



## Postdoctoral research fellow position in human immunity, genetic and mitochondrial biology

### Location of the work

*The Mitochondrial Biology and Innate Immunity Lab*

### ImmunoConcEPT

CNRS UMR5164 – INSERM ERL1303

University of Bordeaux, France

Website: <https://immunoconcept.cnrs.fr/axes/mitochondrial-biology-and-innate-immunity/>

### Qualifications

Applicants must hold a PhD in biological sciences (preferably in immunology, genetics or cell biology), and should have a strong interest in metabolism and infection biology.

Fluency in English (spoken and written) is required. French is a bonus, but not required.

Successful candidates will have a strong background in immunology, cellular biology or molecular biology. Background in single cell sequencing approaches will be well considered.

Further scientific skills should include standard techniques like cell culture, qPCR, immunoblotting, basic molecular biology, or mouse handling. Most importantly, candidates should be curious and ambitious. Applicants should demonstrate good communication skills, autonomy and a passion for scientific thinking and experimental work.

### How to apply

Candidates should send a letter containing a statement of interest, curriculum vitae, and the names of two mentors for reference to [joan.garaude@inserm.fr](mailto:joan.garaude@inserm.fr)

The selection process will include an oral presentation and interview.

Salary will be in accordance with the university of Bordeaux scale, depending on experience.

We offer a renewable one-year contract funded by the French ANR.

**Anticipated starting date:** Summer 2024

### The project

The current project focuses on immune consequences of alterations of the mitochondrial respiratory chain and mitochondrial metabolism. It will be developed in collaborations with the groups of [Leif E. Sander](#) (Charité, Berlin, Germany) and [A.-Emmanuel Saliba](#) (Helmholtz, Würzburg, Germany). Using primary human immune cells and patient samples, the successful candidate will be in charge of developing a new approach for single-cell sequencing and implementing molecular tools to edit the mitochondrial genome to assess functional immune outcomes of mitochondrial diseases. Approaches in the lab also include standard immunological, cell biology and biochemical techniques (immunoblotting, ELISA, ELISPOT, reporter assays, microscopy, oxygraphy) as well as metabolomics, proteomics and single cell sequencing approaches.

### The lab

Our group focuses on fundamental aspects of host-pathogen interactions and particularly on the innate immune implications of cellular metabolism and mitochondrial reprogramming. We study how innate immune signals are translated into metabolic adaptations and how genetic mutations affecting mitochondria-associated genes impact immunity. The institute is located in a brand-new building of a campus that gathers the university of Bordeaux the University-Hospital and worldwide renown research institutes (IINS, Magendie institute, MFP, IBGC) in the heart of Bordeaux. We offer excellent scientific training and mentorship, international collaborations and a team-oriented productive work environment.