

IVEP

Hokkaido University-The University of Edinburgh International Vet Exchange Program 2023

Achieving Global Standards of Excellence in Veterinary Education



Student Report from School of Veterinary Medicine,
Hokkaido University
September 11th to 22nd

Project Managers

The University of Edinburgh

1

Professor Toshio TSUBOTA

Laboratory of Wildlife Biology and Medicine, Hokkaido University

Yuto INOUE, 5th year

I participated in the IVEP program in Edinburgh with 3 purposes: 'studying animal welfare', 'observing Hospital for Small Animals (HfSA)', and 'improving my English skill'.

About animal welfare: On the first day, we attended lectures on initiatives in HfSA and how to give enrichment to hens and gave presentations on each theme which every student had chosen in Japan. On another day, we received training on welfare in a bleeding farm of pigs where people made efforts to improve pigs' welfare and on welfare of exhibited animals in Highland Wildlife Park. Through these experiences, I realized that although providing appropriate enrichment to animals could be challenging, it would not only contribute to well-being of animals but also lead to our benefits. However, we must be careful of the risk that we may not be able to offering animals appropriate choices, and in other words, it may even be our self-satisfaction and lead to their annoyance (for example, when the environment we give exhibited animals might be entirely different from their natural habitats).



First day presentation

About staying in HfSA: We had an opportunity to stay in Hospital for Small Animals for half a day, so I participated in oncology department. Vet school of the University of Edinburgh is quite extensive with so large campus that have various research faculties, such as the Roslin Institute, and have more than 140 students in a single year, and students and teachers are from a wide range of countries mainly from Europe, North America, and Africa. The small animal hospital also appeared quite big with many people and rooms. Moreover, I noticed that they have highly specialized departments with some residents and interns, which allows them to keep the number of cases per a veterinarian lower. This, in turn, gives them more time for each case than in Hokkaido University Veterinary Teaching Hospital. In the case that I saw, two final-year students worked together as a team and did clinical activities such as asking the owner the history in detail, analyzing urine, and sampling patient's blood by themselves, which is a different educational system compared to Hokkaido University. One thing that I was impressed was that every department holds meetings every morning. In these meetings, students briefly explained the history and plans of examinations of new and follow-up cases of the day, and then residents and interns provide additional information.

These meetings can provide opportunities for students to present what they searched for disease of the cases and for every staff member to be informed about other cases, which I found to be an excellent practice. Another point is that in the spacious imaging room there are multiple computers for scanning CT and PCs for reviewing images of past cases in a row like a semi-circle. This design allows several people to view the computer screens during scanning CT and communicate with other veterinarians who are diagnosing images with different PCs. Those communications among veterinarians are much useful for students to study and comprehend their cases. Overall, the program allowed me to find several differences between Hokkaido University and the University of Edinburgh in small animal clinical practice including their curriculum. It also helped me identify the strong point as a student of small animal clinic in our university and I found this program a highly interesting experience.



spacious imaging room

Impressions: Looking back on this program, I have a reflection to share that I should have worked more on my listening skills. While the local teachers and students made a conscious effort to speak slowly and clearly, there were still many situations when I needed to keep up with conversations among local people, such as at the small animal/equine hospital. I had been studying English using tools like the accompanying CDs with my vocabulary books and occasionally watching foreign films since I started preparing for the IVEP program interview test. However, I found that English speakers often speak faster than I had expected, and my brain had difficulty in keeping up. This was particularly challenging during the first week of the training. On the other hand, I gained a lot from this program. One thing that impressed me the most was observing the lifestyle of local students. It may be influenced by their personalities and cultural backgrounds, but I got the impression that all the local students were full of life. For example, they engaged in lively conversations with fellow students at the university's cafes or on bus, and during clinical rotations they actively participated in discussions. When they had questions, they didn't hesitate to ask. Their communication skills were excellent and their enthusiasm for learning was evident. Additionally, I noticed that they were good at balancing their focus. They diligently prepared for cases taking comprehensive notes and then actively engaged in lectures. Although there are cultural and societal differences, and the emphasis on clinical work versus research may vary, I was motivated by the same student spirit, and this experience greatly enhanced my enthusiasm for studying veterinary medicine. Overall, this program was enjoyable and fulfilling.

