

## **e-ASIA Joint Research Program (e-ASIA JRP)**

### **Japan-Vietnam-Philippines Joint Research Projects in the field of Infectious Diseases**

The Japan Science and Technology Agency (JST)<sup>\*1</sup>, the Vietnamese Ministry of Science and Technology (MOST)<sup>\*2</sup> and the Department of Science and Technology of the Philippines (DOST)<sup>\*3</sup>, with the approval of the e-ASIA Board, have agreed to commence support for 2 collaborative research projects in the field of 'Infectious Diseases' within the framework of the e-ASIA Joint Research Program<sup>\*4</sup> (e-ASIA JRP).

The selected projects are as follows:

1. ["International study on pulmonary diseases infected with influenza virus and \*Mycobacterium tuberculosis\*"](#) to be conducted jointly by Kazuo Suzuki, Director General of the Institute of Asia International Infectious Disease Control at Teikyo University in Japan, Phung Thi Bich Thuy, Head of the Department of Biomolecular Research for Infectious Disease at the National Hospital of Pediatrics in Vietnam, and Jaime Montoya, Professor at the University of the Philippines College of Medicine.

This collaborative research aims to control pulmonary diseases infected with influenza virus and *Mycobacterium* in Japan, Vietnam and the Philippines according to molecular epidemiology and elucidation of severity of these diseases in laboratories through exchange program on scientists and education.

2. ["Comprehensive study on virus quasi-species and vascular permeability factors in severe dengue infection in humans for innovative epidemic and clinical managements"](#) to be conducted jointly by Futoshi Hasebe, Professor at the Center for International Collaborative Research at Nagasaki University in Japan, Thi Quynh Mai Le, Head of the Department of Virology at the National Institute of Hygiene and Epidemiology in Vietnam, and Filipinas F. Natividad, Vice-President in the Research and Biotechnology Division of St. Luke's Medical Center in the Philippines.

This collaborative research aims to identify dengue viral characteristics (serotype, genotype and quasi-species) and vascular permeability factors in human hosts to determine the mechanism of disease severity and to apply that data for predicting dengue epidemics in Vietnam and the Philippines.

A total of 8 proposals were submitted in response to the joint call implemented by JST, MOST and DOST in the research field of 'Infectious Diseases'. Separate expert evaluations were commissioned by the three parties, conducted according to their respective criteria to assess the quality of the research plan and expected effectiveness of exchange activities among other aspects, before a joint selection meeting in June concluded with the selection of the two (2) successful projects. Support will commence in January 2014, and will last for 3 years.

<sup>\*1</sup> Japan Science and Technology Agency (JST)

JST is one of the core institutions responsible for the implementation of science and technology policy in Japan. JST's comprehensive mission spans knowledge creation - the wellspring of innovation - to ensuring that the fruits of research are shared with society and Japan's citizens. JST also works to provide a sound infrastructure of science and technology information and to raise awareness and understanding of science and technology-related issues in Japan.

JST homepage: <http://www.jst.go.jp/EN/index.html>

<sup>\*2</sup> Vietnamese Ministry of Science and Technology (MOST)

MOST is a governmental agency which performs the function of state management of science and technology, covering scientific and technological activities; development of scientific and technological potential; intellectual property; standardization, measurement and quality control; atomic energy, radiation and nuclear safety; and state management of public services in fields under its management as stipulated by law.

MOST homepage: <http://www.most.gov.vn/Desktop.aspx/Home-EN/>

<sup>\*3</sup> Philippine Department of Science and Technology (DOST)

DOST supports, directs and coordinates all scientific and technological activities in the Philippines, encourages greater private sector participation in research and development, and formulates policies, programs and projects to support national development towards achieving technological self-reliance for the Philippines.

DOST homepage: <http://www.dost.gov.ph/>

<sup>\*4</sup> The e-ASIA Joint Research Program (e-ASIA JRP)

Through the acceleration of science and technology research exchange and collaboration in the East Asian region, the e-ASIA Joint Research Program (e-ASIA JRP) aims to strengthen research and development capabilities towards resolution of shared challenges across the region, including those associated with environmental protection, natural disaster mitigation and infectious diseases prevention.

