



**Microbiology  
University of Fribourg  
Switzerland**

**UNI  
FR**  
UNIVERSITÉ DE FRIBOURG  
UNIVERSITÄT FREIBURG

Emerging antibiotic resistance is being recognized as a crosscutting threat to global health. Multidrug resistance is observed currently mostly in Gram-negative bacteria. It is dominated by the emergence of carbapenemase producers and to a certain extent to resistance to polymyxins and fosfomycin. Carbapenemases are bacterial  $\beta$ -lactamases that hydrolyze almost all broad-spectrum  $\beta$ -lactams, including the carbapenems (i.e. imipenem). Curtailing their spread requires a better understanding of the plasticity of carbapenemase genes at different levels, from bacterial species constituting their reservoir to their final host, once acquired. Polymyxins and Fosfomycin are now considered as last resort antibiotics for treating infections due to multidrug resistant bacterial infections

To join the research group of **Prof. Nordmann at the Section of Medicine of the University of Fribourg (Switzerland)**, we offer a **Post-doctoral position in Microbiology**

To work in a clinically-relevant projects at the interface of genetics, biochemistry and medical microbiology.

**Your project:** You will investigate in particular the mobilization processes of resistance genes from their natural reservoirs to their targets and participate to decipher any novel antibiotic resistance mechanisms including to fosfomycin. You will also contribute to the discovery of novel resistance genes that are spreading worldwide, to develop novel rapid diagnostic tests for antibiotic resistance detection and evaluate/develop novel antibiotics .

**You have:** a PhD degree in Life Sciences or/and MD/Pharm D degree in Medicine/Pharmacy and a strong interest in studying antibiotic resistance in the context of molecular microbiology and/or protein analyses

**We offer:** Cutting-edge research projects, excellent research facilities and full funding and the possibility to join a highly competitive group.

**The position would start best **April 15 , 2020****

Please send your complete documentation (CV, publication list..) to **Prof. Patrice Nordmann** at: [patrice.nordmann@unifr.ch](mailto:patrice.nordmann@unifr.ch) (<https://www.ncbi.nlm.nih.gov/pubmed/?term=nordmann+p>)