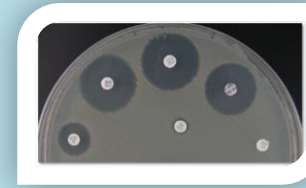


Project staff have been conducting epidemiological studies on drug resistant bacteria in the north of Vietnam since 2014. Within the scope of field epidemiology; statistical patterns, causes and effects have been scrutinized so as to hypothesize feasible public health risks and the actions required to reduce the high prevalence of drug resistant bacteria in local communities. Not only epidemiologists but also microbiologists, pharmacologists and anthropologists from the different institutions are working together to examine the risk factors of increasing drug resistant bacteria and design a framework of epidemiological studies in Hanoi and Thai Binh.



### PROJECT NEWSLETTER

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



## Progress Meeting in Nha Trang



- At NIN in November 2014, a group of microbiologists, pharmacologists and anthropologists exchanged evidence of the prevalence of ESBL-producing *E.coli* in small communities and analysed questionnaire data on hygiene conditions and local customs. A visiting expert epidemiologist from Japan held a consultation on how to deal with statistics and accurately select risk factors.



Figures showing ESBL occurrence in one Thai Binh commune were reported by a TBMPU epidemiologist. After exchanging opinions with the Japanese researchers, the TBMPU team adjusted their statistical study. After the discussion, researchers visited some field sites in the local community to witness the actual conditions.



- In January 2015, researchers of NIN and TBMPU have continued screening for risk factors via web conferencing and intensive meetings with Japanese researchers. Ultimately, the team hypothesized risk factors and feasible intervention activities to reduce the increase of ESBL producing bacteria in the targeted communes.



- Left : Attendees in front of the Pasteur Institute of Nha Trang.
- Right: Handshake between the Vietnamese Project Leader and Japanese Chief Advisor.

The 3<sup>rd</sup> Progress Meeting was held at the Pasteur Institute of Nha Trang on 26<sup>th</sup> of November 2014. The objective of the meeting was to formulate a plan for 2015, while exchanging the scientific progress of 2014 with researchers from both countries. In total 31 members attended the meeting and shared their current research status and future plans. At the end of the meeting, the project leader and chief advisor, witnessed by representatives of five institutions, agreed to the minutes of the meeting that specified the scope of research activities.

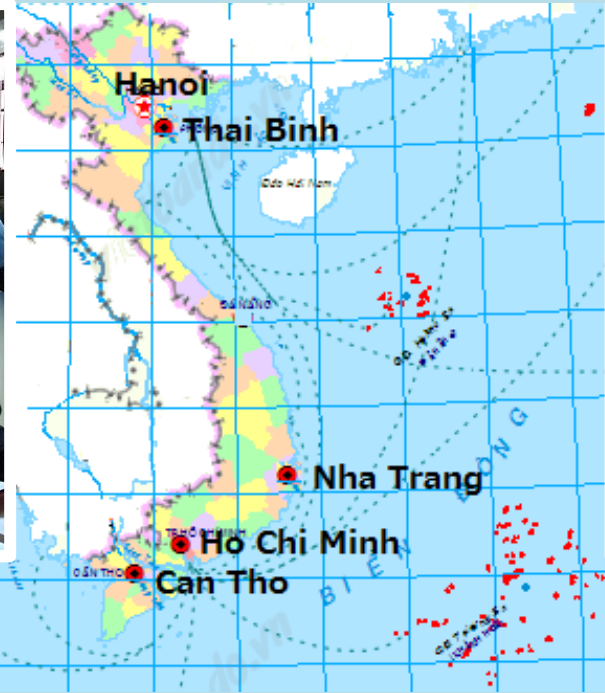


- Representatives of five Vietnamese institutions signed the minutes of meeting.



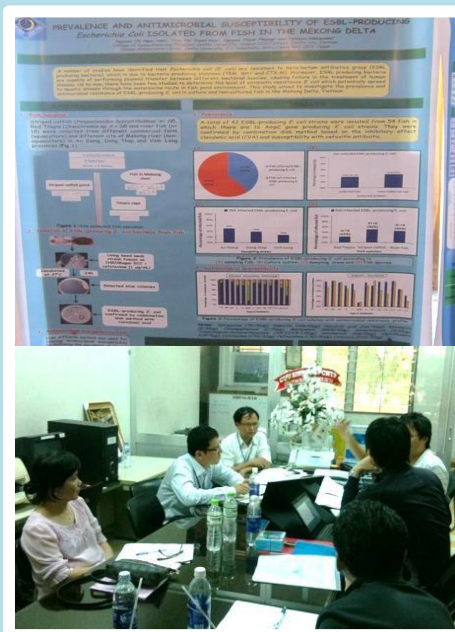
- Meeting to share research plan.





➤ **Hanoi:** Epidemiological presentation by NIN in Nov., and PMU with Prof. Yamamoto in Feb.

➤ **Thai Binh :** Clinical study design with Prof. Yamamoto, and a hospital visit in Feb.



➤ **Can Tho:** Poster presentation by CTU at “The DAA9” conference HCMC in Nov., and study discussion with Dr. Nakayama in Dec.

➤ **HCMC:** IPH Research planning with Dr. Harada in Jan. and BDWSM site visit.

➤ **Nha Trang :** PINT’s health interview conducted with market employees, and isolating ESBL at laboratory in Dec.

➤ **Abbreviation:** NIN=National Institute of Nutrition, TBMPU=Thai Binh Medical Pharmaceutical University, PINT=Pasteur Institute in Nha Trang, IPH=Institute of Public Health in HCMC, BDWSM=Binh Dien Whole Sale Market Company, CTU=Can Tho University

In November 2014, Mr. Le Quoc Phong, a project microbiologist, completed a Master of Public Health degree at Thai Binh Medical and Pharmaceutical University (TBMPU). He presented his master thesis, “A study on the molecular epidemiology of extended-spectrum  $\beta$ -lactamase-producing *Escherichia coli* isolated from food in Nha Trang”, which was highly lauded by the Scientific Council of TBMPU (Advisors: Prof. Pham Ngoc Khai and Prof. Yamasaki Shinji). Mr. Phong, a researcher at the Pasteur Institute in Nha Trang (PINT), has been studying towards the degree since November 2012. Whilst engaging in the project activities in Nha Trang, he has also completed training courses in both Hanoi and Japan. His contributions towards research and his experience gained in the project have added to the success of his Master Thesis. “I would like to say many thanks to Prof. Pham Ngoc Khai (TBMPU) and Prof. Yamasaki Shinji (Osaka Prefecture University) who instructed me during the time I was working on my thesis.”



### The President’s Award

In November 2014, Ms. Hoang Hoi Phuong was the proud recipient of the Osaka Prefecture University (OPU) president’s award for her outstanding research achievements at the University. OPU praised her for her attainment of the presentation award from Japanese Society for Bacteriology back in March 2014 as well as her progress towards her PhD at OPU. Ms. Phuong, from the Institute of Public Health HCMC, has been taking a PhD course under Prof. Yamasaki’s supervision at OPU since April 2013. She is actively disseminating her research, on a model of ESBL-producing *E.coli* in mice, not only at domestic conferences but also internationally.

