The “Development of the human lymphohematopoietic system” group, led by Marisa Toribio at the Centro de Biología Molecular Severo Ochoa (CBMSO), is looking for a highly motivated candidate to develop her/his thesis in their lab. They offer incorporation via a 4-year predoctoral contract (FPI programme) linked to the project “Overcoming current challenges of CAR-T cell immunotherapy for T-ALL leukemia with optimized CAR constructs (TRuCs) and universal, off-the-shelf, effector allogeneic T cells (OPTI-CAR-T)” (PID2022-138880OB-I00) funded by the Spanish Ministry of Science and Innovation (MICIN) and the State Research Agency (AEI).

Requirements:
- Graduate in biomedical sciences or related areas, with a minimum of 300 ECTS through official university studies, with a minimum of 60 ECTS in master studies.
- Academic record with an average grade over 8 (out of 10).
- Experience in in vivo mouse models, cell culture, immunology and molecular biology will be valued.
- Solid communication skills in English.

OPTI-CAR-T is aimed at investigating and validating independent, but complementary, molecular and cellular innovative strategies focusing on optimization of target recognition structures (chimeric antigen receptors, CARs) and effector T cells armed with them, which, in combination, are expected to overcome current challenges of CAR-T immunotherapy for T-cell acute lymphoblastic leukemia (T-ALL). The general goal is to optimize the expression and function of endogenously regulated TCR-fused CAR constructs (TRuCs) that target a surface molecule specifically expressed on T-ALL cells, in combination with the production of universal, allogeneic effector CAR-T cells (uCAR-T) to express them, as the foundations of a next generation, off-the-shelf, universal CAR-T immunotherapy for relapsed/refractory T-ALL that will be validated in preclinical assays.

Further information:
About the group: http://www.cbm.uam.es/toribiolab
About the CBMSO: http://www.cbm.uam.es

If interested, please send an e-mail including CV, academic record and 1-2 reference letters from previous supervisors, no later than September 20th 2023, to:

Marisa Toribio
mtoribio@cbm.csic.es