

Polly Campbell

Curriculum Vitae

Associate Professor Department of Evolution, Ecology, & Organismal Biology University of California Riverside https://www.campbelllab.net/ http://bit.ly/CampbellGoogleScholar	3378 Spieth Hall Riverside, CA 92521 Office: (951) 827-6111 polly.campbell@ucr.edu
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PROFESSIONAL APPOINTMENTS

- 07/2021 – present, Associate Professor.** Department of Evolution, Ecology & Organismal Biology, University of California Riverside, Riverside, CA.
- 01/2019 – 06/2021, Assistant Professor.** Department of Evolution, Ecology & Organismal Biology, University of California Riverside, Riverside, CA.
- 07/2013 – 12/2018, Assistant Professor.** Department of Integrative Biology, Oklahoma State University, Stillwater, OK.
- 2009 – 2013, Postdoctoral Fellow.** Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ. Advisor: Michael Nachman.
- 2006 – 2009, Postdoctoral Fellow.** Department of Biology, University of Florida, Gainesville, FL. Advisor: Steven Phelps.

EDUCATION

- 2006, PhD, Ecology and Evolution.** Boston University, Boston, MA.
 Advisors: Thomas Kunz and Christopher Schneider
 Dissertation title: Evolution and ecology of Southeast Asian fruit bats in the genus, *Cynopterus* (Chiroptera: Pteropodidae)
- 2000, BS, Biology *cum laude*.** University of New Mexico, Albuquerque, NM.

PRIOR GRANTS AND FELLOWSHIPS

- 2016 – 2021** NSF-IOS Award No. 1558109. Epigenetic Effects on Brain and Behavior: Testing the Role of Imprinted Genes. PI
- 2009 – 2013** G. G. Simpson Postdoctoral Fellowship, University of Arizona
- 2007 – 2009** Ruth L. Kirschstein NRSA Postdoctoral Fellowship, NIH
- 2005** National Geographic Society, Committee for Research and Exploration grant
- 2002** American Society of Mammalogists, Grants-in-Aid of Research
 Sigma Xi, Grants-in-Aid of Research
 National Geographic Society, Committee for Research and Exploration grant
- 2001** American Society of Mammalogists, Grants-in-Aid of Research
 Sigma Xi, Grants-in-Aid of Research
 Disney Wildlife Conservation Fund

AWARDS

2017	Margaret S. Ewing Award for Dedication to Mentorship, Oklahoma State University Zoology Graduate Student Society
2016	Faculty Travel Award, Oklahoma State University
2014	Summer Salary Award, Oklahoma State University Faculty Travel Award; Oklahoma State University
2004	Lubee Bat Conservancy Award for Outstanding Oral Paper, North American Symposium on Bat Research
2002	B. Elizabeth Horner Award, American Society of Mammalogists
1999	Undergraduate Conference Award, University of New Mexico
1998	Undergraduate Conference Award, University of New Mexico

PUBLICATIONS

*Denotes Campbell Lab member

In Review

1. EM Giglio, **P Campbell**, B Pasch, A Warren, SM Phelps. For whom the mouse sings: Audiences shape the vocalizations of singling mice. In revision (*Animal Behaviour*).

Published

1. Couger, MB, SW Roy, N Anderson, L Gozashti, S Pirro, LS Millward, M Kim, D Kilburn, KJ Liu, TM Wilson, CW Epps, L Dizney, LA Ruedas, **P Campbell**. 2021. Sex chromosome transformation and the origin of a male-specific X chromosome in the creeping vole. *Science*, 372: 592-600.
2. Arévalo*, L, SA Gardner*, and **P Campbell**. 2021. Haldane's rule in the placenta: sex-biased misregulation of the *Kcnq1* imprinting cluster in hybrid mice. *Evolution*, 75: 86-100.
3. Miller, CH, **P Campbell**, and MJ Sheehan. 2020. Distinct evolutionary trajectories of V1R clades across mouse species. *BMC Evolutionary Biology*, 20: 99.
4. Brass*, KE, N Herndon*, SA Gardner*, JL Grindstaff, and **P Campbell**. 2020. Intergenerational effects of paternal predator cue exposure on behavior, stress reactivity, and neural gene expression. *Hormones and Behavior*, 124: 104806.
5. Arévalo*, L, and **P Campbell**. 2020. Placental effects on maternal brain revealed by disrupted placental gene expression in mouse hybrids. *Proceedings of the Royal Society B*, 287: 20192563.
6. **Campbell, P**, L Arévalo*, H Martin*, C Chen, S Sun, AH Rowe, MS Webster, JB Searle, and B Pasch. 2019. Vocal divergence is concordant with genomic evidence for strong reproductive isolation in grasshopper mice (*Onychomys*). *Ecology and Evolution* 9: 12886-12896.
7. Gardner*, S, JL Grindstaff, and **P Campbell**. 2019. Placental genotype affects pre- and early postpartum maternal behaviour. *Royal Society Open Science* 6: 190732.
8. Sheehan, MJ, **P Campbell**, and CH Miller. 2019. Evolutionary patterns of major urinary proteins scent signals in house mice and relatives. *Molecular Ecology* 28: 3587-3601.

