MICHELLE BROWN

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Updated: October 2022

POSITIONS

| 2015 – present | Assistant Professor, University of California, Santa Barbara | |
|----------------|---|--|
| | 2021 – present: Research Affiliate, Broom Center for Demography | |
| | 2021 – present: Research Affiliate, Center for Black Studies Research | |
| | 2018 – present: Co-Director, Biobehavioral Health Laboratory | |
| 2011 - 2014 | Postdoctoral Research Fellow, University of New Mexico | |
| 2007 – present | Founder and Director, Ngogo Monkey Project | |

EDUCATION

| 2011 | Ph.D. | Columbia University, Evolutionary Primatology |
|------|-------|---|
| 2005 | 3.6.4 | |

- 2005 M.A. Columbia University, Evolutionary Primatology
- Harvard University, Cognitive Neuroscience, cum laude with honors 2000 A.B.

RESEARCH INTERESTS

Primate community energetics. My central research project documents the extensive and fluctuating energetic effects of between-species competition. I hypothesize that this neglected aspect of community ecology fundamentally shapes competitive dynamics within species (intergroup conflict and intragroup dominance), as well as the patterning of cooperative relationships and group structure.

Status: in progress. NSF award #s 2127253, 2216699 and awards from the UCSB Academic Senate and Institute for Social, Behavioral & Economic Research.

Diversity in anthropological fieldwork. The lack of diversity among biological anthropologists is due, in part, to the difficulty that members of historically marginalized groups face in obtaining fieldwork experience before graduate school. My long-term goal is to establish a national center that pairs mentees and mentors, distributes funding for fieldwork experiences, and provides professional development training for diverse post-baccalaureates.

Status: in progress. We surveyed the perspectives of US anthropology faculty on pregraduate fieldwork, and are now writing up the results for publication. Plan to apply for NSF funding to launch a national training network for post-bacc students.

Soundscapes as a selective pressure on social evolution. This project is designed to contextualize the adaptive function of a unique communication system among L'Hoest's monkeys, by evaluating the broader acoustic landscape and its effects on vocal communication and social dynamics in the Kibale primate community.

Status: in development. Pilot funding obtained from NSF (award # 2148760) and UCSB. Additional proposals to US NSF / UK RI and National Geographic planned in 2023.

PUBLICATIONS

Frogge, H., Jones, R.A., Angedakin, S., Busobozi, R., Kabagambe, P., Angwela, F.O., Thompson González, N., & <u>Brown, M.</u> 2022. Constraints on population growth of blue monkeys (*Cercopithecus mitis*) in Kibale National Park, Uganda. *Behaviour* 159:961-987. DOI: 10.1163/1568539X-bja10160

<u>Brown, M.</u>, Steinitz, R., and Emery Thompson, M. 2022. Wins and losses in intergroup conflicts reflect energy balance in red-tailed monkeys. *Philosophical Transactions of the Royal Society B* 377:20210152. DOI: 10.1098/rstb.2021.0152

Kavanagh, E., Street, S., Bergman, T.J., Blaszczyk, M., Briseño-Jaramillo, M., Bolt, L.M., Brown, M., ... Slocombe, K. [61 authors in total] 2021. Dominance style is a key predictor of vocal use and evolution across nonhuman primates. *Royal Society Open Science* 8: 210873. DOI: 10.1098/rsos.210873

Ochieng, J.R., Rwego, I.B., Kisakye, J.J.M., <u>Brown, M.</u> 2021. Gastrointestinal parasites of overlapping groups of blue monkeys (*Cercopithecus mitis*) and grey-cheeked mangabeys (*Lophocebus albigena*) at the Ngogo Research Site in Kibale National Park, Uganda. *African Journal of Ecology* 59(2):489-496. DOI: 10.1111/aje.12833

Knott, C., ... <u>Brown, M.</u>, ... Susanto, T.W. [45 authors in total] 2021. The Gunung Palung Orangutan Project: Twenty-five years at the intersection of research and conservation in a critical landscape in Indonesia. *Biological Conservation* 255:108856. DOI: 10.1016/j.biocon.2020.108856

