

**Post-doctoral position in cellular and molecular virology
of dengue disease in Reunion Island (France)**

A 12-month postdoctoral fellowship, renewable depending on the duration and progress of the project, funded by the European Regional Development Fund (ERDF) is available in the Research Unit **Processus Infectieux en Milieu Insulaire Tropical** (UMR PIMIT, INSERM U1187, CNRS 9192, IRD 249, Reunion University), Reunion Island, France.

The project RUNDENG, Reunion Island against dengue, aims to develop fundamental, translational, clinical and epidemiological research on dengue through an integrated holistic One Health approach.

Since 2017, Reunion Island has been confronted with a continuous circulation of dengue virus transmitted by the mosquito vector *Aedes albopictus*, with three serotypes (DENV-1, DENV2, DENV-3) and an increase in severity. It is accepted that severe forms of the disease are more frequent in cases of secondary dengue than in cases of primary infection. Moreover, the metabolic diseases encountered on Reunion Island may represent aggravating factors.

In this context, the engineer will be assigned to two Actions:

- (1) Cellular and molecular interactions. The main objective is to explore whether the intrinsic infectious/pathogenic power of the epidemic strains that have circulated in Réunion can be correlated with the virulence of the disease, and whether the pathogenic power can be influenced by comorbidities. The aim is to gain a better understanding of the mechanisms of host-virus interactions at the cellular and molecular levels and of immunopathology.
- (2) Viral factors of pathogenicity. This task aims to identify viral factors that are potentially involved in the pathogenicity of DENV to cells targeted by the virus in humans. For this purpose, molecular clones and replicons expressing reporter genes derived from the epidemic strain are required. Such molecular tools will be generated by reverse genetics using the molecular methods that have been successfully developed within the framework of the ZIKAlert programme.

He/she should hold a PhD with strong expertise in cellular and molecular virology. Basic skills on arboviruses would be a plus.

Additional information

Starting date : August 1st 2021

Net salary : 2,500 € / month

Applicants should send a brief summary of research activities, a CV, a list of publications, and names and e-mail addresses of two references to Patrick Mavingui:

patrick.mavingui@cnrs.fr; patrick.mavingui@univ-reunion.fr

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Further information could be obtained from the same person.

Deadline for submission July 30, 2021.

<http://pimit.univ-reunion.fr>