



Post-doctoral position open at CIRI, Lyon, France

“Understanding host-pathogen interaction processes that control Orthonairovirus transmission”

The team EVIR - Enveloped viruses, Vectors and Immunotherapy - at CIRI is welcoming applications from enthusiastic and independent post-doctoral candidates to start research projects on the cellular and molecular aspects of “Orthonairovirus: molecular determinants of transmission”. Orthonairovirus are emerging, tick-borne viruses such as the Crimean-Congo Hemorrhagic Fever Virus. The aim of the post-doctoral researcher will be to conduct a loss-of-function screen using a whole-genome CRISPR/KO library on Huh7.5 cells to identify putative host factors for CCHFV. Using different approaches, identified host factor candidates will be analyzed for their role during CCHFV (and other Orthonairoviruses) cell entry and later stages of the viral cycle. The position is currently available and funded for 3 years.

Environment: The host team is part of the CIRI - International Center for Infectiology Research (<https://ciri.ens-lyon.fr>), in Lyon, France. The laboratory provides state-of-the-art facilities for cellular and molecular biology, biochemistry and top-level research virology with levels 3 and 4 laboratories and animal housing. It is located on the Campus Charles Mérieux, a research environment endowed with strong basic biology sciences and a particular dedication to research on infectious diseases. The lab has cofounded the LabEx (Laboratory of Excellence) Ecofect (<http://ecofect.universite-lyon.fr/>) on Eco-evolutionary dynamics of infectious diseases. The host lab has a particular interest in translating its basic science discoveries in translational research in immunotherapy.

Candidates: The applicants are expected to have a strong background in molecular and cellular biology. The ideal candidates should be highly motivated, curious, and enthusiastic to work in a highly collaborating team. Prior experience in molecular virology, loss-of-function screens, and international training will constitute an advantage. Proven ability to identify research objectives and meet agreed deadlines, self-motivation, flexibility, and assistance to other ongoing research work is essential. Excellent written and communication skills in English are required.

Application: Candidates are invited to contact **François-Loïc Cosset** (flcosset@ens-lyon.fr) for further details. Please send an application with the following:

- Cover letter
- Concise summary of previous research activities
- Curriculum vitae including publication list and contact details for 2-3 referees

Date of publication: 15th July 2022 **Deadline for application:** 31st August 2022

Recent publications of the team related to the position:

- Mishra et al. 2022. Structural basis of synergistic neutralization of Crimean-Congo hemorrhagic fever virus by human antibodies. *Science* 375:104-109.
- Freitas et al. 2022. Crimean-Congo hemorrhagic fever: a growing threat to Europe. *C R Biol.* 345:17-36.-
- Perez-Vargas et al. 2021. A fusion peptide in preS1 and the human protein disulfide isomerase ERp57 are involved in hepatitis B virus membrane fusion process. *Elife* 10:e64507.
- Lerolle et al. 2021. Host Cell Restriction Factors of Bunyaviruses and Viral Countermeasures. *Viruses* 13:784.
- Freitas et al. 2020. The interplays between Crimean-Congo hemorrhagic fever virus (CCHFV) M segment encoded accessory proteins and structural proteins promote virus assembly and infectivity. *PLoS Pathog* 16:e1008850.