

6th EDITION OF THE RESEARCH WEEK FOR DEVELOPMENT November 16th, 17th and 18th 2016

PUBLIC HEALTH CHALLENGES IN LAO PDR: CONTRIBUTIONS FROM RESEARCH AND REGIONAL PERSPECTIVES

Organized by the French embassy and the Institut français du Laos in the Lao PDR, jointly with the Ministry of Health, the 6th edition of the Research Week for Development: "Public health challenges in Lao PDR: contributions from research and regional perspectives" will take place on November 16th, 17th and 18th 2016 in Vientiane.

A yearly event for debate of ideas and promotion of research

Since its first edition in 2009, the Research Week for Development's ambition is threefold: feed into scientific debates for the Lao PDR and the sub-region's development, support decision and policy makers, and attract young students towards scientific careers.

In the close neighborhood of research institutes and laboratories, this Week will take place for the first time at the Francophone Institute of Tropical Medicine (IFMT) and at the University of Health Sciences. Proving the international dimension of this symposium, the interventions will be in French, English and Lao with simultaneous translation in 3 languages available.

Scientific presentations, high-level panels bringing together policy makers and scientific experts, interactive events for a wider audience (workshops, stalls, competitions, tours, screenings, exhibitions etc.) will be organized.

Quality training, sustainable practices in agriculture, optimized national strategies: three key levers for public health development in the Lao PDR

Laos is characterized by high biodiversity and a multifaceted society, and is a crossroads for cultural, human and economic exchange. Laos is subject to many challenges in a dynamic region prone to environmental, human, and climatic changes.

More than any other public action, the role of scientific research is fundamental in Public Health. In addition, current economic development allows authorities to consider an ambitious policy for the development of health and wellbeing of the population.

This edition proposes an ambitious program around three key issues, in order to highlight and discuss contributions and opportunities of scientific research to health systems strengthening in the country.

Day 1: Quality training and scientific careers

Wednesday 16 November

A diversity of health professionals and researchers will share their experience and work to Lao youth, highlighting the opportunities of research for public policy and career development.

Day 2: Emerging risks in agriculture

Thursday 17 November

The focus will be on identifying and addressing emerging health risks linked with environment and economic practices through an integrated approach (One Health).

Day 3: Public health and evidence-based recommendations

Friday 18 November

Researchers will illustrate the contributions of research in the field of surveillance and infectious disease fighting in RDP Lao and in the region. Together with the teams of the Ministry of Health and the National Institute for Health and Epidemiology, health partners will discuss their recommendations to optimize public health policy.

An array of partners united in their efforts for public health

In the context of Laos' ASEAN presidency and increasing South-East Asian integration, the regional perspective will be favored thanks to the participation of researchers and stakeholders from neighboring countries (Cambodia, Thailand, Vietnam, Myanmar...).

Partners

Government of Lao PDR (Ministries of Health, Science and Technology, Agriculture, Education ...) Research institutes and units (Institut Pasteur du Laos, Institute of Research and Development (IRD)), International Centre for Agricultural Research (CIRAD), Christophe Mérieux Centre of Infectiology (CIML), Oxford-Wellcome Trust etc.)

Academia and foundations (National University of Laos, Francophone Institute of Tropical Medicine)

Development partners and UN agencies (WHO, UNFPA UNICEF, LuxDev, EU, etc.).

Civil society organizations and private sector (Fondation Mérieux, Fondation Pierre Fabre)

Venues: Francophone Institute for Tropical Medicine IFMT (Day 1) & University of Health Sciences (Day 2 and 3), Vientiane, Lao PDR

Languages: French, English, Lao (simultaneous translation in 3 languages)

For more information : <u>http://www.if-laos.org/jrd</u>

Side events:

Exhibitions at USSL: *Des vecteurs, des maladies* (IRD-IFL) French Embassy outside walls: Photographic exhibition *Infinités Plurielles* by Marie-Hélène Le Ny

Day 1: Wednesday, November 16th

Promoting health research, scientific career opportunities and quality training towards youth

Scientific leader : Dr. Daniel Reinharz, IFMT ; Rapporteur: Dr. Didier Bertrand, IFMT

Research is a determinant of a country's development. Conducting research requires reviewing one's preconceived ideas, investigating problems and considering solutions that are relevant to the problems found and acceptable to society. Scientific research is essential to improve the well-being of populations. In this regard, this country is a very fertile terrain: there are many research centers carrying out studies that complement one another. Furthermore these research centers work with a lot of expatriates. There is work to be done so that, progressively Laotians and people from the region compete to work in these centers ; not as technicians, but as researchers.

