1. **Country/location of visit**

Danum Valley, Borneo, Malaysia/Hanoi, Vietnam/Bogor, Indonesia

2. **Research project**

Non-invasive analysis of adrenal hormones in wild orangutans and Japanese macaques/Presentation at Conference

3. **Date (departing from/returning to Japan)**

2014.08.02 – 2014.08.22 (21 days)

4. **Main host researcher and affiliation**

Renata Mendonça, Primate Research Institute/XXV Congress of the Primatological Society/Symposium on Diversity and Conservation of Asian Primates

5. **Progress and results of your research/activity** (You can attach extra pages if needed)

I have been living in Japan for 3 years, but for the first time I had the opportunity to take a trip to the developing countries in south east Asia, and I can say that it was an extraordinary experience. In the period of three weeks I traveled to three countries (Malaysia, Vietnam and Indonesia), and in each of them I learned a little bit about their history, culture, and of course, primates.

First I went to Danum Valley conservation area, the largest protected lowland rainforest in Sabah, Malaysia. This place is the home of more than 340 species of birds, 124 species of mammals and 72 reptiles, and 56 amphibians. Among primates, we can see pig-tailed monkeys (*Macaca radiata*), long tailed monkeys (*Macaca fascicularis*), red-leaf monkeys (*Presbytis rubicunda*), and orangutans (*Pongo pygmaeus*), the latter being the reason of my trip.

As part of my PhD research, I am conducting a collaborative research with Renata Mendonça, a PhD student of the Primate Research Institute. Our goal is to evaluate the hormonal profile of wild orangutans and compare with captive animals from Japanese zoos. This approach may be useful to improve the conditions of captivity and to monitor wild primate populations.

However, the purpose of my visit was not to conduct research, but to observe wild orangutans (Figure 1) and to assist the investigators on data collection. Whenever possible, we followed then from early morning (when we knew their sleeping site) until late afternoon when they go to sleep. If we had the chance, we also collected urine (Figure 2-A) and fecal samples (Figure 2-B). In one week we could find 3 orangutans and their infants (Yanti and Sely, Beth and Lom, and Lina and Kate). I have been studying Japanese monkeys for almost 3 years, which are very different from those apes in many ways. The fact that they are mainly arboreal (and sometimes it is hard to see them), solitary and larger than monkeys, I already knew from the literature. But I could experience many things I did not know: you can stare into their eyes (don't ever do this to Japanese monkeys), their aggressive display behavior is similar to humans “sending a kiss” (Figure 3), and they make many nests throughout the day, not only for sleeping (particularly the infants). On the trails we could also see pig-tailed monkeys (Figure 4-A), long tailed monkeys (Figure 4-B) and red-leaf monkeys (Figure 4-C). I was very amazed and pleased to see them for the first time in the wild: free, apparently healthy, and beautiful. This was a good experience, and I really hope to go back there someday.
Figure 1. Wild female orangutan (Yanti) and her infant (Sely).

Figure 2. Orangutan urine (A) and fecal (B) collection
In the following week, I went to Hanoi, Vietnam, to attend the XXV Congress of the Primatological Society. The conference was very productive for me. I gave an oral presentation about my previous work on adrenal hormones in Japanese monkeys, but it was good to hear the ongoing studies from other researchers on this topic. I also had the chance to meet experts and get feedback for my future research. Moreover, I helped Andrew MacIntosh to record interviews from primatologists for the Primate Cast, the podcast dedicated to primatology (Figure 5). The first episode of this series is already available on <www.cicasp.pri.kyoto-u.ac.jp/news/podcasts/ips1>.

I interviewed Dr. James Higham (Department of Anthropology, New York University, USA), Dr. Júlio César Bicca-Marques (Department of Biodiversity and Ecology, Pontificia Universidade Católica do Rio Grande do Sul,
Brazil), and Dr. Elisabetta Visalberghi (Institute of Cognitive Sciences and Technologies, Italy). It was a great opportunity to hear more about their research and it was a good training as graduate student. I also used this chance to talk to them about my research and possible future collaboration. Dr. Elisabetta has in fact agreed with my visit to Rome next year for the European Federation of Primatology meeting and to see the lab facilities of the Institute of Cognitive Sciences and Technologies in Italy. She is also my PWS Italian mentor, so I might be able to practice my language abilities when I visit her in Rome.

Figure 5. Interview with (A) Dr. James Higham, (B) Dr. Júlio César Bicca-Marques, and (C) Dr. Elisabetta Visalbergui.

Finally, I went to Bogor, Indonesia, to attend the 4º Asian Primate symposium on biodiversity and conservation of Asian primates. I heard many interesting talks and I met lots of researchers focused on primate conservation. I also had the chance to talk about my study on Japanese macaques (Figure 6), and I was surprised and happy to see many people interested in my study. In the last day, we went to Jakarta in an excursion to Ragunan Zoo. We saw many species of primates, including langurs (Figure 7-A), proboscis monkeys (Figure 7-B), crested monkeys (Figure 7-C), long-tailed monkeys (Figure 7-D), chimpanzees (Figure 7-E), and gorillas (Figure 7-F). I confess that I was not very excited to see them in cages and enclosures, especially after experiencing the wildlife in Malaysia. But I was happy to see that many enclosures have good conditions, including a huge natural vegetation and enrichment. I hope our efforts on primate research may help to provide a happy and comfortable life for those animals.
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.)

Submit to: report@wildlife-science.org

Figure 6. Oral presentation on endocrinology in Japanese macaques

![Oral presentation on endocrinology in Japanese macaques](image)

Figure 7. Primates from Ragunan Zoo, Jakarta. (A) langurs, (B) proboscis monkey, (C) crested monkey, (D) long-tailed monkey, (E) chimpanzee, (F) gorilla.

![Primates from Ragunan Zoo, Jakarta](images)
6. Acknowledgements

I would like to express my sincere gratitude to the PWS program and Prof. Tetsuro Matsuzawa for the opportunity to experience the life in Southeast Asia. I also thank my advisors, Prof. Michael Huffman and Prof. Fred Bercovitch for their guidance and support, to Renata Mendonça and the assistants Eddy, Pollye, and Mizzi, for hosting me and guiding me in Danum Valley, to Prof. Andrew MacIntosh for the opportunity to assist and participate in the Primate Cast, to Dr. James Higham, Dr. Júlio César Bicca-Marques, and Dr. Elisabetta Visalberghi for kindly agreeing in join the interview for the podcast series, to Ms. Naoko Mizuno for the pictures, to Prof. Hiroo Imai for the invitation to participate in the Asian Primate symposium in Bogor, and to all the staffs from Indonesia who guided us to the conference hall and to Ragunan Zoo.