Lastly, I would like to express my gratitude to all the people who helped this program: Dr. Tsubota, Dr. Nakao, Dr. Yanagawa, Dr. Yokoyama, MS. Oikawa, Dr. Ohtani, Dr. Neil, Dr. Holly, Dr. Nicola, the students of Edinburgh who supported us, and the participants who shared this journey with me...Thank you very much!

Rio HARADA, 5th year

During the program of Edinburgh University, we mainly studied about animal welfare, veterinary medicine of small animal and horse, and wildlife.

At the first day of the program, we attended the workshop about animal welfare of companion animal and farm animal and studied about that. In Hokkaido University, we learned animal welfare in terms of the five freedoms, but the recent global standard is the assessment based on the five domains. Five domains consist of nutrition, environment, health, behavior, and mental, and animal welfare changes through interactions among these domains. In the workshop, we got the lecture and also made a presentation of our own theme. I introduced about animal welfare of laying hens and learned one thing through preparation for this presentation. I learned that animal welfare is based on a balance between positive and negative factors. In Japan, battery cage is the most popular to keep laying hens, but it is prohibited in UK because it is against animal welfare. Instead of it, enriched cage or free range are major now. It is seemed that animal welfare of laying hens improved due to this reformation, but something got worse. The injury rate increased when a large number of hens were kept in the same space and the cases of diseases increased due to the difficulty of managing the sanitary environment. Thus, although animal welfare has improved in terms of natural behavior, it has got worse in terms of physical health.

Furthermore, it is the same for animal welfare of wildlife. During the program, we visited Highland Wildlife Park and studied about animal welfare and conservation of wildlife. In the park, there is the area that were accessible only by car, where Przewalski's wild horse and bison were free ranging, and carnivores were displayed in a vast enclosure. The park was completely different from zoos in Japan. The most impressive of all was the exhibition of polar bear. The enclosure of polar bear was the vastest in the park, with an electric fence surrounding a hillside covered with tall grass and flowers. Two polar bears were in this vast enclosure. We was able to observe a variety of behaviors in a short time: climbing hills, getting in a pond, napping on glass, and communicating with each other. Polar bear is known as a species that shows remarkable stereotypic behavior due to a monotonous environment with no stimulation, and they are often seen moving back and forth in exhibit cages. I was surprised to see the polar bears in the park behaving naturally in contrast to those in Japanese zoos. The park uses score sheet to assess the animal welfare of exhibited animals, and we had an opportunity to experience the assessment of snow leopards and tigers. And here, same as in the case of laying hens, we realized the difficulty of the balance of animal welfare. The enclosures of snow leopards and tigers, like the enclosure of polar bears, were vast and there are a variety of enrichments and shields that allow animals to hide from humans. This enrichment can reduce their stress.



Polar bears in Highland Wildlife Park

On the other hand, there is the risk of injury due to the complex structures in enclosure, and it is more difficult to observe the animal, making it difficult to assess their health conditions. Thus, I realized that exploring a point of compromise for the balance between the mental and physical health of animals will be challenge for animal welfare in the future.

On the last day of the program, we visited the small animal hospital. I was surprised to see the vet students actively participate in examinations and treatments. Also we can see the teachers and students discussed very actively. These activities are different from those of Japanese hospitals. We had an opportunity to talk with the vet students of Edinburgh University and exchange information about each University. We also visited the Roslin institute at Edinburgh University. This is the insitute where Dolly the cloned sheep was born. The Institute has a variety of departments such as genetics, molecular biology, virology, bacteriology, or mycology, and there are many cutting-edge equipment. These equipment are common property of the institute and can be used by anyone who applies for them. What was most surprising was that each equipment had a specialist attached to it, and the specialist is also in charge of experiments using it and management. If one wanted to get the results of experiments using the experiment, and there is no need to learn a complicated operation. In this way, I got the impression that Roslin institute was very efficient. In addition to this laboratory, I was surprised to see the poultry facility where genetically modified chickens are generated. Because now I am studying about avian influenza virus, I am interested in it. In this poultry faculty, the researchers generated genetically modified chickens that are not infected with avian influenza virus by knocking down the host factors involved in the replication of the virus. In Japan, there is no facility that generate genetically modified chicken, so I was very impressed to see this facility and the idea that they tried to make uninfactable chickens.



