Marine biological resources

SEABIOMIC

UNDERSTANDING BACTERIAL INTERACTION NETWORKS WITHIN THE SEAFOOD MICROBIOME

This project will work towards sustainable biopreservation, a way to preserve food based on bacterial competition. This practice involves inoculating protective bacteria into the food matrix to prevent the growth of unwanted microorganisms (pathogens and spoilage bacteria). The description of the seafood product microbiome has been used empirically for several years. Now, especially where it uses new sequencing techniques, it can help further our understanding of the mechanisms underlying biopreservation.

The SEABIOMIC project aims to describe the bacterial interaction networks in the whole seafood product microbiome for the first time.

Identifying antimicrobial molecule biosynthesis pathways and their regulation will provide a better understanding of the factors that trigger bacterial competition during product conservation.

The knowledge acquired during this project will allow us to better predict changes in the microbiome during biopreservation and to develop a more targeted, more efficient process.

Partner

Research center

IFREMER Nantes : Biotechnologies et Ressources Marines -Laboratoire EM3B [Project Developer]

Funder

Agence Nationale de la Recherche

Labelisation

09/11/2020

Overall budget

528 K€