

# Inserm Workshop 253

## Organ-on-chip: understanding and mimicking living organisms for better treatment

**REGISTRATION DEADLINE: June 29, 2018**

**ORGANIZERS:** Nathalie PICOLLET D'HAHAN (CEA-BGE-Biomics, Grenoble), Donald K. MARTIN (TIMC-IMAG, UGA, Grenoble), Christophe MARQUETTE (ICBMS-Université Lyon1-CNRS, Villeurbanne).

**AIMS:** Organ-on-chip (OOC) technology is providing new platforms for drug discovery and toxicity testing and has the potential to become powerful for disease modelling and personalised medicine. The course will cover ongoing efforts and various applications of OOC while also addressing ethical issues.



### PHASE I – CRITICAL ASSESSMENT

October 15-17, 2018 in Bordeaux

#### ORGAN-ON-CHIP: HOW TO MIMIC THE STRUCTURE TO STUDY THE FUNCTION

Nancy ALLBRITTON (University of North Carolina, USA), Olivier GUENAT (University of Bern, CHE), Peter LOSKILL (Fraunhofer Institute, DEU)

#### ORGAN-ON-CHIP: BARRIER FUNCTION & BIOSENSORS

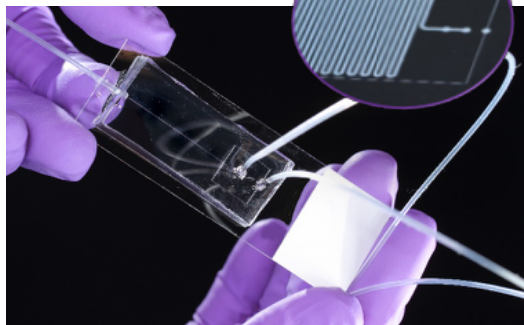
Brian DERBY (University of Manchester, GBR), Torsten MAYR (University of Graz, AUT), Maria DELI (Hungarian Academy of Sciences, HUN)

#### ORGAN-ON-CHIP: CONVERGENCE OF MICROFLUIDICS & TISSUE ENGINEERING

Séverine LE GAC (University of Twente, NLD), Emmanuel ROY (Elveflow, FRA), Christophe MARQUETTE (ICBMS-Université Lyon1-CNRS, FRA)

#### FROM ORGAN-ON-CHIP TO « HUMAN-ON-A-CHIP »: MYTH OR REALITY?

Christine MUMMERY (LUMC, NLD), Cécile LEGALLAIS (UTC, FRA), Oussama EL BARAKA (Group Uwe MARX, Technical University of Berlin, DEU), Marlon SCHNEIDER (BfR, Bf3R, DEU), Rhiannon DAVID (AstraZeneca, GBR)



### PHASE II – TECHNICAL WORKSHOP

October 22-25, 2018 in Lyon and Grenoble

A practical workshop of 4 days with one group of 8 persons focusing on: 1) 3D scaffold manufacturing by using 3D printing technologies (computer aided design, introduction to 3D printing technologies, bioinks, bioreactors) (2 days); 2) Biomaterials and biomembranes (Polyelectrolytes-based biomembranes, self-assembling biopolymers, imaging) (1 day) and 3) Skin bioengineering; flow-focussing microencapsulation; 3D Bioprinting, Skin-on-Chip platform) (1 day). These 3 workshops will be sequentially organized and coordinated by Christophe Marquette (3d.Fab, Lyon); Don Martin (TIMC-IMAG, UGA, Grenoble) and Nathalie Picollet-D'ahan (CEA-BGE-Biomics, Grenoble).

**SELECTION:** One group of 8 persons will be selected among Phase I participants. Everyone follows the 3 workshops sequentially between Lyon (2 days) and Grenoble (2 days).

Information and registration:  
[ateliers@inserm.fr](mailto:ateliers@inserm.fr)