Universitat Pompeu Fabra Barcelona
Departament de Ciències Experimentals i de la Salut

MINISTERIO DE CIENCIA E INNOVACIÓN
Financiado por la Unión Europea NextGenerationEU
Plan de Recuperación, Transformación y Resiliencia
AGENCIA ESTATAL DE INVESTIGACIÓN

Date of publication of the job offer: 10/09/2024

Job title: Research technician for Immune Cell Gene Delivery

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: December of 2024.

Project and Institution that finance the contract

This contract will be funded by UPF

Official number reference: CN01923

Information on the requirements

Must have

- 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.

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.

Education and training

- Bachelor's degree or MSc in biology, biotechnology, genetics, experimental or health sciences; or equivalent relevant experience.

Language

- Fluent in English

Benefits of the opening:

The candidate will receive a full-time contract and an annual salary according to the UPF salary guidelines for PSR category. Salary will be determined based previous experience starting at 29,000 EUR gross annual salary.

Career Development Opportunities

At the Translational Synthetic Biology Lab we are committed to fostering the professional development of our team members. As a Research Technician, you will have access to a wide range of career growth opportunities designed to help you advance in your career and develop new skills:

- Gain hands-on experience with cutting-edge technologies in gene editing, immune cell engineering, and in-vivo gene delivery systems
- Access to specialized courses, workshops and seminars offered by Universitat Pompeu Fabra at PRBB Intervals program.
- Work with you mentor to create a personalized career development plan that aligns with your professional goals and aspirations
- Engage in collaborative projects with industry partners and leading research groups.

Long term career progression

- Demonstrated competences in your role may lead to promotion within the lab and higher salary grades.
- The practical experience and industry connections you gain here will prepare for a transition role in biotech companies or startups, should you choose to pursue a career outside of academia.

Information on the application process

Please send the following documents:
- CV
- Cover letter

To the email address dimitrie.ivancic@upf.edu with “Immune cell engineering scientist” and your name in the email title.

Confidentiality in document handling and equality of opportunities policy are guaranteed by Pompeu Fabra University.

Deadline to submit applications

9th November 2024

Contact

Dimitrie Ivancic