

## To Chulalongkorn University

### Kazuki KUBOTA, 4<sup>th</sup> year

I studied at Chulalongkorn University in Thailand from March 6th to 29th as a student of the IVEP program. Chulalongkorn University is established in 1917 and is the oldest university in Thailand with a rich history and currently has 18 faculties. The total number of students, including undergraduate and graduate students, is about 40,000. In Japan, it is known as the most famous university in Thailand. The Small Animal Teaching Hospital, where I interned, has 17 clinical departments and is a very large university hospital with 10 floors. I was able to participate in three departments: general internal medicine, exotic animal medicine, and surgery. In the general internal medicine department, there were opportunities to consult with ophthalmologists, dermatologists, neurologists, and oncologists depending on the patient, so I was able to observe these departments just a little.

First, I would like to state the training I learned in the general internal medicine department. The role of general internal medicine was to classify cases. As mentioned earlier, there are many clinical departments in the university hospital, so it was necessary to instantly classify whether or not a referral to another department was needed and what kind of treatment was appropriate. Unlike in Japan, I was impressed by a large number of FeLV-positive cats, injuries caused by street dogs, and trauma from traffic accidents in Thailand. Additionally, since the treatment costs at university hospitals in Thailand are about four times cheaper than at general private hospitals, it was also very impressive that more than 100 cases visited the general internal medicine department alone each day. While Hokkaido University Veterinary Teaching Hospital is a secondary hospital, Chulalongkorn University also provided primary care services, such as vaccinations and fluid therapy. Furthermore, the proficiency level of Thai students left an impression on me. In Thailand, students can obtain their national qualifications in their fifth year, and the sixth-year students take part in hospital rotations for a whole year. As a result, the proficiency level of sixth-year students who participated in the internship with me was quite high, and they taught me everything I didn't know. Not only holding animals and examinations but also blood collection and simple tests were performed by the students, and I felt that the level of achievement of



General Internal Medicine Practice

the students at graduation was incomparably higher compared to Japan. In addition, the fact that such education was being provided was the most impressive. The teacher in charge of the general internal medicine department said that general internal medicine is very interesting because they should face a wide variety of diseases every day, and that was the reason they chose general internal medicine.

Next, I participated in the exotic animal medicine department's training. Due to the training schedule, I could only participate for one day, but since there is no exotic animal department at Hokkaido University, it was a new experience for me. It was also refreshing and exciting for me to see animals that



Chinchilla After Surgery

I am not used to seeing in Japan. I examined animals ranging from rabbits, guinea pigs, and chinchillas to pygmy slow lorises, sugar gliders, and prairie dogs. In particular, I was impressed by a chinchilla with a fractured tibia. According to the owner, the chinchilla's hind leg got caught in the cage wire, and it broke while struggling. Oblique fractures were observed in both proximal and distal parts. After the examination, the chinchilla was transferred from the exotic animal department to the surgery department and an orthopedic surgeon performed the operation there. They performed external fixation with intramedullary pins, and I was amazed by the technique of inserting pins into the chinchilla's extremely thin tibia. After the surgery, I was allowed to watch its condition in my arms until it woke up. After he was fully awake, the chinchilla was handed over to the owner. In Thailand, the demand for exotic animals is increasing, and the exotic animal department was relatively newly established. There are lectures on exotic animals, so the curriculums for being a veterinarian are different from Japan. Although it is a separate department, the teachers from the exotic animal department are also involved in research and medical care for marine animals.

Lastly, I participated in surgical training. In the surgery department, about 5 to 10 surgeries were performed daily, and the responsibilities were divided between soft tissue and orthopedic surgery. Emergency surgeries were also performed, though not every day. In addition to the surgeries, daily examinations were conducted. During the examinations, neurological tests and dislocation examinations were performed, and for outpatient cases, treatment using Multiwave Locked System (MLS) therapy lasers was provided. During the tests, the Thai students and I were taught by the teacher, who pointed out any abnormalities as we learned together.

Life in Thailand was a refreshing experience. In March the average daytime temperature was around 35°C (95°F), which was very hot, and the traffic was so heavy that I think I never needed so much courage to cross the street in Japan. The food was also different from Japan, so I spent the first week struggling with stomachaches every day. However, it was amazing how I was able to adapt to this environment within one or two weeks. My mornings were spent commuting to school using motorcycle taxis just like local students. During lunch, I spent time with friends while eating tapioca. At night, I would buy and eat dinner at the market. Chulalongkorn University is located in the city center of Bangkok, so once I got used to it, I was able to live a very comfortable life. On holidays, I was guided by a teacher in Chulalongkorn University and students to explore Ayutthaya and spent a day. I think we couldn't have planned by ourselves. On another weekend, I visited Phuket with another member, allowing us to fully enjoy Thailand beyond just Bangkok.



At a Restaurant in Ayutthaya with Thai Students

In conclusion, I would like to express my gratitude to Dr. Navapon of Chulalongkorn University for organizing such a fulfilling program, to the teachers at the animal hospital for their guidance, and to all the students who took care of us. By participating in this program, I was able to experience a variety of things and broaden my view. Thank you very much.