As part of that objective, the e-ASIA JRP is intended to support collaborative research implemented among 3 or more of the member countries. Through the implementation of joint research among participating countries in agreed fields of research, it is the goal of the e-ASIA JRP to contribute to economic and human resource development, as well as the resolution of various challenges in the East Asian region.

e-ASIA JRP Homepage: <http://www.the-easia.org/jrp/>

## **Attachments**

Attachment 1: e-ASIA Joint Research Program (e-ASIA JRP) List of Japan-Vietnam-Philippines Joint Research Projects Selected for Funding

Attachment 2: Overview of this Joint Call for Proposals within the Framework of the e-ASIA Joint Research Program (e-ASIA JRP)

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**e-ASIA Joint Research Program (e-ASIA JRP)**

**List of Japan-Vietnam-Philippines Joint Research Projects Selected for Funding**

<Infectious Diseases>

Project Title	Japanese Researcher	Position and Institution	Abstract of Research Project
	Vietnamese Researcher		
	Filipino Researcher		
International study on pulmonary diseases infected with influenza virus and <i>Mycobacterium tuberculosis</i>	Kazuo Suzuki	Director General, Institute of Asia International Infectious Disease Control, Teikyo University	<p>This project focuses on the control of pulmonary diseases infected with influenza virus and Mycobacterium based on collaboration and education for molecular epidemiology through sharing research and technology related to severity of these diseases among three countries Japan, Vietnam and Philippine.</p> <p>Specifically, the Japanese researchers will be in charge of establishment of a database for analysis of molecular epidemiology, and preparation of a protocol for clinical research and analysis of severity for pulmonary diseases infected with influenza virus and Mycobacterium. Researchers in Vietnam and the Philippines will perform planning protocol for the epidemiology and clinical research, sampling to analyze severity of these diseases in their laboratories.</p> <p>By working together on molecular epidemiology and laboratory research on pulmonary diseases infected with influenza virus and Mycobacterium, it is expected to be a collaboration model for Asian international study on infectious diseases.</p>
	Phung Thi Bich Thuy	Head, Department of Biomolecular Research for Infectious Disease, National Hospital of Pediatrics	
	Jaime Montoya	Professor, University of the Philippines College of Medicine	

Project Title	Japanese Researcher	Position and Institution	Abstract of Research Project
	Vietnamese Researcher		
	Filipino Researcher		
Comprehensive study on virus quasi-species and vascular permeability factors in severe dengue infection in humans for innovative epidemic and clinical managements	Futoshi Hasebe	Professor, Center for International Collaborative Research, Nagasaki University	<p>This project aims to gather data that will be useful for developing novel countermeasures against dengue epidemics.</p> <p>Collection of clinical data and sera and/or ascites fluid, serologic neutralization testing, basic virological analysis (serotyping and genotyping) and identification of plasma leakage molecules will be performed in Vietnam and the Philippines. Specifically, the Japanese researchers will be in charge of sequencing the whole viral genome and of the identification of viral quasi-species variants.</p> <p>With this collaborative work, it is expected that viral and host factors related to dengue severity will be elucidated and these findings will contribute to future strategy for dengue control and to the development of therapeutic agents and vaccines.</p>
	Thi Quynh Mai Le	Head, Department of Virology, National Institute of Hygiene and Epidemiology	
	Filipinas F. Natividad	Vice-President, Research and Biotechnology Division, St. Luke's Medical Center	

## Overview of this Joint Call for Proposals within the Framework of the e-ASIA Joint Research Program (e-ASIA JRP)

### 1. Aims of the Program

By implementing and supporting joint projects in strategically important research fields, as determined by its Board, the e-ASIA Joint Research Program aims to promote collaboration with and among members and prospective members of the e-ASIA JRP and to contribute to the future development of science and technology in the region.

### 2. Field of collaboration

Proposals for research projects in the field of “Infectious Diseases” were jointly called for by JST of Japan, MOST of Vietnam and DOST of the Philippines.

### 3. Prospective Applicants

Researchers at universities, research institutes or private companies in Japan, Vietnam and the Philippines were invited to submit proposals.

### 4. Period of Research

Three years (36 months).

### 5. Amount of Funding

Over the research period of three years, the following support will be provided subject to the availability of budget to each agency:

- JST will provide 36 million JPY (maximum) to the Japanese researchers of each project
- MOST will provide 120,000 USD to the Vietnamese researchers of each project
- DOST will provide 350,000 USD to the Filipino researchers of each project

### 6. Funded Expenses

Funding provided within this call is intended to enhance the capacity of the applicants to collaborate. Funding will therefore be provided mainly in support of activities that enable collaboration such as travel and holding symposia/seminars, and may cover some local research expenses such as facilities, equipment and consumables that are necessary for the collaboration.

### 7. Evaluation Process and Criteria

Expert evaluations were initially commissioned separately by JST, MOST and DOST to assess the proposals received, on which basis the three parties negotiated to jointly select the successful projects. The following were among the general criteria considered in the evaluation process:

- (1) Conformity with e-ASIA JRP aims and designated research fields
- (2) Capability of the research leaders and relevance of their current research activities
- (3) Effectiveness and synergistic benefit of the joint research activities
- (4) Validity of the research plan
- (5) Effectiveness and continuity of exchange
- (6) Validity of the exchange plan