(Abroad • Domestic) Official trip report form (Student) <u>2015/7/22</u> (Year/Month/Day)						
Name	Duc-Huy Chu					
Laboratory	Microbiology					
Year (Grade)	DC 3					
Destination	 Vietnam Department of Animal Health, Hanoi, Vietnam National Center for Veterinary Diagnostic (NCVD), Hanoi, Vietnam Sub-Department of Animal Health of Vinh Long province, Vinh Long, Vietnam 					
Period of trip	8 days, from 28 th June, 2015 to 5 th July, 2015					
Purpose of trip	1. Discussion on the results of avian influenza (AI) surveillance conducted in center part (Thua Thien Hue province) of Vietnam in 2014 with Department of Animal Health of Vietnam (DAH).					
	2. To negotiate with DAH to get permission for the AI surveillance in 2015 in the South part of Vietnam- Mekong Delta river (MDR).					
	3. To negotiate with Vinh Long sub-DAH and local authority for the selection of study area. And a discussion with Vinh Long sub-DAH for sampling plan in detail will be made.					
	4. Carrying out a pre-sample collection in few selected live bird markets under the suggestion of Vinh Long Sub-DAH.					

Summary of activities (about 800 words, provide photos, tables and figures that clearly show the activities during the period)

I. Background

In 2014, our laboratory conducted avian influenza (AI) surveillance in Thua Thien Hue, Vietnam (central part of Vietnam) under my research project. We will explain our results to the central veterinary office, Department of Animal Health (DAH) in Hanoi, Vietnam and propose a new plan for the next surveillance in Hue city.

In 2015, our laboratory will conduct AI surveillance in Vinh Long city, Vietnam (South part of Vietnam) under the research project of Nguyen Thanh Lam (D1, Lab of Microbiology). For this purpose, we will negotiate our sampling plan to the DAH and local authority for veterinary office, sub-Department of Animal Health (sub-DAH) of Vinh Long province. In Vinh Long province, we will visit several live bird markets (LBMs) and collecting pre-sample to practice sampling methods.

After finishing sample collection, I will negotiate with Regional Animal Health Office No. 7 (RAHO7) for screening test of samples and how to manage samples and transferring samples to Japan in next August, 2015.

II. Aims

- To continually carry out AI surveillance at LBMs with and without intervention in Thua Thien Hue province, Vietnam in order to find out the risk factors contributing to the virus circulation at LBMs and setting up the control methods for improvement of hygiene status at LBM.
- To conduct the AI surveillance in the south part of Vietnam, we want to select Vinh Long province as a representative province in Mekong River Delta area for conducting AI surveillance in LBMs.

III. Activities

- Reporting the results AI surveillance conducted in center part, Thua Thien Hue province of Vietnam in 2014 with

DAH and discussion to get permission for the AI surveillance in 2015 in the South part of Vietnam- Mekong Delta River in Hanoi (Activity 1).

- Negotiating with local authority of Vinh Long province for AI surveillance program at LBMs in 2015 (Activity 2).
- Investigating the infrastructure of LBMs to select LBMs with and without intervention and conducting pre-sample collection in Vinh Long province (Activity 3).

IV. Results

Activity 1: Reporting the results AI surveillance conducted in center part, Thua Thien Hue province of Vietnam in 2014 with DAH and discussion to get permission for the AI surveillance in 2015 in the South part of Vietnam-Mekong Delta River in Hanoi.

In the 1st day (June 29th), we had a discussion with DAH and NCVD for reporting the result of virus isolation in LBMs in Thua Thien Hue province. In this meeting, we informed the number of virus isolates (178 isolates/3045 samples) and genetic analysis of H5, H6 and H9 viruses circulating in both types of LBMs with and without intervention. We concluded that there are no different between LBMs with and without intervention. We discussed on the results, why variety of AI viruses are circulating in LBMs with intervention even these LBMs have operated disinfection methods. In order to solve this problem, we decided that we will continuously conduct AI surveillance in Hue in November or December, 2015 to get enough data for risk identification and sampling collection focus on environmental samples.

In this meeting we also discussed about expanding AI surveillance program to the South part of Vietnam. Finally, we got the agreement of DAH for selection of new study area in the South of Vietnam, Vinh Long province.



Discussion in NCVD office, Hanoi, Vietnam

- Activity 2: Negotiating with local authority of Vinh Long province for AI surveillance program at LBMs in 2015 (Activity 2).

