



## Post-doc position at Centre de Recherche des Cordeliers

(Team : Immunopathology and Therapeutic Immuno-intervention)

### Abstract of the project

Basophils, although rare, play a key role in the initiation and propagation of allergic diseases. It is therefore conceivable that basophils are potential therapeutic targets for allergic diseases. However, there is currently no specific approach to target them. Since IL-3, secreted mainly by T cells, is the most potent activator of basophils, we propose to finely dissect the IL-3 axis in various facets of human T cell-basophil crosstalk *in vitro*, *in situ* in allergic patients, and *in vivo* in genetically engineered mouse models. In addition, in a translational research setting, we will interfere with the IL-3 axis as a novel means to inhibit basophil activation and treat allergic diseases. This ANR funded project involves four partners and the objective of our group, as project coordinator, is to dissect the interaction between human regulatory T cells and basophils at the cellular and molecular level. This is a follow-up to our report published in Science Immunology (2018).

(<https://immunology.sciencemag.org/content/3/23/eaan0829.long>)

**Duration:** The initial offer is for one year but can be extended for an additional year based on progress.

**Salary:** Up to 56 k€ based on the candidate's experience. Candidates with up to 4 years of post-doc experience are sought.

### Main activities

- Immune cell isolation from human blood and primary cell culture
- Use of techniques such as various immune cell isolation techniques, flow cytometry, cell sorting, ELISA, western blot, RT-qPCR and other regular techniques
- Active support of the other research activities of the group (in particular, ongoing EU project on flu vaccine and ANR funded COVID project)
- Data Reporting, preparation of project reports, writing of the articles

### Associated activities

- Write technical procedures
- Control the storage conditions of biological samples
- Plan the experiments, order the materials
- Work in a confined environment or in a protected area
- interaction with team members

### Experience required

- Experience in human immunology
- Mastering the biology techniques of the experimental field
- Techniques such as flow cytometry, specific immune cell isolation, ELISA, Western Blot, RT-qPCR, molecular biology techniques
- Knowledge in bioinformatics

**Deadline for application:** Opening is immediate. Due to pandemic, candidates from France or neighboring EU countries are preferred to avoid administrative delays.

**To apply:** please send CV and letter of motivation to:

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