



Webinar Tissue and organ bioengineering

1. Day 1 – 03/04/2024

9h40 *Opening of the webinar*

B. Le Pioufle (ENS Paris-Saclay)

10h : *Bioengineering for biomedical applications*

JC. Duclos-Vallée (APHP – Hépatinov – IFBF)

Ethics, regulations, social and economical impact of Tissue bioengineering

chairman JC Duclos-Vallée

10h30 – 11h00 : Ethics – H. Chneiweiss (Inserm)

Break – 15 mn

11h 15 – 11h 45 : ATMP for tissue bioengin. – H. Rouard

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Stem Cells / Spheroids / Scaffolds

chairman : A. Barakat

13h30 – 14h : Embryonic tissue development – F.

Lemaigre (UCL)

14h – 14h30 : Gut models – M. Mahe (Inserm)

Break – 15 mn

14h45 – 15h15 : Liver models – A. Messina (Inserm UMR 1193)

15h15 – 15h-45 : 3D Porous scaffolds – D. Letourneur (Inserm UMR 1148)

15h45 – 16h15 : Recellularization – P. Baptista (Aragon Health Sciences)

Day 2 – 04/04/2024

Introduction on Organ on Chip

9h30 – 10h : Introduction to on-chip strategies and modelisation – B. Le Pioufle (ENS Paris-Saclay)

On Chip Strategies

chairman B. Le Pioufle

10h – 10h30 : Tissue fiber extrusion using microfluidics – S. Takeuchi (Université Tokyo)

10h30 – 11h : Liver on chip – Y. Sakai (Université Tokyo)

Break – 15 mn

chairman B. Le Pioufle

11h15 – 11h45 : Cerebroids : Modeling a brain *in vitro* – F. Yates (Sup'Biotech - CEA)

11h45 – 12h15 : Spheroids in digital microfluidics – C. Baroud (Institut Pasteur)

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chairman JC Duclos-Vallée

14h – 14h30 : Vessel on chip – A. Barakat (Ecole Polytechnique)

14h30 – 15h : endothelium derived from iPSC on chip – Y. Chen (ENS Paris)

Break – 15mn

Extracorporeal systems

chairman JC Duclos-Vallée

15h15 – 15h45 : Extracorporeal Liver – C. Legallais (UTC)

15h45 – 16h15 : Extracorporeal Lung – J. Issard (APHP)

Day 3 – 05/04/2024

BioPrinting Technologies

chairman B. David

9h30 – 10h : Bioimpression Technologies – C. Marquette (UMR 5246, Lyon 1)

Organ on chip for toxicology

chairman B. David

10h - 10h30 : Predictive toxicology – J. Richard (Sanofi)

10h30 - 11h : Pharmaco-Kinetics and toxicology with Organ on chip – A. Moreau & C. Korlowski (Servier)

Imaging

chairman B. David

11h – 11h30 : Multiphoton microscopy of tissues – E. Beaupère

Break – 15 mn

Clinical applications

chairman JC. Duclos-Vallée

11h45 – 12h15 : Retinal reconstruction – O. Goureau (Institut de la Vision)

12h15 – 12h45 : Tracheal reconstruction – E. Martinod (APHP)

LUNCH

Chairwoman S. Kascakova

14h – 14h30 : Bone reconstruction – H. Petite (Lariboisière)

14h30 – 15h : Skin reconstruction – S. Banzet (Percy)

End of the webinar