

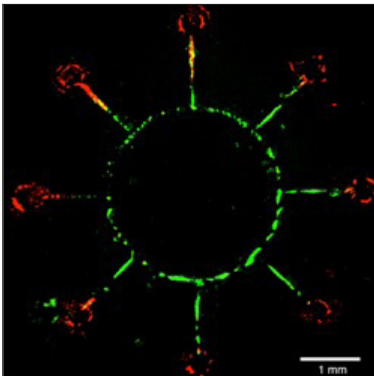
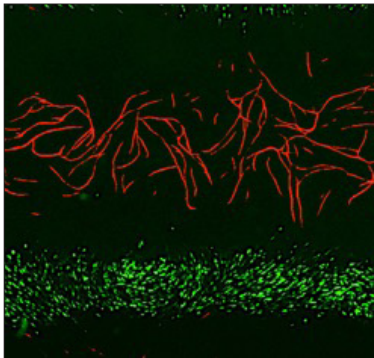
Inserm Workshop 258

3D Bioprinting and Biofabrication: From cellular models to tissue engineering applications

REGISTRATION DEADLINE: September 13, 2019

ORGANIZERS: Hugo OLIVEIRA, Sylvain CATROS, Raphael DEVILLARD (Inserm U1026, Bordeaux)

AIMS: The lecture session will present innovative biofabrication and 3D bioprinting technologies for the development of advanced cell culture models for organoid development, cancer models and on tissue engineering approaches. The main objective is to give a broad vision of bioprinting and its applications.



PHASE I – CRITICAL ASSESSMENT

November 13-15, 2019 in Bordeaux

3D BIO/PRINTING AND BIOFABRICATION : FROM BASICS TO APPLICATION

Sylvain CATROS (Inserm U1026, FRA), Hugo OLIVEIRA (Inserm U1026, FRA), Vianney DELPLACE (Inserm UMRS 1229, FRA), Phoebe LI (University of Sussex, GBR)

BIOPRINTING/BIOFABRICATION TOOLS FOR THE CREATION OF ADVANCED CULTURE MODELS

Tim WOODFIELD (Christchurch School of Medicine and Health Sciences, NZL), Jordan MILLER (Rice University, USA), Kymberly HOMAN (Wyss Institute, USA), Lorenzo MORONI (MERLN Institute, NLD)

BIOPRINTING/BIOFABRICATION FOR TISSUE REGENERATION

Riccardo LEVATO (Utrecht University, NLD), Anja LODE (Centre for Translational Bone, Joint and Soft Tissue Research, DEU), Olivia KEROUREDAN (Inserm U1026, FRA), Nieves CUBO (Centre for Translational Bone, Joint and Soft Tissue Research, DEU), Monica LARONDA (Feinberg School of Medicine, USA)

BIOPRINTING: A MARKET AND INDUSTRY PERSPECTIVE

Fabien GUILLEMOT (Poietis, FRA), Marc THURNER (RegenHU, CHE), Maite RIELLAND (L'Oréal, FRA)



PHASE II – TECHNICAL WORKSHOP

November 19-20, 2019 in Bordeaux

The practical sessions will consider 4 different printing technologies:

A - 3D printing using fused deposition modeling (FDM) of poly(lactic acid) and hydroxyapatite composite matrices for bone tissue regeneration applications.

B - 3D bioprinting of cancer cell lines by laser-assisted bioprinting inside a methacrylated gelatin matrix for the creation of cell spheroid arrays.

C - 3D bioprinting of a co-culture of cancer cells and endothelial cells, using inkjet, for the creation of geometrically defined cell-communication models.

D - 3D bioprinting of a methacrylated hyaluronic acid-based matrix, using microextrusion, containing both endothelial and stromal cells.

SELECTION: 12 trainees will be selected among Phase I participants.

Information and registration:
ateliers@inserm.fr