



**Announcement for the recruitment of a student intern in the field of microfluidics**

Supervisor : Micaela Vitor (Large Molecules Research Platform, Sanofi R&D - Vitry sur Seine)

Tel : 01 58 93 30 78

Email : [micaela.vitor@sanofi.com](mailto:micaela.vitor@sanofi.com)

**Title : Set up of droplet-based microfluidic system for use in the repertoire mining of cognate paired antibodies**

The Large Molecules Research (LMR) Platform France, part of Sanofi R&D based in Vitry-sur-Seine, has the mission of developing therapeutic antibodies in the context of different diseases. As the discovery of potential targets with higher therapeutic implication is advancing, and more and more complex targets are being identified, there is a demand for correspondingly more complex antibodies with sometimes quite rare characteristics. To meet this demand, it is crucial for LMR - France to increase the throughput of antibody screening and selection processes in order to generate a more diverse panel of antibody hits which in turn will increase the chance of finding antibodies with those rare characteristics. The LMR is investing in developing a microfluidic platform to meet this high throughput need.

One of the Sanofi's microfluidics team missions is to develop droplet-based microfluidic systems to compartmentalize antibody information in droplets and, in addition, to perform molecular biology reactions within droplets. In the context of this project, we aim to convert antibody libraries in a high throughput. For that, the student will work on the set up of microfluidics system for digital droplet PCR (ddPCR) in order to maintain antibody cognate pairing information.

The student will need to have strong knowledge in the field of microfluidics (Bac+5 final internship). Knowledge of antibodies and experience in molecular biology and ddPCR is desirable.

**Desired start date** : February 2021

**Duration** : 6 months

Interested candidates will have to send CV and cover letter by email before November 15th.