9. Sun, S, Z Miao, B Ratcliffe, **P Campbell**, B Pasch, Y El-Kassaby, B Balasundaram, and C Chen. 2019. SNP variable selection by generalized graph domination. *PLoS One* 14: e0203242.
10. Murray, SW, FAA Khan, T Kingston, A Zubaid, and **P Campbell**. 2018. A new species in the *Hipposideros bicolor* group (Chiroptera: Hipposideridae) from Peninsular Malaysia. *Acta Chiropterologica* 20: 1-29.
11. Couger MB, L Arévalo*, and **P Campbell**. 2018. A high quality genome for *Mus spicilegus*, a close relative of house mice with unique social and ecological adaptations. *Genes/Genomes/Genetics* 8: 2145-2152.
12. Bruck, JN, NA Allen*, KE Brass*, BA Horn*, and **P Campbell**. 2017. Species differences in egocentric navigation: the effect of burrowing ecology on a spatial cognitive trait in mice. *Animal Behaviour* 127: 67-73. [Featured Article]
13. Curtis, RC, JK Murray, **P Campbell**, Y Nagamori, A Molnar, and TA Jackson. 2017. Interspecies variation in the susceptibility of a wild-derived colony of mice to pinworms (*Aspicularis tetraptera*). *Journal of the American Association for Laboratory Animal Science* 56: 42-46.
14. Shipley, RJ, **P Campbell**, J Searle, and B Pasch. 2016. Asymmetric energetic costs in reciprocal-cross hybrids between carnivorous mice (*Onychomys*). *Journal of Experimental Biology* 219: 3803-3809.
15. Mack, KL, **P Campbell**, and MW Nachman. 2016. Gene regulation and speciation in house mice. *Genome Research* 26: 451-461.
16. **Campbell, P**, B Pasch, AL Warren, and SM Phelps. 2014. Vocal ontogeny in Neotropical singing mice (*Scotinomys*). *PLoS One* 9: e113628.
17. Lüke, L, **P Campbell**, MV Sanchez, MW Nachman, and ERS Roldan. 2014. Sexual selection on protamine and transition nuclear protein expression in mouse species. *Proceedings of the Royal Society B* 281: 20133359.
18. **Campbell, P** and MW Nachman. 2014. X-Y interactions underlie sperm head abnormality in hybrid male house mice. *Genetics* 196: 1231-1240.
19. **Campbell, P**, JM Good, and MW Nachman. 2013. Meiotic sex chromosome inactivation is disrupted in sterile hybrid male house mice. *Genetics* 193: 819-828. [Highlighted by Faculty of 1000 Biology]
20. **Campbell, P**, JM Good, MD Dean, PK Tucker, and MW Nachman. 2012. The contribution of the Y chromosome to hybrid male sterility in house mice. *Genetics* 191: 1271-1281.
21. Murray, SW, **P Campbell**, T Kingston, A Zubaid, CM Francis, and TH Kunz. 2012. Molecular phylogeny of hipposiderid bats from Southeast Asia and evidence of cryptic diversity. *Molecular Phylogenetics and Evolution* 62: 597-611.
22. Pasch, B, AS George, **P Campbell**, and SM Phelps. 2011. Androgen-dependent male vocal performance influences female preference in Neotropical singing mice. *Animal Behaviour* 82: 177-183.

