

Bioprinting - Basics and Tips

Dates: 16 to 20th of December 2024

Number of days: 4.5 days

Number of participants: 6

Theoretical session: 50%
Practical session: 50%

Program: Theoretical sessions

- Basic principles of Bioprinting and 3D/4D printing in health.
- Bio-inks and Biomaterials used in printing: Study of biocompatibility, adhesion, hydrogels formation, degradability.
- Bioprinting and associated technologies:
 Bioprinters / Applied Rheology and rheometry for Bioprinting /
 Predictive tools (FlowTips) / echanical characterization (tissue, hydrogel, scaffolds)
- Cell culture for bioprinting:
 Cell types/ 2D pre-impression cell culture / Post-3D printing cell culture systems
- Maturation and characterization of bioprinted tissues: Sterility / histology / cell growth and quality monitoring

Practical sessions

- Case study and examples of applications
 - Skin printing connective tissue (extrusion)
 - Epithelium printing cell sheet (inkjet)
- Bioprinter and tools demonstration
 - Hands-on-with BioAssemblyBot and multi component bioprinting
 - Shear stress effect related to cell printing
 - Tissue characterization (cytometry, DMA, Histology)

Registration: Click here

Deadline 30th of October 2024

Price: 3 500€ (Excl. Tax)