Roslin Institute tour

I was able to participate in a variety of activities through this program. Especially, I think it was a valuable opportunity that I was able to learn about animal welfare. I felt that what I learned in this time will be very useful for me to work as a vet in the future because vets have an important role for the improvement of animal welfare. In Japan, animal welfare has not spread among people, so vets are responsible for enlightening them as a specialist of animals. In addition, there are many difficult technical terms in English, and I felt that I still need to learn English more in order to work internationally. I would like to make use of this experience in order to make more efforts and become an international veterinarian.

Finally, I deeply thank those who planned and managed this program of Edinburgh University.

Risa YASUDA, 5th year

My experience at the University of Edinburgh was extremely valuable and something I couldn't have obtained through my veterinary education in Japan. The experience related to animal welfare was especially memorable. Therefore, I would like to focus on animal welfare and introduce the appeal of the University of Edinburgh.

· Experience at a hospital

At the University of Edinburgh, we had the opportunity to visit both a horse hospital and a small animal hospital. In the horse hospital, we observed the care provided to horses and the methods used to examine their lameness issues. What surprised me here was the level of importance placed on the well-being of the patients, which differed from what I had seen in Japan. In Japan, when horses get agitated during treatment, sedatives and nosebands are often used. However, at Edinburgh, there were alternatives like giving treats to the horses or allowing them to graze outside. Additionally, there were two large exercise areas used for diagnosing lameness in horses. Furthermore, they had devices attached to the horse's legs or head that allowed real-time monitoring. As someone who had limited experience with lameness diagnosis, I found it to be a challenging task. Therefore, I found these devices very convenient, as they made the changes due to treatment immediately apparent. These facilities and equipment were something I hadn't encountered in my veterinary education in Japan, and they were both refreshing and fascinating. During our visit to the small animal hospital, I had the opportunity to observe the Diagnostic Imaging Unit, and I noticed significant differences compared to Japan. Specifically, I was surprised to learn that it's common to perform ultrasound examinations on animals under sedation. Performing ultrasound examinations while the animal is sedated not only reduces stress on the animal due to immobilization but also allows for more delicate and precise imaging, as there is minimal movement of animals. However, I realized that using sedation for ultrasound examinations is a complex issue, as it comes with certain risks. Furthermore, it was interesting to note that ultrasound examinations were not as common in primary care hospitals in Scotland compared to Japan. This difference, coupled with the tolerance for sedation, made me think that the acceptability of sedation by pet owners is one reason why ultrasound examinations are more prevalent in advanced medical facilities.



· Highland wild life park

Highland Wildlife Park has several significant differences from Japanese zoos. First, they only had animal species that can adapt to the natural environment of the Highland region. In contrast, in Japan, it's not uncommon to find species from tropical or polar regions, which are not suited to the Japanese climate, being kept and displayed outdoors to attract visitors' attention. The second point is that they provide very spacious enclosures for each species on their extensive grounds. This is in stark contrast to many Japanese zoos, where animals are often housed in small enclosures. The difference in space allocation was quite significant, and it made a strong impression on me. Third, I was very impressed by the fact that in Scotland, there are laws that prohibit zoos from operating unless they meet certain standards of animal welfare. To assess whether Highland Wildlife Park indeed met these standards, I conducted an evaluation of the Amur tiger facility based on an animal welfare assessment sheet. This evaluation involved scoring 31 specific items categorized into four areas: environment, health, nutrition, and behavior. It allowed me to assess whether the facilities and animal interactions were appropriate. During this evaluation process, I had the opportunity to discuss the issues I observed with experts from the Royal Zoological Society of Scotland (RZSS), which was a highly valuable experience.



· Pig Unit

In the Pig Unit, we primarily observed research activities related to farrowing crates for pigs. Currently, it's common practice to confine mother pigs in immobile crates to prevent them from accidentally crushing their piglets shortly after birth. However, extended confinement of this nature over several weeks has raised animal welfare concerns. As a result, various designs of farrowing crates have been developed, and research is ongoing to improve pig welfare. In Japan, the use of farrowing crates is widespread, and furthermore, a 90% of farms use gestation crates, where pregnant sows are confined for the entire 100-day pregnancy period (gestation crates are already banned by law in Scotland). One of the reasons why discussions on these issues haven't progressed much in Japan may be the limited awareness and interest of the general public in the lives of animals on farms. In Japan, consumers often prioritize factors like genetically modified foods and food additives when making food purchase decisions. In contrast, in Scotland, I noticed a significant presence of food products explicitly stating that they are produced on farms with a strong focus on animal welfare. This indicates a higher level of concern among the Scottish people regarding the welfare of livestock, including pigs. In Scotland, objective evaluation methods for pig welfare are well-established, and I had the opportunity to learn and apply these assessment methods in the Pig Unit. This experience allowed me to deepen my scientific understanding of animal welfare, ensuring that welfare assessments are not based on vague criteria but on objective measures.

