CONTACT

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EMPLOYMENT

2022~	Associate Professor (tenure), Wildlife Research Center, Kyoto University
2017~2022	Associate Professor (tenure), Primate Research Institute, Kyoto University
2014~2017	Associate Professor (w/o tenure), Wildlife Research Center, Kyoto University
2012–2014	Assistant Professor, Cent. Intl. Collab. Adv. Stud. Primatol. (CICASP), Kyoto University
2011–2012	Research Associate (Postdoc), CICASP, Kyoto University
2010–2011	Research Fellow (Postdoc), Department of Ecology and Social Behavior

EDUCATION

2007–2010	Primate Research Institute, 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)

AWARDS & SCHOLARSHIPS

2022 Top-cited Paper Award, American Journal of Primatology, Wiley
2021 Outstanding Editor Award, Frontiers in Ecology and Evolution
2013 Takashima Prize, Primate Society of Japan (outstanding young researcher)
2013 Most-cited Paper Award, Primates, 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, 12,000 CAD

SKILLS & INTERESTS

• animal behavior • primatology • comparative cognition • zoo biology • conservation and welfare • ecology • biological & ecological networks • parasite/disease ecology & epidemiology • bio-logging • biostats • R • complexity science • SciComm • higher education & pedagogy • EdTech

RESEARCH OUTPUTS

Refereed Journal Articles: 65 (+5 Preprints)
Book Chapters: 11
Google Scholar: http://scholar.google.co.jp/citations?user=zCPdEMoAAAAJ&hl=en

SELECTED PUBLICATIONS

*See full list in the Appendix

1. Sarabian C, Wilkinson A, Sigaud M, Kano F, Tobajas J, Darmaillacq A-S, Kalema-Zikusoka G, Plotnik J, MacIntosh A (2023) Disgust in animals and the application of disease avoidance to wildlife management and conservation. J Anim Ecol DOI:10.1111/1365-2656.13903
2. Castellano-Navarro A, Macanas-Martinez E, Xu Z, Guillen-Salazar F, MacIntosh AJJ, Amici F, Albiach-Serrano A (2021) Japanese Macaques' (Macaca fuscata) sensitivity to human gaze and visual perspective in contexts of threat, cooperation, and competition. Sci Rep 11:5264
3. Romano V, MacIntosh AJJ, Sueur C (2020) Stemming the flow: information, infection, and social evolution. Trends in Ecology and Evolution 35(10): 849-853.
4. 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
5. Sarabian C, MacIntosh AJJ (2015) Hygienic tendencies correlate with low geohelminth infection in free-ranging macaques. Biol Lett 11:20150757
6. 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
7. 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

GRANTS

2022 Ishizue Fund, Kyoto University, Japan, ¥1,000,000 (ca. 7,000 USD) [1yr]
2021 Supporting Program for Interaction-Based Initiative Team Studies (SPIRITS), Kyoto University, Japan, ~6,000,000JPY (ca. 52,000 USD) [2yr]
2020 Japan Society for the Promotion of Science (JSPS) Grant-in-Aid for Scientific Research B, Japan, ~17,000,000JPY (ca. 160,000 USD) #20H03333 [4yr]
2019 JSPS/CAS bilateral grant Japan/Czech (PI: Klara Petrzelkova, Czech Academy of Science & Keiko Matsuura, Oita University) #JPJSBP120192506 [2yr]
2018 JSPS Grant-in-Aid for Scientific Research C, Japan (PI: Naoki Agetsuma, Hokkaido University) [3yr]
2016 JSPS Grant-in-Aid for Young Scientists A, Japan, 16,200,000 JPY (ca. 150,000 USD) #16H06181 [4yr]
2015 Kyoto University Step Up Grant, Japan, 1,600,000 JPY (ca. 13,000 USD) [1yr]
2014 JSPS Sakura grant Japan/France (PI: Akinori Takahashi, National Institute of Polar Research) [2yr]
2012 JSPS Grant-in-Aid for Young Scientists B, Japan, 3,500,000 JPY (ca. 35,000 USD) #24770232 [3yr]
2012 JSPS Research Exchange Grant, Japan/France, 575,000 JPY (ca. 7,000 USD) [1yr]

TEACHING

Undergraduate (Kyoto University)
- *Animal Behavior* [since 2014]
- *Conservation Biology* [since 2017]
- *Zoo Biology* [since 2017]
- *Comparative Cognition* [since 2017]

Graduate (Kyoto University)
- *Animal Welfare Science* (team taught) [2023]
- *Conservation Biology* (team taught) [2023]
- *Seminar in Science Communication* [ongoing, weekly; since 2011]
- *Yakushima Field and Genome Science Training Course* [2011, 2016, 2019]

Teaching Assistant (University of Calgary)
Field Primatology in Ghana [2002]
Primate Behaviour [2001]
Introduction to Social and Cultural Anthropology [2000]

Professional (GEOS Language Corp.)
English as a Foreign Language (EFL), Tokyo, Japan [2003-2006, full time]

ACADEMIC SUPERVISION

I have supervised dozens of students, from undergraduates to doctoral candidates, as well as research interns and postdoctoral fellows.

