

Weekly Report Hokkaido University Name Arisa Yamada

Sept 9 (Sat)	No training
Sept 10 (Sun)	No training



	I studied at the swine unit. First main topic was history taking in pigs. I learned that history taking is very important for disease diagnosis. I was
Sont 11	impressed because I have not studied about swine so much in Japan. After
Sept 11 (Mon)	school, I went to Bangkok to join a welcome party. It took about two and a
	half hours by car because of a traffic jam. I enjoyed the party for only an
	hour and came back.
	Today, I studied a swine case. The teacher gave us information of the case
	and showed us some pictures of the necropsy. We discussed about the
	case for the diagnosis. In the discussion, I encountered some unknown
Sept 12	technical terms, but Thai students always helped me. Furthermore, after
(Tue)	the lecture, they explained about "farrowing to finishing system" for me
	because I couldn't follow the topic in the lecture. In the end, our diagnosis
	was classical swine fever (CSF). I learned that Japan has not experienced
	this disease since 1992, but this is a common disease in Thailand.
	Today I necropsied 3 cases. Before the necropsy, I tried the euthanasia for
	a piglet. This was a very valuable experience because I have never done in
Sept 13	Japan. We found some lesions in the necropsy, so we discussed the
(Wed)	differential diagnosis for the presentation on Friday. The discussion lasted
	until 10 p.m.
	In the morning, I studied swine diseases. The teacher asked us to list 40
	swine diseases. It was very hard for me. I learned that the common swine
Sept 14	diseases in Thailand are different from those in Japan. In the afternoon, I
(Thu)	did a necropsy. I could do that almost by myself. After school, we made
	slides for tomorrow presentation.
	I had a presentation today. Our group made presentations in the morning.
	After each presentation, teachers asked us some difficult questions. I was
Sept 15	asked to answer them by Thai friends, but I couldn't. I have to study swine
(Fri)	diseases harder and increase my knowledge. In the afternoon, we listened
	presentations of the other swine group. Thai friends helped me to
	understand.
Sept 16	
(Sat)	No training



Sept 17 (Sun)	No training
Sept 18 (Mon)	In the morning, I studied swine industry and management in Thailand. I learned that swine industry is very important in Thailand and developing every year. In the afternoon, I studied key performance indicator (KPI). I could understand it easily because Thai friends taught me it last week. In addition, we learned the connection of each KPI.
Sept 19 (Tue)	Today, I went to a pig farm. It was a first time for me to visit a pig farm. The real pig farm was different from my image. There were so many pigs, and the temperature was not so high by evaporative cooling systemMoreover, I learned the swine breed, so I could distinguish Large white, Land race, and Duroc. We found many problems in the farm.
Sept 20 (Wed)	Our group had no class today, so we prepared for the presentation on Friday. We discussed the problems of the farm and finished making slides. In the middle of the day, we joined a lecture by a Chinese company. The speaker talked in Thai, so Thai friends translated in English for me. The lecture was about the animal products of acidifier for superbug. The speaker recommended their products, but we thought there was something suspicious about what he said.
Sept 21 (Thu)	Today, we went to another pig farm. We observed various stage of pigs and found many problems in this farm. For example, we realized that many sows were not on the lateral because of obesity. That is why piglets couldn't suck and grow up. Furthermore, we got the information that this farm give too much antibiotics to pigs by tradition. We think that this tradition is not good because it encourages the growth of resistant bacteria.
Sept 22 (Fri)	We have a presentation today. In the morning, I heard the presentation of another swine group. But, I couldn't concentrate on it because I got diarrhea. In the afternoon, I was getting better. I explained the farm information and pictures we took in the farm to teachers and friends. We discussed the problems in the farm deeply.



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Note: Student must submit this report to the teaching staff at your university each week via e-mail and CC CVE office. Not necessary to report on holidays and weekends unless the training was being held.

