

Andrew J. J. MacIntosh, D.Sc.

## CONTACT INFORMATION

Center for International Collaboration and  
Advanced Studies in Primatology (CICASP)  
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## EMPLOYMENT HISTORY

2017~ Associate Professor, Kyoto University Primate Research Institute  
2014~ Program Associate Professor, Kyoto University Wildlife Research Center and CICASP  
2012–2014 Program Assistant Professor, CICASP  
2011–2012 Research Associate (Postdoc), CICASP  
2010–2011 Research Fellow (Postdoc), Department of Ecology and Social Behaviour

## EDUCATION HISTORY

2007–2010 Graduate School of Science, Kyoto University (Doctor of Science, DSc)  
2000–2002 Department of Anthropology, University of Calgary (Master of Arts, MA)  
1997–2000 Department of Anthropology, University of Calgary (Bachelor of Science, BSc)

## RESEARCH KEYWORDS

• behavioural ecology • behavioural organization • social and ecological networks • parasite/disease ecology • wildlife epidemiology • health and conservation • biostatistics • complexity science/theory (biological fractals)

## SCIENTIFIC PROGRAMS

2014~ Health monitoring of Antarctic wildlife working group, with Scientific Committee for Antarctic Research (SCAR) Expert Group on Birds and Marine Mammals (EG-BMM)  
2013~ *L'AMMER*: Adélie penguins as monitors of the marine environment [Dumont d'Urville, Adélie Land, Antarctica (France)], with Institut Polaire Francais (IPEV)  
2013~ *P<sup>2</sup>ARASITE*: primates and parasites of Sabah as indicators of a transitioning ecosystem [Sabah, Borneo, Malaysia], with Sabah Wildlife Department  
2012~ Koshima Macaque Project (*KoMP*): parasites as a selective force in primate social systems evolution, with Kyoto University

## AWARDS & SCHOLARSHIPS

2013 Takashima Prize, Primate Society of Japan & Kyoei Steel Co. (research excellence)  
2013 Primates most-cited paper award, Japan Monkey Center, Primate Society of Japan, Springer  
2007 DSc scholarship: Ministry of Education, Culture, Sports, Science and Technology (MEXT) Monbukagakusho scholarship, Japan, 150,000 yen/month (ca. 1,500 USD) \* 3.5 years  
2001 MA scholarship: Province of Alberta Graduate Scholarship (PAGS), Canada, 1,000 CAD/month \* 1 year

## RESEARCH GRANTS

- 2016~2020 Japan Society for the Promotion of Science (JSPS) Grant-in-Aid for Young Scientists A, Japan, 16,200,000 JPY (ca. 150,000 USD)
- 2017 JSPS Grant-in-Aid to support a short-term doctoral student fellowship (Ms. Kelly Finn), Japan, 260,000 JPY (ca. 2,000 USD)
- 2016 JSPS Grant-in-Aid to support a short-term doctoral student fellowship (Ms. Valeria Romano), Japan, 900,000 JPY (ca. 7,500 USD)
- 2015 JSPS Grant-in-Aid to support a postdoctoral fellow (Dr. Julie Duboscq), Japan, 900,000 JPY (ca. 7,500 USD)
- 2015 Kyoto University Step Up Grant, Japan, 1,600,000 JPY (ca. 13,000 USD)
- 2014-2015 JSPS 'Sakura' grant Japan/France (PI: Akinori Takahashi, National Institute of Polar Research)
- 2013-2015 JSPS Grant-in-Aid for Overseas Research A (PI: Hirohisa Hirai, Kyoto University Primate Research Institute)
- 2012–2015 JSPS Grant-in-Aid for Young Scientists B, Japan, 3,500,000 JPY (ca. 35,000 USD)
- 2012 JSPS Research Exchange Grant, Japan/France, 575,000 JPY (ca. 7,000 USD)
- 2008–2012 JSPS - AS-HOPE overseas research and training grant, Japan, Awarded 4 times, total: 1,332,000 JPY (ca. 15,000 USD) \*Internal Competitive\*