These are the two observations underlined in the first day of the Research Week for Development 2016. The purpose of this day is to show Laotian students that, first of all, research is a beautiful world. We learn how to think, to interpret our world ... and to look for an ever more satisfactory interpretation of it. Becoming a researcher is very nourishing intellectually speaking as we work with smart and motivated people who have important human values.

This day also aims to show students that Laos is where they must conduct research and undertake their career. And finally, we want to show them that they can have access to quality trainings, to fascinating jobs, full of rewarding opportunities, in a quite favorable environment.

The main challenge of the first day is to get young people on this path and to stimulate exchanges between these two groups: young Lao students and health researchers in Laos. We contemporary researchers are concerned about our succession ... and must find ways to ensure it. That is the main objective of this day.

Detailed programme

8:00 Welcoming guests – Registration

8:15 - 8:30 Opening Ceremony: introducing the objectives of the Research Week for Development and Day 1 H. E. Claudine Ledoux, French Ambassador to Lao PDR, Jérôme Dubois-Mercent, Head of cooperation, Dr. Daniel Reinharz, IFMT, H. E. Sèngdeuane Lachanthaboune, Minister of Education and Sports

8:30 - 9:45 Session 1 - Laos, area of health research: current context, needs and opportunities

- Opening words by Dr. Bouthavong Phengsysomboun, Department of Research and Training, Ministry of Health
- Opening words by Dr. P. Niranh, Vice-Dean of the Faculty of Medicine at the University of Health Sciences
- The use of operational research to inform policy making (Jennie Musto, WHO)
- Review and case studies (Dr. Ketmany Ratsavong, NIOPH)
- Research on adolescents in the Lao PDR time to invest (Dr. Mandira Paul, UNFPA)
- Benefiting from the quality of research field and opportunities for young researchers (Dr. Daniel Reinharz, Francophone Institute for Tropical Medicine)
- Exchange and debate with students (Moderation: Dr. Anousone Sisoulath, USSL Nursing Dpt)

9:45 - 10:30 Session 2 - Terms and means for health research: scientific and social challenges

- From theory to practice, needs on the field: mental health (Dr. Chantaravady Choulamany, Basicneeds)
- Medical research and public health Issues in conducting clinical research on Lao pregnant women : a practical case in the Lao PDR in 2016 (Dr. Vilada Chansamouth, Microbiology Laboratory, Lao-Oxford-Mahosot-Wellcome-Trust Research Unit (LOMWRU))
- The role of laboratory data in the fight against dengue transmission (Pr. Julien Pompon, IRD, Duke-NUS Medical School)
- Exchange and debate with students (Moderation: Thomas Kadzahlo, IFMT)

10:30 - 11:00 Coffee Break

11:00 - 12:30 Session 3 – Conducting research studies in the Lao PDR: experience sharing on feasibility and opportunities

- EcoRubber Research (Mr Saysongkham, DALAM, JEAi (Jeune Equipe Associée IRD))
- Research on the galenic : to study in France, a professional opportunity and a human adventure (Mrs Chithdavone Ting Her, Fondation Pierre Fabre)
- Quantified positive health impact of clean cooking solutions paves the way for results-based financing (Mr Bastiaan Teune, Sector Leader Energy Lao PDR, SNV Netherlands Development Organisation)
- Dengue surveillance in the Lao PDR (Mr Somphavan Somlor, Institut Pasteur du Laos)
- Research on the rota-virus diarrhea (Douangdao Souk Aloun, USSL)
- Cohort study on pregnant women infected with Hepatitis B Virus (HBV) and their children in Laos (Mrs Vattanaphone Latthaphasavang, PhD University Lyon 1, Infectious Diseases at Mahosot Hospital)
- Assessment of the ISBAR communication tool to structure paediatric progress notes, in the Lao PDR (Mme Vanidaah Douangbouphaa, medical staff of PICU/NICU at Mahosot Hospital)
- Exchange and debate with student (Moderation: Dr. Pascale Hancart-Petitet, IRD)

