Title: Medical Entomology

Dates: June 10-23 2019

This workshop completes the Institut Pasteur course entitled "Insect vectors and transmission of pathogens" co-directed by Anna-Bella Failloux (IPP) and Vincent Robert (IRD) which took place in Paris in April 2018. The proposed workshop combines both theoretical and practical training in biology and control of disease vectors and the human pathogens they transmit. We also include an initiation to techniques and observations organized during a field mission. It will focus on insect vectors of pathogens of interest in the Indochinese peninsula and more broadly, in tropical Asia. It will articulate with the research and public health activities of the medical entomology unit of the Institut Pasteur Laos (IPL).

This two-week workshop will be conducted in English. It can train 15 students with at least a master degree, interested in research in medical entomology and its applications for entomological surveillance, prevention and vector control. Students will gain specialized skills in the biology/ecology of major vector-borne diseases in Asia.

The workshop will consist of lectures and lab or field trainings delivered by IPL members, IPP and external experts from partner institutions in the Indochinese region. During the theoretical courses, basic questions in medical entomology will be addressed: insect immunity, vectors of arboviruses (dengue, yellow fever, Japanese encephalitis, chikungunya, zika), insect microbiome (Wolbachia and role in vectorial transmission), sandflies, malaria vectors, ticks vectors, control strategies and insecticide resistance, mathematical modeling, and concepts of emergence of arthropod-borne viruses.

This panel of courses that will be proposed by session of 3 hours (33 hours in total), will be associated with practical work for a total duration of 21 hours. We will be offering sessions on insect morphology and physiology, identification (mosquitoes, sandflies, ticks), mosquito dissection/inoculation, experimental infections, insecticide resistance bioassays. We will also focus on a short field mission in Vangvieng to harvest mosquitoes, ticks and sandflies.

The registration to this course will be free. Applicants can receive support for accommodation in Vientiane. Travel expenses to Laos should be covered by applicants.

Directors: Paul BREY (IP Laos), Anna-Bella FAILLOUX (IP Paris)

Organization Committee
IPP: Khamsing VONGPHAYLOTH, Pouthmany THAMMAVONG, Paniphone PANOLITH, Antoine des GRAVIERS, Paul BREY

IP/IRD: Marie VAZEILLE, Vincent ROBERT, Anna-Bella FAILLOUX

Registration deadline: April 30 2019

Participants: 15 at least with a master degree in vector-borne diseases or related subjects