- Master's students supervised: 7 (1 current; 6 completed)
- Doctoral students supervised: 11 (5 current; 6 completed)
- Postdoctoral fellows supervised: 6 (6 completed)

INVITED LECTURES/SEMINARS

2023 Monkeys in the middle: social and ecological networks in primate-parasite interactions. National Parks, Singapore

2022 Monkeys in the middle: navigating the costs of being socially central. France-Japan Exchange Public Symposium [Considering Human-Animal Symbiosis: Intersecting Perspectives], Kyoto

2022 Worming out of the tropics: intestinal parasites in a temperate primate. Overview of the World's Primates Symposium, Inuyama, Japan

2021 Vignettes from the wormy world of primates: behavioral ecology of host-parasite interactions viewed through a primate lens. University of Lausanne, Switzerland. Online

2020 Show me chaos! Measuring organizational complexity through fractal time series analysis of behavior sequences in indicator species. International Bio-logging Society Webinar – Approaches to Modeling Bio-logging Data. Online

2019 (1) Show me chaos! Fractal time in animal behavior as a bioindicator of ecological challenge; (2) Behavioral ecology and epidemiology of gastrointestinal parasitism in primates: patterns, processes and host responses (Czech Academy of Sciences, Czechia)

2017 Monkeys in the middle: sociality and parasitism in a primate-helminth model system (Primatology and Evolutionary Anthropology Young Scholars Forum, Sun Yat Sen University, Guangzhou, China)

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 29th 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)

SCIENTIFIC OUTREACH

Zooentropy – research collective leveraging complexity theory for zoo animal welfare (https://www.zooentropy.net)

International Primatology Lecture Series: Past, Present, and Future Perspectives of the Field (co-host, co-producer) (https://www.youtube.com/user/cicaspTV)

The PrimateCast – a podcast series dedicated to the study and conservation of primates (host, producer) (https://www.theprimatecast.com)

PROFESSIONAL SERVICES

Editorial Roles: Proceedings of the Royal Society B: Biological Sciences (2023~), EcoHealth (2016~), Primate Research (2015~), Frontiers in Ecology and Evolution (2019~2023), Scientific Reports (2015~2020)

Reviewer Roles: Front. Ecol. Evol., Front. Comp. Neurosci., Landscape Ecol., Behav. Ecol. Sociobiol., IJPPAW, Kor. J. Parasitol., Mol. Ecol. Resources, EcoHealth, PNAS, Phil. Trans. R. Soc. B. Biol. Sci., Proc. R. Soc. B. Biol. Sci., Anim. Behav., Amer. J. Primatol., Int. J. Primatol., Primates, Ethology, Behav. Proc., PLoS ONE, Peer J, Int. J. Parasitol., Integr. Zool., Am. Soc. Trop. Med. Hyg., Folia Primatol., Sci. Data, National Science Foundation (USA), European Science Foundation, Oxford University Press, The Leakey Foundation, Nat Geo Society, Ranger Rick

Society Memberships: International Primatological Society (lifetime), Primate Society of Japan (current), American Society of Primatologists, Society for Conservation Biology, Society for Ecology and Health

Symposium Organization:

- *Communicating Science: Expert Panel on Engaging the Media, the Public, and Policy Makers*, 12th International Symposium on Primatology and Wildlife Science (September, 2019)
- *10 years of CICASP: making an impact within and beyond Academia in a global community*, 12th International Symposium on Primatology and Wildlife Science (September, 2019)
- *Penguins, in Full Color*, 10th International Symposium on Primatology and Wildlife Science (September, 2018)

Departmental Management:

- Center for International Collaboration and Advanced Studies in Primatology (CICASP): promoting and managing international center, managing and conducting international exams, developing and teaching curriculum for International Course in Primatology and Wildlife Research, online engagement, web development and social media
- Wildlife Research Center: curriculum development for graduate program in Primatology and Wildlife Research

