

Funded Post-doc position in FRET microscopy applied to mitochondrial imaging (H/F)
IGDR, Rennes, France.

About us: We are thrilled to welcome a highly motivated Postdoctoral Researcher to join our dynamic group at the **Institute of Genetics and Development of Rennes (IGDR), France**. Research in the Cyclochondria team led by Giulia Bertolin (<https://igdr.univ-rennes.fr/team-mitochondrial-biology-and-integration-with-the-cell-cycle>) focuses on state-of-the-art methods and tools in quantitative fluorescence microscopy to investigate the spatiotemporal regulation of protein-protein interactions and biochemical activities at mitochondria (see Gökerküçük et al., Autophagy 2023 DOI: 10.1080/15548627.2023.2179845; Jolivet, Desmason et al., Adv Sci 2026, DOI: 10.1002/advs.202522243; Caron et al., BiorXiv 2026, DOI: 10.64898/2026.03.17.712317).

Project description: The successful Postdoc candidate will be an integral part of our ongoing project focused on how mitochondria adapt to the changing needs of the cell throughout cell cycle progression. The team has a strong ongoing research axis relying on the use of **FRET biosensors**, biochemistry, and **live microscopy** in human cells to follow mitochondrial physiology.

Duration and salary: The appointment is for 11 months. The salary is calculated according to French national grids. Ideal starting date: October 2026.

Postdoc responsibilities:

- Implement innovative data analysis protocols and approaches for FRET/FLIM or ratiometric FRET microscopy in cultured cell lines
- Modify and/or develop molecular biology tools (cloning, mutagenesis, etc.) required for microscopy experiments
- Use standard cell biology and biochemistry protocols for sample preparation (transfection, immunofluorescence, Western blot, etc.)
- Analyze data and prepare results for publication;
- Present results at conferences and contribute to the team's grant applications (preliminary data, drafting project proposals or sections of proposals, etc.);
- Supervise undergraduate students (BSc, Master's) in the team

Expected qualification:

- Hold a Ph.D. in molecular biology, cell biology, biochemistry, or a related field;
- Possess strong expertise in FRET/FLIM microscopy. Knowledge of biosensors or high-resolution microscopy (Airyscan, dSTORM, or SRRF) would be a plus.
- Design and carry out experiments, from sample preparation to data analysis.
- Adapt the team's existing data analysis protocols as needed. Expertise in coding (Python, ImageJ) would be a plus.
- Be able to communicate research results, whether within the team or at the national/international level, at conferences and workshops.
- Be able to work both independently and collaboratively (within the team and at the national/international level).

The institute: The IGDR is a dynamic institute, with 16 teams including more than 200 international researchers and staff. Research at the IGDR covers a wide range of subjects in cell biology, taking advantage of classical model systems while strongly promoting interdisciplinary approaches, particularly at the interface between physics and biology. The institute also benefits from state-of-the-art core facilities, particularly in microscopy (Microscopy Rennes Imaging Center, **MRic**, <https://microscopie.univ-rennes1.fr/>). Rennes is the capital of Brittany (northwestern France), with easy and direct access to Paris (1.5 hours by train). Its rich tradition of cultural, musical and artistic events, as well as its close proximity to the coast, makes it a very welcoming and pleasant place to live.



Application Process: Interested candidates should provide:

- CV showcasing relevant experience and the list of publications (either accepted or as preprints).
- Cover letter detailing research interests and alignment with the project.
- Recommendation letters to be sent directly by at least three professional referees.

To apply: <https://emploi.cnrs.fr/Offres/CDD/UMR6290-GIUBER-004/Default.aspx?lang=EN>