

Research area

The Centre International de Recherche en Infectiologie, CIRI, brings together scientific and medical research communities from complementary disciplinary backgrounds who work together with the main objective of understanding the interactions between microbes and their hosts in order to better fight against infectious diseases.

In this research unit, the HORIZONE group proposes a 3-year PhD position, financed by VetAgro Sup, a CIRI partner. We study horizontal gene transfer in pathogenic bacteria. This thesis project proposes to unravel the dynamics of transmission and propagation of antibiotic resistance genes in populations of human and animal pathogenic bacteria (*Acinetobacter baumannii*).

Education, skills, qualities

- Master in microbiology (microbiology/bacteriology, bacterial genetics, biostatistics)
- Handling of BSL2 agent, molecular biology, bioinformatics
- Communication skills and ability to integrate into a research team. Writing and speaking skills (French and English)

Contact information

Application should be sent to Maria-Halima Laaberki (CV, application letter)

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Lab address : 10 rue Raphael Dubois, 69622 Villeurbanne, France

Selected publications

- Godeux, A.-S., Svedholm, E., Lupo, A., Haenni, M., Venner, S., Laaberki, M.-H., and Charpentier, X. (2020). Scarless Removal of Large Resistance Island AbaR Results in Antibiotic Susceptibility and Increased Natural Transformability in *Acinetobacter baumannii*. **Antimicrob Agents Chemother** 64.
- Carvalho, G., Fouchet, D., Danesh, G., Godeux, A.-S., Laaberki, M.-H., Pontier, D., Charpentier, X., and Venner, S. (2020). Bacterial Transformation Buffers Environmental Fluctuations through the Reversible Integration of Mobile Genetic Elements. **MBio** 11.
- Durieux, I., Ginevra, C., Attaiech, L., Picq, K., Juan, P.-A., Jarraud, S., and Charpentier, X. (2019). Diverse conjugative elements silence natural transformation in *Legionella* species. **Proc. Natl. Acad. Sci. U.S.A.** 116, 18613–18618.
- Godeux, A.-S., Lupo, A., Haenni, M., Guette-Marquet, S., Wilharm, G., Laaberki, M.-H., and Charpentier, X. (2018). Fluorescence-Based Detection of Natural Transformation in Drug-Resistant *Acinetobacter baumannii*. **Journal of Bacteriology** 200, e00181-18.

