

## 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 Symposiums (\*presenting author)*

- 2017**  
**7<sup>th</sup> 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*).  
**7<sup>th</sup> 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<sup>ème</sup> 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<sup>e</sup> 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 5<sup>th</sup> 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<sup>e</sup> 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)

**6<sup>th</sup> 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)

**31<sup>st</sup> 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 3<sup>rd</sup> 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.

**XXV<sup>th</sup> 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.

**XXV<sup>th</sup> 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

**29<sup>th</sup> 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<sup>e</sup> 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*, 5<sup>th</sup> 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<sup>e</sup> 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