

Station Biologique
de Roscoff



1872—2022



Henri de Lacaze-Duthiers



1872

On August 20, 1872, Henri de Lacaze-Duthiers, Professor of Zoology at Sorbonne University, signed the first lease for a “new home” in Place de l’Église, Roscoff, to house his **Experimental Zoology Laboratory.**

This was the first marine station in Europe dedicated to fundamental research.

1908

After the construction of a floor of laboratories, the Laboratory of Experimental Zoology, now named **the Marine Station**, is open to all fields of biology.



Engraving by Félix Benoist, published in 1865. All of the buildings situated to the left of the church were later bought by Henri de Lacaze-Duthiers, founder of the Laboratory of Experimental Zoology. Today they constitute the historical heart of the Roscoff Marine Station.

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The emblem of the Laboratory of Experimental Zoology.



The Station circa 1891



The aquarium room on the ground floor is one of the 25 different laboratories available to French and international researchers in the new floor.
—
The research aquarium building circa 1908.





1945

The director of the CNRS, Georges Teissier, also director of the Station from 1945 to 1971, signed the decree establishing the **centre for the study of oceanography and marine biology**. The Marine Station opens up to a new area of research: oceanography.

1953

The public aquarium is opened to introduce the general public to the main reason the Marine Station was created at Roscoff - the richness of local fauna and flora. This was later transformed into the Marine Biological Resource Centre in 2015.



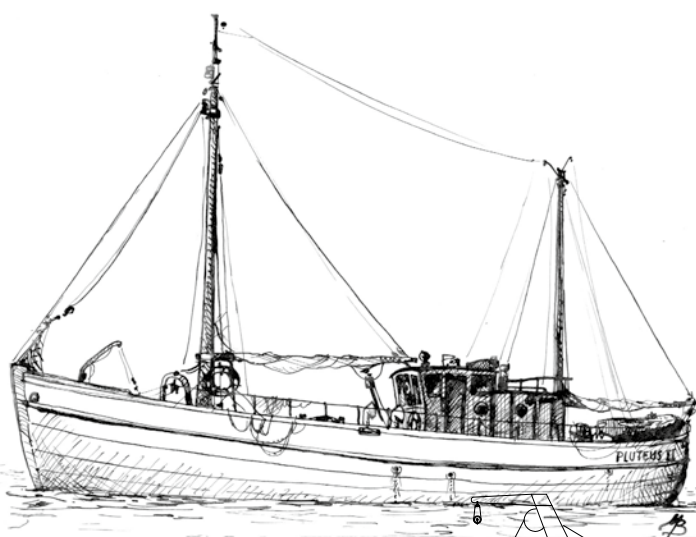
With more than 700 algae and 3000 animal species, the biodiversity in North Brittany is exceptional.

The public aquarium in 1953

Aquarium de recherche

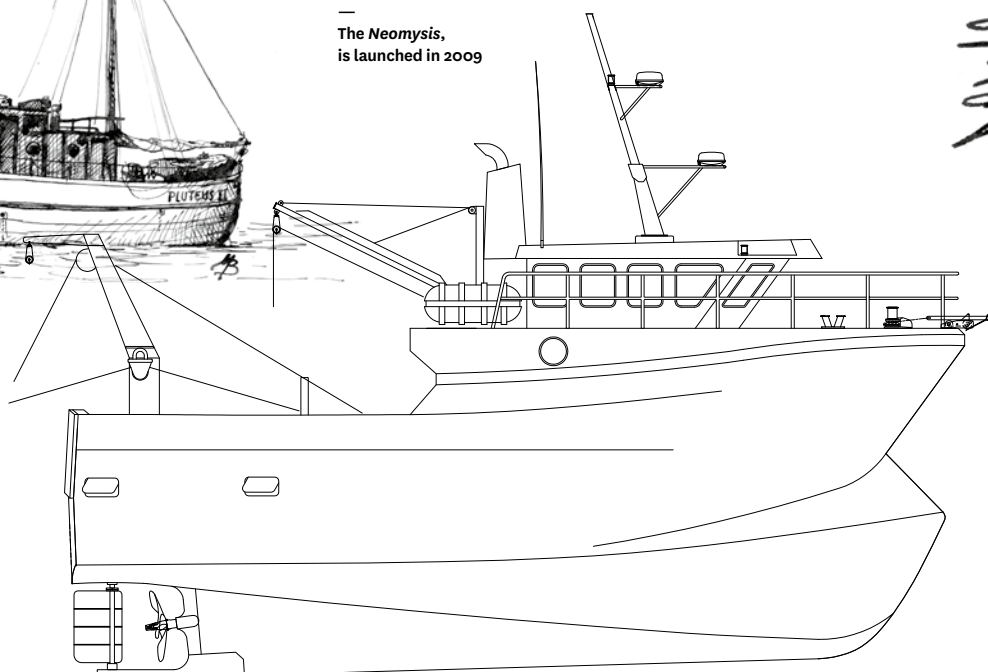
Together, the research aquarium built in 1883 and the old public aquarium renovated in 2010, now house the Marine Biological Resource Centre (CRBM). The mission of the CRBM is to provide access to local biodiversity and experimental facilities to scientists from around the world.

