Announcement for the recruitment of a student intern in the field of molecular biology and

microfluidics

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

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Title: Set up of droplet-based microfluidic system for screening of functional 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

individually compartmentalize antibody-secreting cells and identify binder / functional antibodies. For

that, antibody binding assays, such as ELISA, and functional assays need to be redesigned to fit the

droplet platform. Then, positive droplets can be recovered by our in-house made droplet sorting

station for further characterization of target antibodies.

The student (Bac+5 final internship) will need to have knowledge in cellular biology, antibodies and

experience in microfluidics is desirable.

**Desired start date:** February 2022

**Duration:** 6 months

Interested candidates will have to send CV and cover letter by email before November 26<sup>th</sup>.