## To Chulalongkorn University

Hana HASHIZUME, 4<sup>th</sup> year

### General Medicine

I spent the first week of my stay at the Department of General Medicine. Dogs and cats that come to the hospital for the first time are first examined here, and then, if necessary, receive treatment and tests in other departments. The Chulalongkorn University Companion Animal Hospital is a general internal medicine department within a large general hospital that provides both primary and secondary care, so the waiting room was always busy with a very large number of patients. While spending time in this department, I was able to get a rough idea of what kind of pets are preferred in urban areas in Thailand, how they are kept, and what diseases are seen. The average amount of time spent on each case was small, and during the consultation, the owner and veterinarian basically communicated in Thai, so it was difficult to keep up until I got used to it, but the doctor explained each case to me, and it was a very informative and fulfilling training experience. As is characteristic of veterinary practice in Thailand, owners play a large role in this hospital. Weights and measures are taken outside the waiting room, retention is done jointly under the direction of the veterinary nurses, and it is the owners who carry the animals that have undergone surgery around the hospital. Therefore, when measuring TPR, drawing blood, or performing ultrasound examinations, the owner is by their side. This is a nerve-wracking situation, especially for the students who are doing the practical training, however, perhaps due to the fact that university hospitals charge much less for treatment than private hospitals, we saw almost no signs that the owners were bothered by the students' presence. When the nurse gave instructions, most owners would grab the animal by the neck and hold it in place without resistance. I had thought that the common sense of how to treat animals in different countries must not be the same, but I was surprised and impressed when I actually saw this. I had a chance to talk with some of the owners during the waiting time. We were able to ask them why they chose the different treatment plans and what they thought of the private veterinary clinics. The doctor was also willing to allow us to perform physical and other examinations. After the examination, the time spent listening to the doctor's thought process that led to the diagnosis was like an answer-answer session, and I was able to experience the interesting aspects of internal medicine. General internal medicine is a department where cooperation with other



General Medicine Treatment

departments is important, and during the training, we visited various departments such as neurology, oncology, dermatology, and ophthalmology. In addition, together with polyclinic students from Chulalongkorn University, I participated in consultations and treatment in the diagnostic imaging department and the emergency department. In a hospital in a country with such a tradition of dividing the hospital into many departments, it is clear that each department has its own color and atmosphere for veterinarians. In a sense, the differences between departments may be easier for veterinary students to understand than hospital training in Japan when they consider which department to specialize in.

### Department of Exotic Animals

Thanks to the arrangement of the doctor who was in charge of us at the Department of Internal Medicine, we were able to participate in the training at the Department of Exotic Animals. We were together with sixth-year students whom we had met at the Department of Internal Medicine. As a bird

lover, I was envious of the opportunity to learn about exotic animals as a compulsory subject at Chulalongkorn University. The acupuncture department across the hall from the general internal medicine department also offers practical training for students. I thought it would be a great advantage for students to have the opportunity to study in a number of unique departments. However, the students' opinion was that there were not enough opportunities for students to learn about farm animals on campus. When I told them that I came from Hokkaido, they were often envious of the large number of cows. Thailand has many cultural similarities with India, and cows are basically cherished. I do not think there are many Holsteins in this hot country, but when they see a dog or a cat with a white background and black patches, everyone gathers around and starts loving them, saying "cow dog", or "cow cat". For Hokkaido, which has many black and white cattle, there may have been other admiration factors besides the fact that it has a thriving snow sports industry. Surgeries on exotic animals are performed both by veterinarians in this department and by surgeons, and on this day, I was able to observe a professor of the exotics department remove a tumor from a sugar glider. It was very interesting, because even the injection technique was the first time to learn.

### Surgery

We observed the OR, where surgery is performed, and the OPD, where outpatient consultations are conducted. I had a lot of first-hand experiences, such as participating in a fluoroscopy, in which stem cells are injected into the intrathecal space while X-rays are taken. I gained a lot. It seemed that there were relatively many orthopedic surgeries due to traffic accidents and bite wounds; as far as OPD is concerned, bite wounds seemed to be the most common case. In addition, as a hospital that also provides primary care, there were quite a few dental surgeries as well.

### Laboratory Animal Facility

On the first day, I told them that I belong to the laboratory of Laboratory Animal Science, and on the last day I was allowed to visit the Laboratory Animal Center at Chulalongkorn University. This was a very valuable experience directly related to my specialty.

### Sightseeing

I will not go into detail here, but I visited Ayutthaya, the three major temples, museums, etc., and gained a lot of insight. In Bangkok, as long as I was careful about crossing the street, I did not feel uneasy walking around alone during the daytime. I would like those who are going to Thailand on IVEP to enjoy sightseeing on weekends. You should carry your passport with you because you may be asked to show it. The Thai classics are first of all Ramayana, so if



mural of Wat Phra Kaew

you are interested in them, you might want to study them beforehand. It seems that all Thai schools teach it. When I was talking with the resident doctors, I told them that I had tried to read it in the past, but it was too long and I failed at the beginning of the book, and they sympathized with me.