Sept 23 (Sat)	No training
Sept 24 (Sun)	No training
Sept 25 (Mon)	I studied at the poultry unit. In the morning, we learned chicks quality, evaluation of chicken gut health, and evaluation of immunosuppression in chicken. In the afternoon, our group visited a layer farm. Layers were kept in the cage on the pond. Thai friends told me that the feces of layers were eaten by fish in the pond. This is very different from Japan.
Sept 26 (Tue)	I went to a broiler farm with Japanese friends. Many chicks were kept in the farm. We learned equipment, the method of feeding, and so on. After we came back to the university, we did the case necropsy of chicks. This is the first time to necropsy a chick. I necropsied one chick by myself with the help by a teacher. I found many abnormalities in the air sac, lung, liver, yolk, and brain.
Sept 27 (Wed)	We visited a hatchery farm in the morning. We could not go into the buildings because the biosecurity is very strict. We practiced egg breakout analysis. Through this practice, I learned chick embryo development. In the afternoon, we practiced evaluation of chicken quality. We checked the physical conditions, for example, body weight, yolk free body mass (YFBM), chick length. Moreover, we evaluated chick quality using one of the most common method called Tona score. After school, we went to Hua Hin by bus.
Sept 28 (Thu)	We have no class today, but we joined the international rabies conference at Princess Chulabhorn International Conference Centre in Hua Hin. I cannot speak Thai, so I was just sitting at the reception and passed the souvenir to the Thai friends who gave it to the guests. I was tired. But I had a lot of chance to talk with students of other groups. In the evening, we welcomed the princess. This was a great experience for me. After that, we stand by in the animal hospital because we were not allowed to join the conference. The hospital has an emergency room, operation room, blood



	bank, laboratory, and so on. Today, I have seen a cockroach for the first time.
Sept 29 (Fri)	We joined the international rabies conference and exhibitions at Princess Chulabhorn International Conference Centre in Hua Hin, following yesterday. I listened to some lectures about rabies. And I enjoyed games and quiz about rabies. I made many Thai friends in the last two days, so I was very happy. In the evening, we came back to Kamphaeng Saen.
Sept 30 (Sat)	Today, we had a class. In the morning, we practiced in broiler necropsy. I learned the anatomy and the score of coccidiosis in chicken. My chicken was suspected of the infection of <i>Eimeria acervulina</i> and <i>Eimaria tenalla</i> from the lesions. In the afternoon, we practiced egg breakout analysis again. I understood the infertile and the day of chick embryo development.
Oct 1 (Sun)	No training
Oct 2 (Mon)	In the morning, we studied reproductive system in poultry and egg quality. After that, we analyzed egg weight, egg color, albumin height, egg yolk color, and grading by using the machine. In the afternoon, we had a presentation about vaccination in Thailand. My topic was about Derzsy's disease, which is caused by parvovirus. I could not explain well because I have not studied about duck diseases so much in Japan. But I became interested in duck diseases. I listened to other many presentations of vaccination of the poultry diseases, and I learned that vaccination is very important to control diseases in Thailand.
Oct 3 (Tue)	I went to a layer farm with only Japanese friends today. The manager of this farm welcomed us warmly. She explained the details of her farm, for example, the producing and selling eggs business, layer feed and water, the management, and so on. And she showed us how to produce eggs. The teachers said this farm is one of the best farm in Thailand because she cares about biosecurity, feed, health of layers, and something like that. She loves her layers and work so much. I was very lucky to visit this farm. I have to prepare the presentation about this farm.



Oct 4 (Wed)	I listened to many presentations all day. Thai students made a presentation about duck farm which Japanese students didn't visit. And other Hokkaido University students made a presentation about a broiler farm we visited last week. We discussed the problems of the farms. In addition, they showed us the results of the necropsy. I learned some poultry diseases. We had many presentations all day. In the morning, I gave a presentation
Oct 5 (Thu)	about the layer farm visit with Japanese friends. This was the first time to make a presentation with only Japanese friends. It was hard for us to answer all the questions by ourselves. In the afternoon, I gave a presentation with Thai friends. I talked about the introduction of chick quality. I understood the most common methods to evaluate chick quality.
Oct 6 (Fri)	We had many presentations all day. The teacher was very strict. We prepared many slides, but the teacher asked us to show only results and discussions. So I had no chance to make a presentation. In class, he asked us many questions. He was usually kind to Japanese students, but he blamed Thai students in Thai. I couldn't understand him because he spoke almost in Thai. And suddenly, he asked us a question in English, so I couldn't understand the purpose of the question. I was confused all day.
Oct 7 (Sat)	No training
Oct 8 (Sun)	No training
Oct 9 (Mon)	I learned in shrimp unit. Today, we studied shrimp management all day. Everything was new for me because I have studied only two shrimp diseases in Japan. However, the teacher explained the shrimp management in Thailand thoroughly. So, I understood the species of shrimp, the way of shrimp culture, water management system, and so on.