12:30 - 13:30 - Lunch

13:30 - 16:00 OPEN FAIR on Research and development in the Lao PDR: Health for and by the youth

- Free Expression Wall Building together tomorrow's research
- Researchers' dreams Video Competition Screenings
- > Outside booths, exhibitions and afternoon group activities:

Workshops	Exterior forum	On-site visits: (registered people only)
-14:00 Critical thinking and state of	- Demonstration : Health cook	-Visit of the Centre d'Infectiologie
health research: nursing care (Dr.	stove (SNV / World Bank in	Christophe Mérieux du Laos (Chloé
Anousone Sisoulath, USSL Nursing	Laos), Emergencies (Vientiane	Laboisne, French embassy)
Dpt)	Rescue)	- On field research and project
- 15:00 Mother-child: the question		management (Dr. Julie-Anne Tangena,
of vaccination (Dr. Chansay	- Scientific posters exhibition	Institut Pasteur du Laos)
Pathammavong, Deputy Manager,		- Visit of Institut Pasteur du Laos
National Immunization Program,	- Stands : Non-Governmental	- Initiation to ethnographic research
Maternal and Child Health Center,	Organizations, Non-Profit	(Dr. Pascale Hancart-Petitet, IRD)
Ministry of Health)	associations, foundations	

16:00 - 17:20 Session 4 – The stakes of quality trainings for the youth and career opportunities in the scientific and health research area

- Quality and means of control in research: a rigorous pharmaceutical training to benefit the people (Dr. Françoise Nepveu, IRD)
- Observatoire E-santé: an innovative initiative to improve access to quality healthcare in the southern countries (Beatrice Garrette, Director General of Fondation Pierre Fabre)
- Funding and experience: quality trainings, scientific careers (Jérôme Carujo, Coopération attaché for French language ; Campus France)
- Feedback on the workshops, visits, training and job opportunities (Dr. Pascale Hancart-Petitet, IRD; Chloé Laboisne, Technical assistant USSL – IRSE - French Embassy)
- Presentation of the new Fondation Pierre Fabre / Campus France doctoral scholarship for young researchers from southern countries (Beatrice Garrette, Director General of Fondation Pierre Fabre; Jérôme Carujo, Coopération attaché for French language)
- Exchange and debate between students and professionals (Moderation: Didier Bertrand, IFMT)

17:20 - 17:30 - Closing ceremony

- Closing remarks (Dr. Didier Bertrand, IFMT)
- Awards to the winners of Researchers' Dream Video-competition; Certificate handout for students attending the day-training

Day 2: Thursday, November 17th

Addressing emerging health risks linked with environmental changes and economic practices

through an integrated approach (One Health)

Scientific leader: Dr. Serge Morand, CNRS/CIRAD, Moderator: Mr Jerome Dubois-Mercent

This day will address the emerging health risks linked with environmental changes and economic practices through the "One Health" integrated approach. The "One Health" concept recognizes that the health of people is connected to the health of animals and the environment. "One Health" aims to encourage the integrative effort of multiple disciplines (human and animal medicine, agronomy, ecology, anthropology, economy...) to address the interdependence of ecosystems, human health and animal health. The "One Health" agenda is supported by international organizations and development partners such as France.

Among Southeast Asian countries, Laos is experiencing a twofold burden. One of traditional infectious diseases of a developing country on the one hand, and the one related to a health transition of a middle-income country, with an ongoing shift from communicable to non-communicable diseases on the other hand. Additionally, in a dynamic regional context, economic transformation induces major changes regarding demography, agricultural and farm intensification, land use changes, rapid urbanization and biodiversity loss. These changes have consequences for livelihood, management of natural resources and conservation. They have a direct influence on the emergence of emerging infectious diseases in the region, originating mostly from wildlife, land use changes and biodiversity changes.