· Conclusion

In conclusion, through my experience during the Edinburgh exchange program, I gained valuable insights and deepened my understanding of animal welfare, particularly in contrast to the situation in Japan. Efforts to enhance animal welfare in Japan are still evolving, with numerous challenges ahead. Regardless of the specific field I choose in veterinary medicine, I aspire to be a veterinarian who approaches the profession with a broad perspective and actively contributes to the improvement of animal welfare. I am deeply grateful to the individuals who supported and made this invaluable experience possible, including Professor Holly, Professor Neil, Professor Nicola, Mr. Otani, Professor Yanagawa, Professor Yokoyama, Mr. Oikawa from IVEP, and all the staff and students who generously shared their knowledge during my time in Edinburgh. Thank you very much.

The University of Edinburgh

Kazuki KUBOTA, 5th year

I was dispatched to the University of Edinburgh in the UK from September 11th to September 22nd as part of the IVEP program. During this program, I undertook clinical training for both small and large animals at The Royal (Dick) School of Veterinary Studies (RSVS). I also participated in conservation activities at Carrifran Wildwood and Spey River, and assessed animal welfare at pig farms and at the Highland Wildlife Park. First, I'd like to discuss the clinical training for small and large animals. The small animal hospital at RSVS had many more specialties than Hokkaido University. We could choose from departments like internal medicine, oncology, radiology, anesthesiology, and neurology. I chose to observe the internal medicine department. In this department, after briefly reviewing case studies, students and staff would have tutorials. During the tutorial, we discussed topics like cat urine tests and infectious diseases for about 1.5 hours. Although they only dealt with about 8 cases a day, their procedures seemed very efficient. This was due to a well-staffed team and delegating some specific tasks, like imaging. I noticed that they made good use of their ample time for discussions with residents, promoting a deeper understanding of clinical knowledge. Even though my observation was only in the morning, the hospital staff were very kind, and I had a fulfilling experience. Comparing with our university, the services offered seemed similar. However, I felt that they place a great emphasis on clinical education, securing human resources for tutorials, and having a longer rotation period in the hospital. Next, I'd like to share my experiences with conservation activities. At Carrifran Wildwood, I learned in-depth about the forest regeneration efforts that have been ongoing since the 1990s. This project aims to recreate the primitive forest that existed before human intervention. The main activities involve planting native species and removing invasive ones. The sight of barren land, stripped of vegetation due to overgrazing by livestock, was truly shocking. The goal of the project isn't just planting trees, but creating a habitat for a diverse range of flora and fauna. I got the chance to walk through the regenerating forest and learned a lot about these efforts. The stark contrast between the conserved areas and the non-conserved ones emphasized the importance of conservation. In the areas without conservation efforts, there wasn't a single tree, showcasing the dire state of the land.

Moreover, I'd like to report about my canoeing experience at Spey River. The flow of the Spey River was calm, and I leisurely traveled down about 15km. Although the weather was a bit chilly, I managed to enjoy canoeing without falling into the water. It was my first time canoeing, but I gradually got used to it and eventually had a lot of fun. At the Spey River, we can also enjoy fishing through a registration system. The fees for this seem to be used for river maintenance. As a result, I realized that the river remains pristine and beautiful. Engaging with Scotland's nature allowed me to truly appreciate its beauty and value.



First day presentation



Scottish breakfast

Finally, I'd like to discuss animal welfare. I attended a conference on animal welfare at the University of Edinburgh, where I took lectures on anesthesia for companion animals and on poultry farming. A lecture from a nurse specializing in anesthesia particularly stood out, and I was impressed with the University of Edinburgh's approach to minimizing pain for treated animals. There were clear differences from practices at Hokkaido University, such as the use of sedatives during ultrasound examinations. This experience made me more aware of how much the general public understands about animal welfare and how it's communicated. Specifically, we debated how to effectively convey the importance of animal welfare to the public. While it can be challenging to instill understanding, I felt that letting pet owners directly experience the effects of basic procedures can be essential.