The *Pluteus II*, 1959
The *Neomysis*, is launched in 2009



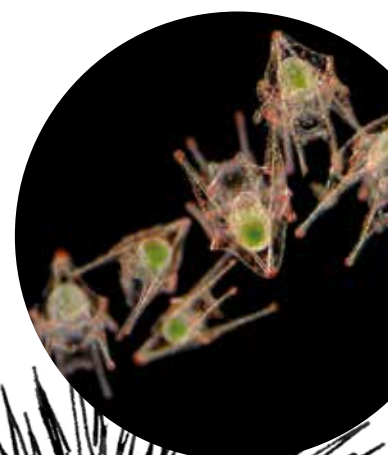
The boats

From the *Pentacrine* in 1873, to the *Neomysis* today, the boats are crucial for collecting animals and plant species and for recording a variety of seawater properties. Each boat is traditionally named after a marine species.

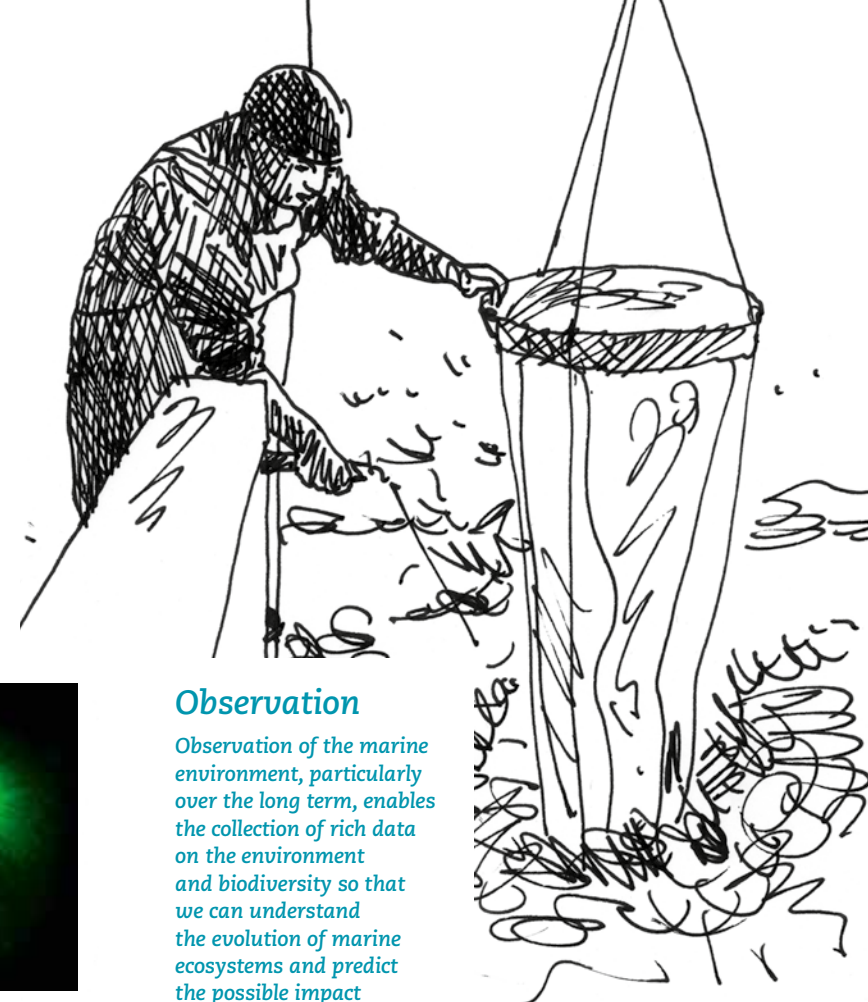
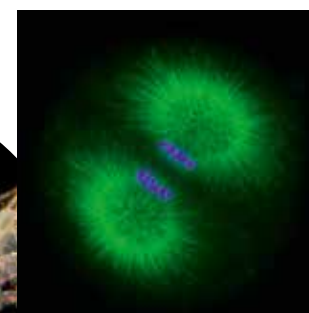


1970-1980

Scientists working at the Station on a seasonal basis choose to settle there permanently. They create new teams and bring in new scientific fields, such as cell biology.



