Postdoctoral Position in CRYO-ELECTRON MICROSCOPY OF MEMBRANE PROTEINS (M/F)

The hosting structures

**Institut Curie Research Center**
Institut Curie is a major player in the research and fight against cancer. It consists of a Hospital group and a Research Center of more than 1000 employees with a strong international representativeness. The objective of the Research Center is to develop basic research and to use this knowledge to improve the diagnosis, prognosis, and therapeutics of cancer as part of the continuum between basic research and innovation serving the patient.

**Leibniz-Institute for Molecular Pharmacology (FMP)**
The FMP is a non-university research institute and member of the Leibniz Association. The institute conducts basic research in molecular pharmacology and provides a vibrant, international and collaborative environment with state-of-the-art research facilities. The FMP belongs to the “Forschungsverbund Berlin e. V. (FVB)”, an institution of seven natural sciences research institutes in Berlin.

Context

The Johannes team from Institut Curie (https://institut-curie.org/team/johannes) and the Roderer team from Leibniz-Institute for Molecular Pharmacology (https://www.leibniz-fmp.de/roderer) collaborate on a research program concerning the structural glycobiology of plasma membrane proteins. The discovery of structural mechanisms by which glycan information is translated into biological functions is one of the timeliest challenges in the life sciences. In our program, we study how glycan-binding proteins are restructured by their interaction with transmembrane glycoproteins, and how this in turn leads to the reorganization of membrane domains in relation to the construction of endocytic sites. The focus of the proposed postdoctoral project is the high-resolution structural analysis of complexes of glycan-binding proteins with physiologically glycosylated receptors and membrane-embedded glycosylated lipids. Thereby, the project will address fundamental cell biological questions from yet unexplored angles and lay the foundation for novel concepts in structural and functional glycobiology.

Candidate Profile

**Requirements**
We are looking for an ambitious, highly motivated and talented postdoctoral researcher with a genuine interest in the structure-function relationship of transmembrane receptors and the wish to excel in science. Candidates should have an excellent PhD in natural sciences, including, but not limited to biochemistry, biophysics or physics. A strong background in structural biology, especially cryo-EM and single particle analysis is required for the position, as well as scripting skills in
Python. MD simulation and data management skills are also highly appreciated. Furthermore, strong written and oral communication skills in English and mobility to move between our research sites in France and Germany are required.

**Why join us?**
The position will offer the unique possibility to be part of two vibrant, international, interdisciplinary, diverse and highly exciting scientific communities at Institut Curie (Paris, France) and at the Leibniz-Institute for Molecular Pharmacology (Berlin, Germany). Both institutes offer an extensive range of resources and benefits, such as:

- High-priority access to state-of-the-art research facilities, in particular a modern Cryo-EM facility with a Titan Krios equipped with a K3 camera and an energy filter.

- Fully equipped cellular and chemical biology environment with biochemistry facilities for membrane protein purification, reconstitution and functional characterization.

**Contract information**

**Type of contract:** Fixed-term contract.  
**Starting date:** The position is available immediately  
**Duration:** 24 month / 2 year with possibility for extension  
**Working time:** full time - number of days  
**Remuneration:** European Union level post-doc salary  
**Benefits:** Collective catering, reimbursement of transportation fees up to 70%, supplementary health insurance  
**Location of the position:** Paris  
**Reference:** 2022-04-JOHANNESCHPDT

**Contact**

Please send your CV, letter of motivation and 1-page statement of research experience and interests, PhD, MSc and BSc certificates, contact details of two referees), to Dr. Ludger Johannes, Institut Curie (ludger.johannes@curie.fr) and Dr. Daniel Roderer, Leibniz-Institute for Molecular Pharmacology (roderer@fmp-berlin.de) until May 15th, 2022.

Publication date: April 25th, 2022  
Deadline for application: May 15, 2022

_Institut Curie is an inclusive, equal opportunity employer and is dedicated to the highest standards of research integrity._