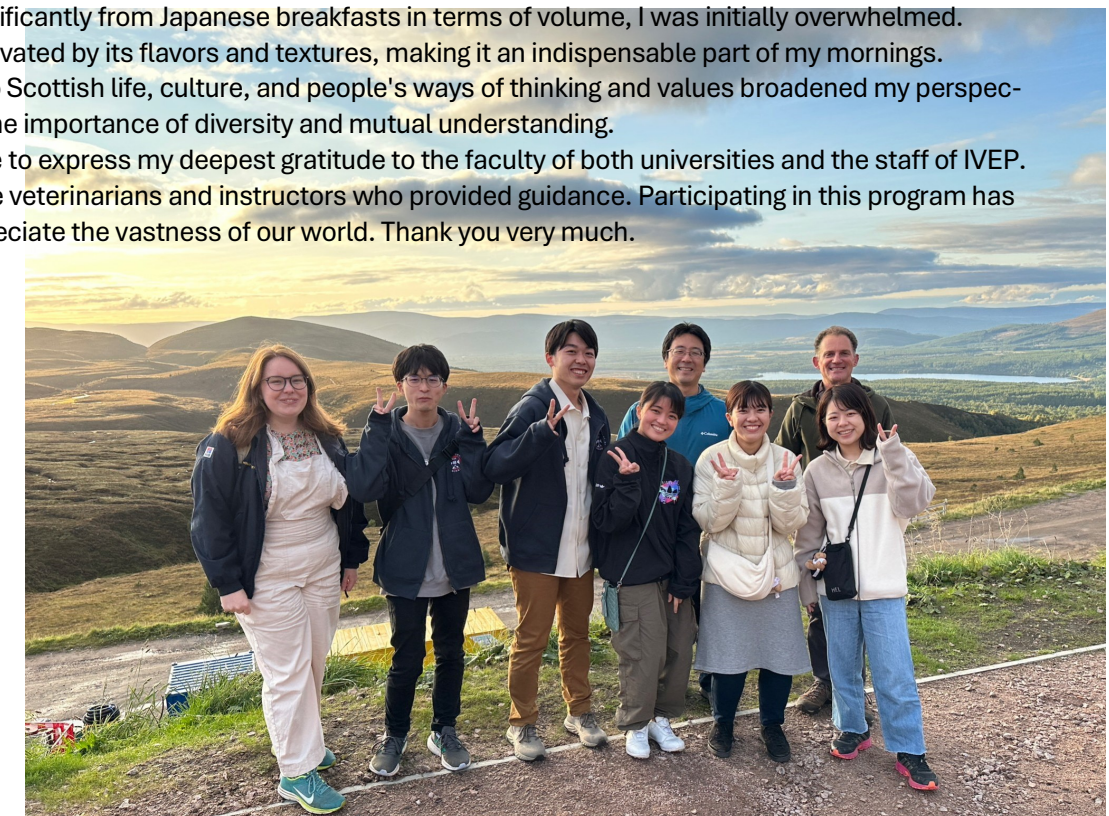
We also presented at the conference. Presenting and participating in Q&A sessions in English, in an English-speaking environment, was a first for me and quite nerve-wracking. Comparing myself to other presenters, it wasn't just about pronunciation but also the style of presentation that was different. I was especially struck by their ability to engage with the audience and convey their message, and I'd like to be mindful of that in future presentations.

Among the things I learned in Edinburgh, evaluations related to the practical application of animal welfare stood out. I visited a pig farm and the Highland Wildlife Park to directly observe and evaluate the state of animal welfare. At the pig farm, I was surprised to see facilities designed with respect to the pigs' natural behaviors and characteristics. For instance, there were designs allowing pregnant sows to hide from other pigs and spaces emulating group living, reflecting a genuine concern for individual welfare. Meanwhile, the Highland Wildlife Park, set against the backdrop of Scottish nature and culture, primarily showcased endangered species. Their commitment to ensuring animal welfare by limiting the number of displayed animals and the size of the exhibit area was striking. I was in charge of evaluating the Amur tiger, and behavioral observation-focused evaluations proved challenging. I also learned about the challenges related to the captivity of Japanese macaques and other animals. This experience deepened my understanding not just of the theory behind animal welfare but also the real-world challenges and efforts. I was profoundly moved by the local dedication to ensuring animal welfare and addressing related challenges.

