

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.)

2019. 11, 13	
Affiliation/Position	Primate Research Institute/D1
Name	Vanessa Nadine Gris

1. Country/location of visit
Curitiba, Teresópolis - Brazil
2. Research project
Federal University of Paraná, Brazilian Congress of Primatology
3. Date (departing from/returning to Japan)
2019. 10. 24 – 2019. 11. 13
4. Main host researcher and affiliation
Ricardo de Castro Vilani (Professor of Anesthesiology, Federal University of Paraná), Leonardo Carvalho Oliveira (Brazilian Society of Primatology)
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>I traveled to Brazil with the main objective of presenting the work developed in PRI at the XVIII Brazilian Congress of Primatology (Rio de Janeiro).</p> <p>Before going to Rio, I attended a seminar of the Veterinary Anesthesia and Analgesia Laboratory of the Federal University of Paraná where we discussed two papers about horse anesthesia: (1) Comparison of desflurane and propofol at equipotent doses in combination with a constant rate infusion of dexmedetomidine on global and peripheral perfusion and oxygenation in horses. Neudeck S et al. Am J Vet Res. 2018 May;79(5):487-495 and (2) Effects of controlled hypoxemia or hypovolemia on global and intestinal oxygenation and perfusion in isoflurane anesthetized horses receiving an alpha-2-agonist infusion. Hopster K et al. BMC Vet Res. 2017; 13: 361. At the Department of Veterinary Sciences, I met Dr Ricardo de Castro Vilani, professor of Veterinary Anesthesiology. We discussed about collaboration, since we both are working with propofol and pharmacokinetics of opioids. Also, I met with the biologist and illustrator Gabriela Noguchi to discuss about a primate-themed flipbook. I also met a wildlife DVM (Aline Konnel) and visited Curitiba City Zoo.</p> <p>From 06 to 10 of November I participated in the XVIII Brazilian Congress of Primatology in the city of Teresópolis, Rio de Janeiro, Brazil. The theme of the conference for this year was “Educating Primates”, a very strong subject especially in 2019 where politic tensions in Brazil are resulting impacting the education and environment. On the first day, I participated on the workshop “Introduction to Scientific Illustration Applied to Primatology” taught by Dr Stephen Nash (Stony Brook University). After a brief history of scientific illustration and the works applied to primatology for educational purposes, Dr Nash provided us some material and gave us time to practice some drawing. We were drawing and colouring tree leaves by free hand. He then approached each student individually to give feedback and ask about the aspirations with illustration. The workshop was very interesting and Dr Nash keeps contact with the class by email, sending information almost weekly.</p> <p>During the congress I gave two oral presentations: the work entitled “Facial Expressions of Acute Pain in Japanese Macaques: development of an assessment tool”. For this work we studied captive macaques belonging</p>

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to the Primate Research Institute and evaluated the differences in their faces before and after laparotomy using a morphometric approach. We observed changes in the faces of macaques which suggest that pain is associated with tightening of the muzzle, as has been observed in other species. This work potentially offers an effective complement for existing way to train others in the evaluation of pain and welfare in captive primates.

The other work was entitled: Boundaries between humans and captive chimpanzees: Two Cases of Intensive Care in Japan. In this work we discussed the reasons behind the treatment of two chimpanzees housed in PRI. Besides the brief description of the cases, we discussed about the westerns and Japanese approach to it. Reo and Puchi presented tetraparesis and subarachnoid hemorrhage, respectively. In general, euthanasia can be an option on such cases due to poor prognosis, financial and personnel cost. However, Japanese are more reluctant towards euthanasia compared to westerners. Likewise, in Western societies, cruelty is associated with unnecessary suffering. In Japan, however, Buddhist-Shintoist traditions directly relate cruelty to killing and have been suggested to partially explain this phenomenon. These beliefs fostered symbolic and practical innovations in care and rehabilitation that may serve as guide for the treatment of physical impairments in captive great apes.

The highlights of the Brazilian Congress of Primatology were the talks and methods developed to deal with the outbreaks of yellow fever and malaria. Also, we saw the results and current state of South American species conservation programs. One example was Dr Karen Strier presenting about the Muriqui Project of Caratinga, conservationist program of the Northern murrelet (*Brachyteles hypoxanthus*).

The initial plan was to visit Pico Paraná State Park in Paraná, but due to work, Gabriela Noguchi could not go on the date. Nevertheless, I had the opportunity to visit the Serra dos Órgãos National Park in Rio de Janeiro. The park is in the Atlantic Forest biome, meaning it is superhumid (80% to 90% relative humidity) presenting a rich diversity of plant species. Fortunately, we could spot some capuchin monkeys in the area!



XVIII Brazilian Congress of Primatology: Educating Primates, Teresópolis – Rio de Janeiro

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Araucaria angustifolia, a critically endangered conifer species native to southern Brazil. Curitiba Municipal Zoo.



Southern muriqui (*Brachyteles arachnoides*) at the Curitiba Municipal Zoo



Oral presentation. BCP2019, Teresópolis, Brazil: Facial expressions in Japanese Macaques



Oral presentation. BCP2019, Teresópolis, Brazil: Boundaries between Humans and Chimpanzees in PRI

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Makiko Take and I at Serra dos Órgãos National Park, Teresópolis, Brazil. Peaks from left to right:
Escalavrado (1 406 m), Dedo de Deus (1 692 m), Cabeça de Peixe (1 680 m) and Santo Antônio (1 990 m).

6. Others

I would like to thank PWS for logistics and financial support. Also, thank you to all the co-authors, especially Dr Takako Miyabe-Nishiwaki for supervising the work and always being available for eventual questions and Dr Gabriela Daly for the great anthropological and linguistical explanations regarding the chimpanzee work.