23. **Campbell, P**, B Pasch, JL Pino, OL Crino, M Phillips, and SM Phelps. 2010. Geographic variation in the songs of Neotropical singing mice: testing the relative importance of drift and local adaptation. *Evolution* 64: 1955-1972.
24. SM Phelps, **P Campbell**, D Zheng, and AG Ophir. 2010. Beating the boojum: comparative approaches to the neurobiology of social behavior. *Neuropharmacology* 58: 17-28.
25. **Campbell, P**, AG Ophir, and SM Phelps. 2009. Central vasopressin and oxytocin receptor distributions in two species of singing mice. *Journal of Comparative Neurology* 516: 321-333.
26. **Campbell, P**, RL Reep, ML Stoll, AG Ophir, and SM Phelps. 2009. Conservation and diversity of Foxp2 expression in muroid rodents: Functional implications. *Journal of Comparative Neurology* 512: 84-100.
27. Ophir, AG¹, **P Campbell**¹, K Hanna, and SM Phelps. 2008. Field tests of cis-regulatory variation at the prairie vole *avpr1a* locus: association with V1aR abundance but not sexual or social fidelity. *Hormones and Behavior* 54: 694-702. [¹denotes shared first authorship]
28. **Campbell, P**. 2008. Determinants of variation in the mating systems of harem-forming bats: species and population-level perspectives from *Cynopterus*. *Journal of Mammalogy* 89: 1351-1360.
29. **Campbell, P**, AS Putnam, C Bonney, R Bilgin, JC Morales, TH Kunz, and LA Ruedas. 2007. Contrasting patterns of genetic differentiation between endemic and widespread species of fruit bats (Chiroptera: Pteropodidae) in Sulawesi, Indonesia. *Molecular Phylogenetics and Evolution* 44: 474-482.
30. **Campbell, P**, CJ Schneider, A Zubaid, AM Adnan, and TH Kunz. 2007. Morphological and ecological correlates of coexistence in Malaysian fruit bats (Chiroptera: Pteropodidae). *Journal of Mammalogy* 88: 105-118.
31. Bardeleben, C, **P Campbell**, M Lara, and RL Moore. 2007. Isolation of polymorphic tetranucleotide microsatellite markers for the silky short-tailed bat *Carollia brevicauda*. *Molecular Ecology Notes* 7: 63-65.
32. **Campbell, P**, and TH Kunz. 2006. *Cynopterus horsfieldii*. *Mammalian Species* 802: 1-5.
33. **Campbell, P**, A Zubaid, AM Adnan, and TH Kunz. 2006. Resource distribution and social structure in two harem-forming species of old world fruit bats: variations on a polygynous theme. *Animal Behaviour* 72: 687-698.
34. **Campbell, P**, NM Reid, A Zubaid, AM Adnan, and TH Kunz. 2006. Comparative roosting ecology of *Cynopterus* (Chiroptera: Pteropodidae) fruit bats in peninsular Malaysia. *Biotropica* 38: 725-734.
35. **Campbell, P**, CJ Schneider, AM Adnan, A Zubaid, and TH Kunz. 2006. Comparative population structure of *Cynopterus* fruit bats in peninsular Malaysia and southern Thailand. *Molecular Ecology* 15: 29-47.
36. **Campbell, P**, CJ Schneider, AM Adnan, A Zubaid, and TH Kunz. 2004. Phylogeny and phylogeography of Old World fruit bats in the *Cynopterus brachyotis* complex. *Molecular Phylogenetics and Evolution* 33: 764-781.

37. Turner, TF, MV McPhee, **P Campbell**, and KO Winemiller. 2004. Phylogeography and intraspecific genetic variation of prochilodontid fishes endemic to rivers of northern South America. *Journal of Fish biology* 64: 186-201.

Non-peer-reviewed

1. Kurta, A, WF Frick, MB Fenton, **P Campbell**, GF McCracken, RM Timm, HH Genoways. 2020. Obituary: Thomas Henry Kunz (1938-2020). *Journal of Mammalogy*, 101: 1752-1780.

