

Engineer in Biotechnology/Biological Techniques New technologies for cell cryopreservation

24-month contract

Job profile (Emploi type RéFérens III) A2A43

Main description

The newly recruited engineer will be in charge of developing and optimize a dedicated directional freezing setup for cryopreservation of mammalian cells. The job is open for Master holders or engineers in the domains of biotechnology, cell biology, molecular biology and related disciplines.

Activities

- Adapt the experimental setup for the cryopreservation of different cell lines
- Cell culture experiments, viability and metabolic measurements
- Flow cytometry characterization of thawed cells
- Phenotypic characterization of thawed cells (RT-qPCR, Elisa, confocal microscopy)
- Development and validation of process protocols in agreement with the project industrial partners
- Production of relevant documents associated with the project (device manual, protocols, reports and presentations)
- Manage and ensure traceability of the cryopreserved samples library.
- Manage stocks and orders associated with the project

Key competencies

Knowledge

- Solid knowledge in cell culture and flow cytometry
- Strong theoretical and practical knowledge in techniques associated with cellular and molecular biology
- Strong knowledge of cryopreservation techniques
- English language: B2 (Common European Framework of Reference for Languages).

Know-How

- Experience in cell culture and cell biology
- Knowledge of the techniques used for the preparation of biological samples in flow cytometry, confocal microscopy and molecular biology
- To know and apply the rules of hygiene and safety in a cell culture room (L2 confinement, culture of human cells)
- Knowledge in analysis of data obtained by flow cytometry
- Ability to organize their work to carry out several tasks within the project simultaneously
- Ability to present results (written reports, oral presentations) in both academic and industrial context.

Skills

- Aptitude for interdisciplinary work (between biology and materials chemistry)
- Team player, able to communicate, transmit and educate
- Discipline and autonomy in all aspects of the project;
- Strong interpersonal and organizational skills.

Context

The engineer will be working at the Laboratory of Condensed Matter Chemistry of Paris at Sorbonne Université in close collaboration with SATT Lutec. He/she will work in the Materials and Biology team (<https://lcmcp.upmc.fr/site/matbio/>).

This team brings together biologists, chemists and physicists for the development of biomaterials and associated processes. The candidate will be under the supervision of Dr. Francisco M. Fernandes and Dr. Christophe Hélyary. He/she will participate to the scientific project aiming at developing a new cryopreservation technique. This project is carried out within the framework of a maturation project supported by the SATT Lutech aiming at valorizing intellectual property assets.

Compensation: 2268€ (gross salary) + transport benefits

Dates: ASAP

How to apply: Address your application—full CV and motivation letter—to Francisco M. Fernandes and Christophe Hélyary.

Deadline to apply: 10th of November 2025

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