



One hundred and fifty years ago 'HMS Challenger' spent four years circumnavigating the globe, mapping the seafloor, recording ocean temperature, and providing us with a first scientific view of life in the ocean depths. It is considered the birth of deep-sea biology and oceanography.

Today the Challenger name is a byword for exploration, from lunar landers to deep-sea submersibles. It is also the name of the deepest point of the ocean, the Challenger Deep.

We use the name Challenger here to invoke the same spirit of exploration embodied by the previous Challengers, and to recognise the importance of that first global deep-sea biological dataset that, for some parts of the ocean, remains the only data available.

Acknowledging its past associations with colonialism and exclusion, one of the principal aims of Challenger 150 is to build a new identity for an historic name, which in-keeping with the Ocean Decade, is inclusive, representative and equitable.

BRIDGING HORIZONS: ACHIEVING THE OCEAN DECADE THROUGH INNOVATIVE COLLABORATION IN DEEP-SEA RESEARCH

by Bernadette Butfield - DOSI Digital Officer
and the Challenger 150 Community

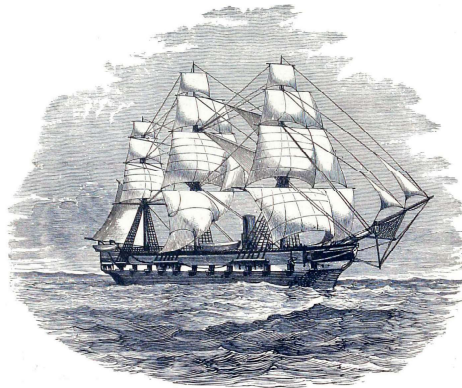
UN OCEAN DECADE CONFERENCE:
DELIVERING THE SCIENCE WE NEED FOR THE OCEAN WE WANT
Barcelona 10-12 April 2024

The Challenger 150 programme is a global scientific cooperative developed to respond to the needs of the UN Ocean Decade. It is a vehicle for the global coordination of deep-sea research towards a set of common objectives. Those objectives are set out by the UN Ocean Decade but framed in the context of deep-sea research.

As a Decade Programme, the focus of Challenger 150 is on driving contributions to achieve the objectives of the Ocean Decade, with an emphasis on interdisciplinary collaboration, indigenous voices, and capacity building.

Challenger 150 aims to:

- Build capacity for deep-sea research globally.
- Expand deep-sea biological observations.
- Build fundamental ecological understanding.
- Increase use of deep-ocean knowledge.



The HMS Challenger

Challenger 150 is a continuation of two decades of deep-sea effort that has involved scientists, economists and lawyers from around the world under the umbrella of two major initiatives: INDEEP (International network for scientific investigation of deep-sea ecosystems) and DOSI (Deep-Ocean Stewardship Initiative), which are legacies of the deep-sea projects of the Census of Marine Life programme (2000-2010).



In 2021, UNESCO's International Oceanographic Commission formally endorsed Challenger 150 as a new 10-year programme of deep-sea science under the UN Decade of Ocean Science for Sustainable Development.



DEEP-OCEAN STEWARDSHIP INITIATIVE

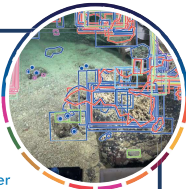


Working Together

Challenger 150 has established 12 Regional Scientific Research Working Groups covering the entire global ocean. These groups bring together researchers active in specific ocean basins to identify and prioritise regional research needs, develop funding bids, coordinate scientific research to fill data gaps, and build regional capacity in deep-ocean science. Furthermore, they ensure that survey schedules for each region will be completed by 2030, whilst working with the wider stakeholder network to move science into policy.

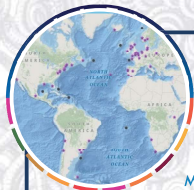
Creating Standards

Challenger 150 has formed three Technical Scientific Research Working Groups: the Megafaunal Image-Based Working Group, the Litter Recording Working Group, and the Traits Working Group, each aimed at developing and establishing standards in methods and measurements for deep-ocean research. Such standards are critical for delivering data that will form the basis of ecosystem models to assess environmental impacts of human activities on the deep ocean.



Building Partnerships

The Challenger 150 Programme is host to eight formally endorsed Decade Projects, including Seabed Mining and Resilience to Experimental impact (SMARTEX), Crustal Ocean Biosphere Research Accelerator (COBRA), Deep-Ocean Genomes Program, Aleutian Trench Biodiversity Studies (AleutBio), IceDivA, One Ocean Hub Research Programme 4, DEEP REST, LIFE DEEPER, and NEPDEP. Together, these projects coordinate to deliver the Challenger 150's aims, devising novel solutions for a sustainable ocean. Challenger 150 also collaborates with other Ocean Decade Programmes, such as the Deep Ocean Observing Strategy (DOOS).



Science Innovation

Key expeditions, such as AleutBio, IceDivA and Blue Belt DY159, have provided crucial insights into biodiversity and ecosystems in the Aleutian Trench, the North Atlantic and the South Atlantic, respectively. Similarly, initiatives like the Deep Arctic ecosystems for a Sustainable Central Arctic Ocean (DASCAO) workshop and publication of "An Ecologists Guide to BILLG" exemplify Challenger 150's dedication to developing scientific knowledge and methodologies in deep-ocean research.



Knowledge Exchange

For the past two years, the Northeast Pacific Deep-sea Exploration Project (NEPDEP), co-created by Fisheries and Oceans Canada, the Council of the Haida Nation, Nuuchahnulth Tribal Council, Pacheedaht and Quatsino First Nations, and Ocean Networks Canada, has conducted expeditions focused on seamounts and hydrothermal vents in significant marine areas. This collaborative partnership enables the team to share resources, knowledge, and expertise to develop a genuine ecosystem-based research plan.



Capacity Building

In 2022, Challenger 150 launched the African Network of Deep-water Researchers with a view to advance deep-sea research in Africa through collaboration, coordination, knowledge exchange, capacity development and fair partnerships. To date, there are more than 200 members from 27 African nations, representing over 140 institutions and 76% early career researchers. The network will work together to produce a strategy for developing capacity in deep-sea research in Africa.



Challenger 150 is represented at the 'Deepening the Decade' booth in the Banquet Hall - Level 2, with a dedicated presence on Thursday 11 April, 1-3pm.

Challenger 150 is participating in the 'Ocean Census' Side Event on Friday 12 April, 8:30-9:45am, in the One Ocean Room (Plenary), and in the 'Deepening the Decade' Side Event on Friday 12 April, 1:15-2:45pm, in the Southern Ocean Room (133+134).

SEE YOU THERE!