26 nov 2024

POST-DOC POSITION AVAILABLE : B-CELL GENETIC ENGINEERING FOR IMMUNOTHERAPY

Our laboratory seeks to accelerate the development of novel vaccines and immune therapies to treat HIV infection or other emerging high-burden infectious diseases.

The project will be supervised by Dr. Anne Galy in the laboratory directed by Pr. Y. Levy at IMRB in Créteil. The host laboratory is an academic laboratory affiliated with Inserm, the French National Institute for Health and Biomedical Research, the university Paris-Est Créteil in the south east Paris region. The laboratory is the founder of the Vaccine Research Institute, an expert academic network. It is situated in the campus of a large hospital, south of Paris France, with easy access by public transportation. The laboratory includes several research groups including a gene therapy group directed by Anne Galy who also directs the ART-TG gene therapy unit situated nearby (www.art-tg.com), enabling access to a variety of gene therapy vector systems and technologies for gene therapy, to be used in the project.

The post-doctoral fellow will study the immune responses obtained by engineering the antigenic specificity of human B cells using CRISPR/Cas9 genome editing, in the perspective of HIV treatment.

The objective of the post-doctoral fellow is to study the cellular and antibody immune responses ellicited by HIV broadly-neutralizing antibody-engineered human B cells, in response to antigens. The post-doctoral candidate will benefit from expertise already in place to engineer human B cells and to use vaccination models. To test novel hypotheses, the post-doctoral fellow will further develop existing tools for gene editing and gene transfer, including novel vectors addressing B cells. The post-doctoral fellow will study human B cell responses to novel vaccines through cellular tests, flow cytometry and molecular DNA sequencing methods for instance to analyze B cell repertoire diversity. Novel in vitro organoid models will be used. In vivo experiments will be conducted in a humanized mouse model in collaboration with the preclinical group of the laboratory. Through collaborative work, the candidate will conduct viral challenges to obtain therapeutic proof of concept. Results are expected to be published in high impact journals and presented at international conferences.

The candidate will have a PhD or MD/PhD in the field of health or life sciences with a demonstrated track record of publication. This position requires experience and expertise in the field of immunology (preferably for the study of B cells) and in molecular biology (preferably gene editing, PCR, and sequencing). Experiences in virology, specifically HIV, hematology, or gene therapy would be highly desirable.

The salary range is commensurate to experience and according to Inserm French public salary grid (ranging between 3400 to 4400 euros gross monthly with additional benefits). Junior candidates (less than 5 years post PhD) are encouraged to apply.
The position is funded for 3 years.

Apply with CV and motivation letter **before Jan 6 2025**
contact **anne.galy@inserm.fr** reference **POSTDOC_THERAB**
Start date is February, 2025.