Ocean Conference took place in Nice from 9 - 13 June 2025, co-hosted by the Governments of France and Costa Rica. A number of official special events were held alongside UNOC3, including the first One Ocean Science Congress, organised by Ifremer and CNRS. Sophie Seeyave and Margaret Leinen presented OBON at a Town Hall and other side events, including the "Ocean Omics Partner Showcase and Reception", hosted by Fortescue, the Minderoo Foundation, and Tattarang, on board the Fortescue Green Pioneer in Villefranche-sur-Mer (image, right).



eDNA Shipboard Training onboard OceanXplorer

OBON was involved in planning and delivering eDNA-related shipboard training during an Early Career Explorers Transit Mission on-board the OceanX research vessel OceanXplorer, in March 2025. The training was funded by OceanQuest and organised by POGO, OceanX, & OceanQuest (image credit: OceanX).

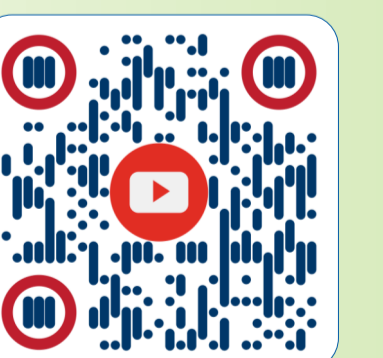


Network Spotlight: Our webinar series

We continue to introduce new projects and provide opportunities for existing projects to share their latest progress, insights, and innovations through the Network Spotlight webinar series.

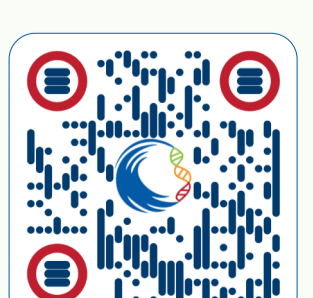


All sessions are recorded and are publicly available on the OBON YouTube channel.

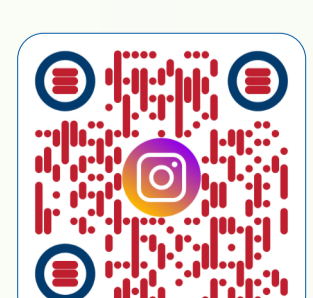


Full reports on all recent activities can be found in the quarterly newsletters and on the OBON website.

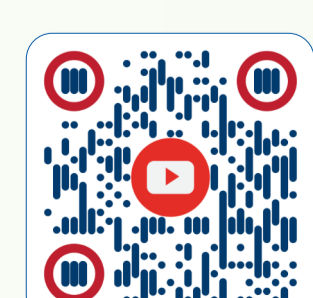
Further Information & Contact



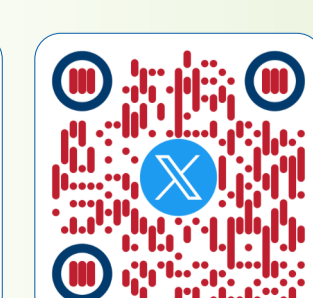
OBON Website: obon-ocean.org



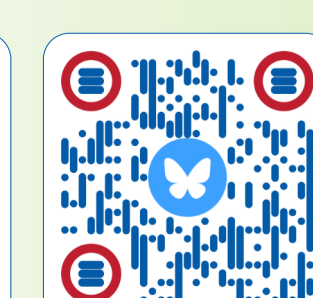
Instagram



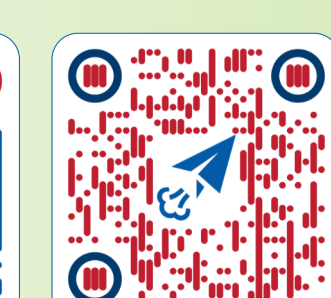
YouTube



Twitter/X



BlueSky



Email us: observing@obon-ocean.org