

**Research Activity Report**  
**Supported by “Leading Graduate Program in Primatology and Wildlife Science”**  
 (Please be sure to submit this report after the trip that supported by PWS.)

	2015. 04. 17
<b>Affiliation/Position</b>	Primate Research Institute/D1
<b>Name</b>	Duncan Andrew Wilson

<b>1. Country/location of visit</b>
Kyoto, Seto, Seta, Kumatori, Inuyama, Japan
<b>2. Research project</b>
Inter-lab
<b>3. Date (departing from/returning to Japan)</b>
2014.04.08 – 2014. 04.11 (4 days)
<b>4. Main host researcher and affiliation</b>
Assistant Professor. Hiroyuki Tanaka, Genome Diversity Section, Primate Research Institute
<b>5. Progress and results of your research/activity</b> (You can attach extra pages if needed)
Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.
<b>A.) Please describe your impressions regarding the current situation of biodiversity research at Kyoto University.</b>
<p>Although I am not familiar with biodiversity research in general, I learnt that researchers at Kyoto University are involved in a wide variety of biodiversity research at locations across the country. Perhaps the most controversial current situation I learned about during Inter-lab trip was regarding the Kyoto University Research Reactor Institute, which I understand has been shut down as a direct result of the Fukushima Daiichi nuclear disaster. Although it was explained that the KU Research Reactor Institute has additional safety measures in place to ensure that such an accident cannot happen in the event of a tsunami, it seems that many Japanese people are still greatly opposed to restarting nuclear reactors across the country.</p> <p>Overall, I think that Inter-lab is a very good way to strengthen links between researchers and students at different biodiversity research facilities across Kyoto University. In most universities it is quite unusual to visit departments and laboratories outside your own, but I feel that the experience has helped to give me a broader overview of the Division of Biological Science and a greater understanding of my position within the university.</p>
<b>B.) Please describe the involvement/connection of your future research through the perspective of biodiversity research.</b>
<p>As my research is focused on cognitive experiments with chimpanzees at the Primate Research Institute (PRI), my main connection with other biodiversity research is at Kyoto City Zoo (KCZ) and the Japan Monkey Center (JMC). During the trip to the Great Ape enclosures at Kyoto City Zoo, we were introduced to the same type of experimental room and computer apparatus used for cognitive experiments with chimpanzees at the PRI. Therefore, there may be some possibilities for future research with the chimpanzees and gorillas at the zoo. At the Japan Monkey Center there are also chimpanzees and gorillas. However, there are no apparatus set up for cognitive experiments. In addition, the PRI currently has no infant chimpanzees available for research. Both KCZ and JMC have an infant chimpanzee, so there may be the potential to conduct cognitive research with infant chimpanzees too, particularly at KCZ. Kyoto University Kumamoto Sanctuary also looks like a suitable place for cognitive research with chimpanzees and bonobos. I look forward to visiting Kumamoto Sanctuary too in the near future.</p>

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C.) Please write your thoughts on the administration and content of this Inter-lab coursework. In addition, please share your thoughts on next year’s Inter-lab coursework.

**Research Reactor Institute:** The trip to the institute was brief, but well organised and on time. Although the lecture before visiting the reactor was in Japanese, I thought some of the research presented was interesting and important – particularly Boron Neutron Capture Therapy (BNCT) for treating cancer. The visit to the nuclear reactor itself was a rare opportunity to see inside the reactor and learn first-hand how it is operated.



Photo A. Kyoto University Research Reactor.



Photo B. Explanation of how a nuclear reactor works.

**Seto Marine Biological Laboratory:** The trip to the laboratory took approximately four hours from Kyoto, but the bus was very comfortable and we arrived on time. On the second day we listened to several lectures from researchers talking about their chosen species in Japanese, e.g. water spider and jelly fish. Then we were taken on a tour of the field site to see the aquarium, different vegetation and insect species, and features of the coastline. Although the tour was very visual and entertaining, it would have been nice for our guides to use a bit more English in their explanations.

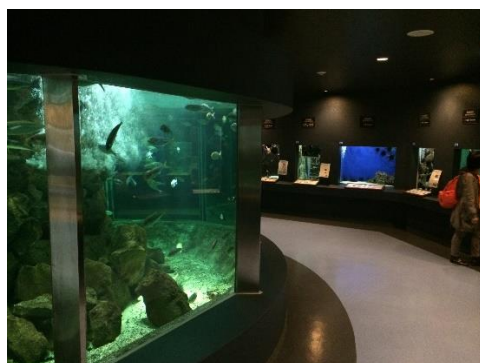


Photo C. Kyoto University Shirahama Aquarium



Photo D. Coastline around Seto Laboratory.

**Kyoto City Zoo:** We were guided around the zoo in Japanese by Professor. Tanaka and shown a wide variety of animal species kept in living conditions ranging from good to poor. As the zoo is the second oldest in Japan, some of the animal enclosures are too small and not animal welfare friendly - I noticed a number of animals performing stereotypic behaviours. I hope the zoo will continue to make an effort to improve the living conditions of the animals kept there. Finally we had an opportunity to see a collection of taxidermies and animal bones. Our accommodation (Kyoto Kyouiku Bunka Center) was located within walking distance from the zoo. However, we had to travel quite a long distance to the meeting place outside Yoshida Campus to get the bus to the zoo. It may have made more sense to walk there directly.

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Photo E. A tiger pacing stereotypically at Kyoto City Zoo.



Photo F. Explanation of primate bone structure.

**Center for ecological research:** We listened to several lectures from researchers and toured some of the facilities to see research with caddisflies. Although the visit was brief, I was impressed with the effort which the staff made to give their lectures in English. In fact, for the benefit of the foreign participants some researchers gave their presentations only in English, which was very thoughtful and a great help.



Photo G. Facilities for breeding and raising caddisflies.



Photo H. Caddisfly larvae.

**Primate Research Institute and Japan Monkey Center (JMC):** It was interesting to hear about the history of Japanese primatology and the Primate Research Institute from the Director of the Institute, Professor. Hirai. Although we only had a brief tour, we had a chance to see the chimpanzee and Japanese macaque enclosures. The monkey collection at JMC is impressive in terms of the number of species. However, there are a number of welfare issues regarding lack of space and enrichment, and overcrowding. I also noticed different species of monkeys were isolated in individual cages in a single room for various reasons, which was a welfare issue. On a more positive note, I talked with one member of staff who was trying out a food puzzle as enrichment for the capuchin monkeys for the first time. This was encouraging to see and I hope more enrichment work will take place in the near future.

**Overall recommendations:** As an international student, my main recommendation for next year would be for researchers to include more English and pictures in their talks, or at least provide a handout with basic information in English, so that foreign students can also understand the gist of the research being presented.

**A.) Others**