

ART BIOPRINT

A structure created to provide you with the state of the art in bioprinting.

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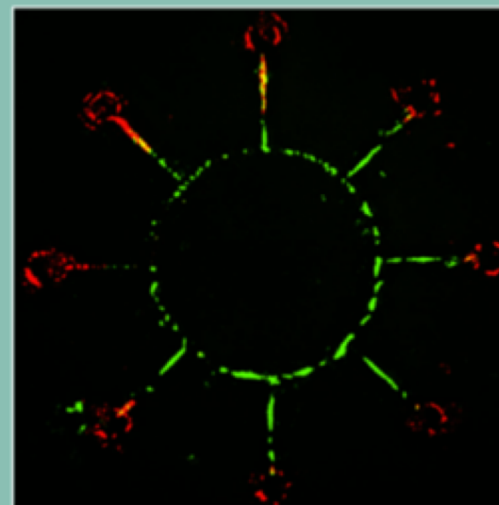
ACCÉLÉRATEUR DE RECHERCHE
TECHNOLOGIQUE (ART)
BIOPRINT

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LES RENCONTRES DU GDR ORGANOÏDES
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C. Handschin, ART BioPrint, Inserm U1026, Bordeaux

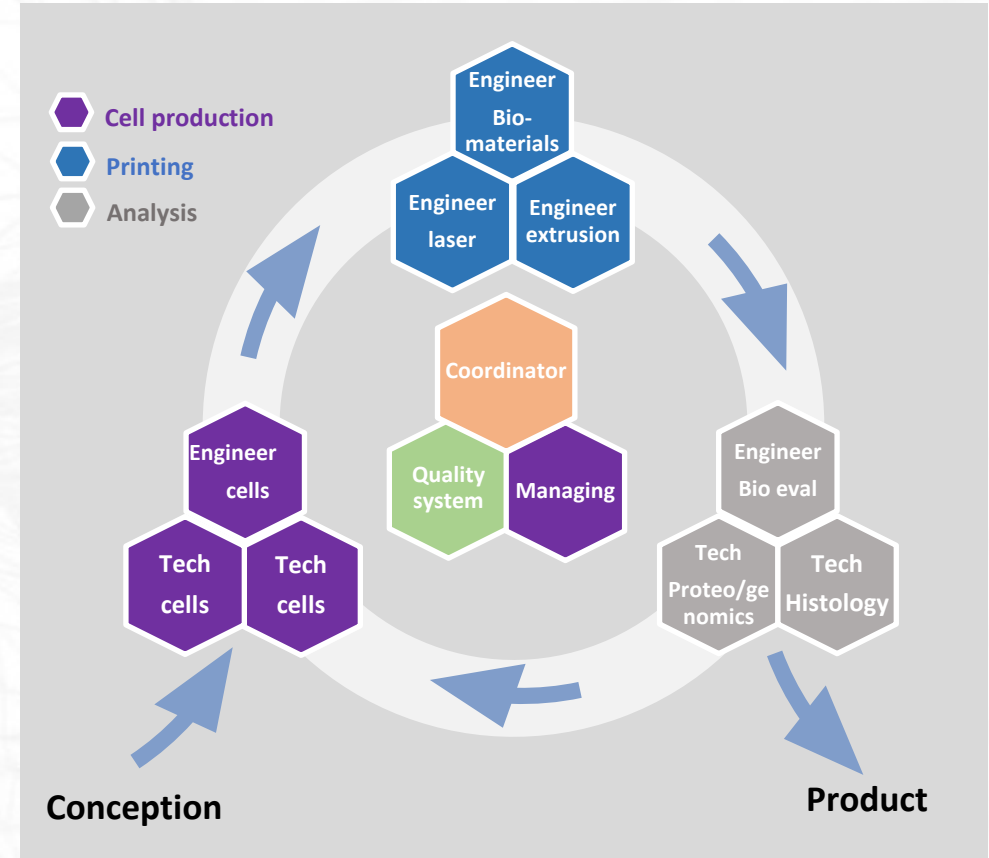
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TECHNOLOGIQUE (ART)

BIOPRINT

A structure created by Inserm and making part from the BioTis laboratory (Inserm U1026)

- Specialized in bioprinting.
- Improving research and visibility in the field at national and international level.
- Providing scientific and technological support to Inserm laboratories.
- A pool of engineers directed by J.C. Fricain (PUPH) and coordinated by H. De-Oliveira (research engineer).



