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.)

	2014. MM, DD
Affiliation/Position	Primate Research Institute / M1
Name	Yugo Kawamoto

1. Country/location of visit

Primate Research Instutute

2. Research project

Genome Science Course

3. Date (departing from/returning to Japan)

2016. 10.24 - 2016. 10. 28 (5days)

4. Main host researcher and affiliation

Dr. Kinoshita, Dr. Hayakawa, Dr. Kishida

5. Progress and results of your research/activity (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.

We performed sex identification and hormonal analysis using fecal samples of Yakushima macaque (*Macaca fuscata yakui*) in this course.

10/24 DNA extraction 10/25 Sex identification 10/26 Hormonal analysis 10/27 Hormonal analysis 10/28 Presentation

First, we performed DNA extraction from fecal samples. Some samples didn't have information about sex because we couldn't get the information in the field. We wanted to know the sex of these samples to increase usable data in our analysis. We measured DNA concentration after the extraction. However, many samples showed low concentration. We performed sex identification by PCR and electrophoresis; however, many samples couldn't identify sex or changed the result from observation result about sex in the field. I think the cause of this result is problem how to get DNA from feces and occurring contamination of our DNA. If we get the sequence the PCR product, we can estimate how much concentration occurs from species different from monkey. This result made me sad because I usually perform my experiments using DNA.

We measured two hormone, testosterone and cortisol. We tried this experiment to show relationship between the sex, breeding season and parasites infection. I paid attention to prevent failure. Finally we got good result.

We used sex data from observation in Yakushima because the data from DNA identification couldn't be sure in this presentation. We wanted to show relationship the result of sex identification, hormonal analysis and parasites analysis; however, we couldn't find any relationship so far. We might get more interesting result than this result if we improve the processing of feces to observe parasites and focus on specific group that we follow.

This course was good experience for me because I can improve methods and processes in my future study.

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