Post doctoral position:

Liver organoïd bioconstruction based on micropatterning and liver stem cells differentiation

Duration: 1 year (renewable once) **Period:** to be started in September, 2019 **Location:** UMR-S INSERM 1174. University Paris Saclay, France.

General description of the project

The iLITE (8,5M€) project has the ambitious goal of producing bioartificial liver. The consortium, driven by the DHU HepatInnov, brings together teams from the INSERM, the Paris-Saclay university, the St-Louis hospital (AP-HP), the CEA, the INRIA and four start-up companies in a multidiciplinary partnership. In the present project, bioconstruction of the liver will be performed by the assembly of building blocks –liver organoids, vascular networks and biliary networks. Vascular and biliary networks will be produced by a mix of technologies comprising organotypic culture, micropatterning and stereolithography. We will focus particularly on producing a functional biliary network which has been a missing element in all previous studies. This projects aims to answer two major challenges:

- The production of a bile duct network of defined geometry
- To adapt the bile duct to microfluidics for functional studies

Post-Doctorate Profile

We are seeking a highly motivated and autonomous post-doctoral fellow with experience in cell biology and microfluidics to develop experimental conditions in collaboration with members of the consortium, aiming in the organogenesis of bile ducts produced from liver precursor or co-cultured cells.

The ideal candidate would possess:

- a PhD with at least 3 years expertise in hepatic cell biology and pathophysiology, 3D culture and cell differentiation
- A willingness to work on a project at the interface between technology (microtechnologies, microscopy, ..) and biology (cell and tissue applications)
- English, both written and spoken.

Send CV, cover letter and any pertinent information to:

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