



POST-DOCTORAL POSITION
3-year, available immediately
Antibody responses induced by
DC-targeting vaccines



Key words:

HIV, DC, vaccine, antibody

Context and environment:

The Vaccine Research Institute (VRI), which has been established in 2011 under the banner of the French Government, aims at accelerating research for an effective HIV/AIDS vaccine development. The VRI gathers national and international leading scientists and physicians who strengthen the links between basic, translational research, patients associations and the socio-economic world.

A joined immunology program has been launched in 2020 between the Inserm VRI team of Prof Lelièvre in Créteil (<http://vaccine-research-institute.fr/>) and the Inserm CIML/CIPHE team of Dr Malissen in Marseilles (<http://www.ciml.univ-mrs.fr/science/lab-bernard-marie-malissen/hom>).

Project:

One main avenue for the development of an HIV vaccine remains the induction of protective antibodies. A rationale approach for vaccine design is to target HIV antigens to specific receptors on dendritic cells (DCs) via fused monoclonal antibodies (mAb), with the intention to favor antigen presentation and activation of HIV-specific immune responses. We propose to extend this vaccine approach by developing HIV vaccine candidates targeting skin Langerhans cells (LC). We provided evidences that human Langerhans cells properly targeted may be licensed to efficiently induce Tfh cells and HIV-specific B-cell responses. Our investigations further underscored that LC are an important target to consider for the induction of germinal center B-cell and antibody responses.

The postdoctoral candidate will take part of the research program that will be performed at CIML/CIPHE site. He/she will investigate different routes of immunization in mouse models, as well as homologous or heterologous prime boost regimen. The candidate will focus on cellular and transcriptomic signatures of the vaccine. Overall, the results of the project will assess the ability of vaccines targeting Langerhans cells to efficient induce humoral responses specific to HIV antigens.

Candidate profile:

We are looking for a qualified and motivated Ph.D. in immunology. The candidate should have a strong experience in flow cytometry and immune functional assays. Excellent technical skills, strong motivation, autonomy and ability to quickly and effectively develop the proposed project in relation with the group leaders and collaborators will be essential. Validated training for animal experimentation is mandatory.

Salary:

Depending on experience and in accordance with the Inserm policy.

Contact:

This position is available for 36 months, and needs to start between April 2020 and July 2020. Applicants should submit to Sylvain Cardinaud (sylvain.cardinaud@inserm.fr) and Sandrine Henri (henri@ciml.univ-mrs.fr) a curriculum vitae, a brief description of their research accomplishments and career goals, the list of their publications and the name of three referees.