APPENDIX 1: FULL PUBLICATION LIST

1.1 JOURNAL ARTICLES

*These authors contributed equally to this work
†Invited Paper

1. Sarabian C, Wilkinson A, Sigaud M, Kano F, Tobajas J, Darmaillacq A-S, Kalema-Zikusoka G, Plotnik J, MacIntosh A (2023) Disgust in animals and the application of disease avoidance to wildlife management and conservation. J Anim Ecol DOI:10.1111/1365-2656.13903
2. Costa R, Romano V, Pereira AS, Hart JDA, MacIntosh A, Hayashi M (2022) Mountain gorillas benefit from social distancing too: Close proximity from tourists affects gorillas' sociality. Conserv Sci Pract DOI: https://doi.org/10.1111/csp2.12859
3. Beltzung B, Martinet L, MacIntosh A, Meyer X, Hosselet J, Pele M, & Sueur C (2023) To draw or not to draw: understanding the temporal organization of drawing behaviour using fractal analyses. Fractals DOI: https://doi.org/10.1142/S0218348X23500093
4. Cheron M, Kato A, Ropert-Coudert Y, Meyer X, MacIntosh AJJ, Raoelison L, Brischoux F (2022) Exposure, but not timing of exposure, to a sulfonylurea herbicide alters larval development and behaviour in an amphibian species. Aquat Toxicol DOI: 10.1016/j.aquatox.2022.106355
5. Xu Z, MacIntosh AJJ, Castellano-Navarro A, Macanás-Martínez E, Suzumura T, Duboscq J (2022) Linking parasitism to network centrality and the impact of sampling bias in its interpretation. PeerJ 10:e14305 DOI: 10.7717/peerj.14305
6. Romano V, Lussiana A, Monteith K, MacIntosh AJJ, Vale P (2022) Host and pathogen drivers of infection-induced changes in social aggregation behavior. Biol Lett DOI: 10.1098/rsbl.2022.0233
7. Castellano-Navarro A, Beltrán Francés V, Albiach-Serrano A, MacIntosh AJJ, Maulany RI, Ngakan PO, Liebl K, Amici F (2022) Maternal and offspring behavior in Japanese macaques and moor macaques: a comparative approach. Am J Primatol DOI: https://doi.org/10.1002/ajp.23461
8. Towle I, MacIntosh AJJ, Hirata K, Kubo MO, Loch C (2022) Atypical tooth wear found in fossil hominins also present in a Japanese macaque population. Am J Biol Anthropol DOI: 10.1002/ajpa.24500
9. Romano V, Sueur C, MacIntosh AJJ (2021) The trade-off between information and pathogen transmission in animal societies. Oikos DOI: 10.1111/oik.08290
10. Kavanagh E, Street SE, Angwela FO, ... MacIntosh A ... et al (2021) Dominance style is a key predictor of vocal use and evolution across nonhuman primates. R Soc Open Science DOI: 10.1098/rsos.210873
11. Morino L, Pasquaretta C, Sueur C, MacIntosh AJJ (2021) Communication network reflects social instability in a wild siamang (Symphalangus syndactylus) population. Int J Primatol 42:618–639 DOI: 10.1007/s10764-021-00227-1
12. Cheron M, Raoelison L, Kato A, Ropert-Coudert Y, Meyer X, MacIntosh AJJ, Brischoux F (2021) Ontogenetic changes in activity, locomotion and behavioural complexity in tadpoles. Biol J Linnean Soc 134(1):165–176 DOI: 10.1093/biolinnean/blab077
13. Sarabian C, Belais R, MacIntosh AJJ (2021) Avoidance of contaminated food correlates with low protozoan infection in bonobos. Front Ecol Evol 9:651159 DOI: 10.3389/fevo.2021.651159
14. Frias L, Hasegawa H, Chua TH, Sipangkui S, Stark D, Salgado-Lyn M, Goossens B, Keuk K, Okamoto M, MacIntosh AJJ (2021) Parasite community structure in sympatric Bornean primates. Int J Parasitol 51(11):925-933 DOI: 10.1016/j.ijpara.2021.03.003
15. Castellano-Navarro A, Macanas-Martinez E, Xu Z, Guillen-Salazar F, MacIntosh AJJ, Amici F, Albiach-Serrano A (2021) Japanese Macaques' (Macaca fuscata) sensitivity to human gaze and visual perspective in contexts of threat, cooperation, and competition. Sci Rep 11:5264