A first session will present the outcomes of the regional project ECOMORE on emerging infectious diseases and risk evaluation.

A second session will give an overview of the environmental and health impacts of agricultural practices such as the misuses of pesticides and antibiotics and the impacts of soil resources loss.

The third session will gather high-level speakers to discuss key takeaways informing an integrated approach to human and animal health and the need to conciliate competing priorities: agricultural market competitiveness, food security, environmental sustainability, health and well-being.

Detailed programme

8:30 - 9:00 Registration

9:00 - 9:30 Welcome remarks by the French Ambassador to Lao PDR and opening words by a representative of the Lao PDR Government

9:30 - 9:40 Exhibitions opening and official photo

9:40 - 10:00 Coffee break

10:00 - 12:00 Session 1 – Evaluation of health risks and economic practices:Closing symposium of the ECOMORE 1 - ECOsystem MOdifications, and emerging infectious diseases Risk Evaluation project

- ECOMORE 1 Introduction, Dr. Yves Froehlich, Project coordinator, Institut Pasteur Paris/Cambodia
- ECOMORE 1 Programme and results, Dr. Julie-Anne Tangera, Institut Pasteur du Laos
- ECOMORE 1 Impact on rubber plantation, safety measures and publication of a book "Rubber in Laos", Phoutmany Thammovong
- Institut Pasteur du Laos & Phoutasone Ouanesamone, Lao National Agricultural and Forest Research Institute
- ECOMORE To YERSIN, Dr. Paul Brey, Director, Institut Pasteur du Laos
- ECOMORE 2 Dengue Cambodia, Dr. Didier Fontenille, Director, Institut Pasteur Cambodia
- ECOMORE 2 Dengue Lao PDR, Dr. Marc Grandadam, Institut Pasteur du Laos

12:00 - 13:30 Lunch

13:30 - 15:30 Session 2 - Environmental and health impacts of agricultural practices

13:30 - 14:10 A panorama in Lao PDR and the Mekong region

- Introduction: Biodiversity, health and societies (Dr. Serge Morand, CNRS/CIRAD)
- Intensive use of pesticides in banana plantations in the Bokeo and Oudomxay regions (Mr. Pouthasone, National Agriculture and Forestry Research Institute/NAFRI, Ministry of Agriculture and Forestry)
- Intensive use of pesticides in maize plantations in the Xieng Khouang provinces (Andrew Bartlett Helvetas/LURAS)
- Interactions between human and animal health: Use of antibiotics in animal farming in the Mekong region (Flavie Goutard/CIRAD)
- Impact of land use and farming practices on, soil degradation, runoff and spread of contaminants (Alain Pierret/IRD)

14:20 - 15:30 Exchanging on current actions and the updated law on the use of pesticides and chemicals (Ministry of Agriculture and Forestry)

15:30 - 15:50 Break

15:50 - 17:15 Session 3 – High level panel : How to reconciliate agricultural market competitiveness, human health and well-being and environmental sustainability ?

Moderator: Mr Stephen Rudgard, Food and Agriculture Organization of the United Nations (FAO) Representative

Speakers:

- H.E. Dr. Phouang Parisack Pravongviengkham, Vice-Minister of Agriculture and Forestry
- Dr. Bounlay Phommasack, Director General of Department of Communicable Disease Control, Ministry of Health (*tbc*)
- Mr Pierre Ferrand, Regional Coordinator Agroecology Learning alliance in South East Asia (ALiSEA), GRET
- Mr Philippe Cao-Van, agronomist, ACTAE regional project coordinator "Towards Agroecology Transition in the Mekong Region", CIRAD
- Representative, Burapha Agroforestry Co LTD

17:15 - 17:30 Summary of discussions and conclusions

18:00 Reception at the French Embassy (on invitation only)

The role of scientific research in the development of Public Health in Laos

Scientific leader: Dr. Marc Souris; Moderator: Mr Eric Fleutelot

Pathogens and vulnerabilities: understanding infectious diseases to optimize public health policy

More than any other public action, the role of scientific research is fundamental in Public Health. Faced with threats constantly renewed, the decisions makers must be able to anticipate danger, predict the emergence, assessing risk, to prepare responses and develop the infrastructure and resources. Only scientific research enables, upstream of public action, build the technical foundation for effective political action. For this, scientific research must identify hazards, understand the phenomena, decrypt biological processes and vulnerabilities of human society, find therapeutic and societal responses.