In the 2nd day (June 30th), we visited Vinh Long province to discuss with director of Sub-DAH Vinh Long for negotiation of AI surveillance program in Vinh Long. We introduced the aims of project, what things we will do for

the AI surveillance in LBMs in this province and how we can cooperate together to launch this project. In real situation, each province in each part of Vietnam has a different characterization of poultry husbandry and infrastructure. However, in general, we will harmonize the real situation and apply the same method (study design) that we used for Thua Thien Hue (in central part of Vietnam in 2014) on Vinh Long province. Basically, director of Vinh Long sub-DAH already give us all information about recent AI outbreak, results of local AI surveillance program, LBMs system in Vinh Long province.



Discussion in Vinh Long, Vietnam

Activity 3: Investigating the infrastructure of LBMs to select LBMs with and without intervention and conducting pre-sample collection in Vinh Long province

In July 1st, we went to 3 trial LBMs to investigate the poultry population in LBMs and determine the type of LBMs with or without intervention.

Pre-sampling was conducted in early morning at the same day by staffs of Vinh Long sub-DAH. Totally, 30 swab samples from apparently poultry (10 chickens, 15 ducks, 5 muscovy ducks) were collected. All samples were transferred to RAHO7 for H5N1 screening test by RT-PCR.



Investigation of poultry population in LBMs

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LBM without intervention

LBM with intervention

V. Conclusions

We finished successfully negotiation trip in Vietnam within 1 week. During this trip we already obtained good discussions with central level and local level. We received positive signal from Vietnam side. Therefore, our surveillance plan in Vietnam will be conducted in 2015.

In Thua Thien Hue province (Central part of Vietnam), we will continuously conduct AI surveillance in Hue in November or December, 2015 to get enough data for risk identification and sampling collection focus on environmental samples.

In Vinh Long province (South part of Vietnam), we already identified LBMs with or without intervention. We can fit our study design for Vinh Long from Hue model. AI surveillance program will be conducted in Vinh Long province in August 2015. RAHO 7 located in Can Tho city (near Vinh Long province) will manage all samples collecting in Vinh Long province for screening test and sample shipment to Hokkaido University.

	Institution • Official title • Name :	
Approval of	Department of Disease Control, Laboratory of Microbiology	
supervisor	Prof. Yoshihiro Sakoda	印

*1 Send the electronic file to the Leading School section, International Affairs Office, also submit the original print out with seal of supervisor to the Leading School section, International Affairs Office.

Submit to : Leading School section, International Affairs Office Ext: 9545 e-mail: leading@vetmed.hokudai.ac.jp Hokkaido University Program for Leading Graduate Schools Fostering Global Leader in Veterinary Science for contributing to One Health

VI. Annex

Schedule of official trip

Day		Time	Main activities	Fight	Hotel		
28-Jun	Sunday	14:15	Departure from Sapporo-Chitose-Japan	KE766 KE679			
		17:10	Arrival in Incheon-Korea				
		18:45	Departure from Incheon				
		21:30	Arrival in Hanoi				
		23:00	Check in hotel		Hanoi city		
29-Jun	Monday	13:30	meeting with DAH, NCVD		Hanoi city		
30-Jun	Tuesday	7:30	Departure from Hanoi city for Can Tho city then	VN1201	Vinh Long		
		7.30	moving to Vinh Long province		province		
		14:00	Discussion with Vinh Long sub-DAH		Vinh Long		
		14.00			province		
1-Jul	Wednesday	AM	Visit LBMs and pre-sample collection		Check out		
		РМ	Move to Can Tho, end of mission in the field,	VN1202	stay with		
			back to Hanoi (16:25)		his family		
2-Jul	Thursday				Discussion with NCVD staffs for preparation of		stay with
			materials and sample shipment, screening test		his family		
				for samples collection in next August, 2015		This farming	
3-Jul	Friday	PM	Preparation paper work with DAH for the		stay with		
			sampling round in August 2015		his family		
4-Jul	Saturday	22:50	Departure for Incheon from Hanoi	KE680			
5-Jul	Sunday	10:10	Sapporo from Incheon	KE765			

• In Hanoi

28th June: Departure for Hanoi city, Vietnam

29th June: Discussion with DAH on the results of AI surveillance in Thua Thien Hue in 2014 and negotiating for the next round in 2015 in MDR.

• In Vinh Long province

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30<sup>th</sup> June:
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AM:

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- Departure from Hanoi city for Can Tho city, Vietnam
- Moving from Can Tho city to Vinh Long province (50 km distance)
- Discussion with Vinh Long sub-DAH

PM:

Pre-sample collection

1st July:

AM: Pre-sample collection

PM: Move to Can Tho city and departure for Hanoi.

 2^{nd} - 3^{rd} July: testing samples with staffs of NCVD and DAH for preparation of sampling materials and shipment method for AI surveillance in 2015.

 $4^{th} - 5^{th}$ July: End of mission within 8 days, leaving Vietnam for Japan.