

## Postdoctoral Opportunity on mosquito metabolomics at MIVEGEC, IRD in Montpellier, France.

Mosquitoes are the deadliest animals on earth due to their ability to transmit deadly and lifedebilitating pathogens. Dengue virus is the most prevalent arthropod-borne virus as it infects about 400 million people yearly and threatens half of the human world population. Unfortunately, there are neither efficient vaccine nor therapeutics and vector control has moderate effect on epidemics.

We recently developed a novel approach based on metabolomics applied to mosquito vector competence (Vial et al. PLoS Pathogens, 2019; doi: 10.1371/journal.ppat.1008199; Vial et al. PNAS, 2020; doi: 10.1073/pnas.2015095117). By combining **mosquito metabolomics with molecular entomology and cell biology**, we discovered how and why dengue virus reconfigures phospholipids in mosquitoes. This improved understanding of how viruses hijack the host metabolome will be useful to develop novel intervention strategies.

The team of Dr. Pompon (https://scholar.google.com.sg/citations?user=wRQf0q8AAAAJ&hl=en) is searching a motivated post doc candidate to pursue this new research field and improve our understanding of **mosquito-virus metabolic interactions**. The candidate will ask scientific questions using molecular and cell biology and entomology, while the metabolomics analyses will be conducted with a partner institution in University of Toulouse (Pr. Marti). This project that is based on a pioneering approach has high potential to open up **a new dimension** in our understanding of mosquito-virus interactions.

The candidate should have a strong experience in molecular biology and cell biology and a good track-record of publications. We strongly encourage candidates from fields that are not related to mosquito biology to apply. The candidate should have a high level of intellectual engagement and excellent problem-solving skills. The ability to work independently and generate hypotheses is essential.

The project will be conducted in MIVEGEC at IRD in Montpellier, France. MIVEGEC possesses BSL2 and BSL3 molecular labs and a cutting-edge BSL3 insectary. Rich with its mosquito research community, MIVEGEC and Montpellier represent a stimulating environment.

We propose a two-year contract. Salary is attractive and will depend upon experience. Only selected candidates will be invited for interview. The position is expected to start between March to July 2021.

Please send a CV and cover letter to: julien.pompon@ird.fr