Oct 10 (Tue)	We studied water quality for shrimp. You have to control temperature, turbidity, pH, dissolved $O_2$ , total NH <sub>3</sub> , alkalinity, NO <sub>2</sub> <sup>-</sup> , salinity, mineral, bacteria to culture shrimp. I made a short presentation about dissolved $O_2$ . It was hard for me to prepare the presentation because I had only one day. I explained dissolved $O_2$ drawing some charts and graphs.
Oct 11 (Wed)	In the morning, we went to a shrimp farm. It was the first visit for me. I have never visited shrimp farm in Japan. We observed the water, food, equipment in each pond. And we checked the water quality. Moreover, we analyzed shrimp weight, and we looked for abnormalities in shrimp body. In the afternoon, we made a presentation about shrimp diseases. I talked about yellow head disease. I learned this disease is one of the most serious diseases in Thailand, but Japan has never experienced it.
Oct 12 (Thu)	Today, we studied molecular diagnosis of <i>Vibrio parahaemolyticus</i> EMS/AHPND based on PCR method. We actually tried molecular diagnosis by using real-time PCR. I prepared a standard dilution of the plasmid DNA with a Thai friend. However, our group did not get a good result. I have to develop my skill in PCR.
Oct 13 (Fri)	No training
Oct 14 (Sat)	No training
Oct 15 (Sun)	No training



Oct 16 (Mon)	I learned in fish unit. In the morning, I studied fish management, culture system, water quality, disease diagnosis, immune system, and so on. In the afternoon, we joined a seminar about equine nutrition and management. I got lunch, many goods, snacks, and a lot of equine knowledge. I am looking forward to equine unit.
Oct 17 (Tue)	Today, we went to a guppy farm in Nakhon Pathom. I have visited a fish farm for the first time. There are many ponds, and the farm keeps various guppies to export them to other countries including Japan. I checked water quality of some ponds with chemical kits. After we came back to school, we prepared the presentation of this farm. I got very interested in guppy.
Oct 18 (Wed)	In the morning, we made a lot of calculations associated with the fish management. And we studied about the filter. I learned that the fish tank filters play an important role in keeping healthy fish. Thai friends helped me because this class was in Thai. I am sure that I understood this class. In the afternoon, we had no class. But we practiced the presentation of a guppy farm and prepared another presentation about a paper given by the teacher.
Oct 19 (Thu)	In the morning, we had a presentation about guppy farm. In this presentation, I talked about the information of this farm. I could explain it without a script. In the afternoon, we had a necropsy of Nile tilapia. I tried the necropsy, and I inspected the liver, spleen, and kidney. We were suffering from bad smell, but fish necropsy was very interesting for me.
Oct 20 (Fri)	We had six presentations today. First, we made a presentation about the necropsy of Nile tilapia. It was hard for us to prepare this presentation for only one day. Other five presentations were about a paper given each two students by the teacher. I made a presentation about antimicrobial resistance in aquaculture with a Thai friend. It was difficult for me because I have never read a paper about fish. However, the antimicrobial resistance is a big problem not only in fish but also in every animals. If we use antimicrobials in agriculture responsibly, we can support sustainable food security and save lives.
Oct 21 (Sat)	No training



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Oct 22 (Sun)	No training
Oct 23 (Mon) Chulalongkorn Memorial Day	No training
Oct 24 (Tue)	We had a case conference today. I just listened to presentations all day. Thai friends in my group made a presentation about the case of piglets with diarrhea. I know that they prepared the presentation for this case conference very very hard. So, I was happy that they could make it. Another group had a presentation about a crocodile case. I talked with Thai friend about it because I was interested in the presentation. She said crocodiles are cultured for meat, leather, and blood in Thailand. The crocodile blood is in high demand for anemia, allergy, and cancer although the mechanism is unclear.
Oct 25 (Wed)	We had a shrimp class today. We made a presentation about shrimp farm we visited when we studied at shrimp unit. We discussed the problems in the shrimp farm with my teacher. After that, we had a group examination. We worked together and answered the questions about a shrimp case. I have to study about shrimp management harder because I could not answer the questions about it.
Oct 26 (Thu)	No training
Oct 27 (Fri)	No training