About Life in Scotland

September in Scotland felt a bit chillier than Hokkaido. Its capricious weather, characterized by almost daily rains even if brief, made umbrellas indispensable. Nevertheless, the frequent showers enriched the landscapes with lush greenery and offered glimpses of rainbows. The Scottish people's attitude towards dogs was genuinely heartwarming and astounding. In restaurants, hotels, and even on public transportation, it was a common sight to see dogs naturally accompanying their owners. In the UK, nearly all public transport allows dogs to accompany their owners without the need for cages, and often without any charge. This widespread acceptance of dogs as an integral part of daily life was palpable. I also wish to touch on the food experiences. The traditional Scottish breakfast, especially dishes like haggis and black pudding, was remarkable not just in appearance but in taste too. Contrasting significantly from Japanese breakfasts in terms of volume, I was initially overwhelmed. However, I was soon captivated by its flavors and textures, making it an indispensable part of my mornings. In general, the exposure to Scottish life, culture, and people's ways of thinking and values broadened my perspective and reminded me of the importance of diversity and mutual understanding.

Lastly, I would like to express my deepest gratitude to the faculty of both universities and the staff of IVEP. Also, a big thank you to the veterinarians and instructors who provided guidance. Participating in this program has genuinely helped me appreciate the vastness of our world. Thank you very much.



The University of Edinburgh

Fuka WATANABE, 4th year

I participated in the IVEP program at the University of Edinburgh from September 13 to 19. On the 13th, we went to a conference at the University of Edinburgh, listened to some presentation on animal welfare, and gave a presentation on animal welfare that we had prepared in advance. On the 14th, we went to Carrifran Wildwood to learn about the reforest and hiked to learn about the ecology of various plants and animals. On the 15th, we visited and saw Equine Clinics in the morning, and in the afternoon, we visited a pig unit to see a pig farm and evaluate the animal welfare of pigs there. On the 16th, we moved to Aviemore, and on the 17th, we went canoeing on the Spey River, observing wildlife and learning about ecosystems. On the 18th, we visited Highland Wildlife Park, and toured the zoo and worked in groups to assess the animal welfare of snow leopards and tigers. On the 19th, we visited Small Animal Clinics in the morning, breaking up into individuals and visiting different departments. In the afternoon, we attended a lecture at the Roslin Institute and also toured the institute. As I mentioned above, it was a very productive period of the program, with a variety of experiences each day.

Next, I would like to introduce three things in the program that particularly impressed me. The first is about animal welfare. Actually, one of the reasons I originally applied for this program was because I wanted to learn about animal welfare in the UK. Therefore, I was very interested in animal welfare lectures about small animal clinical care and animal welfare in egg-laying hen and broiler production. It was also the first time for me to evaluate animal welfare in the zoo or the pig unit, and it was a good experience for me to learn how to evaluate. I also found free range eggs in supermarkets and dishes using free range eggs in food stalls in the UK, and I was reminded of the great interest people in the UK have in animal welfare. Furthermore, I had the opportunity to talk with Yuki Otani, a graduate of Hokkaido University who is currently conducting research on animal welfare at the University of Edinburgh. Ms. Otani believes that because of the differences in culture and national character between Japan and the U.K., the way of animal welfare in the U.K. does not necessarily suit Japan, and that there may be unique ways to improve animal welfare in Japan. As I had been looking at the animal welfare in the UK and thinking only about what Japan lacks, her way of thinking was an eye-opener for me, and I thought that she was right. I learned a lot from her.

The second was a clinical tour. In this program, we visited Equine and Small Animal Clinics, and in both cases, I was very surprised at the quality and size of the facilities. Equine clinics was divided into an inpatient wing and an operating room wing, and there were a great many stables for horses. In the UK, there are many cases that horses are privately owned, and equine clinics are developed very well. There are an indoor room and outdoor grounds for gait testing of horses to examine horse's gait on both hard floor and soft soil. In the gait test we saw, electronic devices are attached to horses to analyze their leg movements. It was the first time for me to see equine clinical practice itself, so everything was new and interesting for me.

In Small animal clinics, I visited the anesthesiology department. I had imagined that veterinarians in the anesthesiology department manage anesthesia during surgery, but I knew that they must do more various tasks, for example, preparation for anesthesia, meeting before surgery and post-operative animal management. Unfortunately, I didn't understand everything because technical terms were difficult for me. But everyone in the anesthesiology department explained the equipment and anesthesia to me very kindly. With this experience, I would like to visit an anesthesiology department in Japan someday and see the difference.

