

## **Post-doctoral position in organ on chip and human stem cells**

The team Mechanobiology of Host-Microbe Interactions (MOHMI) is recruiting a young post-doctoral researcher to develop new organ on chip systems based on human induced pluripotent stem cells.

### *Who we are*

The lab aims to understand how microenvironment and physical forces control host-microbial interactions. Our research is highly interdisciplinary and combines microbiology, cell biology and bioengineering approaches. The lab recently demonstrated that human organ on chip are relevant *ex vivo* models for investigating bacterial infection at a tissue scale (Grassart et al, Cell Host Microbes 2019). Because the reservoir of infection of many pathogens are restricted to human, these new biomimicking approaches could represent realistic alternatives when small animal models are not fully satisfying. The lab is now developing new organ on chip solutions to provide affordable and accessible biomimetic systems. The team has been awarded by an ATIP-Avenir funding and is established within the Center of Infection and Immunity of Lille (CIIL) at the Institut Pasteur of Lille.

### *The project*

The candidate will develop human lung organoids based on induced pluripotent stem cells and eventually enhance the physiological relevance of these models using lung on chip technology developed in house. Using this novel strategy, the candidate will work in close collaboration with a consortium of two other teams (located in Lille and Paris) aiming to better understand mycobacterium tuberculosis infection.

### *Candidate profile*

We are seeking for a candidate with a background in stem cell culture (preferentially hiPSC) and/or candidates with research background in microfluidics/microfabrication/organ on chip. Curiosity, creativity, team spirit and interest in working at the interface of different fields are necessary.

The lab will support a full-time salary through for an initial period of 24 months. Salary and benefits will follow the official CNRS salary grid, commensurate with research experience. It is expected that candidate start his employment from June 2022 but date of arrival is open to discussion.

If you are interested by this opportunity, please send your CV to [agrasart@gmail.com](mailto:agrasart@gmail.com)