16. Gomez-Melara JL, Acosta-Naranjo R, MacIntosh AJJ, Maulany RI, Ngakan PO, Amici F (2021) Dominance style predicts differences in food retrieval strategies. Sci Rep 11:2726
17. Amici F, Widdig A, MacIntosh AJJ, Beltrán Francés V, Castellano-Navarro A, Lopez Caicoya, Karimullah K, Maulany RI, Ngakan PO, Hamzah AS, Majolo B (2020) Dominance style only partially predicts differences in neophobia and social tolerance over food in four macaque species. Sci Rep 10:22069
18. Beltrán Francés V, Castellano-Navarro A, Maulany RI, Ngakan PO, MacIntosh AJJ, Llorente M, Amici F (2020) Play behavior in immature moor macaques (Macaca maura) and Japanese macaques (Macaca fuscata). Amer J Primatol 82(10):e23192.
19. Romano V, MacIntosh AJJ, Sueur C (2020) Stemming the flow: information, infection, and social evolution. Trends in Ecology and Evolution 35(10): 849-853.
20. Miyabe-Nishiwaki T, Miwa M, Konoike N, Kaneko A, Ishigami A, Natsume T, MacIntosh AJJ, Nakamura K (2020) Evaluation of anaesthetic and cardiorespiratory effects after intramuscular administration of alfaxalone alone, alfaxalone-ketamine and alfaxalone- butorphanol -medetomidine in common marmosets (Callithrix jacchus). J Med Primatol 49(6):291-299
21. Meyer X, MacIntosh AJJ, Chiaradia A, Kato A, Ramirez F, Sueur C, Ropert-Coudert Y (2020) Oceanic thermal structure mediates dive sequences in a foraging seabird. Ecol Evol 10:6610–6622
22. Sarabian C, Ngoubangoye B, MacIntosh AJJ (2020) Divergent strategies in faeces avoidance between two cercopithecoid primates. R Soc Open Sci 7: 191861.
23. Tasdemir D, MacIntosh AJJ, Stergiou P, Kaiser M, Mansour N, Bickle Q, Huffman MA (2020) Antiprotozoal and antihelminthic properties of plants ingested by wild Japanese macaques (Macaca fuscata yakui) in Yakushima Island. J Ethnopharmacol 247:112270
24. Hasegawa H, Frias L, Peter S, Hasan NH, Stark D, Salgado-Lyn M, Sipangkui S, Goossens B, Matsuura K, Okamoto M, MacIntosh AJJ (2020) First description of male worms of Enterobius (Colobenterobius) serratus (Nematoda: Oxyuridae), the pinworm parasite of proboscis monkeys. Zootaxa 4722(3):287–294
25. Miyabe-Nishiwaki T, MacIntosh AJJ, Kaneko A, Morimoto M, Suzuki J, Akari H, Okamoto M (2019) Hematological and blood chemistry values in captive Japanese macaques (Macaca fuscata fuscata). J Med Primatol 48:338–350
26. Frias L, Stark DJ, Salgado Lynn M, Nathan S, Goossens B, Okamoto M, MacIntosh AJJ (2019) Molecular characterization of nodule worm in a community of Bornean primates. Ecol Evol 9:3937-3945
27. Poirotte C*, Sarabian C*, Ngoubangoye B, MacIntosh AJJ, Charpentier M (2019) Faecal avoidance differs across sexes but not with nematode infection-risk in mandrills. Anim Behav 149:97-106
28. Frias L, Hasegawa H, Stark DJ, Salgado-Lynn M, Nathan KSS Senthilvel, Chua T, Goossens B, Okamoto M, MacIntosh AJJ (2018) A pinworm's tale: the evolutionary history of Lemuricola (Protenterobius) nycticebi. Int J Parasitol: Parasites & Wildlife. 8:25-32
29. Le Guen C, Kato A, Raymond B, Barbraud C, Beaulieu M, Bost, C-A, Delord K, MacIntosh AJJ, Meyer X, Raclot T, Sumner M, Takahashi A, Thiebot J-B, Ropert-Coudert Y (2018) Reproductive performance and foraging behaviour share a common sea-ice concentration optimum in Adélie penguins (Pygoscelis adeliae). Global Change Biol 24:5304–5317
30. Romano V, Shen M, Pansanel J, MacIntosh AJJ, Sueur C (2018) Social transmission in networks: global efficiency peaks with intermediate levels of modularity. Behav Ecol Sociobiol 72:154
31. Burgunder J, Petrzelkova KJ, Modry D, Kato A, MacIntosh AJJ (2018) Fractal measures in activity patterns: do gastrointestinal parasites affect the complexity of sheep behaviour? Appl Anim Behav Sci 205:44-53
32. Sarabian C, Belais R, MacIntosh AJJ (2018) Feeding decisions under contamination risk in bonobos. Phil Trans B 373: 20170195
33. Frias L, Stark DJ, Salgado Lynn M, Nathan SKSS, Goossens B, Okamoto M, MacIntosh AJJ (2018) Lurking in the dark: Cryptic Strongyloides in a Bornean slow loris. Int J Parasitol: Parasites & Wildlife 7:141-146.
34. Sarabian C, Ngoubangoye B, MacIntosh AJJ (2017) Avoidance of biological contaminants through sight, smell and touch in chimpanzees. R Soc Open Sci 4:170968
35. Balasubramaniam KN, Beisner BA, Berman CM, De Marco A, Duboscq J, Koirala S, Majolo B, MacIntosh AJ, McFarland R, Molesti S, Ogawa H, Petit O, Schino G, Sosa S, Sueur C, Thierry B, de Waal FBM, and