## INVITED LECTURES/SEMINARS

- 2017 *Parasites and primate social systems evolution* (SoHaPi Workshop, German Primate Center (DPZ), Gottingen, Germany)
- 2016 (1) *Project l'AMMER: Adélie Penguins as Monitors of the Marine Environment*; (2) *The Wormy World of Primates: Vignettes from an Empirical Model System in Japan* (National Institute of Ecology, South Korea)
- 2013 *Complexity lost: assessing behavioural organization in stress and disease* (Central European Institute of Technology mini-symposium and HPI-lab workshop, University of Veterinary and Pharmaceutical Sciences Brno, Czech Republic)
- 2013 *The complex primate: interdisciplinary science and the math behind the monkey* (Takashima Prize Lecture at the 29<sup>th</sup> Congress of the Primate Society of Japan, Okayama)
- 2013 *Epidemiology of nematode parasite infection among wild Japanese macaques: heterogeneity in the external and internal environments* (Symposium: "Ecological Roles of Primates in Forest Ecosystems", KUPRI, Japan)
- 2012 *A fractal ethos for ethology: revealing behavioural stereotypies in stress and disease* (German Primate Center (DPZ) Kolloquium Series, Gottingen, Germany)
- 2011 Public Lecture: *Of worms and monkeys: the secret struggle for health in the wild* ("Yakushima Kenkyuu Koza", co-hosted by the Kyoto University Global COE Program and The Yakushima Environmental Culture Foundation, Japan)

## TEACHING

- 2017~ Lecturer: *Conservation Biology, Zoo Biology, Comparative Cognition*, Kyoto University
- 2014~ Lecturer: *Animal Behavior*, Kyoto University
- 2016~ Instructor (field school): *Yakushima Field and Genome Science Training Course*, Kyoto University [annual]
- 2011~ Instructor: *CICASP Seminar in Science Communication*, KUPRI [ongoing weekly]
- 2011 Instructor (field school): *Formation of a strategic base for biodiversity & evolutionary research: from genome to ecosystem* (Japan), Kyoto University Global COE Program
- 2003 Instructor: *English as a Foreign Language (EFL)*, Tokyo, Japan [3 years]

Andrew J. J. MacIntosh, D.Sc.

- 2001 Teaching Assistant (field school): *Field Primatology* (Ghana), University of Calgary  
2001 Teaching Assistant: *Primate Behaviour*, University of Calgary  
2000 Teaching Assistant: *Introduction to Social and Cultural Anthropology*, University of Calgary

SCIENTIFIC EDUCATION AND OUTREACH

- 2012~ The PrimateCast – a podcast series dedicated to the study and conservation of primates (host, producer)  
www.theprimatecast.com; www.cicasp.pri.kyoto-u.ac.jp/news/podcasts

GRADUATE STUDENTS & POSTDOCTORAL FELLOWS SUPERVISED

- 2016~ Postdoctoral Fellow: Julie Duboscq (“*Connecting the dots: linking host behavior to parasite transmission and infection risk*”; Kyoto University, Japan)  
2016 Master’s Student: Kenneth Keuk (“*Social networks, social style and the dynamics of parasite infection*”)  
2015~ Doctoral Student: Liesbeth Frias (“*Host-Parasite Systems Dynamics in Human-Modified Habitats*”; Kyoto University, Japan)  
2015~ Doctoral Student: Cecile Sarabian (“*The Origins of Hygiene: Infection-risk Avoidance in Papionini and Hominiidae*”; Kyoto University, Japan)  
2015~ Graduate Student: Kelly Finn (“*Complexity as a new frontier in primate behavior, ecology and cognition*”; University of California at Davis, USA)  
2013~ Doctoral Student: Xavier Meyer (“*Does complexity in behavioral organization allow seabirds to adapt to changes in their environment?*”; University of Strasbourg, France)  
2013~ Doctoral Student: Valeria Romano de Paula (“*Primate Social Networks as a Trade-off between Information and Disease Transmission*”; University of Strasbourg, France)  
2013~ Doctoral Student: Jade Burgunder (“*Complexity in Behavioral Organization: a Novel Approach to Assessing Clinical Outcomes of Parasitic Diseases*”; Masaryk University, Czech Republic)  
2013–2015 Postdoctoral Fellow: Julie Duboscq (“*Social networks as a trade-off between optimal decision-making, information transmission and reduced disease transmission*”; University of Strasbourg Institute for Advanced Studies, France)  
2013 Master’s student: Elodie Thomas (“*Influence of Nematode Parasites on Stress among Koshima Macaques, Macaca fuscata*”; University of Toulouse, France)  
2012–2014 Master’s student: Cecile Sarabian (“*Hygienic Tendencies Constrain Geohelminth Infection in Free-ranging Macaques*”; Rennes 1 University, France)

