

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.)

| | |
|-----------------------------|-------------------------------|
| | 1 Aug 2017 |
| Affiliation/Position | Primate Research Institute/M1 |
| Name | Nelson Broche |

| |
|--|
| 1. Country/location of visit |
| Yakushima, Kagoshima prefecture, Japan |
| 2. Research project |
| Study on alpha-amylase enzyme and its potential use as a acute stress biomarker in Japanese macaques |
| 3. Date (departing from/returning to Japan) |
| 10 Jul – 14 Jul 2017 (5 days) |
| 4. Main host researcher and affiliation |
| Dr. Yosuke Kurihara & Dr. Goro Hanya (Post-doctoral Fellow & Associate Professor at PRI, respectively) |
| 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. |
| <p>Itinerary</p> <p>10 July = travel, begin field work at Seiburindou</p> <p>11 – 13 July = field work</p> <p>14 July = complete field work, travel</p> <p>During this visit to Yakushima, I was able to join a team of researchers led by Dr. Kurihara for the capture and collaring of up to 6 specific Yakushima macaques (<i>Macaca fuscata yakui</i>) from 3 different troops (KwA, UmiA, UmiB) in order to study the effects of intergroup encounters on ranging behavior. I used this opportunity as a small pilot study for my ongoing master’s study of salivary alpha-amylase (sAA) enzyme as an acute stress biomarker in Japanese macaques. I was able to collect 11 saliva samples from captured monkeys (n=3) in order to assess acute stress levels. Monkeys foraging for food, spitting out chewed matter were also collected (n=4) in order to determine if [1] sAA enzyme is detectable and measurable from foraged foods and [2] act as a non-stress comparison. Samples are currently stored at -20°C and will be assayed using a salivary alpha-amylase kinetic enzyme assay kit.</p> <p>This experience was useful for my research. I am currently developing a non-invasive methodology for collecting saliva from Japanese macaques by relying on cooperation and enticing monkeys to chew on 100% cotton ropes. Deposited saliva can be later centrifuged and used to measure a variety of analytes. I hope to later use such a technique in a field environment in order to learn more about acute stress physiology of Japanese macaques.</p> |

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.)



Kurihara & Kaneko in pursuit of a Yakushima macaque (*Macaca fuscata yakui*)

6. Others

Many thanks to all team members: Dr. Yosuke Kurihara, Prof. Goro Hanya, Dr. Akiko Sawada, Mr. Takayoshi Natsume, & Mr. Akihisa Kaneko. This trip was generously supported by PWS.