

**BECAS DE COLABORACIÓN – JAE INTRO 2020
EN CENTROS DE EXCELENCIA SEVERO OCHOA – CSIC**

TÍTULO DEL PROYECTO:

Lymph nodes on a chip for cancer immunotherapies

IP:

Judith Guasch

**RESUMEN DE LA PROPUESTA:
(Máximo 500 caracteres)**

This project consists of developing a microfluidic system to submit our artificial lymph nodes based on synthetic 3D hydrogels to a flow, with the objective of improving T lymphocyte expansion, which is an important limitation of adoptive cell therapy. This immunotherapy has already obtained remissions of patients with advanced cancers, but still needs to overcome this limitation to be broadly used in the clinics. The student will be involved in the optimization of the microfluidic chip through the analysis of human T cell expansion by means of flow cytometry, ELISA, microscopy, etc.