



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development

Ocean Biomolecular Observing Network (OBON)

Decade Programme

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Lead Institution

Partnership for Observation of the Global Ocean

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KEY PARTNERS

- Scripps Institution of Oceanography (SIO)
- Monterey Bay Aquarium Research Institute (MBARI)
- GEOMAR Helmholtz Centre for Ocean Research (GEOMA)
- National Oceanography Center (NOC)
- Commonwealth Scientific and Industrial Research Organisation (CSIRO)

DECADE CHALLENGES ADDRESSED

CHALLENGE 2: Protect and restore ecosystems and biodiversity

CHALLENGE 6: Increase community resilience to ocean hazards

CHALLENGE 7: Expand the Global Ocean Observing System

CHALLENGE 9: Skills, knowledge and technology for all

OCEAN BASINS

North Atlantic	Indian
South Atlantic	Arctic
North Pacific	Southern
South Pacific	



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Summary

Ocean life - from viruses to whales - is built from "biomolecules." Biomolecules such as DNA infuse each drop of ocean water, grain of sediment, and breath of ocean air. The Biomolecular Ocean Observing Network (OBON) will develop a global system that will allow science and society to understand ocean life like never before. The programme will transform how we sense, harvest, protect, and manage ocean life, which faces multiple stresses including pollution, habitat loss, and climate change. It will also help communities detect biological hazards like harmful algal blooms and pathogens, and be a key component of next-generation ocean observing systems.

Duration: 01/09/2021 - 31/12/2030

Priority Activities (first 2 years)

Priority activities during the first two years of OBON will be:

- Work with users to ensure that techniques, technologies, and science activities are developed in ways to assist in resource development, biodiversity assessment, and other user needs.
- Develop projects that address key science objectives identified in the OBON proposal.
- Sponsor workshops and activities to develop best practices for eDNA and other biomolecular measurements.
- Work with development and aid agencies to provide funds for training and to provide instrumentation that will allow scientists and technicians to make biomolecular measurement to address scientific and user needs.

"OBON has the potential to unveil the biodiversity of the ocean and monitor its changes through time."

*Margaret Leinen
Director, Scripps Institution of
Oceanography*

OBON
OCEAN BIOMOLECULAR
OBSERVING NETWORK