### Acknowledgments

I would like to take this opportunity to thank all the people who were involved in our study at Chulalongkorn University, including the doctors who took care of us in the Department of General Medicine, and the Surgery Clinic.



X-ray photography



outpatient consultation room of surgical department

## To Chulalongkorn University

### Takaya HOKETSU, 4<sup>th</sup> year

Chulalongkorn University (CU) is the most traditional university in the Kingdom of Thailand and provides high level education. The animal hospital of CU is very large, with ten floors in the main building. In addition to internal medicine and surgery, there are various departments such as dermatology, rehabilitation and ophthalmology. Unlike the Hokkaido University Veterinary Teaching Hospital, the animal hospital of CU provides primary care.

In this program, I mainly observed two departments, surgery and medicine clinic, for about seven days each. I was on a different schedule from the other students so that I had to do almost of all practice alone. I was anxious before my practice began.

During the surgery term, I observed OPD and OR for five of the seven days. I was able to observe many kinds of surgeries, including orthopedic and soft tissue surgeries. I have two memorable cases of surgeries. The first was a case of flail chest caused by a wild dog bite. Doctors need to do wound debridement and established chest drainage. Moreover, doctors must check infectious disease of some kind. Flail chests caused by wild dogs are rare cases in Japan. The other was left radius fracture fixation in rabbits. It was a valuable experience for me because rabbit surgeries cannot be observed frequently in Japan. I was surprised at the thinness of the bone and its structure. It was very exciting for me because I could not only learn about surgery techniques, but also understand the differences from Japan. For example, Etomidate was used as an anesthetic in CU, however the medicine is not used in Japan. In OPD, I observed the euthanasia case that the owner and the doctor need to select. I learned that euthanasia was not allowed in Thailand before this program started, I realized that the articles on the internet unreliable. There were also differences in the drugs administered during euthanasia. In Japan, I think that pentobarbital is used in many cases, but in CU, pentobarbital was not used and the KCl method was often used.

For the remaining two days, the doctor kindly allowed me to visit the rehabilitation department. It was very interesting for me to see the laser therapy, electrotherapy, acupuncture and so on. Pool for animals and a water treadmill which I had never seen before so that I was excited.

In the first day of my surgical training, I became friends with the sixth-year students of CU. When I didn't seem to understand their explanations of surgical treatments and procedures in Thai, they taught me in English kindly. They also took me to lunch with them and introduced me to various restaurants.

There is one of the most memorable events for me. When I visited a restaurant in canteen which my friends recommended, the cafeteria staff said "Welcome to Thailand! Today is free!". Furthermore, when we were eating lunch after I thanked her, she said "Eat this food with your friends!" and brought me some dumplings as a service. I felt the kindness of the Thai people and my anxiety were gone.

In the surgery term, I was also able to participate in the sixth grade class because the teacher encouraged me to join the class. The teachers immediately changed the language of the class from Thai to English for me to understand the classroom. It was a very valuable experience for me to directly feel the different classroom atmosphere from Japan.



with canteen staff



with surgery team

Seven days of surgery passed quickly and it was time for the medicine clinic department.

In the medicine, after listening history taking from patients and conducting basic tests such as blood tests, the doctor decided on treatment plans. Because of the large number of wild dogs, ticks, and mosquitoes, the disease transmission situation was different from that in Japan. I would like to introduce two particularly memorable cases. The first case was the dog with symptoms of vomiting. The owner said that the dog was often infected by ticks. Results of the 4Dx test, we found to be infected with anaplasmosis and ehrlichiosis. The second case was the stray cat with skin peeled off its face and body surface. After skin test, the doctor diagnosed Sporothrix. I heard that this disease has become more common in Thailand in the last four years. Both cases were very interesting because they are rarely seen in Japan. Before the examination, the doctor told me past medical history and today's main problems, and after the examination, she translated all the conversations with the owner.

In addition to the practical training, I also enjoyed my vacation such as having dinner with my CU friends, going bowling and karaoke after the weekday practice, visiting many temples and the ruins of Ayutthaya on weekends, tasting delicious food, walking around the road on elephant rides. We also took a plane to Phuket and enjoyed our vacation by snorkeling and other activities. I recall that because I did not wear sunscreen, I got too much sunburn and had to practice with aloe gel, which was recommended by my friends. I was able to make many special memories.

On the last day of my stay at CU, the veterinary technician who retired the Royal Thai Navy gave me the cap with the Navy logo. I will never forget the kindness of him. This cap is one of my precious treasures.



with the best veterinary assistant

Through this exchange program at Chulalongkorn University, I was able to understand how veterinary medicine in Thailand differs from that in Japan, along with its social background, and I was able to broaden my own perspective. Moreover, I am sure that the connections with many friends and doctors will be useful in the future. I will never forget this special three weeks.

I would like to express my deepest gratitude to the teachers and staff who were involved in this wonderful program at Chulalongkorn University and Hokkaido University. Thank you very much.