北海道大学 One Health フロンティア卓越大学院プログラム One Health Allyコース Student Free Design Activities報告書 Hokkaido University
WISE Program for
"One Health Frontier Graduate School of Excellence"
One Health Ally Course
Student Free Design Activities Report from

Student Free Design Activities (One Health on-site Training) 報告書 Report

報告者 [Reporter]

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活動報告 [Activity Report]

※活動内容が判る様な写真や図表を加えて下さい。/ Provide photos, tables and figures that clearly show the activities during the period.

タイトル [Course Title]	Ally course, Module 4, Student Free Design Activities	
実施期間 [Periods]	June 13 – June 27	
共同実施者 [Other participants]	DARAWIROJ Kanittha MULENGA Nomsa Handondo	
言語 [Language]	English	
実施場所 [Location]	Texas A&M University (College Station, Texas) AVMA Convention Center (Austin, Texas)	

申請時計画の実施報告 [Report how you carried out your plan in the application form]

Did you follow the schedule you initially planned? Did you get the outcome(s) you expected? Please describe what you did during the activity period in detail.

Following the planned visit to Texas A&M University, I participated in the AVMA Convention. The experience was more diverse than I had initially anticipated.

1. Texas A&M University (June 14-20)

I visited the Gastrointestinal Laboratory in the Department of Small Animal Clinical Sciences at Texas A&M Veterinary Medicine. The lab is divided into several sections, and in the Microbiome Science section, fecal samples, serum assays, and various other types of samples are sent from all over the world by mail each day for testing. The fecal samples undergo various tests, including GI panel tests and the canine microbiota dysbiosis index, among others. If dysbiosis is detected, they perform fecal transplants. The Gastrointestinal



Laboratory also has its own histopathology section, highlighting the lab's significant scale. Along with faculty members, postdoctoral researchers, graduate students, and technicians, it was particularly interesting to see veterinary medicine school students participating in the lab as part of their student work.

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At the Small Animal Teaching Hospital, I participated in the Diagnostic Imaging department. X-rays, CTs, and MRIs are primarily handled by technicians, with light sedation or anesthesia often accompanying the procedures. The case's supervising veterinarian orders the examinations, and if consultation is needed, the Diagnostic Imaging veterinarians suggests appropriate types of modalities, exams and positioning. They primarily work in the imaging reading room, interpreting images or conducting ultrasound examinations. Diagnostic Imaging residents participate in both large and small animal cases and are involved in clinical practice and research projects. I had the opportunity to attend a research progress report meeting, where experts in radiology from both large and small



animal fields freely exchanged research ideas. The weekly meetings involved film reading within a limited time, with participants sharing their answers and reasons, highlighting the importance of speed and accuracy in clinical settings.

Beyond clinical fields, I also visited the Department of Veterinary Pathobiology. At Dr. Albert Mulenga's laboratory, which focuses on tick research, I observed experiments and tick incubation. Their primary research goal is to understand how ticks feed to identify targets for tick vaccines, ultimately aiming to develop vaccines that prevent tick feeding and disease transmission.

2. American Veterinary Medical Association (AVMA) Convention 2024 (June 21-25)

Compared to traditional academic conferences, the AVMA Convention had a strong emphasis on practical aspects for working veterinarians. There were lectures on various themes, including small animal practice, large animal practice, public health, and one health. Sessions on how to use Artificial Intelligence in veterinary medicine were particularly interesting, with venues packed with attendees, reflecting the high level of interest and enthusiasm. While my approach to AI is research-oriented, the sessions focused on practical applications in small animal



practice, such as veterinary-specific voice input for charting and client email responses. There was significant interest in technologies that can be used on the front lines of veterinary practice.

In addition to lectures, there were numerous events for young veterinarians to network with senior veterinarians. A small animal clinician sitting next to me introduced me to Korean and Japanese veterinarians working in LA after hearing about my career with veterinary medicine licenses in both Korea and Japan. It was impressive to see veterinarians actively promoting their strengths and connecting with others to help each other along their career paths.

目的達成狀況報告 [Report how you achieved your goal/objectives listed in the application form]

Did you achieve all the goals you initially planned? If not, please describe why you failed to fulfill your objectives.

During my visit to Texas A&M University and participation in the AVMA Convention, I achieved all my initially planned goals. At Texas A&M, I gained insights into advanced clinical practices and research methodologies. I was particularly impressed by the involvement of veterinary medicine school students in lab work alongside faculty, postdoctoral researchers, graduate students, and technicians, highlighting a strong collaborative environment. The AVMA Convention emphasized practical aspects for working veterinarians, including the use of AI in veterinary medicine. The sessions and networking opportunities allowed me to connect with professionals and gain practical knowledge applicable to my research and clinical interests. These experiences have deepened my understanding of clinical medicine in the U.S. and laid the groundwork for my future career pathway in the U.S.

One Health Approach実践報告 [Report how your activity could link to One Health Approach]

Did you have a chance to experience One Health approach (collaboration with people from other academic areas)? Please describe some of the examples of One Health approach you implemented in your activity. Otherwise, explain the possibility(ies) how you could link this activity to One Health approach for your future.

At the Gastrointestinal Laboratory of Texas A&M University, the integration of veterinarians,

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microbiologists, immunologists, and pathologists highlighted the interdisciplinary effort essential for comprehensive health research. Additionally, in the Department of Veterinary Pathobiology, Dr. Albert Mulenga's lab focused on developing vaccines for tick-borne diseases, demonstrating the direct impact of such research on both animal and human health. At the AVMA Convention, sessions on antimicrobial resistance and Lyme disease surveillance in dogs emphasized the role of veterinarians in public health. These experiences showcased the practical applications of One Health and provided insights into how I can contribute to this approach through interdisciplinary research and collaboration in my future work.

備考 [Remarks]

※ 報告書を作成後、担当教員に確認をお願いし署名をもらってください。PDFファイルとしてVetlogから提出してください。

提出先:「Student Free Design Activities報告書」

Please ask your instructor to check this report and get his/her signature. The scanned report is to be submitted through Vetlog 「Student Free Design Activities Report」.