

Kick-off Meeting of e-ASIA Joint Research Program, JST-MOST-DOST

# Pulmonary Infectious Diseases induced associated with Influenza and TB in Asia Countries

Saturday, January 18, 2014 09:30 - 18:00

Teikyo University Itabashi Campus  
2F Meeting Room



鈴木和男  
Kazuo Suzuki

Asia International Institute of Infectious Disease Control, Teikyo University



# Collaboration with Vietnam Team

## Infectious Diseases Project

## 3 National Hospitals in Hanoi

Hanoi Visit 2005-2013 (26 times)

### Bachmai Hospital

バクマイ病院のQuy院長らとの協議



バクマイ病院のICU



バクマイ病院院内のオフィス



### National Hospital of Pediatrics

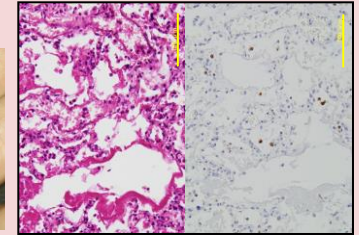
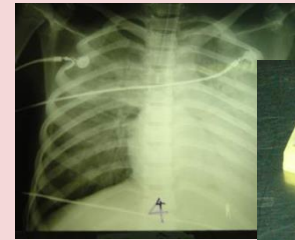
小児病院・病理

小児病院での死亡例 (ARDS)

小児病院のLiem院長らとの協議



小児病院の病理研究室



### National Institute of Infectious and Tropical Diseases

研究所での死亡例 (ARDS)

NIHEの長崎大ラボ



# e-ASIA JRP

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**From Jan. 1 2014-Dec.31, 2016**

## e-ASIA JRP

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# International study on pulmonary diseases infected with **Influenza virus** and *Mycobacterium tuberculosis*

### **Mission:**

- **Molecular Epidemiology**
- **Exchange program**
- **Drug Innovation**

# Project Unit

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**JAPAN(JST)**

**Leader:**  
**Prof. Kazuo Suzuki,**  
**Teikyo University**

**VIETNAM(MOST)**

**Leader: Dr Phung Thi Bich**  
**Thuy, NHP, Hanoi**

**PHILIPPINES(DOST)**

**Leader: Prof. Jaime Montoya**  
**Professor, University of the**  
**Philippines College of**  
**Medicine**

# Project Members

## JAPAN(JST)

**Leader: Prof. Kazuo Suzuki**

**Asia International Institute of Infectious Disease Control,  
Teikyo University**

**Prof. Koichi Makimura, Dr. Mariko Inoue**

**MTB**

**Dr, Seiya Kato, Vice director, Research Institute of Tuberculosis  
(RIT)**

**Dr. Naoto Keicho, RIT**

**Dr. Shinji Maeda, RIT**

**Prof. Toshiaki Sunazuka, Kitasato University, and others**

# Project Members

## VIETNAM(MOST)

**Leader: Dr. Phung Thi Bich Thuy,  
NHP, Hanoi**

**Influenza: Dr. Tran Minh Dien, Vice  
Director, NHP, Dr. Phung Thi Bich Thuy, NHP,  
Prof. Nguyen Thanh Liem, RICH**

**MTB: Dr. Luu Thi Lien, Vice Director, Hanoi  
Health Service,  
Dr. Le Van Duc, Director, Danang Hospital for  
Tuberculosis and Lung diseases and Others**

# Project Members

## PHILIPPINES(DOST)

**Leader: Prof. Jaime Montoya**  
Professor, University of the Philippines  
College of Medicine

**Influenza: Dr. Marilla Lucero, The  
National Influenza Surveillance center in  
Research institute of Tropical Medicine,  
Dr. Mary Ann F. Aison, Philippine Children's  
Medical Center, others**

**MTB: Prof. Jaime Montoya, and others**



# **Vietnam Team**

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# National Hospital of Pediatrics

National Hospital of Pediatrics



Phung Thi Bich Thuy, PhD



TS. Trần Minh Điền  
Phó Giám Đốc



Prof. Nguyen Thanh Liem

# Dr. Keicho's visit in Vietnam



# **Philippines Team**

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# Drs. Montoya and Inoue

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**Prof. Jaime C Montoya,  
University of the Philippines  
College of Medicine**



**Dr. Mariko Inoue,  
Teikyo University**

Department of Health  
National Center for Disease  
Prevention and Control  
Director, Dr. Lilibeth C. David

# Mission

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**Mission:**

- **Molecular Epidemiology**
- **Exchange program**
- **Drug Innovation**

# Goal

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# **Pulmonary diseases infected with Influenza virus and *M. tuberculosis* in Japan-Vietnam-Philippines**

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- 1) Establishment of research work
- 2) Exchange of research protocols
- 3) Clinical trials with macrolides used in Japan
- 4) Development of new drugs for severe pneumonia
- 5) Establishing optimal genotyping systems to characterize *M. tuberculosis* sublineages and utilizing molecular bacteriological and clinico-epidemiological information for more effective control of tuberculosis.



# Approach

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- -Specimen of patients with influenza will be collected to analyze NS1 gene and other risky genes of influenza virus to compare three countries.
- -Establishment of research work in Vietnam and Philippines using research protocols established in Japan.
- -Approach to clinical trials with macrolides used in Japan and development of new drugs for severe pneumonia in Japan.
- -After recruiting patients with pulmonary tuberculosis in a particular area of each country, researchers will extract DNA from cultured bacteria and characterize them not only by conventional genotyping methods but also single nucleotide polymorphism (SNP) typing methods and then compare them with clinico-epidemiological data.

# Outcome

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- Measurements for pulmonary diseases infected with Influenza virus and *M. tuberculosis* in three countries.
- 1) Exchange of researches among three countries.
- 2) Establishment of research works in both countries using protocols for laboratories.
- 3) Clinical trials for influenza with macrolides which has been used in Japan
- 3) Development new drugs innovated in Japan for intervention against severe pneumonia.
- 4) Molecular epidemiological approach to characterization of sublineages of *M. tuberculosis* will help understanding their transmission patterns, particularly for drug resistant tuberculosis. Combined analysis of molecular bacteriological and clinico-epidemiological information is useful considering more effective countermeasures against tuberculosis.