

## **Job Profile for Recruiting a Postdoctoral Researcher in Lille (France)**

**Job Title:** Postdoctoral Researcher in Cellular Biology and Tissue Engineering

**Duration:** 2 years

**Project Context:** The LIPOTEC project, coordinated by INSERM CANTHER U1277 and LATTICE MEDICAL, aims to optimize breast reconstruction technology using the MATTISSE© device. The postdoctoral researcher will be assigned to the task, which focuses on integrating lipofilling into the MATTISSE© TEC, allowing for the regeneration and maintenance of non-vascularized adipose tissues.

### **Main Responsibilities**

#### 1. In-Vitro Research (Task 2.1)

- Identify the ideal type of adipose tissue/cells for breast reconstruction (microfat, SVF..)
- Evaluate the frequency and quantity of adipose tissue introduction to avoid excessive cellular degeneration.
- Write a report on the choice of non-vascularized fat

#### 2. Hydrogel Screening and Bio-Printing (Task 2.2)

- Conduct in-vitro experiments to analyze the impact of GMP hydrogels on tissue growth.
- Set up in-vitro models using bioprinting techniques.
- Write a report on hydrogel screening and bio-printing.

#### 3. Pre-Clinical Performance Evaluation (Task 2.3)

- Validate the results obtained from previous in vitro tasks in terms of performance during in-vivo experiments.
- Study neovascularization, kinetics, and the final volume obtained through MRI on animal models.
- Write a performance report on in-vivo studies.

### **Desired Profile**

- Education: PhD in cellular biology, tissue engineering, bioengineering, or a related field.
- Technical Skills:
  - Experience in cell culture and bioprinting techniques.
  - Knowledge of biomedical materials, particularly hydrogels.
  - Experience in pre-clinical evaluation on animal models.
- Soft Skills:
  - Ability to work in a team and collaborate with academic and industrial partners.
  - Project management skills and scientific report/ article writing.
  - Proficiency in written and spoken scientific English.

### **Work Environment**

The postdoctoral researcher will work primarily in the laboratories of LATTICE MEDICAL and INSERM CANTHER U1277, with occasional travel for project meetings and inter-institutional collaborations.

### **Application**

Applications should include a detailed CV, a cover letter, relevant scientific publications, and 2 academic references. Applications should be sent to the following email address: [philippe.marchetti@inserm.fr](mailto:philippe.marchetti@inserm.fr).

### **Application Deadline**

July 31, 2024

For more information on the LIPOTEC project, please visit our website or contact us directl