

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.)

	2016. 10, 10
Affiliation/Position	Primate Research Institute / D2
Name	Morgane Allanic

1.	Country/location of visit
	Chicago, Illinois, United States of America
2.	Research project
	Chimpanzees in Context symposium and joint meeting of the International Primatological Society and the American Society of Primatologists
3.	Date (departing from/returning to Japan)
	2016. 08. 17 – 2016. 08. 29 (13 days)
4.	Main host researcher and affiliation
	Lincoln Park Zoo
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 went to Chicago from August 17th to 29th 2016 to attend both the Chimpanzees In Context symposium (CIC) and the joint meeting of the International Primatological Society and the American Society of Primatologists (IPS/ASP). I had the opportunity to present my recent work on the body site preferences in captive chimpanzees and bonobos to both conferences.</p> <p>The CIC symposium was host by the Lincoln Park Zoo and was the fourth of a serie of symposiums focused on the study of chimpanzees. The symposium covered different topics such as development, conservation, cognition, communication, feeding ecology. It was very interesting to hear about the last work done on chimpanzees in comparison to bonobos and other great apes as well. Many talks were on bonobos and it was nice to have the comparison between the two species and to have researchers working in the lab and in the field as well. Since I am doing this two-by-two comparison on chimpanzees and bonobos in the wild and in captivity, this symposium was a really great opportunity for me. The speakers were very well selected and I particularly enjoyed the sessions on communication and the one on altruism and cooperation.</p> <p>I presented my work on the body site preferences in captive chimpanzees and bonobos during the electronic poster session. It was the first time for me to prepare and present an electronic poster. I really enjoyed it, it made the discussion easier, and more interactive since we can have several slides or videos. The session lasted for about one hour and half and was only one day so I could not see the other ePosters which was a bit frustrating.</p> <p>During the IPS/ASP conference, I mainly joined the talks on communication, sociality, and behavior. I found particularly interesting the symposium called “Tolerant primates: how variation in temperament affects social behaviors, cognition, and preferences” organized by Jingzhi Tan and the one called “Without words: how do we investigate meaning in great ape communication” organized by Catherine Hobaiter and Brittany Fallon.</p> <p>I was invited by Prof. Tomonaga and Prof. Hirata to present my work during their symposium called “Comparative study of chimpanzees and bonobos: 2 by 2 comparison to understand the evolutionary origin of human cognition and behavior”.</p> <p>Overall, I really enjoyed both conferences. I am very grateful that I had the opportunity to attend and present my work to both of them. It was my second international conference, but my first one abroad Japan and my first one focusing on primate behavior. I am very glad that I could meet people whom I have heard and read about their work and that I could receive feedback on my study from experts. I would like to express my sincere gratitude to the PWS program and Prof. Matsuzawa for supporting my attendance to these conferences.</p>

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IPS/ASP Oral presentation (photo credit: Chris Martin)



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BODY SITE PREFERENCES IN THE GENUS PAN

Allanic M¹, Hirata S², Hayashi M¹, Matsuzawa T^{2,3}

1. Primate Research Institute; 2. Wildlife Research Center; 3. Institute for Advanced Study – Kyoto University

INTRODUCTION

Allogrooming in non human primates serves different functions:
 - Social: establishment and maintenance of social bonds, reduction of tension, hierarchy manipulation, etc.
 - Hygienic: to remove parasites and dirt from skin and fur

Do chimpanzees and bonobos show the same body site preferences for allogrooming?

CHIMPANZEES
 females leave during adolescence
 male dominance
 M-M > M-F > F-F

BONOBOS
 females leave during adolescence
 female centered society
 F-F or F-M > M-M

If chimpanzees and bonobos show different preferences for body sites, it might suggests that body sites have different social meanings

VIDEO CODING

BACK

FACE

FRONT

GENITALS

LIMBS

METHODS

12 chimpanzees: 1M-6F and 1M-4F observed 197h
 6 bonobos: 2M 4F observed 223h

from September 2015 to June 2016 at Kumamoto Sanctuary, Japan

VIDEO RECORDS OF GROOMING INTERACTIONS

only dyads with at least 5 grooming interactions were included into analyses

chimpanzees = 18 dyads, bonobos = 18 dyads

RESULTS 1: body sites preferences in bonobos and chimpanzees

limb = face
back = front
genitals

Wilcoxon test bonobos = 18
p < 0.05

limb
back = genitals
face = front = genitals

Wilcoxon test chimps = 18
p < 0.05

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RESULTS 2: comparison between bonobos and chimpanzees

Mann-Whitney U test
 bonobos = 18, chimpanzees = 18
 * p < 0.05, *** p < 0.001

- ❖ Bonobos groom the face more
- ❖ Chimps groom the genital more

DISCUSSION AND CONCLUSION

Chimpanzees groom the genital more

Bonobos groom the face more

Eye contact in bonobos:
 - more often
 - occurs in other contexts than threat.
 e.g. VENTRAL-VENTRAL SEXUAL BEHAVIOR
 → not in other non human primates

Bonobos look eyes and face longer than chimps⁵

Chimps look genital longer than bonobos⁵

Kano et al 2015

RESULTS 3: comparison between female and male groomers

CHIMPANZEES
 Mann-Whitney U test
 females = 13, males = 5, * p < 0.05

- ❖ Male chimpanzees groom the genital more than females do
- ❖ No difference between female and male groomers in bonobos

Male chimpanzees groom the genital more than females do (no difference in bonobos)

- M-F grooming is influenced by female menstrual cycle in chimpanzees^{1,2} but not in bonobos³
- Swelling is not a reliable ovulatory signal for males in bonobos⁴

Chimpanzees and bonobos show different body site preferences for allogrooming. Results suggest that face and genital might have different social meanings for these species.

- Grooming the genital might help to determine the fertile period in chimpanzees but not bonobos.
- Eye contact and grooming the face might be an important communication way in bonobos. Compared to other non human primates that may use eye contact mostly as a threat.

1. Hemelrijk et al 1992, 2. Wallis 1992, 3. Franz 1999, 4. Douglas et al 2016, 5. Kano et al 2015

CIC ePoster presentation

6. Others

Submit to : report@wildlife-science.org
 version

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