INVITED TALKS

- 2021** Placental effects on maternal brain and behavior. Neuroscience Graduate Program Seminar, University of California Riverside, virtual. January 2021.
- Sex chromosome evolution in voles. Department of Biology, University of Maryland College Park, virtual. March 2021.
- 2020** Sex chromosome evolution in voles. Department of Biology, Portland State University, Portland, OR. February 2020.
- 2019** Placental effects on maternal brain and behavior. Molecular and Computational Biology Colloquium, University of Southern California, Los Angeles, CA. November 2019.
- Placental effects on maternal brain and behavior. Division of Biological Sciences, University of Montana, Missoula, MT. October 2019.
- Placental effects on maternal brain and behavior. Department of Earth and Biological Sciences, Loma Linda University, Loma Linda, CA. April 2019.
- 2018** Brain-placenta interactions: communication at the molecular level. UT Center for Brain, Behavior & Evolution Spring Symposium: Behavioral Epigenetics. University of Texas, Austin, TX. May 2018.
- From premating isolation to placenta-brain interactions: communication at the molecular level. Department of Evolution, Ecology & Organismal Biology, University of California, Riverside, CA. January 2018.
- 2017** Speciation in mice. Department of Microbiology and Molecular Genetics, Oklahoma State University, Stillwater, OK. April 2017.
- Premating isolation and unstudied hybrid phenotypes in mice. Department of Genetics, University of Georgia, Athens, GA. March 2017.
- 2016** Speciation, premating isolation, and hybridization in mice. Department of Biological Sciences, Northern Arizona University, Flagstaff, AZ. October 2016.
- 2014** Sex chromosomes and speciation in mice. Department of Biology, University of Oklahoma, Norman, OK. December 2014.
- 2012** Sex chromosomes, gene regulation and speciation in house mice. Department of Zoology, Oklahoma State University, Stillwater, OK. December 2012.

Sex chromosomes, gene regulation and speciation in house mice. Biological, Earth and Environmental Sciences, University of New South Wales, Sydney, Australia. August 2012.

Gene regulation and reproductive isolation in house mice. Department of Genetics. North Carolina State University, Raleigh, NC. May 2012.

- 2009** Vocal variation in singing mice: Geography, genes and brains. Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ. April 2009.

PRESENTATIONS AT PROFESSIONAL MEETINGS (2014 – 2022 only)

- 2022** Gardner, S, and P Campbell. Meta-analysis of prenatal microbiome studies. Society for Integrative and Comparative Biology, Phoenix, AZ, January 2022. (poster, graduate advisee presenter)
- Berger, A, **P Campbell**, and C Clark. To sing in two ways: a ‘tail’ of converging forms of acoustic mating displays in the Anna’s hummingbird (*Calypte anna*). Society for Integrative and Comparative Biology, Phoenix, AZ, January 2022. (talk, graduate co-advisee presenter)
- 2021** Berger, A, **P Campbell**, and C Clark. Geographic variation in Anna’s hummingbird (*Calypte anna*) song. Animal Behavior Society Annual Meeting and 45th Annual Western Field Ornithologists Conference, August 2021 (virtual talks, graduate co-advisee presenter)
- Gardner, S, L Arévalo, and **P Campbell**. Defining the origin of the prenatal gut microbiome in *Mus*. Virtual Evolution, June 2021 (talk, graduate advisee presenter)
- 2020** Gardner, S, L Arévalo, and **P Campbell**. Characterizing the placental microbiome in mouse (*Mus*) hybrids. Society for Integrative and Comparative Biology, Austin, TX. January 2020. (talk, graduate advisee presenter)
- Brass, K, N Herndon, S Gardner, J Grindstaff, and **P Campbell**. Epigenetic effects of paternal perception of predation risk on offspring phenotypes. Society for Integrative and Comparative Biology, Austin, TX. January 2020. (talk, graduate advisee presenter)
- Johnston, M, C Finton, K Brass, AG Ophir, and **P Campbell**. Central oxytocin and vasopressin receptor distributions in the house mouse, *Mus domesticus*, and non-commensal congeners, *M. spretus* and *M. spicilegus*. Society for Integrative and Comparative Biology, Austin, TX. January 2020. (poster, undergraduate mentee presenter)
- 2019** N Clauss, J Byrd-Craven, and **P Campbell**. The impact of a Western-pattern diet on the interaction of prenatal stress, maternal behavior, and offspring phenotype. Society for Neuroscience, Chicago, IL, October 2019. (poster, graduate mentee presenter)
- Campbell, P**, and L Arévalo. Haldane’s rule and placental misexpression in hybrid mice. Evolution, Providence, RI. June 2019. (talk, presenter)