Sea urchins have been studied in Roscoff since the beginning and are still used by biologists at the Station to understand the intricate mechanisms of cell division, which are common to all living beings.



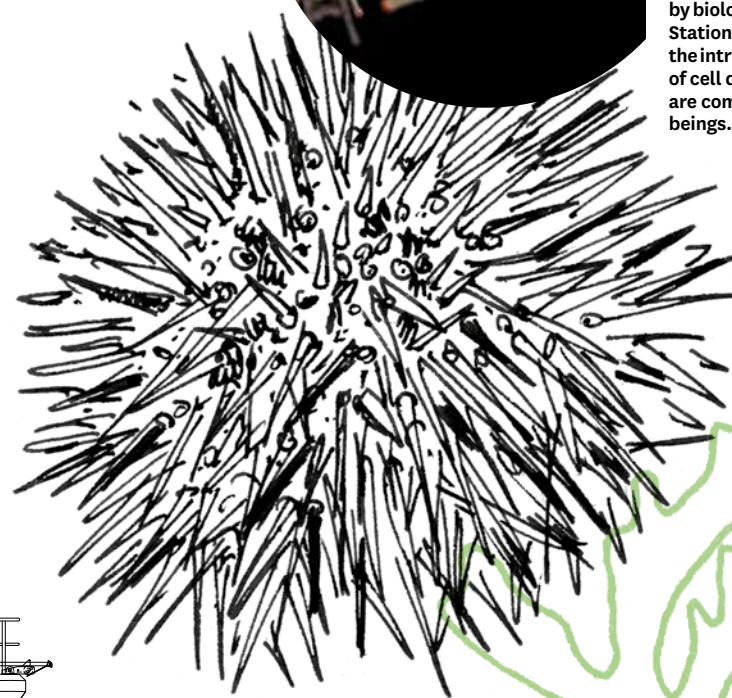
Observation

Observation of the marine environment, particularly over the long term, enables the collection of rich data on the environment and biodiversity so that we can understand the evolution of marine ecosystems and predict the possible impact of human activities and climate change.

Access to the sea

Studying marine ecosystems requires skilled sailors and experienced scientific divers who operate the oceanographic vessels of the Station.

Introduced to the Station in 1948/1949, diving has given us the capacity to install underwater instruments that enable experiments to be carried out in the natural environment.



1980-1990

Innovative technologies arrive at the Marine Station. The use of flow cytometry has led to new discoveries on marine plankton and DNA sequencing has enabled the exploration of genes.

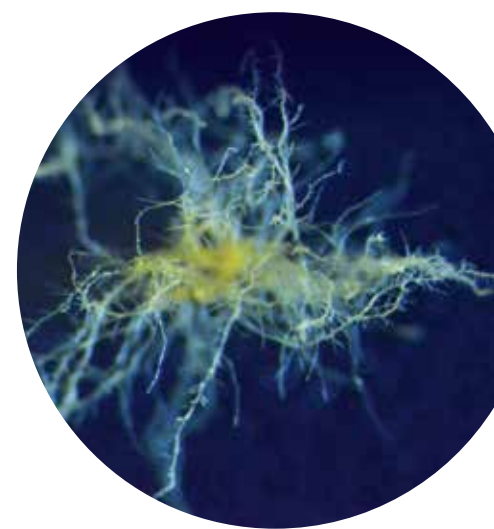
Sequencing gel: Decoding the sequence "ATGC" of DNA.



2001-2010

First introduced to Roscoff by George Tessiers, genetics is in the midst of a revolution: the development of high-throughput sequencing techniques allows the analysis of entire genomes and population genetics.

Roscoff was among the pioneers of marine genomics. This new data extends our coastal observation and experimental studies from organisms to ecosystems.



The complete genome of the brown alga *Ectocarpus siliculosus* is sequenced in 2010.

At the heart of marine science

Teaching

Since 1872, the Roscoff Marine Station has been a centre for teaching as well as research. For 150 years, students and Scientists, from France and abroad, have been using the classrooms and teaching laboratories of the Marine Station during their academic training.



