Postdoctoral Researcher in Cryo-Electron Microscopy for GPCR Structural Biology

Location: Institute of functional genomics (IGF), Montpellier, France
Position Type: Full-time, Postdoctoral Researcher
Duration: 18 months renewable
Start Date: 1st of June 2025

We are seeking an outstanding and motivated Postdoctoral Researcher to join our cutting-edge research team at IGF (University of Montpellier, CNRS, INSERM) in the field of G-Protein Coupled Receptors (GPCRs) structural biology. This position offers the opportunity to apply advanced cryo-Electron Microscopy (cryo-EM) techniques to investigate the structure and function of GPCRs at the molecular level, providing insights into their signaling mechanisms and their role in human health and disease.

Key Responsibilities:

- Utilize cryo-EM to determine high-resolution structures of GPCRs in their native lipid bilayer environment.
- Investigate conformational changes and dynamic signaling states of GPCRs associated with cellular processes.
- Design and execute experiments, including sample preparation, data acquisition, and cryo-EM reconstruction.
- Analyze and interpret complex cryo-EM datasets using state-of-the-art software and computational methods.
- Collaborate closely with computational biologists, biochemists, and other structural biologists to integrate data and gain functional insights.
- Publish results in high-profile scientific journals and present findings at international conferences.

Qualifications:

- A Ph.D. in Structural Biology, Biophysics, Cell Biology, or a related field.
- Strong background in cryo-EM techniques and experience in structural analysis of membrane proteins is highly preferred.
- Knowledge of GPCRs, their structural characteristics, and their signaling pathways is a plus.
- Expertise in cryo-EM data processing, including single-particle analysis and refinement.
- Ability to work in a collaborative, interdisciplinary team and contribute to experimental design.
- Experience in EM data treatment (cryoSPARC, Relion, Amira, Dragonfly).
- Knowledge of GPCRs, their structural biology, and signaling pathways is an advantage.
- Excellent problem-solving skills and ability to work independently.
- Strong written and verbal communication skills, including the ability to write manuscripts and present research.

Benefits:

- Opportunity to work at the forefront of structural biology and drug discovery in a leading research institution.
- Access to state-of-the-art cryo-EM facilities and cutting-edge research technologies.
- Competitive salary and benefits package.
- Opportunities for professional growth and career development in a dynamic research environment.
- A collaborative, supportive, and innovative research environment.

Application Instructions:

Interested candidates should submit the following:

1. A cover letter detailing research experience, motivation, and career goals.
2. A CV including a list of publications.
3. Contact information for at least two references.

Please send your application to guillaume.lebon@igf.cnrs.fr by 15th April 2025.

The IGF (University of Montpellier/CNRS/INSERM) is committed to fostering diversity and inclusion in its workforce and encourages individuals from all backgrounds to apply.