<u>Brown, M</u>. 2020. Detecting an effect of group size on individual responses to neighboring groups in grey-cheeked mangabeys (*Lophocebus albigena*). *International Journal of Primatology* 41:287-304. DOI: 10.1007/s10764-020-00144-9

<u>Brown, M.</u> 2020. An observation of intergroup infanticide in grey-cheeked mangabeys (*Lophocebus albigena*). *Behaviour* 157(12-13):1091-1098. DOI: 10.1163/1568539X-bja10031

McLester, E., <u>Brown, M.</u>, Stewart, F., and Piel, A. 2019. Food abundance and weather influence habitat-specific ranging patterns in forest- and savanna mosaic-dwelling red-tailed monkeys (*Cercopithecus ascanius*). *American Journal of Physical Anthropology* 170(2):217-231. DOI: 10.1002/ajpa.23920

Jaeggi, A.V., Trumble, B.C., and <u>Brown, M</u>. 2018. Group-level competition influences urinary steroid hormones among wild red-tailed monkeys, indicating energetic costs. *American Journal of Primatology* 80:e22757. DOI: 10.1002/ajp.22757

<u>Brown, M.</u> and Waser, P. 2018. Group movements in response to competitors' calls indicate conflicts of interest between male and female grey-cheeked mangabeys (*Lophocebus albigena*). *International Journal of Primatology* 80:e22918. DOI: 10.1002/ajp.22918

Goldberg, T.L., Angedakin, S., Basuta, G.M.I., <u>Brown, M.</u>, Butynski, T.M., Chapman, C.A., et al. 2016. Remembering Jerry Lwanga: a perspective from his colleagues. *International Journal of Primatology* 37(2): 131-135. DOI: 10.1007/s10764-015-9888-3

<u>Brown, M.</u> 2014. Patch occupation time predicts responses by grey-cheeked mangabeys (*Lophocebus albigena*) to real and simulated neighboring groups. *International Journal of Primatology* 35(2):491-508. DOI: 10.1007/s10764-014-9762-8

Brown, M. 2013. Food and range defense in group-living primates. *Animal Behaviour* 85(4):807-816, DOI: 10.1016/j.anbehav.2013.01.027

<u>Brown, M.</u> and Crofoot, M. 2013. Social and spatial relationships between primate groups. In: *Primate Ecology and Conservation* (pp. 151-176). Eds: Sterling, E., Bynum, N., and Blair, M. Oxford University Press.

Beehler, B.M., Stevenson, T.C., and <u>Brown, M.</u> 2004. Letters to the editor: Virgin rainforests and conservation. *Science* 305:943-944, DOI: http://www.jstor.org/stable/3837537

Hare, B., <u>Brown, M.</u>, Williamson, C., and Tomasello, M. 2002. The domestication of social cognition in dogs. *Science* 298:1634-1636, DOI: http://www.jstor.org/stable/3832853

OTHER MANUSCRIPTS

<u>Brown, M.</u> and Gaffney, M. Submitted. Range utilization slopes as a measure of central tendency and intergroup overlap in primates. *Behavioral Ecology and Sociobiology*.

Jones, R.A., Frogge, H., Dopulos, C., Lee, L., Mitchell, S., Soto, A., Tetreault, F., Utter, J., Valdez, A., Emery Thompson, M., & <u>Brown, M</u>. In prep. Sublethal energetic effects of gastrointestinal parasite infection.

Steinitz, R., Potts, K., Bryer, M., Rothman, J., Emery Thompson, M., & <u>Brown, M.</u> In prep. Energetic and reproductive consequences of interspecific competition on a small-bodied primate.

