



<u>Microbial</u> <u>E</u>cology

Investigating the complex interactions between mobile genetic elements and their microbial hosts at ecological and molecular levels to gain insights into their respective evolution.

Research Unit in Biology of Microorganisms (URBM)







## Research group: Gipsi LIMA MENDEZ





Keywords: Networks, -omics, -bacteriophages, horizontal gene transfer, microbiome

### **Main interests**

- 1. Prediction and classification of mobile genetic elements (MGEs)
- 2. Discovering molecular mechanisms of phage-MGEs-bacteria interactions
- 3. Multi-layer network based modelling the interactions between bacteriophages, MGEs and host.



# Research group: Gipsi LIMA MENDEZ



### **PhD students**

Rémy DUGAUQUIER



Bioinformatics: development of ADAM, a computational tool for prediction of bacterial defenses against phages and other mobile genetic elements.

#### Diana BITTREMIEUX – from december



Bacteria-phage interactions in the human gut

#### **Master student**

Lara PELZER



Experimental validation of *in silico* predicted bacterial defense mechanisms.