



3 YEAR FUNDED POST-DOCTORAL POSITION AT INSTITUT PASTEUR, PARIS

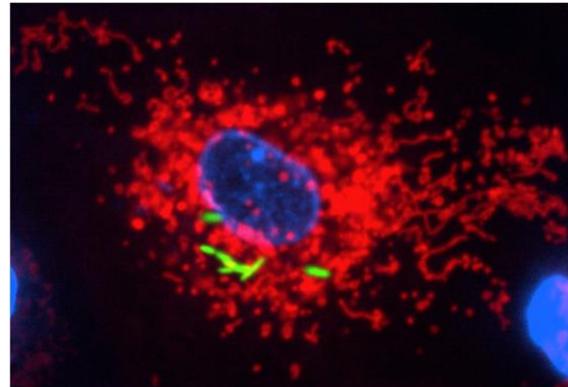
Metabolic Host-Pathogen Interactions:

Revealing how Intracellular Bacteria hijack Mitochondrial OXPHOS during Infection

A postdoc position is available at the Biology of Intracellular Bacteria Unit (BBI) at Institut Pasteur, headed by Prof. Carmen Buchrieser (<https://research.pasteur.fr/en/team/biology-of-intracellular-bacteria/>). The BBI Unit investigates and characterizes the molecular, genetic and cellular basis of the infection by intracellular bacteria. We have recently shown that the intracellular bacterium *Legionella pneumophila*, which causes Legionnaires' disease in humans, alters mitochondrial oxidative phosphorylation (OXPHOS) and ATP production during infection of human macrophages. Now we aim to understand the mechanism(s) by which *L. pneumophila* and other intracellular bacteria such as *Salmonella enterica* ser. Typhimurium hijack the mitochondrial OXPHOS machinery of infected macrophages.

The position will be funded for 3 years through an ANR JCJC grant awarded to Dr. Pedro Escoll, and would start at an agreed time between February and December 2022. By combining state-of-the-art image-based methods with bacterial genetics, si-RNA silencing, proteomics, and cellular biology approaches, the selected candidate would identify new mechanisms pathogenic bacteria employ to subvert mitochondrial functions in infected human macrophages.

We seek for a highly motivated and creative post-doc having an optimistic personality and excellent skills in cell biology and imaging. Knowledge in cell culture of human primary cells and basics in bacteriology will be welcomed. The selected candidate should be independent and ready to work in a collaborative manner in an international team, having also good organizational skills.



The Institut Pasteur (<https://www.pasteur.fr/en>) is a world-renowned center of excellence for its research in biology, infectious diseases and immunology. The Institut Pasteur is located in the center of Paris and offers outstanding research facilities, including state of the art imaging facilities and many technical platforms providing cutting edge technologies.

If you are interested, please contact Pedro Escoll (pescoll@pasteur.fr) with a brief motivation letter about your research interests, your CV and up to 3 recommendation contacts/letters.

References:

[Cell Host Microbe. 2017; 22\(3\):302-316](#)

[Curr Opin Immunol. 2019; 60:117-123](#)

[bioRxiv 2021.05.12.443790](#)