McCowan B (2017) The influence of phylogeny, social style, and sociodemographic factors on macaque social network structure. Am J Primatol 80(1):e22727
36. Duboscq J, Romano V, Sueur C, MacIntosh AJJ (2017) One step at a time in investigating relationships between self-directed behaviours and parasitological, social and environmental variables. R Soc Open Sci 4:170461
37. Meyer X, MacIntosh AJJ, Chiaradia A, Kato A, Mattern T, Sueur C, Ropert-Coudert Y (2017) Shallow divers, deep waters, and the rise of behavioural stochasticity. Mar Biol 164:149
38. Burgunder J, Hashimoto C, Modry D, Kalousova B, Petrzelkova K, MacIntosh AJJ (2017) Complexity in behavioural organisation and strongylid infection among wild chimpanzees. Anim Behaviour 129:257-268
39. 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 Sci 3:160571
40. Rigaill 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
41. Duboscq J, Romano V, MacIntosh A, Sueur C (2016) Social information transmission in animals: Lessons from studies of diffusion. Front Psych 7:1147
42. 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
43. 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
44. Sarabian C, MacIntosh AJJ (2015) Hygienic tendencies correlate with low geohelminth infection in free-ranging macaques. Biol Lett 11:20150757
45. †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
46. 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
47. 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 Biotel 3:25
48. Rigaill 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
49. 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
50. †MacIntosh AJJ (2014) The fractal primate: interdisciplinary science and the math behind the monkey. Pri Res 30:95-119
51. †MacIntosh AJJ (2014) Ecology and epidemiology of nematode infection in Japanese macaques: building an empirical model. Pri Res 30:23-51
52. 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 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
53. 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
54. 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

55. 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
56. 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
57. 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
58. 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
59. 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
60. 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
61. 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
62. MacIntosh AJJ, Hernandez AD, Huffman MA (2010) Host age, sex, and reproductive seasonality affect nematode parasitism in wild Japanese macaques. Primates 51:353–364
63. 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
64. Sicotte P, MacIntosh AJ (2004) Inter-group encounters and male incursions in Colobus vellerosus in Central Ghana. Behaviour 141(5):533–553
65. 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

1.2 PREPRINTS

1. Arseneau-Robar TJ, Teichroeb JA, MacIntosh AJ, Saj TL, Glotfelty E, Lucci S, Sicotte P, Wikberg EC (2023) When population growth intensifies intergroup competition, female colobus monkeys free-ride less. BioRxiv DOI: https://doi.org/10.1101/2023.05.05.539387
2. Romano V, Lussiana A, Monteith K, MacIntosh AJJ, Vale P (2022) Host and pathogen drivers of infection-induced changes in social aggregation behavior. BioRxiv DOI: 10.1101/2022.05.17.492254
3. Costa R, Romano V, Pereira AS, Hart JDA, MacIntosh AJJ, Hayashi M (2022 PrePrint) Mountain gorillas benefit from social distancing too: close proximity from tourists affects gorillas' sociality. EcoEvoRxiv DOI: 10.32942/osf.io/ztreq
4. Xu Z, MacIntosh AJJ, Casellano-Navarro A, Macanas-Martinez E, Suzumura T, Duboscq J (2021 PrePrint) Linking Parasitism to Network Centrality and the Impact of Sampling Bias in its Interpretation. bioRxiv DOI: 10.1101/2021.06.07.447302
5. Romano V, MacIntosh AJJ, Sueur C (2020) The trade-off between information and pathogen transmission in animal societies. EcoEvoRxiv DOI:10.32942/osf.io/vqt4g

1.3 BOOK CHAPTERS

1. MacIntosh AJJ, Shimada M (Accepted) Behavioral Immunity in Primates. In: Japanese Encyclopedia of Primatology, Maruzen (in Japanese)
2. Frias L, MacIntosh AJJ (2020) Global Diversity and Distribution of Soil-Transmitted Helminths in Monkeys. In: S Knauf & L Jones-Engel (eds) Neglected Diseases in Monkeys - From the Monkey-Human Interface to One Health. Springer Nature, pp. 291-322
3. Balasubramaniam KN, Sueur C, Huffman MA, MacIntosh AJJ (2020) Primate Infectious Disease Ecology: Insights and Future Directions at the Human-Macaque Interface. In: J-H Li et al. (eds) The Behavioral Ecology of the Tibetan Macaque. Springer, pp. 249-284

