Job title: Research technician for Immune Cell Gene Delivery ref. MELIS-PSR-INDF-2024-56

Date of publication of the job offer: 23/09/2024

Research line: Genome Editing

Project and Institution that finance the contract: ARGOBIO SAS-Marc Güell

Job description:

The vast expansion of gene editing technologies and therapeutic enzymes holds substantial promise in disease treatment via a new class of genetic drugs. However, the challenge of how to efficiently deliver those tools to specific cell types and tissues remains to be solved. In our group, we have developed a synthetic evolution platform that uses molecular biology and machine learning frameworks to drive evolution of delivery vehicles with the potential to target any desired cell type with unprecedented precision. We are working in extensive engineering of our VLP based delivery vehicles and their implementation for in-vivo gene delivery.

We are seeking a passionate, impact-motivated scientist and problem solver who wishes to participate in a fast-paced, dynamic research environment. The developed work will involve developing and testing new methods for genomic modification of cells in-vivo. Methods for the efficient delivery in T-cells, and other immune cell types, will be the primary focus. The project will involve Interactions with industry and Key opinion leaders in the field, in a vibrant ecosystem of translation projects and spin-off companies in the Translational Synthetic Biology Lab at the MELIS department.

The mission of the Translational Synthetic Biology lab is to develop transformative technologies for human health. The Translational Synthetic Biology lab is part of the Medical and Life Sciences (MELIS) department at Pompeu Fabra University (Barcelona). Our lab is located at the PRBB in Barcelona one of the largest hubs of biomedical research of southern Europe.

Key responsibilities:

- Conduct experiments focused on the development and optimization of viral-based gene delivery systems.
- Maintain meticulous records and contribute to the analysis and presentation of research findings.

Expected starting date: November/December of 2024.

Information on the minimum requirements:

- Over 3 years in-hands lab experience.
- Strong tissue culture experience.
- Experience with FACS analysis for cellular characterization.
- Highly developed organization skills.
- Curiosity and motivation to applied novel biotechnological solutions.
- Excellent team player who enjoys working in a fast-evolving research environment.
- Interest in applied genetic engineering and synthetic biology.
- Fluent in English.

Technical skills valued:

- Previous experience in lentiviral vectors will be highly valued.
- Previous experience with primary immune cell manipulation or HSCs derived cell types will be highly valued.
- Previous experience in CRISPR or other pooled screens will be valued.
- Previous experience in next generation sequencing and single cell technologies be valued.
- Prior experience in in-vivo murine experiments will be valued.
- Other requirements:
- Bachelor's degree or MSc in biology, biotechnology, genetics, experimental or health sciences; or equivalent relevant experience.

Expected remuneration: annual gross salary of 28.676,14 – 32.971,18€.

Group and complement*:* PSR 3 level U – M.

Dedication and working time: 35 hours/week (full time)

Type of contract: Indefinida, segons el previst al RD 32/2021 de 28 de desembre de 2021; i a l'article 23 bis de la Llei 14/2011 d'1 de juny, de la Ciència, la Tecnologia i la Innovació.

Selection criteria:

1. Academic background: 0-20 points.
2. Professional experience/Appropriateness to the proposed profile: 0-60 points.
3. Other achievements: 0-20 points.

Minimum score to pass the selection process: 80 points.

Selection Committee:

President: MARC GÜELL CARGOL

Member 1: LAURA FORT AZNAR

Member 2: BERTA ALSINA ESPAÑOL

Information on the application process: send an email with a copy of the candidate's curriculum vitae, indicating the **reference MELIS-PSR-INDF-2024-56** in the subject line.

Contact: recruitment.melis@upf.edu

Deadline to submit applications: 07/10/2024