

High-throughput screening for VHH/nanobodies discovery

Missions

We are seeking for a highly motivated research scientist with experience in antibody discovery to join a project already developed by 3 labs, the Antibody engineering platform, the Unit of Antibodies in Therapy and Pathology (both Institut Pasteur, Paris) and the Immunovirology lab (Institut Pasteur, Montevideo). The candidate will work at the Antibody engineering platform in collaboration with the 2 other labs.

The project global aim is to help developing a pipeline for high-throughput discovery of alpaca VHH nanobodies. This pipeline includes alpaca immunization, B cell differentiation in vitro, droplet microfluidic sorting of B cells of interest, VH sequencing by NGS, antibody cloning and expression, antibody validation.

The candidate will be entrusted with B cell differentiation in vitro, VH sequencing by NGS, antibody cloning and expression, antibody validation. He/she will learn droplet microfluidic sorting of B cells of interest in collaboration with a microfluidicist from the consortium.

Novel assays and methods of analysis will have to be developed, including plasmocyte differentiation from alpaca memory B cells, repertoire analysis of VHH and antibody engineering.

The ideal candidate has expertise in molecular biology, B cell biology, and antibody biochemistry.

Profil

PhD in Protein/Antibody engineering and/or single cell technologies

Expertise in antibody engineering, high-throughput screening, antibody characterization is required.

A hands-on expertise in bioinformatics and repertoire analysis would be a plus.

An experience in cell culture will also be appreciated.

Capacity to work with the different partners is essential.

ABOUT THE POSITION

Job Title: Temporary employee

Location: Paris

Starting Date: November 2018- March 2020

Duration: 16 months.

Contact

Pierre LAFAYE

Head of Antibody Engineering Platform

Institut Pasteur Paris

25 rue du Dr Roux 75015 Paris

plafaye@pasteur.fr