4. Duboscq J, Romano V, MacIntosh AJJ (2019) Social Behavior and Infectious Disease. In: J Choe (ed) Encyclopedia of Animal Behavior, 2nd edition. Elsevier, pp. 790-800
5. Frias L, MacIntosh AJJ (2019) Threatened Hosts, Threatened Parasites? Parasite Diversity and Distribution in Red-Listed Primates. In: A Behie et al. (eds) Primate Research and Conservation in the Anthropocene. Cambridge University Press, pp. 141-164
6. MacIntosh AJ, Frias L (2018) Parasites of gibbons. In: D Modry et al. (eds) Parasites of apes: an atlas of coproscopic diagnostics. Edition Chimaira, pp. 76–82
7. MacIntosh AJJ, Frias L (2017) "Coevolution of Hosts and Parasites". In: A Fuentes et al. (eds) The International Encyclopedia of Primatology. Wiley
8. MacIntosh AJJ (2017) "Pathogen". In: A Fuentes et al. (eds) The International Encyclopedia of Primatology. Wiley
9. 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: 60 Years of Primatological Research on the Japanese Macaques of Arashiyama. Cambridge University Press, pp. 356–432
10. 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
11. 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

1.4 SELECTED CONFERENCE PRESENTATIONS

*Best presentation prize
†Invited Talk

1. Chen P, Xu Z, Hayashi M, Akami R, Watanuki K, Yamanash Y, MacIntosh AJJ (2023) A preliminary comparison of time budgets and behavior patterns in brown capuchin monkeys (Sapajus apella) at Kyoto City Zoo and Japan Monkey Centre. The 67th Primates Conference, Inuyama, Japan
2. MacIntosh AJJ, Chen P, Xu Z, Goto Y, Hayashi M, Akami R, Watanuki K, Yamanashi Y (2023) The life zooentropic: leveraging complexity for zoo animal welfare. The 2nd Animal Behavior Twitter Conference.
3. Mason B, Cervena B, Frias L, Goossens B, Hasegawa H, Keuk K, Langgeng A, Majewski K, Matsumoto T, Matsuura K, Mendonca R, Okamoto M, Peter S, Petrzelkova K, Sipangkui S, Xu Z, Parfco B, MacIntosh AJJ (2022) Novel insight into the strongylid nematodes of South-East and East Asian primates. Primate Society of Great Britain, Winter Meeting
4. MacIntosh AJJ, Chen P, Xu Z, Goto Y, Takeshita RSC, Martin C, Stewart B, Turner SE, Hayashi M, Akami R, Watanuki K, Kinoshita K, Yamanashi Y (2022) Project Zooentropy: monitoring animal behavior through a lens of complexity. The 44th Meeting of the American Society of Primatologists, Denver, USA
5. MacIntosh AJJ, Lee, YT, Xu Z, Duboscq J, Keuk K, Suzumura T, Nagaoka F, Itoh M (2022) Toward a protective immune phenotype: linking host traits and parasitism with fecal IgA in a primate-helminth model system. The 28th International Primatological Society Congress, Quito, Ecuador (Online)
6. MacIntosh AJJ, Chen P, Xu Z, Takeshita R, Martin C, Stewart B, Turner S, Hayashi M, Akami R, Watanuki K, Kinoshita K, Yamanash Y (2022) Zooentropy: embracing complexity for zoo animal welfare. The 66th Primates Conference, Inuyama, Japan
7. Majewski K, Keuk K, MacIntosh AJJ (2022) All-You-Can-Eat: A preliminary study of invasive raccoon dog (*Nectereutes procyonoides*) predation of endemic species, and dietary competition, on Yakushima Island, Japan. The 17th International Symposium on Primatology and Wildlife Science, Kyoto (Hybrid poster)
8. Xu Z, MacIntosh AJJ (2022) Sociability and Disease Transmission: Evolutionary Ecology and Parasite Transmission in Japanese Macaques. The 69th Annual Meeting of the Ecological Society of Japan, Fukuoka (Online)