Human cellular models:

hUVECs, hPECs, human skin fibroblasts, hSCAPS, hBMSCs, hADSCs, iPS, several cell lines.

Bioink development:

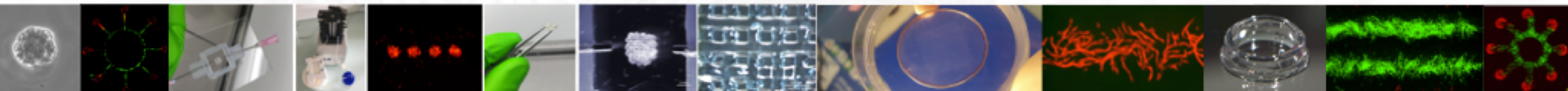
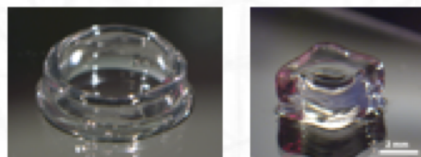
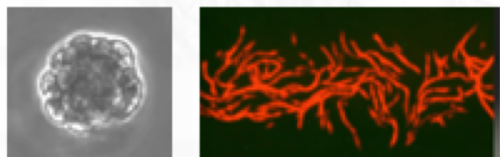
Collagen, collagen MA, Gelatin MA, HA, HAMA, Laminin-derived, ECM-derived.

Printing technologies:

Laser-assisted, microextrusion, Inkjet and stereolithography.

Evaluation:

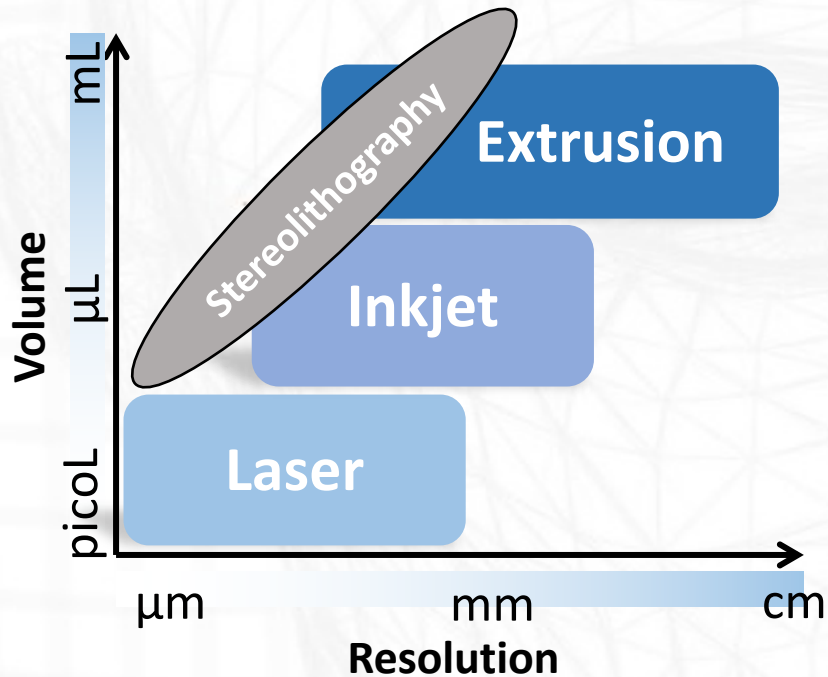
Histology
3D reconstruction
Time-lapse
Proteomics
Genomics