OTHER PROFESSIONAL EXPERIENCE

- 2015~ Editorial Board Member: *EcoHealth* (2016~), *Scientific Reports*, *Primate Research*  
2009~ ad hoc reviewer: *EcoHealth*, *PNAS*, *Phil. Trans. R. Soc. B. Biol. Sci.*, *Proc. R. Soc. B. Biol. Sci.*, *Anim. Behav.*, *Am. J. Primatol.*, *Int. J. Primatol.*, *Primates*, *Ethology*, *Behav. Proc.*, *PLoS ONE*, *Int. J. Parasitol.*, *Integr. Zool.*, National Science Foundation (USA), Oxford University Press, The Leakey Foundation, National Geographic Society, *Ranger Rick*

PUBLICATIONS

- Refereed Journal Articles: 29  
Book Chapters: 5  
Conference Presentations: 50+  
Google Scholar: <http://scholar.google.co.jp/citations?user=zCPdEMoAAAAJ&hl=en>

## JOURNAL ARTICLES

\*These authors contributed equally to this work

\*\*Journal most-cited paper award winner

†Invited Paper

1. Meyer X, MacIntosh AJJ, Chiaradia A, Kato A, Mattern T, Sueur C, Ropert-Coudert Y (Accepted) Shallow divers, deep waters, and the rise of behavioural stochasticity. *Mar Biol*
2. Burgunder J, Hashimoto C, Modry D, Kalousova B, Petrzalkova K, MacIntosh AJJ (Accepted) Complexity in behavioural organisation and strongylid infection among wild chimpanzees. *Anim Behav*
3. Duboscq J, Romano V, Sueur C, MacIntosh AJJ (2016) Scratch that itch: revisiting links between self-directed behaviour and parasitological, social and environmental factors in a free-ranging primate. *R Soc Open Science* 3: 160571
4. Rigai L, MacIntosh AJJ, Higham JP, Winters S, Shimizu K, Mouri K, Suzumura T, Furuichi T, Garcia C (2016) Testing for links between face color and age, dominance status, parity, weight, and intestinal nematode infection in a sample of female Japanese macaques. *Primates* 58:83-91
5. Duboscq J, Romano V, MacIntosh A, Sueur C (2016) Social information transmission in animals: Lessons from studies of diffusion. *Front Psych* 7:1147
6. Romano V, Duboscq J, Sueur C, MacIntosh AJJ (2016) Modelling infection transmission in primate networks to predict centrality-based risk. *Am J Primatol* 78:767–779
7. Duboscq J, Romano V, Sueur C, MacIntosh AJJ (2016) Network centrality and seasonality interact to predict lice load in a social primate. *Sci Rep* 6:22095
8. Sarabian C, MacIntosh AJJ (2015) Hygienic tendencies correlate with low geohelminth infection in free-ranging macaques. *Biol Lett* 11:20150757
9. †MacIntosh AJJ (2015) At the edge of chaos – error tolerance and the maintenance of Levy statistics in animal movement: Comment on “Liberating Lévy walk research from the shackles of optimal foraging” by A.M. Reynolds. *Phys Life Rev* 14:105–107
10. Reynolds AM, Ropert-Coudert Y, Kato A, Chiaradia A, MacIntosh AJJ (2015) A priority-based queuing process explanation for scale-free foraging behaviours. *Anim Behav* 108:67-71
11. Meyer X\*, MacIntosh AJJ\*, Kato A, Chiaradia A, Ropert-Coudert Y (2015) Hydrodynamic handicaps and organizational complexity in the foraging behavior of two free-ranging penguin species. *Anim Biotelet* 3:25
12. Rigai LR, MacIntosh AJJ, Higham JP, Winters S, Shimizu K, Mouri K, Furuichi T, Garcia C (2015) Multimodal advertisement of pregnancy in free-ranging female Japanese macaques (*Macaca fuscata*). *PLoS ONE* 10(8): e0135127
13. Ropert-Coudert Y, Kato A, Meyer X, Pellé M, MacIntosh AJJ, Angelier F, Chastel O, Widmann M, Arthur B, Raymond B, Raclot T (2015) A complete breeding failure in an Adélie penguin colony correlates with unusual, extreme environmental events. *Ecography* 38:111-113
14. †MacIntosh AJJ (2014) The fractal primate: interdisciplinary science and the math behind the monkey. *Pri Res* 30:95-119
15. †MacIntosh AJJ (2014) Ecology and epidemiology of nematode infection in Japanese macaques: building an empirical model. *Pri Res* 30:23-51
16. Pasquaretta C, Levé M, Claidière N, van de Waal E, Whiten A, MacIntosh AJJ, Pelé M, Borgeaud C, Brosnan S, Crofoot M, Fedigan L, Fichtel C, Hopper L, Mareno MC, Petit O, Schnoell AV, di