9. Keuk, K, Majewski K, MacIntosh AJJ (2022) Studying the Effect of a Raccoon Dog Invasion of Yakushima on the Ecology of Disease, from the Ground Up (to the Sky): A Pilot Study. The 17th International Symposium on Primatology and Wildlife Science, Kyoto (Hybrid poster)
10. Langgeng A, MacIntosh AJJ (2022) Hot spring bathing behavior and helminth infection in Japanese macaques at Jigokudani. The 17th International Symposium on Primatology and Wildlife Science, Kyoto (Online Poster)
11. MacIntosh AJJ, Lee, YT, Xu Z, Duboscq J, Keuk K, Suzumura T, Nagaoka F, Itoh M (2021) Sociality, parasitism, and the protective immune phenotype. IPS-SLAPrim Virtual Program, Symposium on Sociality and Health in Primates (Online)
12. Sarabian C, MacIntosh AJJ, Adachi I (2021) Exploring the effects of disgust-related images on cognition in chimpanzees. Animal Behavior Society Virtual Meeting (Online)
13. Langgeng A, MacIntosh AJJ (2021) Of hot spring & lice: Linking hot spring bathing behaviour and ectoparasitism in Japanese macaques. Primate Society of Great Britain Winter Meeting (Online)
14. Langgeng A, MacIntosh AJJ (2021) Seasonal variation of gastrointestinal helminth infection in Japanese macaques of the Jigokudani Snow Monkey Park. The 16th International Symposium on Primatology and Wildlife Science, Kyoto (Hybrid Poster)
15. Sarabian C, MacIntosh AJJ, Adachi I (2021) Exploring the effects of disgust-related images on cognition in chimpanzees. CogSci 2021 Comparative Cognition - Animal Minds, Vienna, Austria (Online poster)
16. Frias L, MacIntosh AJJ (2021) Worming into the Anthropocene: disturbed parasite communities as indicators of ecosystem health. Commonwealth Science Conference 2021. Virtual (Feb. 22nd–26th, 2021)
17. Langgeng A, MacIntosh AJJ (2021) The Diversity of Gastrointestinal Helminths in Japanese Macaques of Jigokudani Snow Monkey Park. The 15th International Symposium on Primatology and Wildlife Science, Virtual Symposium
18. MacIntosh AJJ, Romano V, Duboscq J, Keuk K, Xu Z, Sueur C (2020) Monkeys in the Middle: Navigating the Costs and Benefits of Social Centrality. The 14th International Symposium on Primatology and Wildlife Science, Virtual Symposium
19. Xu Z, MacIntosh AJJ (2020) Comparative look at the transmission of parasites in macaque social and spatial networks. The 36th Congress of the Primatological Society of Japan. Virtual Conference
20. Keuk K, MacIntosh AJJ (2021) Enter SimuNet: a social network simulation framework, with a zest of empirism. The 15th International Symposium on Primatology and Wildlife Science, Virtual Symposium
21. Xu Z, MacIntosh AJJ (2020) Comparative look at the transmission of parasites in macaque social and spatial networks. The 14th International Symposium on Primatology and Wildlife Science, Virtual Symposium
22. Keuk K, MacIntosh AJJ (2020) Primate and Parasite communities in Sabah: the biodiversity-disease relationship across a Bornean landscape. The 14th International Symposium on Primatology and Wildlife Science, Virtual Symposium
23. Frias L, MacIntosh AJJ (2019) Worming into the Anthropocene: impacts of habitat fragmentation on parasite ecology. The 12th International Meeting of Asian Society of Conservation Medicine, Phnom Penh, Cambodia
24. MacIntosh AJJ, Meyer X, Chiaradia A, Kato A, Ropert-Coudert Y (2019) Show me chaos! seeking fractal time in the behavior of indicator species. The 29th International Congress for Conservation Biology, Kuala Lumpur, Malaysia.
25. Sarabian C, Plotnik JM, Curtis V, Chapman C, MacIntosh AJJ (2019) Conservation through disgust and public health: Introducing a new framework. The 29th International Congress for Conservation Biology, Kuala Lumpur, Malaysia
26. Sarabian C, Curtis V, Chapman C, MacIntosh AJJ (2019) Disgust as a tool to mitigate human-primate conflicts and enforce appropriate ecotourism practices? The 2nd African Primatological Society Conference, Entebbe, Uganda
27. MacIntosh AJJ, Frias L (2019) Altered parasite community structure in threatened primates. The 35th congress of the Primate Society of Japan, Kumamoto, Japan

28. MacIntosh AJJ, Martin CF (2019) Show me chaos! seeking fractal time in captive animal behavior. The 14th International Conference on Environmental Enrichment, Kyoto, Japan
29. MacIntosh AJJ, Meyer X, Chiaradia A, Kato A, Ropert-Coudert Y (2018) Just like clockwork? on the significance of periodic penguins. 10th International Symposium on Primatology and Wildlife Science, Kyoto, Japan
30. Sarabian C, Belais R, MacIntosh AJJ (2018) Feeding decisions under contamination risk in bonobos. The 27th International Primatological Society Congress, Nairobi, Kenya
31. Sarabian C, MacIntosh AJJ (2018) Do primates yuck? Pathogen and parasite avoidance behaviors in Papionini and Hominini. The 27th International Primatological Society Congress, Nairobi, Kenya
32. Frias L, Okamoto M, MacIntosh AJJ (2017) From the darkness: cryptic diversity of Strongyloides in a community of Bornean primates. 66th Annual International Conference of the Wildlife Disease Association, Chiapas, Mexico
33. Sarabian C, MacIntosh AJJ (2017) Pathogen and parasite avoidance behaviors: perspectives from Papionini and Hominini. The 35th International Ethological Conference (Behaviour 2017), Estoril, Portugal
34. Romano V., Puga-Gonzalez I., Sueur C., MacIntosh AJJ (2017) Modeling the evolution of social structure: from individual decisions to group-living trade-offs. Gottinger Freilandtage - Social complexity: patterns, processes and evolution, Gottingen, Germany
35. Duboscq J, MacIntosh A (2017) Connecting the dots: linking host behaviour to parasite transmission and infection risk. 7th meeting of the European Federation for Primatology, Strasbourg, France
36. Duboscq J, Okamoto M, MacIntosh A (2017) Infection patterns of simian foamy virus in macaques. 7th meeting of the European Federation for Primatology, Strasbourg, France
37. MacIntosh AJJ, Romano V, Duboscq J, Sueur C (2017) Monkeys in the middle: towards organisational immunity in primate societies. Royal Society Scientific Meeting on the Evolution of parasite and pathogen avoidance, Milton Keynes, UK
38. 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
39. Frias L, Okamoto M, MacIntosh A (2016). Towards a primate parasite community ecology: parasite sharing in sympatric Bornean primates. The 26th Congress of the International Primatological Society, Chicago, USA
40. 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
41. 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
42. 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)
43. Sarabian C, MacIntosh AJJ (2016) Testing disgust in non-human primates. The 31st International Congress of Psychology, Yokohama, Japan (Poster)
44. 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.
45. 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 26th Congress of the International Primatological Society, Chicago, USA
46. 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 26th Congress of the International Primatological Society, Chicago, USA