- Brass, K, N Herndon, and **P Campbell**. Epigenetic effects of chronic paternal predation risk on offspring phenotypes. *Evolution*, Providence, RI. June 2019. (talk, graduate advisee presenter)
- Gardner, S, and **P Campbell**. Placental genotype affects pre- and early postpartum maternal behavior in an interspecific mouse cross. *Evolution*, Providence, RI. June 2019. (talk, graduate advisee presenter)
- Gardner, S, and **P Campbell**. Characterizing the placental microbiome in mouse (*Mus*) hybrids: preliminary results and next steps. *Evolution*, Providence, RI. June 2019. (Poster, graduate advisee presenter)
- 2018** Ryan, TD, and **P Campbell**. Quantifying behavioral isolation between closely related species of mice. Animal Behavior Society Annual Meeting, Milwaukee, WI. August 2018. (talk, graduate advisee presenter)
- Gardner, S, and **P Campbell**. Disrupted genomic imprinting impacts early postpartum maternal behavior in an interspecific mouse cross. Animal Behavior Society Annual Meeting, Milwaukee, WI. August 2018. (talk, graduate advisee presenter)
- Brass, K, N Herndon, and **P Campbell**. Effects of paternal perception of predation risk on offspring behavior throughout development. Animal Behavior Society Annual Meeting, Milwaukee, WI. August 2018. (talk, graduate advisee presenter)
- Gardner, S, and **P Campbell**. Disrupted genomic imprinting negatively affects maternal behaviors in an interspecific mouse cross. UT Center for Brain, Behavior & Evolution Spring Symposium: Behavioral Epigenetics. University of Texas, Austin, TX. May 2018. (poster, graduate advisee presenter)
- Brass, K, N Herndon, and **P Campbell**. Effects of paternal stress on development and stress reactivity in offspring. UT Center for Brain, Behavior & Evolution Spring Symposium: Behavioral Epigenetics. University of Texas, Austin, TX. May 2018. (poster, graduate advisee presenter)
- 2017** Cobbs, C, J Jones, S Gardner, J Angle, and **P Campbell**. Does behavioral response to a novel environment vary in parental species and hybrids? National Association of Biology Teachers Professional Development Conference, Saint Louis, MO. November 2017. (poster, preservice teacher mentee presenter)
- Campbell, P**, MB Couger, and S Roy. Sex chromosome evolution in voles. *Evolution*, Portland, OR. June 2017. (talk, presenter)
- Arévalo, L, and **P Campbell**. Sex differences in mouse hybrids: Differential expression and morphology in placenta. *Evolution*, Portland, OR. June 2017. (talk, postdoctoral advisee presenter)
- Nachman, M, K Mack, and **P Campbell**. Gene regulation and speciation in house mice. *Evolution*, Portland, OR. June 2017. (talk, coauthor)
- Ryan, TD, and **P Campbell**. Quantifying behavioral isolation between closely related species of mice. *Evolution*, Portland, OR. June 2017. (poster, graduate advisee presenter)

- Gardner, S, and **P Campbell**. Disrupted genomic imprinting negatively affects maternal behaviors in an interspecific mouse cross. *Evolution*, Portland, OR. June 2017. (poster, graduate advisee presenter)
- Miller, CH, **P Campbell**, and M Sheehan. Pheromone and vomeronasal receptor evolution in house mice. *Evolution*, Portland, OR. June 2017. (poster, coauthor)
- Gardner, S, and **P Campbell**. Effects Of disrupted genomic imprinting on maternal behaviors in an interspecific mouse cross. Southwestern Association of Naturalists Annual Meeting, Lawton, OK. April 2017. (talk, graduate advisee presenter)
- Gardner, S, S Grider, and **P Campbell**. Effects of disrupted genomic imprinting on maternal behaviors in an interspecific mouse cross. Society for Integrative and Comparative Biology Annual Meeting, New Orleans, LA. January 2017. (poster, graduate advisee presenter)
- McDonald, K, J Grindstaff, and **P Campbell**. Candidate genes for reproductive timing in female eastern bluebirds (*Sialia sialis*). Society for Integrative and Comparative Biology Annual Meeting, New Orleans, LA. January 2017. (poster, NSF-REU mentee presenter)
- Miller, CH, **P Campbell**, and M Sheehan. Vomeronasal receptor evolution: transcriptomics approach to investigate signal diversity and individual recognition. Society for Integrative and Comparative Biology Annual Meeting, New Orleans, LA. January 2017. (poster, coauthor)
- 2016** Foster, D, D Premathilake, **P Campbell**, and J Angle. From virgins to fathers: The onset of paternal behavior in Algerian mice (*Mus spretus*). National Association of Biology Teachers Professional Development Conference, Denver, CO. November 2016. (poster, preservice teacher mentee presenter)
- Campbell, P**, and MB Couger. The molecular substrates of species recognition: Vomeronasal transcriptomes of female mice. Animal Behavior Society Annual Meeting, Columbia, MO. August 2016. (talk, presenter)
- Campbell, P**, and MB Couger. The molecular substrates of species recognition: Vomeronasal transcriptomes of female mice. *Evolution*, Austin, TX. June 2016. (talk, presenter)
- Mack, K, **P Campbell**, and MW Nachman. A role for disrupted gene regulation in speciation in house mice. *Evolution*, Austin, TX. June 2016. (talk, coauthor)
- 2015** Secondi, A, H Martin, and **P Campbell**. Molecular and behavioral correlates of premating isolation in *Mus*. Animal Behavior Society Annual Meeting, Anchorage, AK. June 2015. (talk, presenter)
- 2014** McClellan, A, H Martin, and **P Campbell**. Molecular and behavioral correlates of premating isolation in *Mus*. *Evolution*, Raleigh, NC. June 2014. (poster, presenter)
- K Mack, **P Campbell**, and MW Nachman. Changes in gene regulation associated with reproductive isolation in house mice. *Evolution*, Raleigh, NC. June 2014. (talk, coauthor)