## Andrew J. J. MacIntosh, D.Sc.

- Sorrentino EP, Thierry B, Tiddi B, Sueur C (2014) Social networks in primates: smart and tolerant species have more efficient networks. *Sci Rep* 4:7600
17. Hill DA, Fukui D, Agetsuma N, MacIntosh AJJ (2014) Influence of trap environment on the effectiveness of an acoustic lure for capturing vespertilionid bats in two temperate forest zones in Japan. *Mammal Study* 39:229-236
  18. Cottin M\*, MacIntosh AJJ\*, Kato A, Takahashi A, Debin M, Raclot T, Ropert-Coudert Y (2014) Corticosterone administration leads to a transient alteration of foraging behaviour and complexity in a diving seabird. *Mar Ecol Progr Ser* 496:249-262
  19. MacIntosh AJJ\*, Pelletier L\*, Chiaradia A, Kato A, Ropert-Coudert Y (2013) Temporal fractals in seabird foraging behaviour: diving through the scales of time. *Sci Rep* 3:1884
  20. Sueur C, MacIntosh AJJ, Jacobs AT, Watanabe K, Petit O (2013) Predicting leadership using nutrient requirements and dominance rank of group members. *Behav Ecol Sociobiol* 67: 457-470
  21. MacIntosh AJJ, Jacobs A, Garcia C, Shimizu K, Mouri K, Huffman MA, Hernandez AD (2012) Monkeys in the middle: parasite transmission through the social network of a wild primate. *PLoS ONE* 7:e51144
  22. Pebsworth PA, MacIntosh AJJ, Morgan HR, Huffman MA (2012) Factors influencing the ranging behaviour of chacma baboons (*Papio hamadryas ursinus*) living in a human-modified habitat. *Int J Primatol* 33:872-887
  23. Zhang P, Li BG, Qi XG, MacIntosh AJJ, Watanabe K (2012) A proximity-based social network of a group of Sichuan snub-nosed monkeys (*Rhinopithecus roxellana*). *Int J Primatol* 33: 1081-1095
  24. MacIntosh AJJ, Huffman MA, Nishiwaki K, Miyabe-Nishiwaki T (2012) Urological screening of a wild group of Japanese macaques (*Macaca fuscata yakui*): investigating trends in nutrition and health. *Int J Primatol* 33: 460-478
  25. MacIntosh AJJ, Alados CL, Huffman MA (2011) Fractal analysis of behaviour in a wild primate: behavioural complexity in health and disease. *J R Soc Interface* 8(63):497–509
  26. \*\*MacIntosh AJJ, Hernandez AD, Huffman MA (2010) Host age, sex, and reproductive seasonality affect nematode parasitism in wild Japanese macaques. *Primates* 51:353–364
  27. MacIntosh AJJ, Sicotte P (2009) Vigilance in ursine black and white colobus monkeys (*Colobus vellerosus*): an examination of the effects of conspecific threat and predation. *Am J Primatol* 71:919–927
  28. Sicotte P, MacIntosh AJ (2004) Inter-group encounters and male incursions in *Colobus vellerosus* in Central Ghana. *Behaviour* 141(5):533–553
  29. MacIntosh AJJ (2001) Rank relations in two captive juvenile male black-handed spider Monkeys (*Ateles geoffroyi*): a case study. *Laboratory Primate Newsletter* 40(2):1–4

