

Press release

The European project VIVALDI kick-off in April

Viruses, bacteria, parasites... The European shellfish industry has undergone massive mortalities for some years now. How can we prevent and mitigate shellfish diseases (oysters, mussels, clams...)? In this context, and after a two-day meeting with the 21 partners from 10 countries, the European project VIVALDI was kicked-off on 6 April 2016. This event was steered by Isabelle Arzul, VIVALDI project coordinator and research scientist at the Laboratory for Genetics and Pathology of Marine Molluscs, in IFREMER La Tremblade. (France)

The European shellfish industry enjoys a privileged position on the global scene. However, serious mortality events tend to weaken the sustainability of this production (8000 micro companies) In this context, VIVALDI aims **at increasing the sustainability and competitiveness of the shellfish industry** in Europe. VIVALDI is a 4-years European Horizon 2020 project coordinated by Ifremer (2016-2020): 21 mostly European, public and private partners take part in it, representing the diversity of the European shellfish industry landscape.

The project focuses on different farmed mollusc species such as oysters (cupped and flat), mussels, clams, cockles or scallops. VIVALDI takes into account the diversity of farming practices in the different countries and will carry out studies on contrasted sites, such as the **Ebre Delta and the Vigo Ria in Spain, the Brest harbor in France and Dungarvan Bay in Ireland.**

VIVALDI will not only bring new knowledge on the complex interactions between shellfish, environment and pathogens, but it will also develop **practical tools and approaches aiming at better preventing and controlling marine bivalve diseases.**

Shellfish diseases cross all borders, that is why an international network will be set up, gathering experts from the main countries producing shellfishes beyond Europe, such as China, Japan, Korea, Australia, New Zealand, the United States and Canada. Within this network, VIVALDI will contribute to sharing all stakeholders' information and experiences on shellfish mortalities, for a better management of the related diseases.

VIVALDI is organized along 6 working axis:

1. Studying pathogen diversity and life cycle for a better surveillance of bivalve diseases;
2. Understanding marine bivalve functional response for alternative methods of prevention and treatment;
3. Genetic selection for disease resistance/tolerance;
4. Understanding complex interactions between animals, environment, pathogens and health for risk assessment;
5. Disease management measures and biosecurity;
6. Sharing information for better disease management.



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Context

Since 2008, in several European countries, abnormally high mortality events have impacted spats of cupped oysters, *Crassostrea gigas*. The OsHV-1 virus has been identified as one of the organisms causing these mortalities. Since 2012, the *Vibrio aestuarianus* bacteria has induced mortalities among adult cupped oysters, which caused serious economic losses. Other shellfish species, such as the *Cerastoderma edule*, cockle, have a major economic importance in some regions, such as Galicia in Spain. A parasite called *Marteilia cochillia* was recently described as the main cause for the dramatic decrease of beds in the Galician rias.

Project partners



On 18 April 2016, VIVALDI takes part in the La Tremblade shellfish fair

At the occasion of the 44th shellfish fair from 16 to 18 April in La Tremblade, IFREMER organised two VIVALDI events:

- In the morning of 18 April, a visit of the IFREMER station in La Tremblade, focusing on VIVALDI activities. Research needs equipment and know-how: participants were invited to visit the scientific facilities where some parts of the VIVALDI project research work will be carried out.
- In the afternoon of 18 April, an introduction to the VIVALDI project took place on the fair premises. 6 French researchers (IFREMER and CNRS) involved in VIVALDI explained the topic along three lines: what is the state of the art, which research will be carried out and what are the expected outcomes.



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