

# Offre d'emploi Job offer

## Post-doctoral fellowship in Obesity and Type 2 Diabetes

 24 months

 Début : 02/2025

 Paris

Fully funded 2-year Post-doctoral position in the team of Dr. Ralf JOCKERS, at Institut Cochin (Paris, France)

### Description du poste / Job description

#### Research project Investigate a novel regulator in obesity :

Obesity, overweight, and type 2 diabetes (T2D) are major public health concerns. Adipose tissue stores excess energy as fat and acts as an endocrine organ, releasing hormones and inflammatory molecules that influence metabolism, appetite, and insulin sensitivity. Our research focuses specifically on the function of G protein-coupled receptors (GPCRs) involved in obesity/diabetes. GPCRs are of significant therapeutic interest because they can be easily targeted by drugs. We are seeking a motivated and talented Postdoctoral Researcher to join a funded project aimed at uncovering the role of a GPCR in obesity and diabetes, using *in vitro* and *in vivo* experimentation (PI: Dr. Julie DAM).

#### Main Activities

- Characterize obesity mouse model of transgenic mice
- | Investigate the underlying molecular and cellular mechanisms
- ¶ Main techniques to be performed by the postdoctoral fellow: cell culture (adipocyte primary culture), western blot, RT-qPCR, cell signaling, immunoprecipitation, *in vivo* metabolic profiling, mitochondrial function analysis, confocal microscopy, histology

#### Expertise

- Experience in cell biology, mammalian cell culture
- | Experience in analysis of gene expression by qPCR, in detection of protein by western-blot and by immunofluorescence analysis of cells and tissues
- | Experience in microscopy imaging (confocal)
- | Experience in basic mouse experimentation (body weight, i.p. injection and oral administration). Expertise in mouse model of obesity and diabetes would be appreciated.
- | Expertise in primary culture of adipocytes would be appreciated

#### Skills

- Good communication skills in English, orally and written
- | Strong organization and scientific rigor skills
- | Curiosity and Motivation for scientific projects
- | Ability to solve problems
- | Team-oriented personality
- | Strong analytical skills and experience with data analysis tools

**Diploma level** PhD in physiology, cell biology, biochemistry, or a related field

## Host structure

**Team leader** The team “Functional pharmacology and pathophysiology of membrane receptors”, is part of the Institut Cochin located in the center of Paris, 22 rue Méchain – 75014 Paris, France.  
Team leader: Dr. Ralf JOCKERS. The team is composed of approx. 15 international collaborators and has a specific interest in identifying new therapeutic approaches for obesity and type 2 diabetes.

Publications:

- Duquenne M et al., Leptin brain entry via a tuncytic LepR-EGFR shuttle controls lipid metabolism and pancreas function. **Nat Metab.** 2021.
- Gao W et al., Human GLP1R variants affecting GLP1R cell surface expression are associated with impaired glucose control and increased adiposity. **Nat Metab.** 2023.
- Roca-Rivada A. et al., Whole-body deletion of Endospanin 1 protects from obesity-associated deleterious metabolic alterations. **JCI Insight.** 2024.

<https://institutcochin.fr/equipes/pharmacologie-fonctionnelle-physiopathologie-recepteurs-membranaires>

**About the structure**

The Institut Cochin is a research center affiliated to INSERM, CNRS, Université Paris Cité, located in the heart of Paris. It has more than 600 members in 41 teams, dedicated to high-level biomedical sciences and assisted by 10 cutting-edge core facilities.

[www.institutcochin.fr](http://www.institutcochin.fr)

**Director** Florence Niedergang

**Adresse** 22 rue Méchain 75014 Paris, France

## General Informations

**Starting from:** As Soon As Possible from 01/02/2025

**Duration** 24 months, or more

**Working time** Temps plein/Full time

**Salary.** Salary adjusted to experience level, according to INSERM references

## How to apply

**Application Deadline** 15/12/2024

**To Apply** Candidates should send their CV, letter of motivation and reference letter(s) with contacts to:  
**Dr Julie DAM**  
Email : [julie.dam@inserm.fr](mailto:julie.dam@inserm.fr)