## BOOK CHAPTERS

1. MacIntosh AJJ, Frias L (2017) “Coevolution of Hosts and Parasites”. In: A Fuentes et al. (eds) *The International Encyclopedia of Primatology*, Wiley
2. MacIntosh AJJ (2017) “Pathogen”. In: A Fuentes et al. (eds) *The International Encyclopedia of Primatology*, Wiley
3. Huffman MA, MacIntosh AJJ (2012) Plant-food diet of the Arashiyama Japanese macaques and its potential medicinal value. In: Leca J-B, Huffman MA, Vasey P (eds) *The Monkeys of Stormy Mountain*:

Andrew J. J. MacIntosh, D.Sc.

*60 Years of Primatological Research on the Japanese Macaques of Arashiyama*. Cambridge University Press, pp. 356–432

4. MacIntosh AJJ, Huffman MA (2010) Towards understanding the role of diet in host-parasite interactions: the case for Japanese macaques. In: Nakagawa N, Nakamichi M, Sugiura H (eds) *The Japanese macaques*. Springer, pp. 323–344
5. Hernandez AD, MacIntosh AJ, Huffman MA (2009) Primate parasite ecology: patterns and predictions from an on-going study of Japanese macaques. In: Huffman MA, Chapman CA (eds) *Primate parasite ecology: the dynamics of host-parasite relationships*. Cambridge University Press, pp. 387–401

SELECTED CONFERENCE PRESENTATIONS

\**Student Presenter*

\*\**Best presentation prize*

†*Invited Talk*

1. Frias L, Okamoto M, MacIntosh A (2016). Parasite sharing as a preliminary indicator of multispecies connectivity. 12th Conference of the European Wildlife Disease Association, Berlin, Germany.
2. Frias L, Okamoto M, MacIntosh A (2016). Towards a primate parasite community ecology: parasite sharing in sympatric Bornean primates. The 26<sup>th</sup> Congress of the International Primatological Society, Chicago, USA.
3. Frias L, Okamoto M, MacIntosh A (2016). Gastrointestinal parasite sharing in multi-host primate communities. 13th International Conference on Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases, Antwerp, Belgium.
4. Sarabian C, MacIntosh AJJ (2016) A primate's sense of cleanliness: perspectives from Papionini and Hominini. The 26th Congress of the International Primatological Society, Chicago, USA
5. Sarabian C, MacIntosh AJJ (2016) Revulsion in chimpanzees: health maintenance through avoidance of biological contaminants. Chimpanzees in Context, 'Understanding Chimpanzees' Symposium Series. Chicago, USA (ePoster in PeerJ collection "Chimpanzees in Context", *PEERJ PREPRINTS* 4:e1851v1: <https://doi.org/10.7287/peerj.preprints.1851v1>)
6. Sarabian C, MacIntosh AJJ (2016) Testing disgust in non-human primates. The 31st International Congress of Psychology, Yokohama, Japan (Poster)
7. MacIntosh AJJ, Meyer X, Kato A, Ropert-Coudert Y (2016) Diving into complexity: exploring fractality in seabird foraging behavior. The Seventh Symposium on Polar Science, National Institute of Polar Research, Tachikawa, Japan.
8. MacIntosh AJJ, Sarabian C, Duboscq J, Romano V, Kaneko A, Okamoto M, Suzumura T (2016) Parasites as a selective force in primate social systems evolution: perspectives from an empirical model. The 26<sup>th</sup> Congress of the International Primatological Society, Chicago, USA
9. MacIntosh AJJ, Sarabian C, Duboscq J, Romano V, Kaneko A, Okamoto M, Suzumura T (2016) Helminth parasites as potential regulators of Japanese macaque population dynamics. The 26<sup>th</sup> Congress of the International Primatological Society, Chicago, USA
10. Finn K, MacIntosh A (2016) Behavioral Organization and Parasites in Japanese Macaques (*Macaca fuscata*) on Koshima Island. The 26<sup>th</sup> Congress of the International Primatological Society, Chicago, USA

