

Dr Lucie Rigaill

Program Specific Assistant Professor, Kyoto University, Primate Research Institute, Japan
Chercheur associé UMR 7206 CNRS-MNHN, Musée de l'Homme, France

Education

- 2013-2017 Doctoral Course in Biological Science** Primate Research Institute, Kyoto University, Japan.
PhD dissertation “*Multimodal sexual signaling and mating strategies in olive baboons and Japanese macaques*” Committee: Prof. Takeshi Furuichi, Prof. Fred Bercovitch, Dr. Cécile Garcia, Dr. Andrew JJ MacIntosh, Dr. Kodzue Kinoshita
- 2009-2011 M.Sc. in Physical Anthropology** University of Aix-Marseille 2, France
- 2006-2009 B.Sc. in Cellular Biology and Physiology** University of Paris 7, France

Peer-review publications

- 2017.** **L Rigaill**, N Suda-Hashimoto, L Ducroix, K Mouri, T Furuichi, C Garcia. 2017. Testing the role of female urine on male sexual behaviors in captive Japanese macaques. *International Journal of Primatology* 38(5):823-837 DOI:10.1007/s10764-017-9980-y
- 2017** **L Rigaill**, AJJ MacIntosh, JP Higham, S Winters, K Shimizu, K Mouri, T Suzumura, T Furuichi, C Garcia. Testing for links between face color and age, dominance status, parity, weight and intestinal nematode infection in female Japanese macaques. *Primates* 58(1):83-91. DOI:10.1007/s10329-016-0575-6
- 2016** C Garcia, F Bercovitch, T Furuichi, MA Huffman, AJJ Macintosh, **L Rigaill**, RSC Takeshita, K Shimizu. Ten years of collaboration between France and Japan-Studies on reproduction in Japanese macaques. *Revue de Primatologie* 7 (online). DOI: 10.4000/primatologie.2666
- 2015** **L Rigaill**, AJJ MacIntosh, JP Higham, S Winters, K Shimizu, K Mouri, T Furuichi, C Garcia. Multimodal advertisement of pregnancy in free-ranging female Japanese macaques (*Macaca fuscata*). *PLoS ONE* 10(8): e0135127. DOI:10.1371/journal.pone.0135127
- 2014** **L Rigaill**. Multimodal ovulatory signaling in human and non-human primates. *Bulletins et Mémoires de la Société d'Anthropologie de Paris*. 26 (2-3):161-165 DOI:10.1007/s13219-014-0108-z
- 2014** RSC Takeshita, FB Bercovitch, MA Huffman, K Mouri, C Garcia, **L Rigaill**, K Shimizu. Environmental, biological, and social factors influencing fecal adrenal steroid concentrations in female Japanese macaques (*Macaca fuscata*). *American Journal of Primatology* 76 (11), 1084-1093
- 2013** **L Rigaill**, JP Higham, PC Lee, A Blin, C Garcia. Multimodal sexual signaling and mating behavior in olive baboons (*Papio anubis*). *American Journal of Primatology* 75 (7):774–787. DOI:10.1002/ajp.22154

Publications under review

- L Rigaill *et al.* The redder the better? Skin coloration indicates quality in female Japanese macaques *Proceedings B*

*Presentation in Congresses and Symposia (*presenting author)*

- 2017**
7th European Federation for Primatology Meeting, Strasbourg, France (August)
L Rigaill*, AJJ MacIntosh, JP Higham, S Winters, T Furuichi, C Garcia. Face color indicates female reproductive state but not individual characteristics in Japanese macaques (*Macaca fuscata*).
7th European Federation for Primatology Meeting, Strasbourg, France (August)
C Garcia*, **L Rigaill**, F Bercovitch, T Furuichi, MA Huffman, AJJ Macintosh, RSC Takeshita, K Shimizu. Ten years of collaboration between France and Japan-Studies on reproduction in Japanese macaques.
47^{ème} Colloque Société Française pour l'Etude du Comportement Animal, Gif-sur-Yvette, France (May)
L Rigaill*, AJJ MacIntosh, JP Higham, S Winters, T Furuichi, C Garcia. Impact des signaux sexuels multiples des femelles sur les stratégies de reproduction chez le babouin olive et le macaque Japonais.

2016

XXIX^e Colloque de la Société Francophone de Primatologie, Paimpont, France (October)
C Garcia, L Rigaill*, AJJ MacIntosh, JP Higham, S Winters, K Shimizu, K Mouri, T Furuichi.
Existe-t-il des variations de la couleur de la face en fonction de l'âge, la dominance, la parité, le poids, et l'infection parasitaire intestinale chez des femelles macaques japonais (*Macaca fuscata*)?

Seminar on Japanese macaque research, Inuyama, Japan (June)
L Rigaill*, N Suda-Hashimoto, L Ducroix, K Mouri, T Furuichi, C Garcia. Does female urine modulate male sexual behaviors in Japanese macaques?

The 5th International Symposium on Primatology and Wildlife Science, Inuyama, Japan (March)
L Rigaill*, AJJ MacIntosh, JP Higham, K Shimizu, K Mouri, T Suzumura, T Furuichi, C Garcia. Face color indicates female reproductive state but not quality in Japanese macaques (*Macaca fuscata*).

