

Press release

First European expedition to study human impact on seas and coastal regions stops in Kotor from 18-23 June

After eight months of sampling the European coastline along the Atlantic, Baltic and North Sea throughout 2023, the 'Traversing European Coastlines' (TREC) expedition is exploring the Mediterranean coastline in 2024.



TREC is the first continent-wide project to study coastal ecosystems and their response to the environment. Our seas and coasts host an extremely rich diversity of life and play critical roles in the stability and sustainability of wider ecosystems. However, anthropogenic interferences are leading to accelerated loss of species' genetic diversity and destruction of functional ecosystems. By sampling along the entire European coast, **the TREC expedition will provide a richer and deeper understanding of how ecosystems respond to natural and human-made challenges.**

The TREC expedition is led by the European Molecular Biology Laboratory (EMBL), together with the Tara Ocean Foundation, the Tara OceanS consortium and the European Marine Biology Resource Centre (EMBRC). It brings together more than **150 research teams from over 90 institutions in 21 European countries** and also involves local partners along the sampling route, such as Institute of Marine Biology, University of Montenegro.

The expedition combines scientific activities on land and at sea to the finest details. In Montenegro scientists travelling with EMBL's mobile laboratories and onboard the *Tara* schooner will collect water, soil and sediment samples in Montenegrin waters. At each stop they work together with local partners, such as the Institute of Marine Biology, University of Montenegro. A range of different activities for *the media*, schools and the general public are offered during the expedition's stay.

Opportunities for the media

Upon request, it is possible to participate in the sampling activities scheduled for **22 June** in Kotor, alongside the researchers travelling on the EMBL mobile laboratories or on board the schooner *Tara*.

If interested, please write to media@embl.org - deadline for registration is **20 June**.

Activities for the general public

 **TREC in the City** - Always wanted to play around with a microscope? Check out our pop-up stand!

Garden of Aquarium Boka

20st June 9:00 am - 12:00 pm

21st June 9:00 am - 12:00 pm

 **Run, scientist, run!** - Come and play a giant Game of the Goose - the TREC edition! Both activities will be located at different places across the city

Plateau in front of Faculty of Maritime Studies

19th June 6:00 pm - 9:00 pm

21st June 6:00 pm - 9:00 pm

22nd June 6:00 pm - 9:00 pm

 **Nexus island** - Test your research skills as in this game: join the expedition by discovering and studying the organisms living on Nexus Island... will you be able to save them?

Hall of Institute of Marine Biology Kotor

20th June 9:00 am - 12:00 pm

21st June 9:00 am - 12:00 pm

The TREC public engagement activities organised in Kotor are part of **BIOcean5D** (interdisciplinary project co-funded by the EU - Horizon Europe).

The scientific expedition

The aim of the expedition is to study the biodiversity and ecosystems on land and at sea, as well as the interactions of organisms with each other and with the environment. The scientific teams collect information on factors such as the presence of pollutants, antibiotics, pesticides, or hormones, as well as temperature, salinity, and oxygen levels. At each point where the EMBL team and collaborators sample soil, sediments, and shallow water, the schooner *Tara* samples the associated marine ecosystems – on the same day and in the immediate vicinity. In total, TREC will examine the biodiversity and molecular adaptability of life at the molecular scale at **120 coastal sampling sites across 21 European countries**.



The pan-European nature of this project means that samples will be taken in a standardised fashion. This will make it possible to compare and probe data across Europe instead of a regional or national system in a way that was not previously possible.

EMBL acknowledges the generous support of many institutions, donors and sponsors, in particular the Manfred Lautenschläger-Foundation, Eppendorf SE, Carl Zeiss Microscopy, and Friends of EMBL in helping make TREC possible.

Further information:

[TREC – Traversing European Coastlines](#)

[TREC – Media kit, incl. image and video library](#)

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About EMBL

The [European Molecular Biology Laboratory](#) (EMBL) is Europe's life sciences laboratory. We provide leadership and coordination for the life sciences across Europe, and our world-class fundamental research seeks collaborative and interdisciplinary solutions for some of society's biggest challenges. We provide training for students and scientists, drive the development of new technology and methods in the life sciences, and offer state-of-the-art research infrastructure for a wide range of experimental and data services.

EMBL is an intergovernmental organisation with 29 member states, one associate member, and one prospective member. At our six sites in Barcelona, Grenoble, Hamburg, Heidelberg, Hinxton near Cambridge, and Rome, we seek to better understand life in its natural context, from molecules to ecosystems. www.embl.org

About the Tara Ocean Foundation

The Tara Ocean Foundation — first public interest foundation in France dedicated to the Ocean — has two main missions: exploring the Ocean to better understand it and sharing scientific knowledge about the Ocean to raise public awareness. For 20 years, the Foundation has been supporting innovative Ocean science, in partnership with world-leading research centers, to study marine biodiversity, as well as observe and anticipate the impacts of climate change and pollution. Faced with the urgent need to make the protection of the Ocean a common responsibility, the Foundation raises public awareness of the challenges facing the Ocean, educates young generations, facilitates international cooperation and mobilizes policymakers. Thanks to its Special Observer Status at the United Nations, the Foundation actively participates in crucial decisions in favor of the Ocean. Studying and protecting the Ocean means taking care of the global health of our planet and our future. <https://fondationtaraocean.org/>

About EMBRC

The [European Marine Biological Resource Centre](#) is a European research infrastructure which aims at advancing ocean science to better tackle societal issues. The organisation mobilises scientists, industries, policymakers and citizens towards an open and inclusive science. Gathering more than 70 marine stations and institutions in Europe, it stands as a gateway for researchers studying marine biodiversity and ecosystems worldwide. Focusing on a transnational approach, it provides high level research services, marine data with its biodiversity observatory EMOBON (European Marine Omics Biodiversity Observation Network), and expertise in marine biology and ecology.

EMBRC strives to support knowledge and technological transfer globally in order to promote a sustainable use of living marine resources. In the face of environmental challenges, EMBRC contributes to building a science-based policymaking process to drive further action on an international level. EMBRC has had the status of European Research Infrastructure Consortium (ERIC), granted and assessed by the European Commission, since 2018. <https://www.embrc.eu/>.

About Institute of Marine Biology, University of Montenegro

The Institute of Marine Biology was established in 1961, it underwent several organisational changes, becoming part of the University of Montenegro in 2004. For over 60 years, the Institute has focused on studying the marine ecosystems of the southern Adriatic, exploring the relationships between marine life and environmental factors, and assessing the impacts of climate change and human activities.





The Institute conducts both fundamental and applied research, contributing to environmental conservation, fisheries, mariculture, and coastal management. It collaborates extensively on national and international projects, having participated in over 120 projects since 2011. The Institute's scientific outputs, including over 200 publications, have enhanced its reputation globally.

Organised into five laboratories and one Centre, the Institute addresses various aspects of marine research, including oceanography, marine fisheries, plankton, water quality, and marine biodiversity. Additionally, it engages in commercial activities such as water quality testing and operates the Boka Aquarium, Montenegro's first public aquarium. The Institute's work is crucial for the sustainable management and protection of the Adriatic Sea's marine ecosystem.

