

## 3-years post-doctoral position on the contribution of Autophagy proteins in HIV replication cycle

Annonce mise en ligne le/Offer posted on: 13-Sept 2023

### PROJET/RESEARCH PROJECT

A postdoctoral position is available in the laboratory of Dr. Clarisse Berlioz-Torrent at the Institut Cochin in Paris. This opening position is funded by the ANRS (Agence Nationale de Recherche sur le SIDA et les Hépatites Virales).

#### Overview:

Autophagy is a highly conserved degradative pathway that maintains cellular homeostasis, responds to pathological processes and combats infections. Growing evidences demonstrate that ATG proteins, which control autophagy, also regulate non-autophagy-related cell functions, such as phagocytosis of pathogens, membrane remodeling, antiviral activity or specialized secretion. These recent advances led us to explore the non-canonical function of ATG proteins in HIV-1 replication cycle (Cell Report, 2016; Viruses 2017; PNAS 2023; Autophagy 2023).

#### Project:

With more than 650000 deaths due to this infection in 2021, HIV-1 is still a major global public health issue. It is therefore crucial to better characterize the interactions with cellular proteins that govern the replication cycle of HIV-1 in order to propose new therapeutic targets. In line with our ongoing work, the candidate will identify cellular cofactors required for HIV dissemination, related to non-canonical function of ATG proteins.

Applicants for this position should have strong knowledge and expertise in protein biochemistry, cellular biology, molecular biology and/or the field of autophagy. While previous experience in virology is a plus, we also welcome candidates from other fields, motivated to make the transition to HIV research. Main activities will be: cell tissue culture, gene silencing, gene editing and viral infection in BSL2 and BSL3 environment, Imaging (confocal microscopy, live imaging, electronic microscopy), cellular fractionation and compartment isolation, protein complex purification, mass spectrometry analysis. The candidate must have an excellent autonomy, communication and collaboration skills.

#### The lab:

Our team is composed 14 people: 4 researchers, 3 engineers, 2 post-docs and 5 PhD students. We are located at Institut Cochin, in the heart of Paris, on the site of the Cochin-Port-Royal Hospital (AP-HP Centre).

## STRUCTURE D'ACCUEIL/LOCATION

**Team** « Host-Virus interaction » is part of the « microbiology department » of the Institut Cochin. Our team is composed 14 people: 4 researchers, 3 engineers, 2 post-docs and 5 PhD students.

**Institut Cochin** is one of the biggest biomedical French Research Center (650 people) located in the center of Paris on the site of the Cochin-Port-Royal Hospital (AP-HP Centre), 22 rue Méchain – 75014 Paris, France. It provides a multidisciplinary scientific environment and very efficient core-facilities. Institut Cochin is composed of 41 teams and 10 research core facilities.

**Visit our web:** <https://institutcochin.fr/equipes/interactions-hote-virus>

## CONTRAT/FINANCIAL SUPPORT

**Type:** CDD

**Funding:** ANRS

**Début/Beginning:** January 2024

**Durée du contrat/Length of contract:** 3 years

**Structure employeur/organization**

INSERM

CNRS

UNIVERSITE

Applicants should send their CV, letter of motivation and name of 2 references.

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