

**Fully funded Engineer position**  
**Responsible of the Tissue engineering platform**  
**IRMB – CARTIGEN platform, Hôpital Saint-Eloi, Montpellier, France**

**Background**

The engineer works on the development and management of the tissue engineering platform CARTIGEN, located at the IRMB on the Saint Eloi Hospital campus.

**Main mission**

The engineer will be in charge of the 3D printing and characterization/analysis equipment of the printed constructs and will ensure the proper functioning and maintenance of the equipment.

He/she will accompany research projects in tissue engineering and biomanufacturing by (i) defining the most suitable biomanufacturing technology (ii) developing the printing or bioprinting processes (iii) participating in the choice or preparation of inks or bioinks, and (iv) participating in the analysis of printed constructs.

He/she will participate in the development of research and development projects in collaboration with the institute's research teams, particularly in the osteo-articular fields

He will participate in the scientific and administrative management of the platform and will interact closely with the teams involved in the projects.

**Activities**

- Responsibility for the equipment (maintenance, training, development) and management of the schedule open to users.
- Implementation of an experimental program to define the 3D printing parameters summarizing the mechanical, physicochemical and biological properties required - Interaction with the project partners
- Follow-up of scientific developments in the field of biomaterials and biofabrication.
- Training of users wishing to use the platform's free access equipment.
- Participation in the development of tissue engineering projects in collaboration with the Institute's teams
- Communication, advertising, dissemination (management of the website)
- Record, format and analyze results in the form of reports and publications.
- Follow the management of stocks and orders related to the projects

**Skills / Qualifications**

*Qualifications:*

- Level: master / engineering school
- Discipline: 3D printing, imaging, cell biology

*Essential Knowledge/Skills:*

- Skills in 3D printing techniques and the computer tool for piloting the devices
- Skills on the main analytical tools necessary for the characterization of printed constructs (stereomicroscopy imaging, confocal microscopy and/or benchtop scanning electron microscopy)
- Knowledge in cell culture
- Interpersonal skills: exchanges with referents, users, financial and biomedical departments of the University Hospital, managers and suppliers
- Ability to manage and develop the platform, autonomy
- English: spoken level 1 / read and written level 2

*In-depth knowledge/skills:*

- Knowledge of health and safety regulations

*Specific know-how related to the position:* Interdisciplinarity between printing technologies, characterization of printed structures and biology, chemistry and biomechanics

*Required skills:* Teamwork, autonomy, analytical capacity, initiative, creativity, rigor