

Lao – Lux lab / Vaccine preventable diseases 2014-2015

Head of Laboratory: Professor Claude MULLER, Scientific Director

Main objective of the lab:

The LaoLux Laboratory is operated by the Institute of Immunology in Luxembourg and aims to build capacity for investigations of important human and animal infectious diseases and to initiate and support collaborative research projects in Lao PDR. The laboratory carries out country-specific research in Lao PDR focusing on vaccine-preventable infectious diseases, zoonotic diseases, identification of new viruses and variants and other investigations. These studies are important to estimate the burden of specific infections, to promote virus outbreak control, to improve animal health welfare and productivity, to support public health policies and vaccination programmes and to optimize health strategies.

The research projects include important components:

- + Investigation of public and animal health challenges caused by infectious diseases
- + Training of laboratory and academic staff and students both at IPL and CRP-Santé
- + Implementation of new technologies by technology transfer and by providing equipment
- + Providing international visibility to scientists from Lao PDR and access to the international scientific community
- + Dissemination of research results through scientific publications, presentations and international meetings as well as national and international press releases.
- + Technical and scientific support for other laboratories in Lao PDR

+ Teaching/training of laboratory staff from collaborating laboratories

Areas of research and surveillance include:

+ *Immunology and genetic/antigenic diversity of viruses including molecular epidemiology*

+ *Public health issues related to infectious diseases in humans (measles virus, rubella virus, mumps virus, hepatitis virus, respiratory viruses etc).*

+ *Public health and animal welfare issues related to veterinary viruses*

Visiting scientists from Institute of Immunology, Luxembourg:

Dr. Konstantin Evdokimov

Students trained in 2014:

Dr. Kong Sayasinh, Institut de la Francophonie pour la Medecine Tropicale.

Financial support:

The laboratory is funded by a grant from the Government of the Grand Duchy of Luxembourg.



Team:

Scientist

1. Antony BLACK, Ph. D; Responsible of the Lab
2. Phonethipsavanh NOUANTHONG, Ph. D

Junior Scientist

1. Keooudomphone VILIVONG, MD
2. Siriphone VIRACHITH

Technician

1. Did PANYATHONG
2. Lutdavone KHENKHA

PhD student:

Kostantin EVDOKIMOV

Project carried on in the lab

- +Mumps seroprevalence and molecular epidemiology
- +Hepatitis B virus in the Lao People's Democratic Republic: a cross sectional serosurvey in different cohorts
- +Diphtheria seroprevalence in Huaphan Province
- +Serosurveillance of vaccine preventable diseases and hepatitis C in healthcare workers from Lao PDR
- +Vaccination effectiveness within the Lao National Expanded Program of Immunisation in provinces of Bolikhamxay, Vientiane and Khammouan
- +Hepatitis B and C virus in Lao blood donors
- +Evaluation of influenza virus circulation and transmission in pigs and free ranging poultry from mixed farms in Lao PDR.
- +Childhood respiratory infections in Lao PDR