

Letter from Dr. Paul BREY, Director



A decade ago, on the 16 November 2007 the His Excellency, Mr. Bouasone Bouphavanh, Prime Minister of the Lao PDR, decreed the creation of the Institut Pasteur du Laos (IP Lao PDR) as a national institute for research and training on infectious and parasitic diseases. Opening our laboratories in January 2012, IP Laos has been in operation for 6 years. We now have a staff of 67 people, 38 scientists and 29 administrative and support staff. Among the 38 scientific staff, 27 are Laotians and 11 foreigners from France, Luxembourg, Japan, Germany, USA United Kingdom, Netherlands, Brazil, Canada and Italy. This international environment makes IP Laos a very special work place and perhaps the only scientific institute in Lao PDR with such a culturally divers staff. We believe this exceptional research environment provides our Lao staff with a unique training and educational opportunity. Furthermore, this mixture of Lao and foreign scientists makes for an extremely interesting cultural and intellectual environment. One can hear in the morning a variety of greetings from the typical "Sabaidee" to "Ohayo Gozaimasu", "Bonjour" and "Gudde Moien"

etc. This international penchant also encourages and contributes to sending our Lao staff abroad for specialized Masters and Doctoral training. We hope in 2018 IP Laos' first Ph.D. will return from Japan, while others are preparing to leave to other countries, such as France to pursue their studies. IP Laos also accepts and trains a number of Lao Masters students from the Institut de la Francophonie pour la Médecine Tropicale, Université des Sciences de la Santé and the Lao Army Institute for Disease Prevention.

As you will see in the pages of this year annual report a myriad of new evidenced- based results. All of IP Laos' results are provided to the Lao Ministry of Health on a weekly basis to help the Ministry adjust and direct public health policy. All the scientific research programs of the IP Laos are carried out to investigate and better understand the circulation and transmission of infectious as well as parasitic disease and to find methods to mitigate the spread and impact of these diseases to the Lao population through proper vaccination, vector control, drug treatment etc. IP Laos does most of it is experimental research in it own laboratories, but also collaborates with other research facilities in country like the Lao-Oxford-Mahosot Hospital Wellcome Trust Research Unit (LOMWRU). This synergistic research effort has allowed us to detect numerous Rickettsial pathogens in ticks from various regions of Lao PDR. One of the most concerning results of this year is the rapid northward-spread of Artemisinin drug resistance in the Malaria parasite, *Plasmodium falciparum*.

In the coming year IP Laos will continue its on-going research and surveillance programs on infectious and parasitic diseases. We will also start an institute-wide program named "BioLao Plus". The objective of this project is to detect emerging pathogens and assess the infectious disease burden of a remote area within Khammouane Province in Lao PDR. Provide evidence (human and vector data) and ways to mitigate possible

infections to health authorities and the villagers. This project has both a human and a vector biology component, which will interact and complement each other. The human part of this project aims to establish baseline data on infectious disease burden and basic community health knowledge and monitor these data during 3 years. The vector biology part of this project aims to build upon regional distribution data of medically important arthropods and pathogens to determine the vector-borne disease exposure risk.

Paul Brey