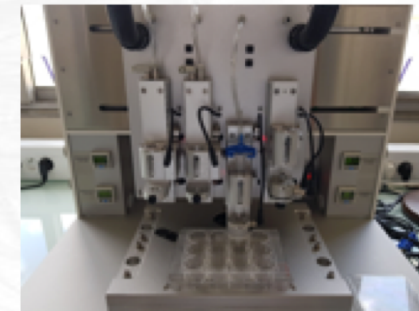
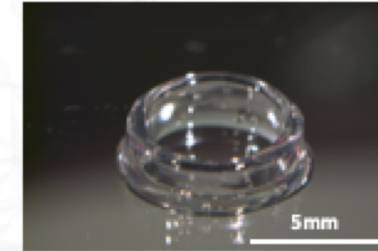
4 types of bioprinting technologies on the structure.

⇒ 6 bioprinters (3 prototypes).

⇒ 2 multimodal bioprinters.



Laser assisted
(2 printers)



Inkjet +
microextrusion
(1 printer)



microextrusion
(2 printers)

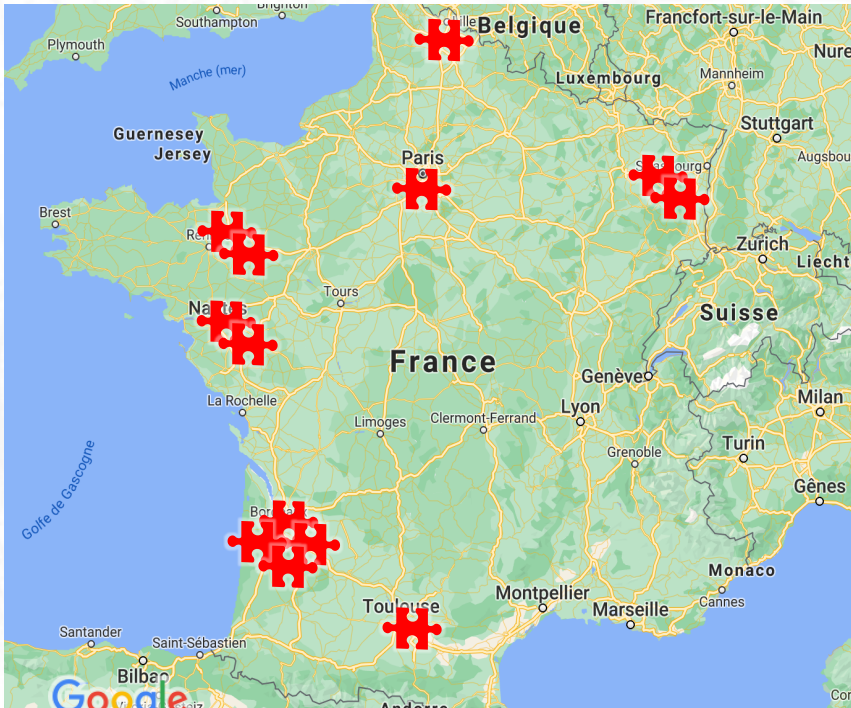


Photolithography
(1 printer)

Tools to implement various biofabricated products.

COLLABORATIONS AND FINANCIAL SUPPORT

National collaborations



European collaborations



FORCE REPAIR

Financial support

- A structure allowing the maturation of your projects in bioprinting.

- Advice/technological support.
- Scientific collaborations.
- Bioink supply.

- Projects organized in 3 thematics.

- In-vitro models
- Tissue engineering.
- Technologies and tools.

- Organoids - tissue projects

Physio pathological models:

- Cancer (glioblastoma, breast, pancreas).
- Complex models (oral epithelium, lung epithelium, bone, cartilage, hepatic, skin)



<https://www.artbioprint.fr>



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