RESEARCH & FELLOWSHIP FUNDING

| 2022 | National Science Foundation | DDRIG: Biological Anthropology |
|------|---|---|
| 2022 | National Science Foundation | High-Risk Research in Biological Anthropology |
| 2022 | UCSB Academic Senate | Faculty Research Grant |
| 2022 | Institute for Social, Behavioral & Econ | nomic Research Social Science Research Grant |
| 2021 | National Science Foundation | Build & Broaden Research Grant |
| 2021 | UCSB Division of Social Sciences | Matching Funds for Build & Broaden |
| 2020 | UCSB Academic Senate | Faculty Research Grant |
| 2020 | UCSB Office of Academic Personnel | Faculty Career Development Award |
| 2017 | Hellman Family Foundation | Faculty Fellowship |
| 2016 | American Association of Physical Ant | hropologists Professional Development Grant |
| 2015 | UCSB Academic Senate | Faculty Research Grant |
| 2015 | Institute for Social, Behavioral & Econ | nomic Research Social Science Research Grant |
| 2013 | Leakey Foundation | General Research Grant |
| 2011 | National Science Foundation | Postdoctoral Research Fellowship |
| 2010 | International Primatological Society | Student Competition, 3 rd place |
| 2010 | American Society of Primatologists | Ruppenthal Student Travel Award |
| 2009 | National Science Foundation | GK-12 Fellowship |
| 2008 | National Science Foundation | Doctoral Dissertation Improvement Grant |
| 2008 | Leakey Foundation | Research Grant |
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- 2008 International Primatological Society
- 2007 Columbia University
- 2007 Animal Behavior Society
- 2005 National Science Foundation
- 2004 Ford Foundation
- 2004 Columbia University
- 2000 Orangutan Foundation International
- 2000 Sigma Xi
- 2000 Harvard-Radcliffe College
- 2000 Harvard University

INVITED LECTURES

Research Grant Traveling Fellowship Diversity Fund Award Graduate Research Fellowship Program Predoctoral Diversity Fellowship Faculty Fellow Lorraine P. Jenkins Fellowship Grants-In-Aid of Research Travelling Fellowships Undergraduate Thesis Research Fund

| Sep 2022 Nov 2021 Mar 2021 Dec 2020 Nov 2020 | University of Minnesota University of Michigan Univ. Southern California Duke University UC Santa Barbara | Dept of Anthropology Evolution and Human Adaptation Program Dept of Biological Sciences Long Term Animal Research Seminar series Dept of Ecology, Evolution, and Marine Biology |
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| | New York Consortium in | New York Regional Primatology Colloquium Series |
| | Evolutionary Primatology | |
| | Stony Brook University | Behavioral Ecology Group |
| - | Duke University | Evolutionary Anthropology Seminar series |
| Jan 2020 | Max Planck Institute | Research Group Leader Symposium |
| May 2019 | UC Santa Cruz | Department of Anthropology |
| | UC Santa Barbara | Center for Evolutionary Psychology |
| Nov 2018 | UC Santa Barbara | Dept of Anthropology |
| Oct 2016 | UCLA | Center for Behavior, Evolution, & Culture |
| Mar 2016 | Arizona State University | Evolution of Social Complexity Seminar series |
| Sep 2015 | NIMBioS | "Evolution and Warfare" workshop |
| Mar 2015 | UC Davis | Dept of Anthropology |
| Oct 2014 | Florida Atlantic University | Dept of Anthropology |
| May 2014 | UC Santa Barbara | Dept of Anthropology |
| Jan 2014 | Kent State University | Dept of Anthropology |
| Jan 2011 | University of Pennsylvania | Depts of Biology and Psychology |
| Nov 2010 | Stony Brook University | Behavioral Ecology Group |
| Nov 2010 | Yale University | Dept of Anthropology |

CONFERENCE PRESENTATIONS

Dopulos, C., Frogge, H., Jones, R., Thompson González, N. and <u>Brown, M.</u> May 2022. "Parasite pals: Gastrointestinal parasite co-infection in sympatric monkeys." California Workshop on Evolutionary Social Sciences (poster). **Awarded 1**st place in the poster competition.

Liao, J., Crommelin, S., and <u>Brown, M.</u> May 2022. "Inter-group competition and home range geometry." California Workshop on Evolutionary Social Sciences (poster).

Mackay, K., Steinitz, R., and <u>Brown, M.</u> Apr 2022. "Evaluation of NDVI and EVI as measures of food availability for fruit-eating monkeys." California Geographical Society (poster). **Awarded 1st place in the poster competition.**

<u>Brown, M.</u>, Gaffney, M., and Emery Thompson, M. May 2021. "Ranging correlates with energy balance among red-tailed monkey (*Cercopithecus ascanius*) groups." American Association of Physical Anthropologists (podium).