Oct 28 (Sat)	No training
Oct 29 (Sun)	No training
Oct 30 (Mon)	I studied at bovine unit. Today, I saw two cases in the hospital in the university. The first case was a calf with joint contracture. The case had an X-ray, but it was almost normal. I have learned Akabane disease and Chuuzan disease as a cause of congenital abnormalities in Japan, but Thai students have never learned these diseases. The case will have a surgery tomorrow. The second case was a very thin cow with ketosis. This case came to the hospital because of abdominal distension about 1 week ago. In the past, she had patent urachus and had a surgery with a wrong method. We injected glucose into a vein.
Oct 31 (Tue)	I visited five farms to see cases. In the first farm, I practiced rectal palpation for diagnosis of pregnancy. I was surprised because Holstein in Thailand are much smaller than those in Japan. It is difficult for me to touch the ovary in Japan, but I could do it easily today. In another farm, I saw a case of retained placenta. Moreover, I administered some drugs to a calf with diarrhea by intramuscular injection.
Nov 1 (Wed)	I visited six farms to see cases today. In the first farm, I tried rectal palpation for diagnosis of estrus. I didn't know whether the condition of ovary was a good timing for artificial insemination, so I need more experiences of rectal palpation. In other farms, I tried intramuscular infection many times. I am confident in injection now. In the evening, we had a case discussion. Our group made a presentation of the case of patent urachus. I explained the definition and type of urachus with drawing pictures.



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Nov 2 (Thu)	<ul> <li>In the morning, a case of dystocia came to the hospital in the university.</li> <li>From the history taking and physical examination, we knew that the fetus was rotten and the condition of uterus was very bad. Any treatment including a surgery was not effective and we could not anything. The owner looked so sad. After the case went back to the farm, we had nothing to do. So, I saw a pig case with intestinal rapture. The pig had a surgery. It was a good chance for me because I had never seen a surgery of a pig. In the afternoon, the teacher took us to some farms to see mastitis cases.</li> </ul>
Nov 3 (Fri)	Today, we had a lot of presentations. In the morning, our group prepared for a presentation. In the afternoon, our group made a presentation about a heifer case with mastitis. I explained the differences between contagious mastitis and environmental mastitis. I also listened to presentations by other group. I was interested in the problem of laminitis in the demonstration farm in the university. I am looking forward to studying in demonstration farm next week.
Nov 4 (Sat)	No training
Nov 5 (Sun)	I had a poultry examination by Dr. Narin. The examination was about diseases, lesions, vaccines, anatomy and so on. It was very difficult. I studied with Japanese friends yesterday, but I could not answer a lot of questions. This is a good opportunity to review what I learned in poultry unit.
Nov 6 (Mon)	In the morning, we had a class about dairy farming in Thailand. I studied milk production system, veterinary service, vaccination program, and so on. I found a lot of differences between Thailand and Japan. In the afternoon, we went to the demonstrated farm in the university and looked for problems in this farm. I found some cows are very thin. I suggested that body condition score is related to milk production because of negative energy balance.
Nov 7 (Tue)	We went to the demonstrated farm. We decided the topic for the assignment. The topic of our group was using pedometer for improvement of heat detection. We started analyzing farm data. The work was very hard because some data were not recorded accurately. We also reviewed the reproductive index such as heat detection rate, fertilization rate,



	pregnancy rate, days open, and so on.
Nov 8 (Wed)	We went to the demonstrated farm. We had a class about reproductive examination. I learned postpartum examination and pregnancy diagnosis by rectal palpation or transrectal ultrasonography. After that, I practiced rectal palpation actually. I checked the condition of ovaries one by one. Moreover, I had a chance to try the ultrasonography. I could show the right ovary on the screen, but I could not keep it for a long time. I need more practices about ultrasonography.
Nov 9 (Thu)	We prepared the presentation for tomorrow all day. The work continued until 1 a.m. I think we did our best. I am so sleepy.
Nov 10 (Fri)	We had a presentation today. In the morning, we finished making slides at last and practiced the presentation. In the afternoon, our group made the first presentation. We were happy because our presentation went well. I also listened to presentations by other groups. I got interested in the presentation about Polioencephalomalacia (PEM) by thiamin difficiency.
Nov 11 (Sat)	No training
Nov 12 (Sun)	No training



