



Post-doctoral position open at CIRI, Lyon, France

“Genetically reprogramming of B cells to enhance their therapeutic properties before autologous transfer”

The laboratory EVIR - Enveloped viruses, Vectors and Immunotherapy - at CIRI is welcoming applications from enthusiastic and independent post-doctoral candidates to continue research projects on the genetic reprogramming of B cells, aiming to trigger the expression of therapeutic molecules under regulation by *in vivo* sensing of diseases-specific signals. The overall goal is to validate an active immunotherapy strategy by targeting some chronic diseases (onco, infectious and inflammatory). This project includes both *in vitro* and *in vivo* experiments. The position is currently available and funded for 3 years.

Environment: The host laboratory 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 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 in immunology and also gene therapy. Moreover, the host lab has several projects on basic science research (particularly in Virology) and a particular interest in translating its basic science discoveries in translational research in immunotherapy. These discoveries notably led to the development of new pseudotyping of lentiviral vectors, allowing the modification of immune cells, which were notoriously hard to modify. The lab has filed several patent applications, including two patents on B cell reprogramming strategies.

Candidates: The applicants are expected to have a strong background in immunology and cellular biology. The ideal candidates should be highly motivated, curious, and enthusiastic to work in a highly collaborating team. Prior experience in flow cytometry, ELISA, viral production, animal experimentation, 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: 10th November 2022

Deadline for application: 31st December 2022

Recent publications of the laboratory related to the position:

- Fusil, Floriane et al. « A Lentiviral Vector Allowing Physiologically Regulated Membrane-Anchored and Secreted Antibody Expression Depending on B-Cell Maturation Status ». *Molecular Therapy* 23, no 11 (novembre 2015): 1734-47. <https://doi.org/10.1038/mt.2015.148>.
- Page, Audrey et al. « Exploiting B Cell Transfer for Cancer Therapy: Engineered B Cells to Eradicate Tumors ». *International Journal of Molecular Sciences* 22, no 18 (16 septembre 2021): 9991. <https://doi.org/10.3390/ijms22189991>.
- Page, Audrey et al. « Efficient Adoptive Transfer of Autologous Modified B Cells: A New Humanized Platform Mouse Model for Testing B Cells Reprogramming Therapies ». *Cancer Immunology, Immunotherapy*, 8 novembre 2021. <https://doi.org/10.1007/s00262-021-03101-4>.

