

Post-doctoral position on Sideroflexins and iron metabolism

We are looking for a post-doctoral researcher to work on the regulation of iron metabolism by Sideroflexins (SFXN). This post-doctoral position is ANR-funded (SiFeMi project). The SiFeMi collaborative project involves four teams of cell biologists, geneticists, and biochemists from LGBC (our team), I2BC (N.Bonnefoy's team), ICSN (MP Golinelli-Cohen's team), and CEA (G.Liot's team).

Project:

The SiFeMi project aims to better understand the functions of SFXN mitochondrial carriers in iron metabolism and cell fate. Sideroflexins (SFXN) are still poorly characterized, despite their emerging importance in mitochondrial function and human disease [1,2]. Recent studies suggest the role of the SFXN family in regulating iron homeostasis, but the precise mechanisms whereby SFXN regulate intracellular iron levels remain unclear. Our objectives are to understand better the role of SFXN in iron homeostasis and their ability to control the synthesis of heme and iron-sulfur clusters, two main co-factors of numerous enzymes.

Profile and skills required:

We are looking for a highly motivated post-doctoral researcher with a strong interest in **cell biology**. The applicant should master mammalian cell culture techniques. Strong knowledge of mitochondria, iron metabolism, or cell death (especially ferroptosis) will be a plus. The candidate should show autonomy, be creative, and be able to work as part of a team.

Location:

The Laboratory of Genetics and Biology of the Cell is located in Montigny-le-Bretonneux and offers excellent material conditions to develop the SiFeMi collaborative project. Montigny-le-Bretonneux is found 25 km south west of Paris, and 5 km from Versailles.

The LGBC lab is a research unit of the Université de Versailles Saint-Quentin-en-Yvelines (UVSQ) / Université Paris-Saclay. The laboratory offers access to core facilities (imaging, cytometry, and genomics).

Website: <https://www.lgbc.uvsq.fr/>

Application:

The position is funded for two years. Applications should be sent to Nathalie Le Floch-Leleu (nathalie.leleu@uvsq.fr) and include a CV, a cover letter describing your past research experience, and two reference letters.

1. Tifoun, N.; De las Heras, J.M.; Guillaume, A.; Bouleau, S.; Mignotte, B.; Le Floch, N. Insights into the Roles of the Sideroflexins/SLC56 Family in Iron Homeostasis and Iron-Sulfur Biogenesis. *Biomedicines* **2021**, *9*, 103, doi:10.3390/biomedicines9020103.
2. Tifoun, N.; Bekhouche, M.; De las Heras, J.M.; Guillaume, A.; Bouleau, S.; Guénal, I.; Mignotte, B.; Le Floch, N. A High-Throughput Search for SFXN1 Physical Partners Led to the Identification of ATAD3, HSD10 and TIM50. *Biology* **2022**, *11*, 1298, doi:10.3390/biology11091298.