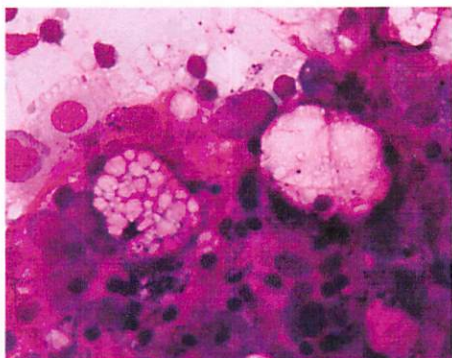


## PhD Position: Rejuvenating hematopoietic stem cells through partial in vivo reprogramming for improved functionality in aging and bone marrow failure syndromes



The SNSF AMBIZIONE junior group of Dr. Gabriela Desdín-Micó at the Department of Biomedical Sciences, University of Lausanne, Switzerland, is offering a PhD position to investigate the potential of partial reprogramming for rejuvenating in vivo hematopoietic stem cells during aging and in bone marrow failure syndromes.

The project will be conducted in the lab and co-supervised by Prof. Olaia Naveiras, head of the Regenerative Hematopoiesis Lab, Staff Physician in Hematology, and Head of the Bone Marrow Failure Unit at Lausanne University Hospital (CHUV). The Naveiras group has

pioneered work on the metabolic regulation of hematopoietic stem cell function and the role of microenvironmental regulation in adult hematopoiesis.

The methods used in this project will include in vivo experimental hematology techniques such as bone marrow competitive transplantation, long-term ex vivo culture, single-cell RNA sequencing (scRNA-seq) of aged hematopoietic stem cells and working with hIPS-derived hematopoietic progenitors from bone marrow failure syndromes such as Fanconi anemia or Shwachman-Diamond syndrome.

The **ideal candidate** should meet the following criteria:

- Comply with the requirements for the UNIL PhD Program in Cancer and Immunology
- Work experience in wet lab (cell culture, flow cytometry, PCR)
- Experience with in vivo mouse research
- Prior experience with bioinformatics (single-cell RNA analysis a valuable plus)
- Excellent English communication skills
- Independent, flexible, reliable, enthusiastic, and collaborative-minded team player

Preference will be given to outstanding candidates who can start on January 1<sup>st</sup>, 2025.

### Application Guidelines

Please send your application, including a CV and your transcript of records, to Gabriela Desdín-Micó ([gabriela.desdin@unil.ch](mailto:gabriela.desdin@unil.ch)) by October 28<sup>th</sup> at the latest. Your **letter of motivation should** address the following questions: What talents or previous experiences do you have that are relevant to this project? What would you like to learn and achieve during your PhD? Do you have experience in writing scientific reports? Give an example of a challenging task you faced in your previous position, and how you overcame it? Why do you find the need to do a PhD?

Selected candidates will be invited to participate in person for a laboratory visit on **November 7<sup>th</sup>, 2024**, which includes an oral presentation and personal interviews (this can also be done online). Administrative and eligibility questions should be directed to the respective PhD program administrators ([cancerimmunology@unil.ch](mailto:cancerimmunology@unil.ch)).

### Starting Date

The PhD position is available starting January 1<sup>st</sup>, 2025.