

Eli D. Strauss

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<http://straussed.github.io>

Research Interests

Social behavior, social evolution, dominance hierarchies, fission-fusion dynamics, quantitative methods in behavioral ecology

Education

2012 – 2018 Candidate for dual PhD at Michigan State University
Integrative Biology and Ecology, Evolutionary Biology & Behavior
2007 – 2011 B.A. at University of California Berkeley (*cum laude*)

Awards and Honors

2017 Best Student Talk at *Göttinger Freiländertage*, Germany (\$180)
2012 NSF Graduate Research Fellowship (\$138,000)
2012 University Distinguished Fellowship (\$80,000)
2011 Undergraduate Thesis in Cognitive Science with Highest Honors

Publications

Peer-Reviewed

Strauss ED, Holekamp KE. (In revision) Identifying stable and dynamic rank relationships in longitudinal dominance hierarchies. *Journal of Animal Ecology*.
Smith JE, Lehmann KDS, Montgomery TM, **Strauss ED**, Holekamp KE. (2017) Insights from long-term field studies of mammalian carnivores. *Journal of Mammalogy*, 98:631-641.
Holekamp KE, **Strauss ED**. (2016) Aggression and dominance: An interdisciplinary overview. *Current Opinion in Behavioral Sciences*, 12:44-51.
Strauss ED, Schloss KB, Palmer SE. (2013) Color preferences change after experience with liked/disliked colored objects. *Psychonomic Bulletin & Review*, 20:935-943.
Schloss KB, **Strauss ED**, Palmer SE. (2013) Object color preferences. *Color Research & Application*, 38:393-411.

Book Chapters

Jones SC, **Strauss ED**, Holekamp KE. (2015) "Ecology of African Carrion." *Carrion Ecology, Evolution and Their Applications*. CRC Press.

Published Conference Proceedings

Johnson AE, **Strauss ED**, Pickett R, Adami C, Dworkin I, Goldsby HJ. (2014) More bang for your buck: Quorum-sensing capabilities improve the efficacy of suicidal altruism. *ALIFE 14: Proceedings of the Fourteenth International Conference on the Synthesis and Simulation of Living Systems*, New York, NY.

Manuscripts in preparation

Strauss ED, Holekamp KE. Coalitionary alliances, rank reversals, and fitness among females in a matriarchal society.

Strauss ED, Holekamp KE. The causes and consequences of variability in maternal rank inheritance.

Invited Seminars

2017. **Strauss ED**, Holekamp KE. The dynamics of social status in a long-term study of nepotistic spotted hyenas. Talk presented at University of Nebraska, Lincoln.

Conference Posters and Presentations

2017. **Strauss ED**, Holekamp KE. Social bonds predict dynamics of dominance status in societies of spotted hyenas. Talk presented at *Göttinger Freilandtage*.

2017. **Strauss ED**, Holekamp KE. Social rank reversals in a long-term study of spotted hyenas. Talk presented at *Animal Behavior Society Meeting*.

2017. **Strauss ED**, Holekamp KE. The structure of nepotistic dominance hierarchies: The role of kinship and dominance. Talk presented at *BEACON Center for Evolution in Action*.

2016. **Strauss ED**, Holekamp KE. Social rank reversals in a long-term study of spotted hyenas. Talk presented at *MSU EEBB Symposium*.

2014. **Strauss ED**, Holekamp KE. Intraspecific variation in the society of a social carnivore. Poster presented at *Animal Behavior Society Meeting*.

2014. Mirmomeni M, Hintze A, **Strauss ED**, Adami C. The collective hunting game: A new game to model social behavior in animals. Talk presented at *Evolution*.

2011. **Strauss ED**, Schloss KB, Palmer SE. 2011. The effects of imagined experiences of objects on preferences for colors. Talk presented at *Annual Meeting of the Vision Science Society*.

2010. **Strauss ED**, Schloss KB, Palmer SE. 2010. The good, the bad, and the ugly: Effects of object exposure on color preferences. Poster presented at *10th Annual Meeting of the Vision Science Society*.

2010. Schloss KB, Fortenbaugh FC, **Strauss ED**, Palmer SE. 2010. CSI Berkeley Episode II: Perceptual organization and selective attention. Talk presented at *10th Annual Meeting of the Vision Science Society*.

2009. Schloss KB, Fortenbaugh FC, **Strauss ED**, Palmer SE. 2009. CSI Berkeley Episode II: Perceptual organization and selective attention. Talk presented at *4th Annual Configural Processing Consortium*.

Research Grants and Fellowships

2017 BEACON Travel Fellowship (\$1000)

2017 MSU EEBB Travel Fellowship (\$600)

2016 MSU IBIO Shaver Award (\$1,125)

2016 MSU EEBB Summer Fellowship (\$1,800)

2014 MSU EEBB Summer Fellowship (\$1,800)

2013 MSU EEBB Travel Fellowship (\$400)

2012 BEACON Top-up Fellowship (\$3,000)

2010 UC Berkeley Undergraduate Research Apprenticeship Summer Award

2009 UC Berkeley Undergraduate Research Apprenticeship Summer Award

Past Research Experience

2011 – 2012 Research Assistant at Mara Hyena Research Project, Kenya (Dr. Kay Holekamp)
2010 – 2011 Research Assistant in Animal Behavior at UC Berkeley (Dr. Eileen Lacey)
2008 – 2011 Research Assistant in Visual Aesthetics Lab at UC Berkeley (Dr. Stephen Palmer)

Mentoring

2015 – 2018 Mentored six students conducting behavioral data extraction and analysis
2014 – 2015 Mentored five students in field methods for behavior through NSF IRES program
2013 – 2014 Mentored two students from underrepresented minorities through SROP program

Teaching

2016 (spring) Evolution (Discussion Instructor)
2015 – 2017 Behavioral Ecology of African Mammals (Lead Instructor)

Service and Outreach

2017 – 2018 MSU Hacky Hour founder & organizer (coding group for graduate students)
2017 – 2018 MSU EEBC Recruitment Liaison
2017 – 2018 MSU Science Festival volunteer
2016 – 2018 Biology on Tap founder & organizer (public outreach event for adults)
2016 – 2018 MSU EEBC Quantitative Methods Committee (revamping stats curriculum)
2015 – 2016 MSU IBIO Seminar Committee
2014 – 2015 Weekly public presentations about spotted hyenas at Serena Lodge in Kenya
2014 – 2015 MSU Hyena Project field blog
2013 – 2014 MSU Museum Darwin Day volunteer