47. Finn K, MacIntosh A (2016) Behavioral Organization and Parasites in Japanese Macaques (Macaca fuscata) on Koshima Island. The 26th Congress of the International Primatological Society, Chicago, USA
48. 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 26th Congress of the International Primatological Society, Chicago, USA
49. *Frias L, Okamoto M, MacIntosh A (2016) Parasite sharing in sympatric Bornean primates. 5th International Symposium on Primatology and Wildlife Science. Inuyama, Japan
50. 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 31st Congress of the Primate Society of Japan, Kyoto, Japan
51. Duboscq J, Romano V, MacIntosh A, Sueur C (2015) A social network perspective on macaque social styles. The 38th meeting of the American Society of Primatologists, Bend, USA.
52. 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 38th meeting of the American Society of Primatologists, Bend, USA.
53. Rigaill 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 31st Congress of the Primate Society of Japan, Kyoto, Japan
54. Sarabian C, MacIntosh A (2015) Hygiene efficiency against parasites in Japanese macaques. The 31st Congress of the Primate Society of Japan, Kyoto, Japan
55. 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
56. MacIntosh AJJ, Kato A, Ropert-Coudert Y (2014) Logging Complexity: ecological challenges and the emergence of behavioral organization. Bio-logging Science 5, Strasbourg, France.
57. 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
58. Morino L, MacIntosh AJJ (2014) Gibbon songs and intergroup dynamics: a community-level network analysis. The 25th Congress of the International Primatological Society, Hanoi, Vietnam
59. 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 25th Congress of the International Primatological Society, Hanoi, Vietnam
60. MacIntosh AJJ (2014) A field-experimental approach to primate-parasite interactions: filling in the knowledge-gaps. The 25th Congress of the International Primatological Society, Hanoi, Vietnam
61. Romano V, Duboscq J, Sueur C, MacIntosh A (2014) Modelling disease transmission in primate networks to predict epidemics. The 25th Congress of the International Primatological Society, Hanoi, Vietnam
62. Sarabian C, MacIntosh A (2014) In the dirt: hygienic behaviours and revulsion as parasite avoidance adaptations in Japanese macaques. The 25th Congress of the International Primatological Society, Hanoi, Vietnam
63. 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 25th Congress of the International Primatological Society, Hanoi, Vietnam
64. *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
65. 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
66. 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 9th Congress of the Göttinger Freilandtage, Gottingen, Germany

67. 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 29th Congress of the Primate Society of Japan, Okayama, Japan
68. †MacIntosh AJJ (2013) The complex primate: interdisciplinary science and the math behind the monkey. Takashima Prize Lecture at the 29th Congress of the Primate Society of Japan, Okayama, Japan
69. 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 24th Congress of the International Primatological Society, Cancun, Mexico
70. MacIntosh AJJ, Jacobs A, Garcia C, Huffman MA, Hernandez AD (2012) Socially-mediated parasite transmission: the role of dominance in exposure and susceptibility. The 24th Congress of the International Primatological Society, Cancun, Mexico
71. MacIntosh AJJ, Jacobs A, Huffman MA, Hernandez AD (2011) Parasite transmission through social networks of Japanese macaques: a cost of grooming? The 26th Congress of the Primate Society of Japan, Inuyama, Japan. Primate Res 27(S):16
72. MacIntosh AJJ, Huffman MA (2010) The fractal dimension: measuring behavioural complexity and its implications for evaluating the health of primates in the wild. The 23rd Congress of the International Primatological Society, Kyoto, Japan. Primate Res 26(S):146
73. 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 31st Meeting of the American Society of Primatologists, West Palm Beach, USA. Am J Primatol 70(S1):67