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.)

	2018. 6. 8
Affiliation/Position	Lab. of Human Evolution Studies /M1
Name	Tsubasa Yamaguchi

1. Country/location of visit

Kyoto University, Kyoto Prefecture, Japan

2. Research project

To participate in "Genome Science Course"

3. Date (departing from/returning to Japan)

2018.5.28-2018.6.1 (5 days)

4. Main host researcher and affiliation

Dr. Miho Inoue-Murayama, Profeessor at Wild Research Center, Kyoto University

5. Progress and results of your research/activity

During "Genome Science Course", we extracted DNA from fecal samples we collected in Yakushima, and conducted sex identification and genotyping of behavior-related genes, catechol-O-methyltransferase (COMT).
It is known that there are two single nucleotide molymorphisms (SNPs) in COMT gene in Japanese macaques (Macaca fuscata), and three haplotypes teermed HT1 (C-G), HT2 (T-G), and HT3 (C-T) were found (Pflüger et al., 2016). Pflüger et al. (2016) reported that carriers of HT3 showed higher fecal cortisol excretion than non-carriers, and that HT3 might have influence on aggressiveness in Japanese macaques. In addition to DNA data from Yakushima, we obtained DNA data of Japanese macaques in Kinkazan, Koshima, and Shodoshima from Murayama-sensei, and compare haplotype frequency among these to investigate the effect of COMT gene on aggressiveness in Japanese macaques.
We found HT4 (T-T), which was not found in previous study, in Shodoshima, and reported that Shodoshima has unique composition of haplotyoes. The Kinkazan group, which was known to be more despotic than other groups, showed higher proportion of HT3, which may indicate the effect of HT3 on aggressiveness in Japanese macaques. We need further research to conclude these results. We reported these results in the 8th International Seminar on Biodiversity and Evolution held in Kyoto University on June 5th (Fig. 1)
It was my first experience to conduct DNA analysis, and I am sure that this experiment will help my research in the future.

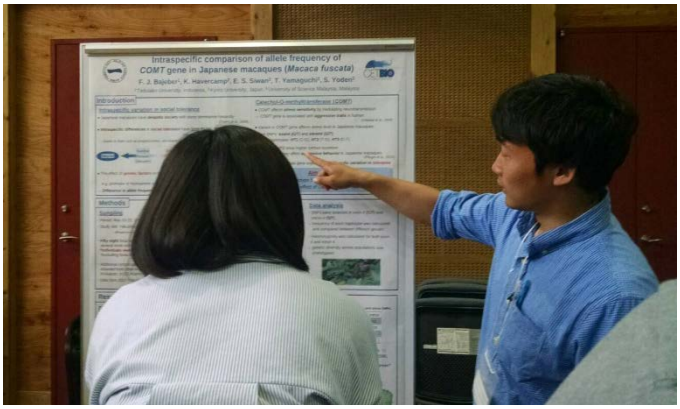

Figure 1. Poster presentation at international seminar on June 5th (Photograph by Kristin Havercamp).

6. Others

This course was supported by Leading Graduate Program in Primatology and Wildlife Science (PWS). I would like to express my gratitude to PWS for supporting us. I am also thankful to Murayama-sensei, Sato-san,

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Kobayashi-san for their support during this course.