Nov 13 (Mon)	I came to Nong Pho to study in bovine unit. In the morning, we visited some farms with a vet clinician. In the first farm, I didn't anything because the purpose of visit was update of data. In the second farm, a cow was suffering from dystocia. The cause of dystocia was abnormal presentation of fetus. The clinician tried to fix it under anesthesia, but it was too difficult. The farmer decided to give up and cull the cow. The last case was a calf with congenital malformation. The clinical sign was no anal orifice, depress, low suckling response, lateral recumbency, and arthrogryposis. The case looked very severe. The farmer chose euthanasia. Today was a bad day because we could not help any cases.
Nov 14 (Tue)	I visited some farms to see cases. The most impressive case was a 8 months pregnant heifer. The main complaint was kicking her belly. We found arrhythmia and rumen hypermotility from the physical examination. I tried rectal palpation and touched the fetus. The response of the fetus was strong. So, we concluded that the movement of fetus made the heifer uncomfortable or painful and it caused the clinical sign of kicking her belly. Moreover, arrhythmia and rumen hypermotility was not big problems because this heifer had appetite. One of the causes of rumen hypermotility is overfeeding. In this case, the owner is just waiting for the parturition without treatment.
Nov 15 (Wed)	I visited some farms to see cases today, too. Our group was lucky because we had cases of sheep and goat. In the sheep case, I learned ovine pulmonary adenomatosis (OPA) and FAMACHA score. In the goat case, I saw entropian for the first time. I was so fun because I got a lot of new knowledge.
Nov 16 (Thu)	I visited some farms to see cases, too. In the first farm, we saw a mastitis case. The udder was swelling and hot, and there were a lot of clots in the milk. We collected the milk sample for the laboratory examination. Moreover, I experienced rectal palpation in various reproductive status. In other farms, we saw lameness cases. In many cases, cows needed hoof trimming and treatment.
Nov 17 (Fri)	In the morning, we treated a goat in the hospital. The goat had ataxia and nystagmus. We injected the glucose and thiamin into the vein. In the afternoon, we had a presentation. Our group made a presentation about calf diarrhea. This was a good chance for me to review the differential diagnosis of calf diarrhea.



Nov 18 (Sat)	No training
Nov 19 (Sun)	No training
Nov 20 (Mon)	Today, I learned in exotic animal unit in the animal hospital of Bang Khen campus in Bangkok. I saw various cases, for example, birds, rabbits, and turtles. I was asked to try the physical examination of a rabbit with problems in eyes. So, I checked palpebral and menace, but the rabbit had no menace reflex. After that, I knew that it was normal, because rabbits have no menace reflex. It is very surprising and interesting for me.
Nov 21 (Tue)	I studied in the animal hospital, too. Today, I saw a lizard case and a bird case mainly. The species of the lizard was bearded dragon. The lizard had an abscess at the base of the tail. In this case, I got the new knowledge that lizards have a hemipenis at the base of the tail. The bird case also had an abscess at the eyelid. We tried to diagnose following POMR (problem oriented medical record).
Nov 22 (Wed)	We had a case presentation today. Our group made a presentation about the bird with an abscess. The teacher said we should use all the information and connect each information. I learned all the information is important for diagnosis. And I will keep in mind to follow POMR when I see a case.
Nov 23 (Thu)	Today, I joined ICVS (international conference on veterinary science) held in Bangkok. Firstly, I listened to a seminar about acupuncture in small animals in English. It was interesting for me although I can't trust in all of the ancient Chinese medical philosophy. However, our group had to go to listen to the wildlife seminar because we study in wildlife unit this week. I couldn't understand the seminar because it was in Thai, but I could catch only the word which means veterinarian in Thai. I could not get any knowledge and time was just passing by. In break time, the teacher gave a lecture about wild animals in Thailand. I was very interested in the project to save wild elephants. The project includes treatment, artificial



	insemination, transportation, and sometimes euthanasia. I want to know more about wild animals in Thailand.
Nov 24 (Fri)	No training
Nov 25 (Sat)	No training
Nov 26 (Sun)	No training
Nov 27 (Mon)	I studied in equine unit. In the morning, our group took care of a pony in the hospital. Her name is Ovaltine. She has been suffering from chronic diarrhea for two months. In the afternoon, I learned physical examination in horse. I examined heart rate, respiratory rate, temperature, gut sound. Moreover, I collected blood from a horse. It was easier than small animals.
Nov 28 (Tue)	Today, we went to the military hospital. There were a lot of horses with some problems. One of the problems was lameness. They were cleaning and treating their hooves. I tried lameness diagnosis with a Thai friend. It was difficult for me. Moreover, I saw castration surgery and teeth trimming. I had a lot of good experiences today.
Nov 29 (Wed)	In the morning, we took care of Ovaltine. We checked her feces under the microscope. My friend found a protozoa, but I could not find it. In the afternoon, a horse with neurological sign ran away from the hospital. But teachers and friends found the horse and he came back to the hospital immediately.



Nov 30 (Thu)	We took care of Ovaltine, too. When we took her outside, she looked very happy. In the lecture, I learned diseases in horse, for example, hygroma, colic, ascariasis, and so on. After that, we were waiting for cases in the hospital but we had no case today.
Dec 1 (Fri)	No training because of VISA extension
Dec 2 (Sat)	No training
Dec 3 (Sun)	No training
Dec 4 (Mon)	
Dec 5 (Tue)	
Dec 6 (Wed)	