

# SARAH E. WESTRICK

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## EDUCATION & PROFESSIONAL EXPERIENCE

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<b>Postdoctoral Research Associate</b> Advisor: Dr. Eva K. Fischer <i>University of Illinois Urbana-Champaign</i>	2020 - present
<b>PhD in Biopsychology</b> Advisor: Dr. Ben Dantzer <i>University of Michigan, Ann Arbor</i>	2015 - 2020
<b>Professional Research Assistant and Lab Manager</b> Supervisor: Dr. Kim L. Hoke <i>Colorado State University, Fort Collins</i>	2014-2015
<b>Laboratory Technician</b> Supervisors: Drs. Lisa M. Angeloni and Cameron K. Ghalambor <i>Colorado State University, Fort Collins</i>	2011-2014
<b>BS in Zoology and Biology, Honors Program</b> Honors advisor: Dr. Lisa Angeloni <i>Colorado State University, Fort Collins</i>	2009 - 2013

## GRANTS & AWARDS

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UIUC Arnold O. Beckham Research Award - \$28,370	2020
NSF Postdoctoral Research Fellowship in Biology (DBI 2010714) - \$207,000	2020-2023
Animal Behavior Society Graduate Student Travel Grant - \$500	2019
Rackham Graduate Student Research Grant - \$3,000	2019
Rackham Graduate Conference Travel Grant - \$800	2019, 2018, 2017, 2016
Rackham One-Term Fellowship (tuition and stipend)	2019
SICB Charlotte Mangum Student Support	2018, 2017, 2016
Rackham Graduate Student Research Grant - \$1,500	2017
American Society of Mammalogists Grants-in-Aid of Research - \$1,500	2017, 2016
UM Library Student Mini-Grant - \$1,000	2016
Diversity in Telomere Dynamics Workshop student bursary award - £845	2016
UM International Institute Individual Fellowship - \$2,500	2016

## PUBLICATIONS

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- Westrick SE, Paitz RT, & Fischer EK. (submitted/preprinted) Why not both? A case study measuring cortisol and corticosterone in poison frogs. *bioRxiv*. [link](#)
- \*Westrick SE, Moss JB, & Fischer EK. (2023) Who cares? An integrative approach to understanding the evolution of behavioural plasticity in parental care. *Animal Behaviour*. 200: 225-236. [link](#) \*Editor's Choice
- Westrick SE, Laslo M, & Fischer EK. (2022) The big potential of the small frog *Eleutherodactylus coqui*. *eLife* 11(e73401). [link](#)
- Westrick SE, van Kesteren F, Boutin S, Lane JE, McAdam AG, & Dantzer B. (2021) Maternal glucocorticoids have minimal effects on HPA axis activity and behavior of juvenile wild North American red squirrels. *Journal of Experimental Biology* 224(10). [link](#)
- Westrick SE, Taylor RW, Boutin S, Lane JE, McAdam AG, Dantzer B (2020) Attentive red squirrel mothers have faster-growing pups and higher lifetime reproductive success. *Behavioral Ecology and Sociobiology*. 74(72). [link](#)
- Dantzer B, van Kesteren F, Westrick SE, Boutin S, McAdam AG, Lane JE, Gillespie R, Majer A, Haussmann M, Monaghan P (2020) Maternal stress promotes offspring growth without oxidative costs in wild red squirrels. *Journal of Experimental Biology*. 223(1). [link](#)
- Santicchia F, Wauters LA, Dantzer B, Westrick SE, Ferrari N, Romeo C, Palme R, Preatoni DG, Martinoli A (2019) Relationships between personality traits and the physiological stress response in a wild mammal. *Current Zoology*. 66(2): 197-204. [link](#)
- Westrick SE, van Kesteren F, Palme R, Boonstra R, Lane JE, Boutin S, McAdam AG, Dantzer B. (2019) Stress is not predictive of coping style in North American red squirrels. *Behavioral Ecology and Sociobiology*. 73(113). [link](#)
- van Kesteren F, Delehanty B, Westrick SE, Palme R, Boonstra R, Lane JE, Boutin S, McAdam AG, Dantzer B. (2019) Experimental increases in glucocorticoids alter function of the neuroendocrine stress axis in wild red squirrels without negatively impacting survival and reproduction. *Physiological and Biochemical Zoology*. 92(5), 445-458. [link](#)
- Westrick SE, Broder ED, Reznick DN, Ghalambor CK, Angeloni L. (2019) Rapid evolution and behavioral plasticity following introduction to an environment with reduced predation risk. *Ethology*. 125(4), 232-240. [link](#)
- Fischer EK, Westrick SE, Hartsough L, Hoke KL. (2018). Differences in neural activity, but not behavior, across social contexts in guppies, *Poecilia reticulata*. *Behavioral Ecology and Sociobiology*. 72(8), 131. [link](#)
- Dantzer B, Westrick SE, van Kesteren F. (2016). Relationships between endocrine traits and life histories in wild animals: insights, problems, and potential pitfalls. *Integrative and Comparative Biology*. 56(2): 185-197. [link](#)

