



UMR CNRS 6023
Laboratoire Microorganismes : Génome Environnement (LMGE)
Université Clermont Auvergne

Postdoc position in microbiology - molecular biology

A **24-month post-doctoral position** is available in the laboratory of Pr Christiane Forestier (Microbial Communities: Ecotoxicology Health). Our team is part of the CNRS unit LMGE, a research laboratory dedicated to microbiology (www.lmge.univ-bpclermont.fr).

The project entitled “Gen-Directed re-sensitization of Antibiotic Resistant Microorganisms within complex communities (GENDARM)” has been funded by the **ANR, 2nd** French-German call for projects on antimicrobial resistance 2020.

Antibiotic resistance is a global phenomenon which can be understood only in the context of a comprehensive approach, considering the spreading of both antibiotics and antibiotic-resistant bacteria in complex microbial communities such as hospitals effluents. The aim of this project is to develop genome-editing approaches that impose pressure on carbapenemase-encoding genes to reduce their prevalence in complex bacterial communities by using **CRISPR-Cas system**.

Applicants for this position should have strong knowledge and expertise in **molecular biology and bacteriology**. Main activities will be: development of conjugation-based delivery plasmids targeting carbapenemase-encoding genes, determination of the plasmid constructs efficiency using isolated strains and controlled-species biofilm firstly, then with complex biofilm formed within hospital effluents.

The project will be conducted in closed relationship with our German partner (Pr HP Horz, Univ Aachen) and the postdoc will spend short stays (2 one-month periods) in the German laboratory during the course of the project.

The position is available starting September 2021.

Please send a cover letter describing past research accomplishments and future research interests, CV, and a list of 2 references by email to: christiane.forestier@uca.fr