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学年	D4
出張先	UC-Davis, California and Washington State University, USA
出張期間	February 17th to 24th
目的	Learn about the One Health Institute at UC-Davis and the Paul G. Allen School for Global Animal Health at WSU

活動内容

The trip to the University of California-Davis and Washington State University was a multipurpose trip, including a visit to the Marine Mammal Center in Sausalito, California, discussion with officials and graduate students of the One Health Institute at UC-Davis, and discussions with officials of the Paul G. Allen School for Global Animal Health and the Department of Veterinary Clinical Sciences at WSU.

The Marine Mammal Center is a private, non-profit organization and facility built for rescue, rehabilitation, and research of injured or ill wild marine mammals and sea turtles. The trip to the Marine Mammal Center was planned and organized by myself. The purpose of the visit was to see the largest marine mammal rescue facility in the world, and learn more about injuries and illnesses of the marine mammal species found in California. Since its establishment in 1975, the facility has treated over 17,500 cases, including a broad range of species which include both endangered and non-endangered species. Approximately 600 miles of California coastline is covered by the facility, and 600 to 800 cases are seen each year. Much of the care of animals and upkeep of the facility is performed by volunteers. The facility performs not only rescue and rehabilitation, but is deeply involved in discovering causes of illness and injuries of marine mammals, and much research is performed in determining the demise of released treated animals.

At the One Health Institute at UC-Davis, we spoke with members of the Wildlife Health Center and the Emerging Pandemic Threats Program PREDICT.

They explained a number of their high-profile projects in detail. They explained their program for treating ill and injured mountain gorillas, and how they have taken a "One Health" approach, educating locals to be involved, and treating people (and their families) who come in close contact with gorillas for parasites and other communicable diseases, as well as providing annual checkups. On another project, the Institute has helped a community improve habitat of the Salish Sea of Washington state and British Columbia for harbor seals by performing research on the declining grebe population, rescuing seals, and restoring the abalone population--taking a whole-ecosystem approach to recovering seal populations. The Institute has also played an important role in the ongoing recovery of the California condor from extinction, lead a Livelihood Improvement project in Tanzania establishing the first molecular laboratory for wildlife disease surveillance in that country, and taking a "One Health" approach to life enrichment by investigating disease in wildlife, treating livestock, and educating people. We also learned more about the PREDICT project, which has discovered 200 novel viruses and has helped build diagnostic testing capacity in 17 countries, along with several other projects covering a broad spectrum of activity.

At the Paul G. Allen School for Global Animal Health, we actually learned very little about the program as it is new. However, we were taken for a tour of the new facilities, and we were allowed to see the Biosafety Level 2 research laboratories working on Nepah virus and *Yersinia*. Furthermore, Dr. Memon explained that the school had been started with a very focused goal of improving animal health worldwide, because from past experience, WSU has found that "One Health" is far too broad of a concept for a single department to realistically tackle. Therefore, the WSU College of Veterinary Medicine decided to focus on the single area that is their expertise, knowing that that alone will improve the livelihood of people around the world.

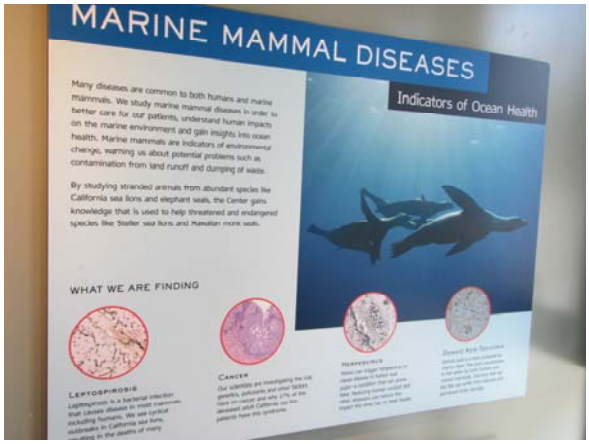
In addition to the student goal of getting exposure to the "One Health" related programs of the two universities, we (the students) had the opportunity to sit in on the discussions between Dr. Tsubota and members of the two schools concerning accepting Hokkaido University students for internship opportunities. There were a few very consistent issues brought up by all of the people we met on

the American side that need consideration before any agreements really can be made. Although the ambitious nature of the Leading Program was met with high regard, there were many questions related to the curricula of the ZCE and CHE programs and the requirements of the international internships.

First of all, a number of professors expressed a wish to see a clear explanation of who would teach the ZCE and CHE programs, whether they were sufficiently qualified, how they would teach such subjects with a "One Health" perspective, what exactly the students would be expected to learn, and how the program would deal with the large variation in knowledge of incoming graduate students of various backgrounds. In other words, a clear, thorough, and accurate syllabus is needed for the entire program in order for foreign researchers to be able to assess whether students graduating as zoonosis control or chemical hazard experts really are experts in those fields. Furthermore, some form of test needs to be required so that evaluation can be made as to whether a student satisfactorily learned the material.

Secondly, as the internship programs are the area that most affect the professors we negotiated with, they expressed a great deal of interest in this. They required detailed information about the length of the internship, the purpose and goals of the internships, whether students will be required to complete specific tasks or projects or learn specific skills, whether there is funding for the student or bench fees available for the accepting laboratory, how much time 2 credits represents etc. Furthermore, it was clear that all final decisions whether a student could be accepted for an internship lay with individual professors. It is necessary, therefore, for a student to find a lab which interests them, have a reason to go to the lab, contact the professor, discuss a mutually beneficial plan for what the student will do in the accepting professor's lab, then finally get permission from the school only if negotiations are successful and the professor is willing to take the student on.

From the overall agreement of all the professors we spoke to, individually, it is evident that the CZE and CHE curricula and internships need thoughtful planning and need to be clearly explained before any professor in the United States is likely to greet the Leading Program with open arms.



Diseases seen at the Marine Mammal Center.

Diagnostic lab at the Marine Mammal Center.

Pens at the Marine Mammal Center.