


**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. 6. 15

<b>Affiliation/Position</b>	Wildlife Research Center/D1
<b>Name</b>	Hiroko Sakuragi

<b>1. Country/location of visit</b>
Japan/Kyoto
<b>2. Research project</b>
Yakushima Genome Science Course
<b>3. Date (departing from/returning to Japan)</b>
2014. 5. 29 – 2014. 6. 5
<b>4. Main host researcher and affiliation</b>
Professor Kiyokazu Agata, Department of Biophysics and Assistant Professor Takushi Kishida, Wildlife Research Center
<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.
<p>This course, following the Yakushima field science course, was mandatory for me as a PWS student. The goal was to obtain the most basic knowledge and skills of DNA analysis. I was in the beginners’ plant group, with the aim of identifying species of fern gametophytes collected in Yakushima Island using DNA barcoding technique. Our larger goal was to reveal fern diversity in Yakushima by comparing species compositions and distributions of sporophytes and gametophytes in three different locations.</p> <p>At first I had no idea what I was doing; I must say I was merely following instructions and moving my hands (my right thumb, mostly, for operating the “pipette-man”). However, after the kind explanations by Professor Fuse, our lecturer, I am happy to say that I now understand how PCR and cycle sequencing work. Unfortunately, we did not have enough time to analyze all our gametophyte samples, much less sporophytes. Luckily for us, though, after obtaining 38 DNA sequences, we found 4 possible samples of an endangered and endemic species and 1 possible sample of a new species closely related to the above. It was a good experience for us as students to have had meaningful and exciting results to show in our poster presentation.</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  </div> <div style="width: 45%;"> <p>The activities in Yakushima field science course were not my specialty, but this genome science course was completely out of my league. I have come to respect all researchers who conduct precise and time-consuming lab work, something I keenly realized I am not cut out for.</p> <p>I deeply thank our lecturers Professor Shizuka Fuse and Professor Hirotoshi Sato for patiently guiding inexperienced students like us. I would also like to thank Assistant Professor Wataru Shinohara for coming to our lab and helping us with analyzing the results and preparing for our poster presentation. I also thank our group-mate in Yakushima field science course, Mr. Satoshi Eguchi and lecturer in said course, Hiroshi Kudoh.</p> </div> </div> <p>Professor Sato (left) and one of my group mates preparing for electrophoresis (right)</p>
<b>6. Others</b>

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