



Environmental and coastal planning and development

## GIGASSAT

### UNDERSTANDING EVOLUTION IN OYSTER ECOSYSTEMS FACED WITH CLIMATE CHANGE

From the 1970s onwards, global climate change has amplified disease epidemics, excess shellfish deaths, toxic algal blooms and other proliferation phenomena. Shellfish farming is especially vulnerable to an increase in disease frequency caused by global warming.

The stakes are high in France, as oyster farming is the country's largest aquacultural industry. Oyster mortality rates have been extremely high since 2008 throughout French farming areas. Excess mortality has generally been associated with the presence of a particular strain of herpes virus and/or of vibrio bacteria. This is a major concern for the future of the country's entire oyster industry.

The GIGASSAT project plans to address this issue through a programme of integrated, participative research into the socio-economic and environmental impacts of climate change on the oyster farming industry. The project aims to observe, analyse, support and manage oyster-rearing ecosystems by studying the effects of climate change on the health and physiology of oysters. It will also study the current ecological and economic status of those production ecosystems.

**The GIGASSAT project is supported by the French Sea Fishing and Aquaculture Directorate and the National Shellfish Farming Committee.**

#### Partners

##### COM\_PROJECTS\_CATEGORIE\_PARTNER\_ENTREPRISES

ACRI-ST, Sophia Antipolis

##### Research centers

Ifremer UL/LER,  
Port-en-Bessin-Huppain [Project Developer]  
Ifremer AGSAE/LGP, La Tremblade  
Ifremer PFOM/LPI et DYNECO, Brest  
INRA UMR MISTEA, Montpellier  
Laboratoire d'Océanographie de  
Villefranche-sur-mer  
Université de Caen, Caen  
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Universitaire Mer et Littoral (IUML)

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- Agence Nationale de la Recherche

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