Andrew J. J. MacIntosh, D.Sc.

11. Martin C, MacIntosh AJJ (2016) Chaotic choice dynamics buffer chimpanzees and orangutans against exploitation by a computer algorithm in a solitary matching pennies task. The 26<sup>th</sup> Congress of the International Primatological Society, Chicago, USA
12. \*\*Frias L\*, Okamoto M, MacIntosh A (2016) Parasite sharing in sympatric Bornean primates. 5th International Symposium on Primatology and Wildlife Science. Inuyama, Japan
13. MacIntosh AJJ, Sarabian C, Duboscq J, Thomas E, Romano V, Kaneko A, Okamoto M, Suzumura T (2015) Hidden constraints of chronic parasitism on health and fitness in Japanese macaques. The 31<sup>st</sup> Congress of the Primate Society of Japan, Kyoto, Japan
14. Duboscq J, Romano V, MacIntosh A, Sueur C (2015) A social network perspective on macaque social styles. The 38<sup>th</sup> meeting of the American Society of Primatologists, Bend, USA.
15. Duboscq J, Romano V, Sueur C, MacIntosh A (2015) Investigating infection risk and sociality: centrality interacts with seasonality to predict lice load in free-ranging female japanese macaques, *Macaca fuscata*. The 38<sup>th</sup> meeting of the American Society of Primatologists, Bend, USA.
16. Rigail LR\*, MacIntosh AJJ, Higham JP, Winters S, Shimizu K, Mouri K, Furuichi T, Garcia C (2015) Multiple sexual signals of pregnancy in Japanese macaques. The 31<sup>st</sup> Congress of the Primate Society of Japan, Kyoto, Japan
17. Sarabian C\*, MacIntosh A (2015) Hygiene efficiency against parasites in Japanese macaques. The 31<sup>st</sup> Congress of the Primate Society of Japan, Kyoto, Japan
18. Hill DA, Anuar S, MacIntosh AJJ, Ghazali A (2014) Acoustic lure gives increased efficiency for short-term surveys of bat diversity in tropical rainforest. The 13th European Bat Research Symposium, Sibenik, Croatia
19. MacIntosh AJJ, Kato A, Ropert-Coudert Y (2014) Logging Complexity: ecological challenges and the emergence of behavioral organization. Bio-logging Science 5, Strasbourg, France.
20. Huffman MA, Mori H, Kawai S, Nahallage CAD, MacIntosh AJJ (2014) The human-primate interface: on-going zoonoses monitoring in Southeast Asia. The 4th International Congress on Asian Primates, Kyoto University and Bogor Agricultural University International Symposium, Bogor, Indonesia
21. Morino L, MacIntosh AJJ (2014) Gibbon songs and intergroup dynamics: a community-level network analysis. The 25<sup>th</sup> Congress of the International Primatological Society, Hanoi, Vietnam
22. Sueur C, Pasquaretta C, Leve M, Claidiere N, van de Waal E, MacIntosh AJ, Pele M, Whiten A (2014) Information transmission efficiency in primate networks. The 25<sup>th</sup> Congress of the International Primatological Society, Hanoi, Vietnam
23. MacIntosh AJJ (2014) A field-experimental approach to primate-parasite interactions: filling in the knowledge-gaps. The 25<sup>th</sup> Congress of the International Primatological Society, Hanoi, Vietnam
24. de Paula VR\*, Duboscq J, Sueur C, MacIntosh A (2014) Modelling disease transmission in primate networks to predict epidemics. The 25<sup>th</sup> Congress of the International Primatological Society, Hanoi, Vietnam
25. Sarabian C\*, MacIntosh A (2014) In the dirt: hygienic behaviours and revulsion as parasite avoidance adaptations in Japanese macaques. The 25<sup>th</sup> Congress of the International Primatological Society, Hanoi, Vietnam
26. Duboscq J, Sueur C, Romano De Paula V, MacIntosh A (2014) Pseudoectoparasites: a promising tool for the study of parasite transmission in relation to social networks. The 25<sup>th</sup> Congress of the International Primatological Society, Hanoi, Vietnam