The third was a tour of the University of Edinburgh's Faculty of Veterinary Medicine. We were given a tour of the Veterinary School's Skills Lab, library, practice rooms, lecture rooms, and study rooms, and were surprised to find that they are very well equipped. There were a lot of spaces for students to study, and desks there were very large. Also, in the library, there was a long whiteboard on the wall, on which there were many detailed notes written by students. I felt environment for studying was excellent.



Horse gait analysis

Next, I would like to introduce what I felt throughout the program. First, I keenly felt my own lack of English ability. In particular, listening was very difficult, and there were many times when I could not understand what the other person wanted to say, which was very frustrating. I also felt that I should have studied English vocabulary for technical terms more. I will make more efforts to improve my English, driven this regret.

Second, I was very impressed by the high level of motivation of the students at the University of Edinburgh. One student happily told me that although she found studying veterinary medicine to be very demanding with a lot to learn, it was also very enjoyable. She attended the conference we had herself and said she also enjoyed it very much. I also met other 5th year students on clinical rotation who were very motivated, actively expressing their opinions and asking many questions. I was very impressed by these students, and I strongly hope to be like them in the future.

This program gave me many experiences that I could not have experienced in Japan, and it was also an opportunity for me to reflect on myself.

If there are any students who are not sure whether to participate in this program, I think they should take the first step and participate. I am sure that this program will give fruitful experiences. Also, if you decide to participate, I strongly recommend that you learn English (especially clinical terms) beforehand.

Finally, I would like to express my sincere gratitude to Dr. Yanagawa and Dr. Yokoyama for leading us, to the professors at the University of Edinburgh for taking care of us, to the students of the University of Edinburgh who showed us around Edinburgh, and to all those who were involved in making this program a successful one. Thank you very much.



The library of the university of Edinburgh



Interaction with students of the university of Edinburgh

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Achieving Global Standards of Excellence in Veterinary Education



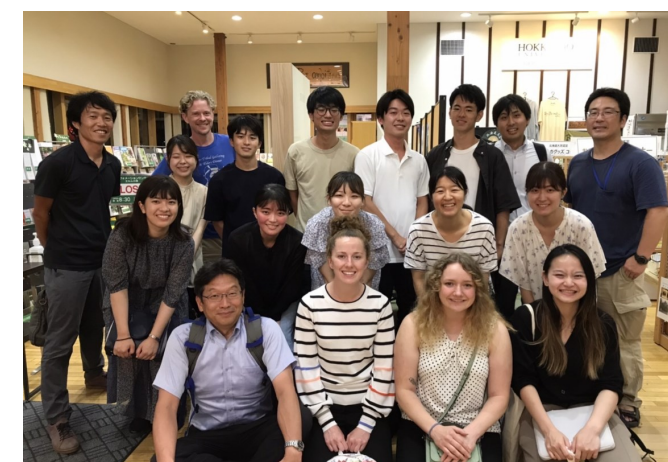
Student Report from
Royal (Dick) School of
Veterinary Medicine in Edinburgh,
August 20th to August 28th

From The University of Edinburgh to Hokkaido Uni

Celest Oon, 4th year

The exchange between Hokkaido University & Edinburgh University has been a wonderful & very enlightening experience. It was a great opportunity to learn more about the farming climate of Hokkaido and about the conservation work that is important in Japan. In particular, learning about the conservation of bears & deers in Shiretoko and the many difficulties faced by the rangers there was very interesting! The talk hosted by Shiretoko National Park was very insightful and taught me a lot about how important it is to mediate human & nature conflicts, especially in areas such as Shiretoko where human and bear conflicts are one of the highest in the world.

I also really enjoyed the opportunity to present in educational conference and learn more about the advancements in Hokkaido Veterinary medicine as well as advancements in conservation in Japan.



In particular, I found the presentations regarding polar bear conservation and the clinical cases at the Hokkaido University Animal Hospital especially riveting. I would love to get the opportunity to have a more in-depth tour of the hospital and witness some of the advanced procedures that take place in the practice!

The exchange also provided with the opportunity to whale watch for the first time. It was an amazing experience getting to see such majestic animals up close. I was extremely impressed by the professionalism of the workers in letting us observe the whales from a distance but also in making sure that we do not disturb their natural behaviour. I am forever grateful to Hokkaido University for allowing me to experience such a memorable moment of nature up close and personal.