Steinitz, R., Emery Thompson, M., and <u>Brown, M</u>. May 2021. "Red-tailed monkeys (*Cercopithecus ascanius*) employ both behavioral and physiological strategies to overcome seasonal hardship." American Association of Physical Anthropologists (poster).

Kavanagh, E., ... <u>Brown, M.</u>, ...Slocombe, K. Sep 2019. "Dominance style and vocal communication in primates." European Federation for Primatology (podium).

McLester, E., <u>Brown, M.</u>, Steward, F.A., & Piel, A.K. Sep 2019. "Thermal constraints on habitat use in forest- and savanna mosaic-dwelling red-tailed monkeys (*Cercopithecus ascanius*)." European Federation for Primatology (poster).

Knott, C.D., Crowley, B., <u>Brown, M.</u>, Susanto, T.W. March 2019. "Fecal isotopes as indicators of weaning and diet in wild Bornean orangutans." American Association of Physical Anthropologists (podium).

Frogge, H., Utter, J., Jones, R., and <u>Brown, M</u>. April 2019. "Health and Disease in a Declining Population of Blue Monkeys (*Cercopithecus mitis*)." California Workshop on Evolutionary Social Sciences (poster). **Awarded 2nd place in student poster competition**.

Utter, J., Frogge, H., Jones, R., and <u>Brown, M</u>. April 2019. "Evaluation of analytical methods for measuring gastrointestinal parasite burden and implications for long-term sample storage." California Workshop on Evolutionary Social Sciences (poster).

<u>Brown, M.</u> August 2018. "Sex-specific (and individual and group-wide) responses to neighboring groups' long-distance vocalizations in wild grey-cheeked mangabeys (*Lophocebus albigena*) in Kibale National Park, Uganda." International Primatological Society (podium).

Steinitz, R.B., Emery Thompson, M., and <u>Brown, M.</u> May 2018. "Surviving on scraps: Redtailed monkeys rely on important foods during times of intense feeding competition." California Workshop on Evolutionary Social Sciences (poster).

Gaffney, M. and <u>Brown, M.</u> May 2017. "A test of the risk hypothesis: home range utilization patterns correspond with physical risk during intergroup encounters." California Workshop on Evolutionary Social Sciences (poster). **Awarded 1**st **place in student poster competition**.

<u>Brown, M.</u> August 2016. "Correlated functions and outcomes of intergroup aggression in wild redtail monkeys (*Cercopithecus ascanius*) in Kibale National Park, Uganda." International Primatological Society / American Society of Primatologists (podium).

Jones, R.A. and <u>Brown, M.</u> August 2016. "Parasite infection in wild blue monkeys (*Cercopithecus mitis*) in Kibale National Park, Uganda." International Primatological Society / American Society of Primatologists (podium).

<u>Brown, M.</u> April 2015. "Male monopolies and female gangs: conflicts of interest during primate intergroup interactions." California Workshop on Evolutionary Social Sciences (podium).

<u>Brown, M.</u> and Emery Thompson, M. March 2015. "Energy balance and stress responses correspond with individual participation by redtail monkeys in aggressive intergroup interactions." American Association of Physical Anthropologists (poster).

<u>Brown, M.</u> 2014. "Competing demands of food vs. mate defense during primate intergroup interactions." Animal Behavior Society (podium).

Jones, R.A., <u>Brown, M.</u>, and Emery Thompson, M. 2014. "A perfect storm: multiple constraints on population growth in blue monkeys (*Cercopithecus mitis*) in Kibale National Park, Uganda." Animal Behavior Society (podium).

<u>Brown, M.</u> and Emery Thompson, M. 2014. "Strong group effects on energetic balance in redtail monkeys (*Cercopithecus ascanius*)." American Association of Physical Anthropologists (podium).

<u>Brown, M.</u> September 2010. "Rethinking the causes of sex-specific aggression during intergroup encounters: Lessons from grey-cheeked mangabeys (*Lophocebus albigena*) and redtail monkeys (*Cercopithecus ascanius*)." International Primatological Society (podium). Awarded third place in the student presentation competition.

