

## Eli D. Strauss

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<http://straussed.github.io>

### Research Interests

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Social inequality, hierarchies, dominance, complex systems, quantitative methods in behavioral studies, comparative sociobiology, social network analysis, collective behavior, ecology

### Education

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

### Awards and Honors

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2019 MSU EEBC Distinguished Student Speaker (\$500) (scheduled April)  
2017 Best Student Talk at *Göttinger Freilandtage*, Germany December 2017 (\$180)  
2012 NSF Graduate Research Fellowship year1-year3 (\$138,000)  
2012 University Distinguished Fellowship (\$80,000) year awarded  
2011 Undergraduate Thesis in Cognitive Science with Highest Honors year awarded

### Publications

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#### Peer-Reviewed

- Strauss ED**, Holekamp KE. (In revision) Social alliances improve rank and fitness in convention-based societies. *Proceedings of the National Academy of Sciences*
- Strauss ED**, Holekamp KE. (In revision) Estimating longitudinal hierarchies: A framework for studying the dynamics of dominance. *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.
- Jones, S. C., **Strauss, E. D.** & Holekamp K. E. (2015) Ecology of African Carrion. Pp. 459-489 in *Carrion Ecology, Evolution, and Their Applications*. M. E. Benbow, J. K. Tomberlin, & A. M. Tarone (Eds). CRC Press. Boca Raton, FL
- 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.
- 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.

### **Manuscripts in preparation**

**Strauss ED**, Shizuka D, Holekamp KE. Variation in rank 'inheritance' in a nepotistic society predicts survival.

Green DS, Farr M, Holekamp KE, **Strauss ED**, Zipkin E. Can hyena behavior predict abundances of sympatric carnivores?

### **Invited Seminars and Workshops**

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.

2019 (scheduled June). Workshop on developing quantitative methods for systematic comparison of human groups at Max Planck Institute of Evolutionary Anthropology, Leipzig, Germany.

### **Conference Posters and Presentations**

2018. **Strauss ED**, Shizuka D, Holekamp KE. Early life dominance interactions predict longevity in spotted hyenas. Talk presented at *BEACON Center for Evolution in Action*, Lansing, MI.

2018. **Strauss ED**, Shizuka D, Holekamp KE. Early life dominance interactions predict longevity in spotted hyenas. Talk presented at the annual meeting of the *International Society for Behavioral Ecology*. Minneapolis, MN.

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

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

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*. Lansing, MI.

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

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

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 annual meeting of the *Society for the Study of Evolution*. Raleigh, NC.

2011. **Strauss ED**, Schloss KB, Palmer SE. 2011. The effects of imagined experiences of objects on preferences for colors. Talk presented at the 11th annual meeting of *The Vision Science Society*. Naples, FL.

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 the 10th annual meeting of *The Vision Science Society*. Naples, FL.

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

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*. Boston, MA.

### **Research Grants and Fellowships**

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2019	Dissertation Completion Fellowship (\$7500)
2018	Dissertation Continuation Fellowship (\$7500)
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**

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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**

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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**

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2018 (fall)	IBIO 830 Statistical Methods in Evolution and Ecology (TA for graduate course)
2018 (sum)	IBIO 341 Fundamentals of Genetics
2016 (spring)	IBIO 445 Evolution (Discussion Instructor)
2015 – 2017	IBIO 490 Behavioral Ecology of African Mammals (Lead Instructor)

### **Service and Outreach**

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