



Bioprinting - Basics and Tips

Dates:	16 to 20 th of December 2024
Number of days:	4.5 days
Number of participants:	6
Theoretical session:	50%
Practical session:	50%
Program:	Theoretical sessions <ul style="list-style-type: none">- 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) / mechanical 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 <ul style="list-style-type: none">- Case study and examples of applications<ul style="list-style-type: none">• Skin printing - connective tissue (extrusion)• Epithelium printing – cell sheet (inkjet)- Bioprinter and tools demonstration<ul style="list-style-type: none">• Hands-on-with BioAssemblyBot and multi component bioprinting• Shear stress effect related to cell printing• Tissue characterization (cytometry, DMA, Histology)
Registration:	https://vu.fr/isgF
Deadline	16 th of November 2024
Price:	3 500€ (Excl. Tax)