2015

XXVIII^e Colloque de la Société Francophone de Primatologie, Strasbourg, France (October)
C Garcia*, L Rigaill, AJJ MacIntosh, JP Higham, S Winters, K Shimizu, K Mouri, T Furuichi. Signalisation multimodale de la gestation chez le macaque japonais (*Macaca fuscata*). (**abstract** Revue de Primatologie, 2016 Varia(6) DOI : 10.4000/primatologie.2346)

6th European Federation for Primatology Meeting, Rome, Italy (August)
L Rigaill*, AJJ MacIntosh, JP Higham, S Winters, K Shimizu, K Mouri, T Furuichi, C Garcia. Female Japanese macaques advertise pregnancy in multiple modalities. (**abstract** Folia Primatologica 2015, DOI: 10.1159/000435825)

31st Congress of the Primate Society of Japan, Kyoto, Japan (July)
L Rigaill*, AJJ MacIntosh, JP Higham, S Winters, K Shimizu, K Mouri, T Furuichi, C Garcia. Multiple sexual signals of pregnancy in Japanese macaques.

EFOR Seminar: Reproductive function in non-human primates, Paris, France (March)
C Garcia* & L Rigaill. Multimodal sexual signaling and mating behavior in non-human primates.
The 3rd International Symposium on Primatology and Wildlife Science, Kyoto, Japan (March)
L Rigaill*, AJJ MacIntosh, JP Higham, T Furuichi, C Garcia. Honest sexual advertisements of pregnancy in female Japanese macaques (*Macaca fuscata*).

2014

Interdisciplinary Seminar on Primatology, Inuyama, Japan (December)
L Rigaill*, AJJ MacIntosh, T Furuichi, C Garcia. Post-conceptive sexual behaviors in Japanese macaques.
XXVth Congress of the International Primatology Society, Hanoi, Vietnam (August)
L Rigaill*, JP Higham, PC Lee, C Garcia. Multimodal sexual signaling and mating behaviors in olive baboons.
XXVth Congress of the International Primatology Society, Hanoi, Vietnam (August)
RS Takeshita*, FB Bercovitch, MA Huffman, K Mouri, C Garcia, L Rigaill, K Shimizu. Environmental, biological and social factors influencing fecal adrenal steroid concentrations in female Japanese macaques (*Macaca fuscata*).

International Seminar on Biodiversity and Evolution, Kyoto, Japan (June)
L Rigaill*, JP Higham, PC Lee, C Garcia. Multiple sexual cues and mating strategies in captive olive baboons (*Papio anubis*).

2013

29th Congress of the Primate Society of Japan, Okayama, Japan (September)
L Rigaill*, JP Higham, PC Lee, C Garcia. Multimodal ovulatory signaling in olive baboons.

2012
Société d'Anthropologie de Paris, Paris, France (January)
L Rigaill*, JP Higham, PC Lee, C Garcia. Multimodal sexual communication and mating behaviors in olive baboons.

2011
XXIV^e Colloque de la Société Francophone de Primatologie, Grenoble, France (October)
L Rigaill*, C Garcia. Signaux sexuels et comportement reproducteur chez le babouin olive.

Competitive awards and fellowships

- 2017** International Primatological Society Research Grant (~US\$1000)
- 2016** Best Poster Award–First Prize: *Face color indicates female reproductive state but not quality in Japanese macaques*, 5th International Symposium on Primatology and Wildlife Science, Japan
- 2015** Fellowship from the Japan Society for the Promotion of Science JSPS, two years (~€15000)
- 2014** Heiwa Nakajima Scholarship for Foreign Students, one year
- 2013** Honors scholarship for Privately Financed International Student JASSO, one year
- 2011** Best Presentation Award–First Prize (€750): *Sexual signals and mating behavior in olive baboons*, XXIV^e Colloque de la Société Francophone de Primatologie, France

Research experience

- 2016:** Fieldwork, Primate Research Institute, Kyoto University, Japan (4 months). Behavioural and biological data collection, experimental design, captive Japanese macaques – PhD thesis
- 2015:** Fieldwork, Primate Research Institute, Kyoto University, Japan (9 months)
Animal training & biological data collection (vaginal secretion), captive Japanese macaques – PhD thesis
- 2014-2015:** Laboratory work, Primate Research Institute, Kyoto University, Japan (6 months)
EIA hormonal assays, microscopy, digital analyses – PhD thesis
- 2013-2014:** Fieldwork, Wildlife Research Station Koshima, Kyoto University, Japan (5 months)
Behavioural, biological, and digital data collection, wild Japanese macaques – PhD thesis
- 2011-2012:** Research assistant, Primate Research Institute, Kyoto University, Japan (3 months)
Behavioural, biological, and digital data collection, captive Japanese macaques – Collaborative project between CNRS (Dr Garcia) and the Primate Research Institute (Prof Huffman, Prof Bercovitch)
- 2010:** Fieldwork, Station de Primatologie (SdP-CNRS), France (3 months)
Behavioural and digital data collection, captive olive baboons – MsC thesis

Skills:

- Experimental design in captivity
Behavioural data collection
Biological sample collection: faeces, urines, vaginal secretions
Enzyme Immuno Assays for faecal and urinary estrogens, progesterone, and creatinine
Microscopic parasitological analyses of gastrointestinal parasites
Photo editing: Adobe Photoshop CS5, ColourWorker, ImageJ, Canon package
Statistics: SPSS, R environment

Student supervision

Louise Ducroix: research student at KUPRI. During her three months at KUPRI, Rigaill trained Ducroix in various techniques in Behavioural Ecology (hormonal assays, parasitology, digital analyses, animal training).

National and International collaboration

Japan: Prof. Takeshi Furuichi, Prof. Fred Bercovitch, Dr Andrew JJ MacIntosh, Dr Ikuma Adachi, Primate Research Institute, Kyoto University
France: Dr Cécile Garcia, Dr Julie Duboscq CNRS-MNHN
UK: Prof. Joanna Setchell, Durham University, Dr Stefano Vaglio, Wolverhampton University
USA: Dr James P Higham, Sandra Winters, New York University