



BME PARIS
BioMedical Engineering
MASTER'S PROGRAM

"Organs-on-chip": really organs ? really on chip?

Open Your Mind Seminar

Friday, Dec 6 2019
1 pm – 2.30 pm

Arts et Métiers
155 Boulevard de l'Hôpital
75013 Paris
Grand amphithéâtre

"Organs-on-chip" developing mimics of organs for research, screening and regenerative medicine

Microfluidic systems, and more generally microfabricated systems have the potential to target cells with physical and chemical clues, such as positioning, exerting forces, providing nutrients, drugs or signaling molecules, at a high spatial and temporal scale (typically micrometer and sub-second respectively). This opens a completely new area for the development of models of organs, able to bridge the gap between animal models and conventional cell culture in petri dishes, microtiter plates or pendant drop. This is a field still in its infancy, but fast developing. We shall provide some examples of the types of tools currently developed, and potential applications in neurosciences, developmental biology and cancer.

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