I am also especially thankful to the Hokkaido University students for being so welcoming and accommodating of us and making sure to strike up a conversation in spite of the language barrier. I made some of my best memories on this trip due to how kind and enthusiastic the Japanese students were and I sincerely hope that I get a chance to visit them in the future!

This trip has been both very fun and very rewarding and I am am very grateful to both the Edinburgh University and Hokkaido University staff and students for making this possible!

From The University of Edinburgh to Hokkaido Uni

Jewellian Welcher, 4th year

My name is Julie Welcher, and I am a 4th year graduate entry student in the BVM&S program at the Royal (Dick) School of Veterinary Medicine in Edinburgh, Scotland. I attended the International Veterinary Exchange Program this summer and had an incredible time learning about wildlife conservation, zoonosis, and the veterinary programs in Hokkaido! This program provided a wonderful opportunity to dive into the One Health Initiative by exposing all of us in the program to specialists from a variety of fields in animal management. The One Health Initiative is a national and global approach to the goal of reaching optimal health between people, animals, plants, and the environment by the collaboration between all fields of work, be they human doctors, veterinarians, researchers, or any other professional in health or environmental maintenance. The specialists who taught us were working toward the aim of improving public health and facing environmental concerns with two main objectives. To briefly summarize the knowledge they imparted on us, the first objective they addressed was to educate as many people as possible, including our program, on the animals in their expertise such as, bears, deer, salmon, raptors, and common pets like dogs and cats. Specifically, they educated us on the animal's interaction with society and their impact on the world around them. The second objective being to implement and maintain programs that both improve the interactions between people and wildlife or pets, as well as direct the impact of different species on the environment around them by managing their health and population. The photos I shared are from just a few of the places we were able to see over the course of the program including a tour of Obihiro University, the trip to Kushiro Wildlife Conservation Center, and the visit to Shibetsu Salmon Park.

This program not only educated the students involved but also created an environment where the international students from University of Edinburgh and the students from Hokkaido University and Kyushu University, all from different backgrounds and many from different parts of the world, could come together and build friendships that cross nationalities and language barriers. This program is a remarkable foundation to build positive relations between people from different countries learning about the issues we and upcoming generations will face together. We were able to learn together, live together, and laugh together throughout the seemingly short week-long program that will forever live in our memories and will impact how we move forward in our careers and lives.



From The University of Edinburgh to Hokkaido Uni

Kelly Fahy, 4th year

My experience during the exchange between Hokkaido University and the University of Edinburgh was fun and enlightening. I studied Japanese language and culture during my first degree at North Carolina State University and have long desired to combine my interest in Japan with my passion for veterinary medicine. It was comforting to see so many similarities between my own university and the universities of Hokkaido and Obihiro, and I was inspired by some of the differences. For example, Hokkaido University's lecture hall that is designed to observe surgeries and accommodate live large animals, as well as Obihiro's recreational horse riding.

The joint conference on the conservation science of polar bears put the study of wildlife in a new perspective for me. Before, I was only vaguely aware of the effects that climate change was having on polar bears' environment, but I came to appreciate it much more as I learned about polar bear biology, reproduction, and their relationship with seals and the impact that has on the food chain. The student research component also introduced several biological concepts I had not even considered, such as using moss to study the livability of other planets and trade ships transporting invasive species attached to their hull. As we made our way to Eastern Hokkaido, I was surprised to learn that Shiretoko had such a concentrated brown bear population and that so much consideration was taken to protect the town and people's livelihood. The guides at Shiretoko Nature Foundation were excellent at explaining the protective mechanisms they implemented and culture of the area. I enjoyed my visit to Kushiro Wildlife Center more than I expected. I am not particularly interested in avian wildlife, but I learned a lot about the limitations and successes of rehabilitation and some pertinent infectious diseases and control mechanisms. Of course, the highlight of the trip for me was seeing the tanuki at Asahiyama Zoo, who carry the namesake of my own dog, Tanuki.

I'm grateful for this experience and the kindness of everyone on the trip. The Japanese students on the course with us made it even more enjoyable, and we had a great time practicing English and Japanese together and learning about each other's language quirks. Studying with biology students rather than vet students also helped broaden my perspective on wildlife and conservation in ways that will help me stay mindful of One Health concepts.