Andrew J. J. MacIntosh, D.Sc.

27. \*\*Sarabian C\*, [MacIntosh AJJ](#) (2014) On the origins of hygiene: from Japanese macaques to African great apes. Origins of human mind annual symposium, International Institute for Advanced Studies, Kyoto, Japan
28. [MacIntosh AJJ](#) (2014) The complex animal: ecological constraints and the emergence of behavioural organization. Origins of human mind annual symposium, International Institute for Advanced Studies, Kyoto, Japan
29. Dubosq J, de Paula VR, Sueur C, [MacIntosh AJJ](#) (2013) Social networks as a trade-off between optimal decision-making, information transmission and reduced disease transmission. The 9<sup>th</sup> Congress of the Göttinger Freilandtage, Göttingen, Germany
30. [MacIntosh AJJ](#), Sarabian C, Thomas E, Suzumura T, Kaneko A, Takeshita S, Mouri K, Itoh M, Shimizu K, Okamoto M (2013) A field-experimental approach to primate-parasite interactions: filling in the knowledge-gaps. The 29<sup>th</sup> Congress of the Primate Society of Japan, Okayama, Japan
31. †[MacIntosh AJJ](#) (2013) The complex primate: interdisciplinary science and the math behind the monkey. Takashima Prize Lecture at the 29<sup>th</sup> Congress of the Primate Society of Japan, Okayama, Japan
32. [MacIntosh AJJ](#), Cottin M, Pelletier L, Kato A, Ropert-Coudert Y (2012) Primates, penguins, and periodicity: maintaining complexity in the face of ecological challenge. The 24<sup>th</sup> Congress of the International Primatological Society, Cancun, Mexico
33. [MacIntosh AJJ](#), Jacobs A, Garcia C, Huffman MA, Hernandez AD (2012) Socially-mediated parasite transmission: the role of dominance in exposure and susceptibility. The 24<sup>th</sup> Congress of the International Primatological Society, Cancun, Mexico
34. [MacIntosh AJJ](#), Jacobs A, Huffman MA, Hernandez AD (2011) Parasite transmission through social networks of Japanese macaques: a cost of grooming? The 26<sup>th</sup> Congress of the Primate Society of Japan, Inuyama, Japan. *Primate Res* 27(S):16
35. [MacIntosh AJJ](#), Huffman MA (2010) The fractal dimension: measuring behavioural complexity and its implications for evaluating the health of primates in the wild. The 23<sup>rd</sup> Congress of the International Primatological Society, Kyoto, Japan. *Primate Res* 26(S):146
36. [MacIntosh AJJ](#), Hernandez, AD, Huffman MA (2008) The importance of host age and sex to the distribution of helminth parasites infecting free-ranging Yaku-Island macaques (*Macaca fuscata yakui*). The 31<sup>st</sup> Meeting of the American Society of Primatologists, West Palm Beach, USA. *Am J Primatol* 70(S1):67