

Education

University of Pennsylvania	2014 – Present
<ul style="list-style-type: none"> • PhD Candidate in Biology • Advisor: Dr. Marc Schmidt 	
Brigham Young University	2011 – 2014
<ul style="list-style-type: none"> • B.S. in Biology, minor in Mathematics 	

Prior Research Experience

Rotation Student with Marc Schmidt, PhD	Spring, 2015
<ul style="list-style-type: none"> • Performed electrophysiological recordings in auditory regions during song stimulus 	
Rotation Student with Shelley Berger, PhD	Winter, 2015
<ul style="list-style-type: none"> • Used RNAi to study epigenetic factors driving behavioral phenotypes 	
Rotation Student with Erol Akçay, PhD	Fall, 2014
<ul style="list-style-type: none"> • Developed a computational model of pair bond formation (ongoing project) 	
Research Assistant to Byron Adams, PhD	2013 – 2014
<ul style="list-style-type: none"> • Ran PCR, collaborated on projects on Antarctic nematode evolution 	
Research Assistant to John Kauwe, PhD	2012 – 2013
<ul style="list-style-type: none"> • Performed Quantitative PCR to evaluate the causes of Alzheimer's Disease 	

Honors, Awards, Fellowships

Computational Approaches... (CANAC) Training Grant	2018 – 2021
Behavioral and Cognitive Neuroscience (BCN) Training Grant	2017 – 2018
Winner: Graduate Poster Session – Penn Biology Retreat	October, 2016
Integrative Graduate Education and Research Traineeship (IGERT)	2015 – 2017

Publications

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- Anderson, H., **Perkes, A.**, Gottfried, J., Davies, H., White, D., Schmidt, M. (2020). Female signal jamming in a socially monogamous brood parasite. *Animal Behaviour* (*accepted*)
- Badger, M., Wang, Y., Modh, A., **Perkes, A.**, ... & Daniilidis, K., (2020). 3D Bird Reconstruction: a Dataset, Model, and Shape Recovery from a Single View. *ICCV*, (*accepted*)
- Perkes, A.**, White, D., Wild, M. and Schmidt, M., (2019). Female Songbirds: The unung drivers of courtship behavior and its neural substrates. *Behavioral processes*, 163, 60-70.
- Lythgoe, C., **Perkes, A.**, Peterson, M., Schmutz, C., Leary, M., Ebbert, M. T., ... & Kauwe, J. S. (2015). Population-based analysis of cholesteryl ester transfer protein identifies association between I405V and cognitive decline: the Cache County Study. *Neurobiology of aging*, 36(1), 547-e1.
- Murcia, J. D. G., Schmutz, C., Munger, C., **Perkes, A.**, ... & Kauwe, J. S. (2013). Assessment of TREM2 rs75932628 association with Alzheimer's disease in a population-based sample: the Cache County Study. *Neurobiology of aging*, 34(12), 2889-e11.

Abstracts

- Perkes, A.**, Kolotouros, N., Pfrommer, B., Schmidt, M.. Computing Courtship: Song circuit modulation of mating posture in a female songbird. Submitted. *Neuroscience 2019 Abstracts*. Chicago, IL: Society for Neuroscience, 2019. Online.
- Perkes, A.**, Messier, C., Wild, M., Pfrommer, B., Schmidt, M. Mating posture and female choice in songbirds. Submitted. *Neuroscience 2018 Abstracts*. San Diego, CA: Society for Neuroscience, 2018. Online.
- Perkes, A.**, Jean, I., Pfrommer, B., Schmidt, M., Copulatory display and female choice in songbirds: II. Behavioral quantification. Submitted. *Animal Behavior 2018 Abstracts*. Milwaukee, WI: Animal Behavior Society, 2018. Online.
- Perkes, A.**, Messier, C., Ippolito, D., Wild, M., Schmidt, M. Characterization of mating posture and modulatory nuclei in a female songbird. Program No. 235.16. *Neuroscience 2017 Abstracts*. Washington, DC: Society for Neuroscience, 2017. Online.
- Perkes, A.**, Schmidt, M. The mindful songbird: respiratory feedback in the avian song system. *University of Pennsylvania Biology Retreat 2016, Philadelphia, PA*.

Talks

- Perkes, A. Quantification of mating behavior in songbirds. *Animal Behavior*, 2020, online.
- Perkes, A. Fine-grain computer vision tracking of songbird social-interaction throughout the breeding season. *Animal Behavior*, 2019, Chicago, IL.
- Perkes, A. Signal Jamming: you can duet (the role of female songbirds in the formation of social networks). *CRPPY GREBE Student Conference, 2019, Princeton, NJ*.
- Perkes, A. Computing Courtship: the neural mechanisms of mating posture and female choice. *Penn Neuroscience Retreat, 2018, Philadelphia, PA*.
- Perkes, A. The theory and practice of monogamy. *Penn, Princeton, Rutgers, Columbia Phd Student Conference, 2018, Rutgers, NJ*.
- Perkes, A. Mating outside the box: aviary data and modeling. *Delaware Valley Avian Courtship Workshop, 2018, Princeton, NJ*
- Perkes, A. A putative circuit linking social context to postural responses in a female songbird. Small circuits Meeting, 2017, Philadelphia, PA.
- Perkes, A. The un-sung heroines: quantifying female behavior and their impact on social networks in songbirds. *Penn, Princeton, Rutgers, Columbia Phd Student Conference, 2017, Columbia, NY*.
- Perkes, A. The unsung heroines: female behavior drives network stability in songbirds. *Emergent Properties of Individual Behavior Workshop, 2017, Lexington, KY*.

Teaching

- Teaching Assistant for BIOL: 437 Intro to Computational Biology 2017 – 2018
- Gave office hours and limited lectures for Junhyong Kim, PhD
- Teaching Assistant for Bio 100: Principles of Biology Fall, 2013
- Gave office hours and graded student work for Riley Nelson, PhD
- Teacher, Portuguese 2011 – 2013
- Taught Portuguese and trained other teachers at Provo Missionary Training Center