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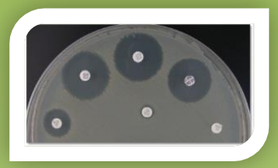


# SATREPS PROJECT NEWSLETTER

***A project to "Determine the Outbreak Mechanisms and Develop a Surveillance Model for Multi-Drug Resistant Bacteria"***

## PCR Method Course in Hanoi, 9th – 11th Oct.

The polymerase chain reaction (PCR) method is a molecular biological technique used to amplify the duplication of DNA, generating many copies of particular DNA sequence. Within the scope of the project, the PCR method is used to identify the DNA types of ESBL-producing bacteria. To enhance the researchers' knowledge and application of PCR, a training course in the form of group workshops was held at the research collaboration laboratory of the National Institute of Nutrition (NIN) in Hanoi from the 9th to 11th of October 2013.

Careful preparation

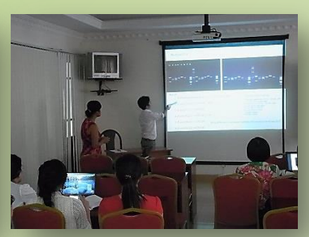
Run Thermal Cycler

Yes! Got results!

Seventeen researchers from Vietnam and Japan were divided into three groups. Their mission was to detect 6 different types of DNA from prepared bacteria strains. The groups applied several PCR methods such as Single-plex PCR, Multi-plex PCR, RT-PCR, Real-time PCR and the LAMP method. During the course, they were assigned to plan an experiment, conduct it and finally review it. Communication among the international group of researchers was one of the primary aims of this course. Although the novice team was challenged by many difficulties during the experiments, their effective collaboration led to successful results. The advanced team completed all PCR methods successfully but more efficient procedure was discussed.


Certificates presented by Prof. Le Danh Tuyen, NIN Director

Real-time PCR team work



Final group presentation and scientific discussions about their findings

## 2nd Field Epidemiology Short Course in HCM, 24th – 25th Sep.

*The 2nd Field epidemiology short course was held from the 24th to the 25th of September 2013 at the Institute of Hygiene and Public Health (IHPH) in Ho Chi Minh City.*


***All are certificated by the Project***

Sixteen researchers from five institutions were trained on the basics of field epidemiology and outbreak management within the context of public health. Epidemiology is the study of the patterns, causes and effects of health and disease conditions in a defined population. It mainly involves the collection and statistical analysis of data.

Dr. Ohayama Takaaki from Japan's National Institute of Public Health pinned down the essence of field epidemiology for public health workers. In his lecture he stated that "it should be quick and dirty" and directly linked to public health strategy. He elaborated, commenting that field epidemiology is a tool for public health in real world situations rather than simply a research tool. After learning the basic concepts of field epidemiology and outbreak management, participants discussed and presented several concepts such as disease control priorities and justification.


*Dr. Ohyama's lecture*

*Group discussion*

*Group presentation*

**EDITED BY PROJECT OFFICE**
Room 308,48B Tang Bat Ho,Hai Ba Trung,Ha Noi
Telephone/Fax (84-4)39729383
http://www.satreps-mdrb.jp/

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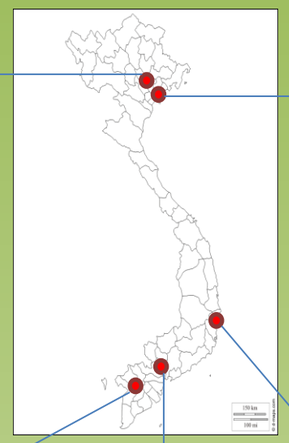
# Dr. Sumimura of Osaka University, awarded by the MOH

❖ Dr. Sumimura Yoshinori, an associate professor at the GLOCOL Osaka University, was recognized by Vietnam's Ministry of Health for his contribution to community health projects in Vietnam. The award ceremony was held at NIN in Hanoi on the 26th of September 2013.


# Project Digest Vietnam, Jul. – Sep.

## Hanoi

*Prof. Yamamoto, Dr. Hase and Dr.Huong inspected the NIN laboratory.*



## Thai Binh

*At TMU, Dr. Kawahara and Ms. Ha analyzed ESBL-producing bacteria in food samples.*

## Can Tho

*At a chicken farm in Can Tho this August, Dr.Hinenoya and a CTU researcher collected chicken samples..*

## HCMC

*At IHPH, Dr. Harada and the IHPH pharmacology team analyzed antibiotic residues in food samples.*

## Nha Trang

*, Mr. Ueda and Mr. Phong isolated ESBL-producing E.coli from food samples at PINT.*

# Close up on the Researchers

## ❖ Institute of Hygiene and Public Health in HCMC (IHPH)

Among the six institutions involved in the project, IHPH's remit covers southern Vietnam and is represented by a working group of microbiologists and pharmacologists. The former are mainly focused on analyzing ESBL-producing E.coli in specific food, while the latter concentrates on detecting antibiotic residue in food samples collected throughout southern Vietnam.


From right,

1. **Dr. Nguyen Do Phuc**, Vice director of the Southern Regional Food Safety Testing Center, IHPH.

2. **Dr. Dang Van Chinh**, Vice director of IHPH.

3. **Dr. Ohyama Takaaki**, Senior researcher at the National Institute of Public Health, Japan.

4. **Dr. Watabe Hiroomi**, Invited professor at the GLOCOL, Osaka University.

**Ms. Tran Nguyen Minh Doan**, researcher at the Southern Regional Food Safety Testing Center , IHPH, receiving microbiology training at Osaka Prefectural Institute of Public Health.

## ❖ Thai Binh Medical University (TMU)

Thai Binh Medical University is responsible for collecting food and human samples and detecting ESBL-producing bacteria throughout the Red River Delta region of Vietnam. The pharmacology team also analyzes antibiotic residues found in food samples in the Thai Binh area.


From right

1 **Ms. Hoang Lan Phuong**, TMU, is currently being trained in microbiology in Osaka

2 **Ms. Tran Thi Hoa**, TMU

3 **Dr. Kawahara Ryuji**, Osaka Prefectural Institute of Public Health

4. **Ms. Khong Thi Diep**, TMU

5. **Dr. Nguyen Nam Thang**, TMU

Left, **Ms. Le Viet Ha**, Genetics & Microbiology Department, TMU, has completed a short training course at Osaka University, February 2013.

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