Organ on chip: technologies, applications and new challenges for personalized medicine

Inserm Workshop 290

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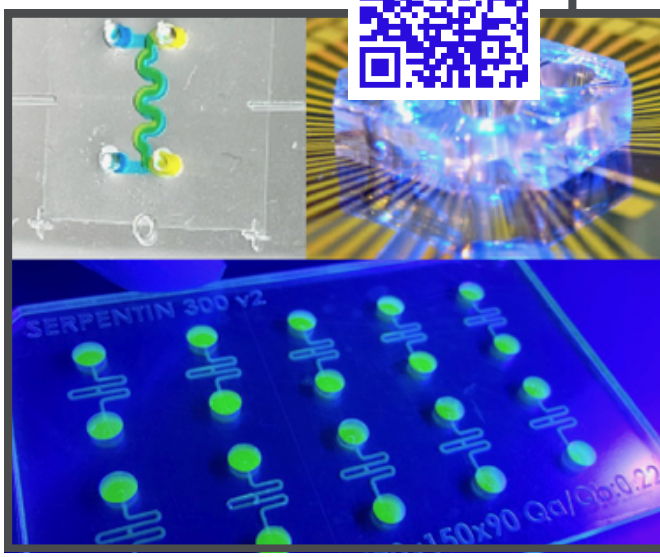
The aim of this 2-step workshop is first to provide to the French scientific community an overview of the latest advances in the field of organ-on-chip, from general introduction to recent advance-ments regarding pathophysiology research (metabolic process-es/neuroscience/cancer/infection/immunity) including biosensors' integration.



Deadline: **July 3, 2026**

PHASE I THEORETICAL

October 5-7, 2026 — **Bordeaux**

ORGAN ON CHIP TECHNOLOGY
Peter LOSKILL (University of Tubingen, DEU), Gaëlle RECHER (University of Bordeaux, FRA) and Peter D. JONES (University of Tubingen, DEU)

ORGAN ON CHIP FOR STUDYING HUMAN PHYSIOLOGY
Cecile LEGALAIS (UTC, FRA), Matthieu RAOUX (University of Bordeaux, FRA), Christine MURMMERY (Leiden University, NLD), Franck HALARY (CR2TI UMR1064, FRA), Severine LE GAC (University of Twente, NLD) and Fabrice NAVARRO (CEA, FRA)

ORGAN ON CHIP FOR MODELLING CHRONIC DISEASES
Maxime CAZORLA (Institut de Neurosciences de la Timone, FRA), Pim PIJNAPPEL (Erasmus MC Sophia Children's Hospital, NLD) and Danijela MATIC VIGNJEVIC (Institut Curie, FRA)

ORGAN ON CHIP FOR MODELLING INFECTIOUS DISEASES & IMMUNITY
Maria BERNABEU AZNAR (EMBL, ESP), Vivek THACKER (Heidelberg University Hospital, DEU) and Alexander MOSIG (University Hospital Jena, DEU)

PHASE II PRACTICAL

November 2-6, 2026 — **Lille & Montpellier**

The practical phase will be splitted in two workshops, one in Lille dedicated to the fabrication of a human gut-on-chip, including 3D-printing, fabrication of PDMS chips using soft lithography, and the culture of an intestinal epithelium microfluidic flow conditions. The training will conclude with functional analyses, including optical microscopy and permeability measurements.
The second practical workshop will be in Montpellier and attendees will learn how to manufacture and prepare microfluidic circuits and microelectrode arrays in clean room, then they will use these devices in experiments for the study of blood flows in microfluidics and the electrophysiology of cardiomyocytes.

SELECTION: 6 trainees for Lille and 10 trainees for Montpellier will be selected among Phase I participants.

INFORMATION & **REGISTRATION** CLICK HERE

*Ateliers Inserm - Réalisation : DRH - SDevRH - Crédit image : Canva - Décembre 2025

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