The economic development of Laos allows authorities to consider an ambitious policy for the development of health and wellbeing of the population. Laos is characterized by a rich biodiversity and a multifaceted society, and is a crossroads for cultural, human and economic exchange. Laos is subject to many challenges in a dynamic region prone to environmental, human, and climatic changes.

This day dedicated to the role of scientific research for the development of Health in Laos revolves around a now classic and systemic vision in Health research: health is seen as a complex system made of pathogens, vectors, human sensitive populations, all of these agents are largely influenced, on several scales, by a natural and social environment that constantly varies in time and space. The health risks result of the combination of biological threat (pathogens and vectors) and vulnerability of populations exposed to it (behavior, socioeconomic characteristics, access to health care, etc.). The day is hence organized in three sessions:

The first session deals with the detection and monitoring of pathogens and their vectors in Laos. The different actors of scientific research will expose their activities in this field: detection and monitoring, diagnostic tools, protocols, national and international networks, organization and infrastructure. The organization between scientific actors and political authorities for the development of surveillance networks and epidemiological database will be at the heart of the discussion with the audience.

The second session deals with the more specific problem of resistance of pathogens and vectors. These resistances pose significant threats to health, in Laos, in the region and beyond. Researchers are working not only on assessing resistances and decryption of their biological mechanisms, but also on human and environmental causes that may drive these resistances. The discussion will focus on the actions to be mobilized by scientific research to give to the political action the means to detect, treat, prevent resistance.

The third session deals with vulnerabilities of susceptible populations. The success of public health political action-and in particular the prevention-depends largely on the proper assessment of vulnerabilities and the effectiveness of policies and measures implemented to reduce them. The presentations will expose various aspects of the study of vulnerabilities, and the discussion will focus on the improvement and generalization of these studies in Laos.

8:00 - 8:15 Registration

8:15 - 9:00 Introduction

- > Welcome remarks and objective of the day, by H.E. Claudine Ledoux, French Ambassador to Lao PDR
- > Opening words by H.E. Dr. Bounkong Syhavong, Minister of Health of Lao PDR
- Ministry of Health's actions for research, surveillance, alert and disease fighting (Pr. Bounlay Phommasack, Director General of Department of Communicable Disease Control)
- The importance of quality training and research in Lao PDR (Dr. Sengchanh Kounnavong, Deputy Director of National Institute of Public Health)
- > Health targets in the regional context, where are we now? (Dr. Dapeng Luo, World Health Organization)

9:00 - 10:30 Session 1 – Pathogens and agent-vectors. Detection and surveillance systems for infectious diseases in Lao PDR

Chair: Pr. Bounlay Phommasack, Director General of Department of Communicable Disease Control

9:00 - 10:15 - Organizations, stakeholders and diagnostic tools

- Presenting the national surveillance system (Dr. Phengta Vongphrachanh, National Center for Laboratory and Epidemiology NCLE)
- The role of the Institut Pasteur du Laos and the laboratory "Arbovirus and emerging viral diseases" in the surveillance of arboviruses and for emergencies preparedness. Baseline monitoring for dengue, chikungunya, zika, ebola (Dr. Marc Grandadam, Institut Pasteur du Laos)
- Detection and monitoring of potential human pathogens in Lao wildlife (Dr. Pruksa Nawtaisong, LOMWRU/Microbiology Laboratory, Mahosot Hospital)
- Central Nervous System infection at Mahosot Hospital (Dr Koukeo Phommasone, LOMWRU/Microbiology Laboratory, Mahosot Hospital)

10:15 - 10:30 Q&A with the audience: which are the key takeaways from research contributions to surveillance systems?