Martin, H, and **P Campbell**. The chemistry of speciation: candidate genes for species discrimination in mice. American Society of Mammalogists, Oklahoma City, OK. June 2014. (poster, undergraduate mentee presenter)

UNDERGRADUATE MENTEE PRESENTATIONS AT OKLAHOMA STATE UNIVERSITY RESEARCH SYMPOSIA

Nathan Herndon: "Intergenerational effects of predator stress on anxiety-like behaviors in mouse". Karen L. Smith Undergraduate Research Symposium, Spring 2019.

Nicole Clapp: "Comparing aggression levels between sympatric mice and their interspecific hybrid". Karen L. Smith Undergraduate Research Symposium, Fall 2018.

Isaac Abram: "The effect of sex on imprinted gene expression levels" Research Experience for Teachers Symposium, Summer 2018. Preservice teacher

Emily West: "Can they dig it? Variations in burrowing behavior of *Mus spicilegus*", HHMI Life Science Freshman Research Scholars Symposium, Spring 2018. Second place in poster competition

Cameron Gilbreath: "Comparing estrous cycles between sympatric mice and their interspecific hybrid offspring", Karen L. Smith Undergraduate Research Symposium, Spring 2018.

Caitlin Cobbs: "Does behavioral response to a novel environment vary in parental species and hybrids?" Research Experience for Teachers Symposium, Summer 2017. Preservice teacher
 "Influences of disrupted genomic imprinting on maternal care in mice with interspecific offspring", College of Education Preservice Science Teacher Research Symposium, Spring 2017.

Kelsey Brass: "Effects of paternal stress on development and stress reactivity in offspring", Scholar Development and Karen L. Smith Undergraduate Research Symposia, Spring 2017.

Katherine McDonald: "Candidate genes for reproductive timing in female eastern bluebirds (*Sialia sialis*)", NSF-REU Research Symposium, Summer 2016. NSF-REU Awardee

Danielle Foster: "From virgins to fathers: The onset of paternal behavior in Algerian mice (*Mus spretus*)", College of Education Preservice Science Teacher Research Symposium, Spring 2016. Preservice teacher

Samantha Grider: "Developing a new mouse model for human imprinting disorders", Scholar Development Undergraduate Research Symposium, Spring 2016.
 "Do hybrid mice exhibit behavioral abnormalities?" Karen L. Smith Undergraduate Research Symposium, Fall 2014.
 "Mice at work: Comparative burrow architecture in sympatric species of *Mus*", Freshman Research Scholars Symposium, Spring 2014. Honorable Mention

Noah Allen: "18 blind mice: Species level differences in path integration between *Mus spicilegus* and *Mus musculus*", Karen L. Smith Undergraduate Research Symposium, Spring 2015.

