



Post-Doc offer

*** Available; deadline September 2025***

Institut Jean-Pierre Bourgin for Plant Sciences
INRAE Versailles, France

Study of lipid transfer proteins in plant autophagy

Supervisor: Céline Masclaux-Daubresse, PhD

IJPB team: SATURNE <https://ijpb.versailles.inrae.fr/en/research-teams/senescence-autophagy-nutrient-recycling-and-nitrogen-use-efficiency/presentation>

Application Deadline: September 1st, 2025

Description of the project:

The project aims to dissect the roles of three lipid transfer proteins (LTP) in autophagy throughout plant development and plant response to stresses. Functional analyses performed on mutants and over-expressing lines using multiomic approaches will characterize LTP functions regarding autophagy. The importance of LTPs for autophagy activity will be determined, and redundancies analysed. Phenotypes of mutants under different growth conditions known to enhance plant autophagy will be analysed in order to determine the importance of the LTP-dependent autophagy in plant tolerance to stress. The molecular determinants of LTP localisations and interactions with autophagy machinery will be determined using different biochemical and modelling approaches.

Main Responsibilities:

- Conduct fundamental research and experiments to better understand roles of LTP proteins in autophagy.
- Actively engage with stakeholders and partners of ANR.
- Publish research findings in high-impact scientific journals and present them at international conferences.
- Contribute to the supervision of graduate students and research assistants.

Qualification requirements:

Candidate should have a PhD in plant biology and relevant experience in physiology with skills in molecular biology and biochemistry, and have good communication skills. Interest in plant physiology, plant adaptation to stress and multiscale analyses (from the cell to the whole plant) will be appreciated.

Expected duration: (24 to 30 month).

Starting date: September-October 2025.

Application Process:

Interested candidates should submit the following documents:

- A cover letter detailing their research interests and suitability for the fellowship.
- A comprehensive curriculum vitae (CV).
- Copies of relevant publications.
- Contact information for three professional references.

Please send your application materials to Celine Masclaux (celine.masclaux-daubresse@inrae.fr) by the 1st of September 2025.