

# GèneSea

## Development and validation of genomic selection procedure in sea bass and sea bream to improve resistance to pathogens

### INTERNATIONAL COORDINATOR

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### GEOGRAPHICAL DEPLOYMENT

– France

### DURATION

3 years  
(January 2017 /  
December 2019)

### FINANCING

European Maritime  
and Fisheries Fund (EMFF)

### OVERALL BUDGET

1 267 054 €

### MARBEC REPRESENTATIVE

François Allal  
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### MARBEC TOPICS

- Sustainable aquacultures
- Evolutionary ecology and adaptation

### BUDGET FOR MARBEC

226 843 €

### OBJECTIVES

The overall objective of this project is to lay the basis for the development of genomic selection in seabass and sea bream for resistance to diseases that represent significant threats to these productions at European level: nodavirus and vibriosis for seabass, pasteurellosis for sea bream. A first specific objective of the project is the production of genomic resources: sequencing and assembly of the sea bream genome, resequencing and polymorphism discovery for sea bass and sea bream. A second objective is the creation of high-throughput and high-density genotyping tools (57000 markers per species). A final objective will be the development and testing of data analysis pipeline applicable in genomic selection.

### 6 PARTNERS (FRANCE)

#### IFREMER

*French Research Institute for the Exploitation of the Sea*

#### UMR ISEM

*University of Montpellier (UM) and National Centre for Scientific Research (CNRS)*

#### UMRS GABI, GENTYANE, GETPLAGE

*French National Institute for Agricultural Research (INRA)*

#### SYSSAF

*French Poultry and Aquaculture Breeders Association*

#### FMD

*Ferme Marine du Douhet*

#### EMG

*Écloserie Marine de Gravelines*

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Ifremer-CNRS:

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57 000 marqueurs SNPs Bar