Ariel Steele: “Do male mice countermark intruding scents in their territory?” NSF-REU Research Symposium, Summer 2014. NSF-REU Awardee

Attika Secondi: “Reward and species recognition: Female house mice say yes to conspecific male urine”, Karen L. Smith Undergraduate Research Symposium, Fall 2014. LSAMP Scholar

Heather Martin: “Candidate genes for species discrimination in mice”, Karen L. Smith Undergraduate Research Symposium, Spring 2014. Best Poster Award

Abby McClellan “Do female house mice find male urine rewarding?” Karen L. Smith Undergraduate Research Symposium, Spring 2014. Preservice teacher

TEACHING

University of California Riverside (2019 – present)

Courses: Introduction to Organismal Biology (co-taught), Animal Behavior, Evolutionary Genetics (co-taught), Introduction to Graduate Studies (co-taught)

Oklahoma State University (2013 – 2018)

Courses: Behavioral Neuroendocrinology, Evolution, General Genetics
Graduate Seminars: Speciation, Evolutionary Genetics

University of Arizona (2009 – 2013)

Courses: Mammalogy, Biodiversity and the Tree of Life (co-taught)

University of Florida (2006 – 2009)

Graduate Seminar: Current Topics in Mammalogy

Boston University (2000 – 2006)

Lab sections: Animal Behavior, Ecology, Introductory Biology, Mammalogy, Vertebrate Zoology

GRADUATE MENTORSHIP

Primary Advisor: Harrison Lin (Ph.D., current, UCR), Sarah Gardner (M.S. 2017, OSU; Ph.D., current, UCR), Kelsey Brass (M.S. 2019, OSU), Tyler Ryan (M.S. 2018, OSU)

Co-advisor: Ayala Berger (Ph.D., current, UCR)

Committee member (current): April Arquilla (Ph.D., UCR), Scott Goepfner (Ph.D., OSU), Elisa Henderson (Ph.D., UCR), Samantha Levell (Ph.D., UCR), Monica McNamara (Ph.D., UCR), Catherine Nguyen (Ph.D., UCR), Daniel Pierce (Ph.D., UCR), Fernando Rodriguez (Ph.D., UM), Ryan Shannon (Ph.D., OSU)

Committee member (past): Marcell Cadney (Ph.D. 2021), Matthew Ridenour (M.S. 2020), Timothy Black (M.S. 2019), Jimmy Lovett (M.S. 2019), Nikki Clauss (Ph.D. 2019), Ryan Sherman (Ph.D. 2019), Chathurika Henpita (Ph.D. 2018), Adam Simpson (Ph.D. 2017), Meelyn Pandit (M.S. 2017), Danielle Perryman (M.S. 2017), Shauni Windle (M.S. 2017), John Davidson (M.S. 2015), Brooke Hoover (Ph.D. student), Jay Walton (Ph.D. student)

SERVICE

Professional

Ad hoc grant review: Agence Nationale de la Recherche, American Society of University Women, Deutsche Forschungsgemeinschaft, NSF, United States-Israel Binational Science Foundation

Panel review: NSF DEB, Evolutionary Processes; NSF IOS, Behavioral Systems

Peer review (selected): *Biological Journal of the Linnean Society*, *Bioscience*, *Brain*, *Behavior and Evolution*, *Chromosome Research*, *Epigenetics*, *Evolution*, *Evolutionary Ecology*, *FASEB Journal*, *Genetics*, *Heredity*, *Journal of Comparative Neurology*, *Journal of Mammalogy*, *Molecular Biology and Evolution*, *Molecular Ecology*, *Nature Communications*, *Oikos*, *Peer J*, *Physiology and Behavior*, *PLoS One*, *PNAS*, *Zoological Journal of the Linnean Society*

Editorial: Associate Editor, *Royal Society Open Science* (2020 – 2023)

Judge: WD Hamilton Award (Society for the Study of Evolution); Louise Stokes Alliance for Minority Participation Research Symposium, Karen L. Smith Undergraduate Research Symposium, Microbiology and Molecular Genetics Graduate Student Association Research Symposium (Oklahoma State University)

University

UCR: Graduate Awards, Graduate Admissions for EEOB, EEOB seminar, and Biology Major Curriculum committees; search committees for faculty hires in evolutionary genomics (2020) and pedagogy (2021); Graduate Admissions committee for Biomedical Sciences; faculty mentor for GradSuccess Mentorship Program; Alternate Undergraduate Advisor

OSU: Seminar, Space, and Sabbatical committees; search committees for faculty hire in evolutionary biology and Animal Resources veterinarian; Manager non-centralized animal unit and liaison to the IACUC.