Job Opening Doctoral Candidate 10 (DC10) InnoCAR-T

Title: Tumor-localized CAR-T production of immunomodulators and bispecific checkpoint inhibitors

Keywords: CAR-T, DBLCL patients, spatial transcriptomics, screening

Duration:	36 months	
Hosting institute:	FCRB, Barcelona, Spain	Duration: 28 months
Secondment institute:	Integra therapeutics, Barcelona, Spain	Duration: 9 months

APPLICATION DEADLINE: 15/02/2023
Intended start date: March 2023

PhD-student position (3 years):

The aim of this project is to develop next-generation CAR-T cells by modification of CAR-Ts with inducible costimulators and/or checkpoint inhibitors. Specifically, tumor-localized production of key cytokines as well previously established bispecific antibody fragments that contain a tumor-targeting domain and a checkpoint inhibitor domain will be pursued in order to develop a tumor micro-environment that promotes CAR-T mediated elimination of cancer cells. The project is expected to yield a panel of next-generation CAR-T that can produce specific checkpoint inhibitors in the tumor micro-environment, thereby, overcoming immune suppression, with a single lead cell product selected for future clinical evaluation.

The PhD candidate will be working as part of an international consortium on their search for an immunotherapeutic approach to cancer treatment and will start their 3 year research project at the Fundació Clínic per a la Recerca Biomèdica (FCRB) / Spain at the Immunogenetics of the autoinflammatory response group of Dr. Manel Juan. FCRB manages and promotes the research activities of Hospital Clínic de Barcelona, which is the leading academic university hospital on Point-of-Care CAR-T cell implementation. The candidate will further work at Integra Therapeutics / Spain, towards implementation of the FiCAT knock-in technology for implementation in the CAR-T pipeline. This research project will end with a PhD thesis defense at FCRB.

This project is part of a collaborative training network of 10 closely related projects (https://www.innocar-t.eu/) in which PhD students will benefit from networking opportunities. This includes a multidisciplinary training program with network-wide training events that will be provided to the candidates. Herewith, the PhD project will provide the candidate a unique opportunity to obtain knowledge/expertise on important facets of both academia and industry.

Key Responsibilities:

- Multi-color flow cytometry and phenotyping
- Gene editing
- Cloning
- Preclinical validation studies
- Management, presentation and publication of research data

Requirements:

- Candidate is in the first four years of his/her research career and does not have a doctoral degree
- Residence duration in Spain does not exceed 12 months in total within the last 3 years
- MSc in biotechnology, biology, biochemistry, biotechnology, or related
- Experienced in molecular and cellular techniques
- Experience in human primary cells culture
- Experience in flow cytometry techniques
- Collaboration skills, demonstrating agility and initiative. Ability to communicate fluently and effectively in English

Contact:

To apply, please send the following documents:
- CV (Name_Surname_CV.pdf)
- Cover letter (Name_Surname_CL.pdf)
- 2 letters of recommendation (Name_Surname_LR.pdf)

to the email address mjuan@clinic.cat with *"PhD_InnoCAR-T"* in the email title.