<u>Brown, M.</u> June 2010. "Do grey-cheeked mangabey (*Lophocebus albigena*) groups in Kibale National Park, Uganda, continue to avoid their neighbors as the population density increases?" American Society of Primatologists (podium).

<u>Brown, M.</u> April 2010. "Sex-specific responses to naturally-occurring and simulated intergroup encounters." American Association of Physical Anthropologists (podium).

<u>Brown, M.</u> September 2009. "Sex-specific strategies during simulated intergroup encounters in grey-cheeked mangabeys (*Lophocebus albigena*) in Kibale National Park, Uganda." American Society of Primatologists (podium).

<u>Brown, M.</u> July 2007. "Predicting sex-specific participation during intergroup interactions in primates." Animal Behavior Society (podium).

Brown, M. and Cords, M. March 2007. "Spatial Position and Dominance Rank in Blue Monkeys (*Cercopithecus mitis stuhlmanni*)." American Association of Physical Anthropologists (poster).

MENTORING

MA/PhD committee chair, Ronnie Steinitz, in progress (UCSB) MA/PhD committee chair, Hannah Frogge, in progress (UCSB) MA/PhD committee chair, Janine Klein, in progress (UCSB) MA/PhD committee chair, Leonie Gussone, in progress (UCSB) MA/PhD committee member, Bidisha Chakraborty, in progress (UC Davis) MA committee member, Zhian Chen, in progress (UCSB) BA honors thesis advisor, Sean Crommelin, 2022 (UCSB) MS external advisor, James Robert Ochieng, 2019 (Makerere University) BS external advisor, Joel Steven, 2019 (Makerere University) BS external advisor, Salmah Jombela, 2019 (Makerere University) MA committee chair, Evan Beierschmitt, 2018 (UCSB) PhD committee member, Angela Garcia, 2018 (UCSB) MS external advisor, Mary Alum, 2012 (Makerere University)

- 2022-23: mentoring 8 UCSB undergraduates in research methods through <u>paid</u> internships (all belong to historically marginalized racial and ethnic groups in STEM disciplines)
- 2021-22: mentored 14 UCSB undergraduates in research methods through <u>paid</u> internships (13 belong to marginalized groups in STEM disciplines).
- 2015-21: individualized research training for 23 UCSB undergraduates (for course credit), 11 from marginalized groups in STEM disciplines, 5 are now in graduate school.

TEACHING AT UCSB

ANTH 153T Primate Behavior (upper-division undergraduate lecture) ANTH 103 Human-Wildlife Interactions (upper-division undergraduate seminar) ANTH 123 Feeding Ecology in Primates & Humans (upper-division undergraduate seminar) ANTH 197 Endocrinology Laboratory Methods (upper-division lab course) INT 84ZP Observing Behavior (undergraduate honors seminar) ANTH 202 Advanced Topics in Primatology (graduate seminar) ANTH 241 Current Methods & Theory in Biological Anthropology (graduate seminar) ANTH 250 Professional Development (graduate seminar)

UNIVERSITY SERVICE

Department of Anthropology Development/Website/Media Committee (2022 - present) BioEngineering Building COVID-19 Committee (2021-present) Department of Anthropology *Ad Hoc* Committee on Anti-Racism (2020) Department of Anthropology Diversity Committee (2016 - 2017, 2020 - present) Department of Anthropology Graduate Committee (2016 - 2019) Department of Anthropology Colloquium Committee (2015 - 2016)

PROFESSIONAL SERVICE & AFFILIATIONS

Editorial board member: American Journal of Primatology; Evolutionary Anthropology

- Journal article reviews: American Journal of Primatology; American Journal of Physical / Biological Anthropology; Behavioural Processes; Evolutionary Anthropology; Hormones and Behavior; International Journal of Primatology; PLOS One; PNAS; Primates
- *Proposal reviews*: Leakey Foundation; Max Planck Institute of Animal Behavior, Dept for the Ecology of Animal Societies; National Geographic Society; National Science Foundation
- *Memberships*: American Association of Physical/Biological Anthropologists; American Society of Primatologists; Animal Behavior Society; International Primatological Society; International Society of Wildlife Endocrinology