600 students study here every year.



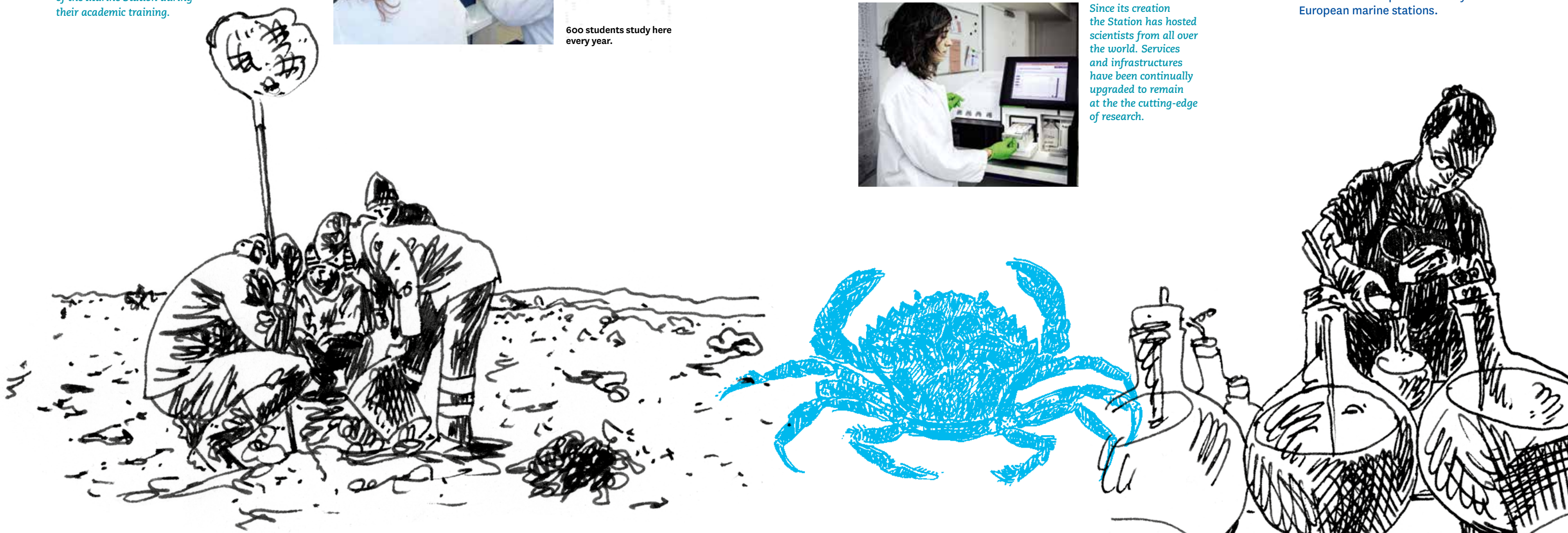
Accueil scientifique

Since its creation the Station has hosted scientists from all over the world. Services and infrastructures have been continually upgraded to remain at the cutting-edge of research.



2002

The European Commission funded Roscoff to lead a network that represents many European marine stations.



2010- 2020



The great oceanographic expeditions make it possible to explore the whole ocean, from the tropics to the poles, from the surface to the abysses. From 2009 to 2013, the sailing vessel Tara took samples of marine microorganism biodiversity, from every ocean in the world.

The Station now employs close to 300 people. The scientific teams continue to expand. Research is flourishing on

**seaweeds,
phytoplankton,
viruses, bacteria,
invertebrates...**

Studies range from coastal environments to global oceans, and from the polar environment to the abysses.

Science Ambassadors

Understanding the ocean is a major challenge for the future of life and the planet. The Station's scientists have been spreading scientific knowledge for many years and have been involved in numerous projects involving the general public, schoolchildren, and artists inspired by the wonders and surprises of the marine world.



In 2022 the Station contributed to the creation of a marine education zone with a school from Moguerou and the city of Roscoff.

Jean Painlevé (1902-1989) is one of the renowned artists who has been invited to the Station. A pioneer of scientific cinema, he directed many films on marine animals in Roscoff.



2022- Future

To tackle the challenges of the future, the Station is leading major projects such as the Augmented Biodiversity Observatories, which has been designed to assess the impact of environmental changes on marine ecosystems, as well as European projects to develop a more ecologically and economically responsible algae industrial sector. Drawing on its rich history, the Station continues its missions:

**to explore,
to understand,
to innovate,
and to share**

knowledge to improve the way we use and protect the ocean.

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