Exchange with Ministry of Health Department of Communicable Disease Control on identifying objectives in terms of detection, surveillance and alert, database development and models for threat control and surveillance.

10:30 - 10:45 Coffee break

10:45 - 12:00 Session 2 - Impact of pathogen resistance on efficacy of treatment and disease fighting

10:45 - 11:45 <u>Introduction: resistance in infectious diseases</u>. Moderators: Mrs. Phimpha Pabouriboune, CIML & Dr. Alexandra Kerleguer, Institut Pasteur Cambodia

- Introduction to resistance in infectious diseases (Dr. Anne-Laure Bañuls, IRD/NIHE Hanoi)
- Bacterial resistance for Tuberculosis (Dr. Khamla Choumlivong, Setthatirath vice-director, chief of services for multi-resistant TB patients)
- Resistance in antiretroviral treatment for HIV/AIDS (Mrs. Phimpha Paboriboune, CIML)
- Insecticide resistance status of malaria vectors in the Lao PDR and recommendations for malaria control (Dr Sébastien Marcombe, IPL)
- A regional look at artemisinin resistance and the impact for malaria elimination (Dr. Eisa Hamid, UNOPS Myanmar)

11:45 -12:30 Discussion: How to prevent and address resistance nationally and regionally? Recommendations and current strategies. Moderators: Dr. Anne-Laure Bañuls & Mr Eric Fleutelot, Regional Counsellor in Global Health, French Ministry of Foreign Affairs and international development

Speakers:

- Ministry of Health (tbc)
- Dr. Khamla Choumlivong, Setthatirath Hospital deputy director, chief of services for multi-resistant TB patients

- Dr. Alexandra Kerleguer, Head of Bacteriology at Institut Pasteur Cambodia
- Dr. Eisa Hamid, UNOPS Myanmar
- Dr. Aurélie Binot, CIRAD, Projet EU ComAcross

12:30 - 14:00 Lunch Break

14:00 - 15:45 Session 3: Vulnerabilities

14:00 - 15:15 How to identify and reduce vulnerabilities?

- The role of anthropology and social sciences in health research. Example of HIV/AIDS (Dr. Pascale Hancart-Petitet, IRD)
- Vaccination coverage and efficacy in Lao PDR (Prof. Dr. Claude Muller, Lao-Luxembourg Laboratory, Institut Pasteur du Laos, Luxembourg Institute of Health)
- Adapting vector control to behaviors and vulnerabilities (Dr. Didier Fontenille, Institut Pasteur Cambodia)
- Modeling risk assessment. Example of vector resistance to insecticides (MALVEC Project, Dr. Marc Souris, IRD)

15:15 - 15:45 Questions and Answers: How to better study and include vulnerabilities in the Lao PDR?

Exchange on the production, access and dissemination of scientific information and health database with Ministry of Health Department of Communicable Disease Control (tbc), National Institute of Public Health (Dr. Sengchanh Kounnavong) & WHO (M. Achyut Shrestha)

15:45 - 16:00 - Coffee Break

16:00 - 17:00 - How can research further contribute to public health policies in Lao PDR?

- Key takeaways on strengths and opportunities, and evidence-based recommendations for Days 1, 2, 3
- Is scientific research filling the expectations of public health authorities?
- Further aligning understanding, in-country capacity, resources, shared objectives and policy action

High-level panel:

- Moderator: M. Eric Fleutelot, Regional Counsellor in Global Health [Thailand, Vietnam, Cambodia, Lao PDR, Myanmar, Indonesia, The Philippines, Singapore, Malaysia, Timor-Leste], Embassy of France in Thailand
- M. Dr. Phouthone Muongpak, Vice-minister of Health
- M. Dr. Paul Brey, Director of Institut Pasteur du Laos
- M. Silakoune Thongdeng, UNAIDS Country director
- Mrs. Frederika Meijer, United Nations Population Fund Representative
- M. Dr. Dapeng Luo, Health Emergencies and Communicable Diseases Team Leader, World Health Organization

17:00 Closing remarks