## TEACHING EXPERIENCE

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<b>Instructor of Record for Biology of Maternal Care (PSYCH 402)</b>	2019
Developed a new seminar focused on the evolution, neuroscience, and psychology of maternal care for senior psychology undergraduates in the Biopsychology, Cognition, & Neuroscience concentration	
<b>Graduate Student Instructor for Intro to Animal Behavior (PSYCH 335)</b>	2016, 2017
Lead Instructors: Dr. Ben Dantzer, Dr. Thore Bergman	
Responsible for 2-3 discussion sections per teaching semester	
<b>Graduate Student Instructor for Intro to Behavioral Neuroscience (PSYCH 230)</b>	2017
Lead Instructor: Dr. Martin Sarter	
Responsible for 3 discussion sections	

## MENTORSHIP

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### 3 undergraduate students at UIUC

I mentored two women in developing their own independent research project on mating behavior of poison frogs for a poster presentation at the UIUC Undergraduate Research Symposium in 2023. One of the students was awarded the iBio Summer Research Fellowship for 2023 to design her own research project on female aggression in poison frogs. They will give an oral presentation of their findings at the summer research symposium. I mentored another student who completed their honors senior thesis on poison frog toe-tapping behavior and presented a poster at the UIUC Undergraduate Research Symposium and the Animal Behavior Conference in 2023 at Indiana University.

### 15 undergraduates and recent college graduates in the field from 2015-2018

In 2018, I was the summer field coordinator for the Kluane Red Squirrel Project (KRSP) and was responsible for directing and managing 15 people, a mix of undergraduates, recent college graduates, graduate students, and postdocs, on the long-term project.

### 5 undergraduate students in the lab at UM

Through the Undergraduate Research Opportunity Program (UROP) at UM, I mentored two women in developing their own independent research projects related to glucocorticoids and behavior. Each presented a poster at the UROP Research Symposium.

## CONFERENCES & PRESENTATIONS

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### Conference Talks

Society of Integrative and Comparative Biology Conference, Austin, TX	2023
Society of Integrative and Comparative Biology Conference, virtual	2022
Animal Behavior Society Meeting, virtual, <i>invited symposium talk</i>	2021
Society of Integrative and Comparative Biology Conference, San Francisco, CA	2018
Society of Integrative and Comparative Biology Conference, New Orleans, LA	2017
Diversity in Telomere Dynamics Workshop, Edinburgh, Scotland, UK	2016
Front Range Student Ecology Symposium, Fort Collins, CO	2012

*Poster Presentations*

Society of Integrative and Comparative Biology Conference, Austin, TX <a href="#">poster</a>	2020
Animal Behavior Society Meeting, Chicago, IL <a href="#">poster</a>	2019
Society of Integrative and Comparative Biology Conference, Tampa, FL <a href="#">poster</a>	2019
Society of Integrative and Comparative Biology Conference, Portland, OR <a href="#">poster</a>	2016
Animal Behavior Society Meeting, Boulder, CO	2013
Front Range Student Ecology Symposium, Fort Collins, CO	2012

*Invited Seminars*

Behavior Group, University of Minnesota, MN	2021
Dept of Ecology, Evolution, & Organismal Biology, Kennesaw State University, GA	2020
Dept of Evolution, Ecology, & Behavior, University of Illinois Urbana-Champaign	2020
Dept of Psychology (Biopsychology Area), University of Michigan, Ann Arbor	2017

*Public Engagement Talks*

Summer Science Nights, Haines Junction, YT, Canada	2017
University of Michigan Library Engagement Symposium, Ann Arbor	2017

**PROFESSIONAL SERVICE & ENGAGEMENT**

Co-Chair of Institute for Genomic Biology Postdoctoral Association at UIUC	2021-2022
Biopsychology Graduate Student Departmental Associate at UM	2019-2020
Biopsychology Graduate Admissions Committee Member at UM	2019
Co-Chair of Psychology Graduate Student Association at UM	2018-2019
Graduate Leadership Council Member in Dept. of Psychology at UM	2018-2020

## Member of:

American Society of Naturalists, American Society of Mammalogists, Animal Behavior Society, International Society for Wildlife Endocrinology, Society of Behavioral Neuroendocrinology, Society of Integrative and Comparative Biology

## Peer-review for:

*Behavioural Brain Research, Behavioral Ecology, Behavioral Ecology and Sociobiology, Current Zoology, Functional Ecology, General and Comparative Endocrinology, Hormones and Behavior, Journal of Comparative Physiology B, Journal of Experimental Zoology Part A, Mammal Review, Molecular Ecology, Oecologia, Philosophical Transactions of the Royal Society B, Physiological and Biochemical Zoology, Physiology and Behavior, The Science of Nature, Urban Ecosystems*