



JULIA MOUGIN

From Sweden to France



Project: **Innovative approach to remove seafood pathogens along the seafood chain**

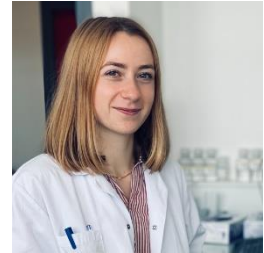
Research topic: **Medecine & Health**

Swedish Institution: **University of Gothenburg**

French Institution: **Anses, Laboratoire de sécurité des aliments, Boulogne sur mer**

Dates of mobility: **09/10/2022 to 16/10/2022**

Program: **SFVE-A (ex FRÖ)**



PRESENTATION

[Julia Mougin](#) is a postdoctoral researcher at the [University of Gothenburg](#). Her research has focused on Vibrio bacteria, more specifically on how to reduce the impact of potentially pathogenic Vibrio species in farming systems or in agro-food companies. Her overarching research interests revolve around marine microbial ecology, bacterial biofilm formation along with natural antibiotics and antibiofilm inhibitors, and genetics virulence mechanisms. She uses a combination of modern molecular techniques to understand how bacteria survive and interact in a complex ecosystem, such as biofilm or while infecting a host, with the aim of developing effective natural prophylactic and curative methods to reduce their pathogenicity and virulence to animals or humans.

ACTIVITIES IN FRANCE

During her visit, Julia Mougin developed and strengthened a collaboration with [Dr. Thomas Brauge](#), which will hopefully result in several projects and publications in peer-reviewed journals. This new collaboration provided her with access to specific and crucial apparatus for the success of her research. With Dr. Thomas Brauge, they discussed a variety of possibilities to implement in a new project with the aim to optimize seafood safety by developing a method to reduce bacterial pathogen biofilms based on couple biological and physical approaches. They proposed an innovative approach based on the use of natural iron-chelating proteins and enzyme that hydrolyses phosphodiester bonds for Vibrio and Listeria biofilm control in seafood industry. To pursue this collaboration, they agreed on the necessity to further develop multilateral funding opportunities, such as with Horizon Europe. Thus, Julia Mougin's visit was fruitful for long-term collaboration, and some visits were already planned to Gothenburg University.