Curriculum vitae Jennifer D. Cooper, Ph.D.

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EDUCATION

Purdue University Ph.D. in Biological Sciences, 2009 M.S. in Biological Anthropology, 2001 University of Texas at Austin B.S. in Zoology, 1999 B.A. in Anthropology, 1999

PROFESSIONAL EXPERIENCE

Full Time Lecturer: Stanislaus State University, Fall 2010 – current

Teaching using active learning approaches such as small group discussions, in-class writing assignments, and clicker questions, coupled with traditional lectures and exam-style assessment instruments. Developed course content. **Courses in the major**

961	Graduate Seminar (Special topic: "Animal Dispersal")
960	Biology Colloquium
330	Population Genetics
100	Evolution
600	Animal Behavior
350	Introductory Genetics
)50	General Biology lecture and laboratory
230-35	Human Physiology
250-60	Human Anatomy
S	
350	DNA, The Code of Life (course re-design to "flipped" classroom)
020	Introduction to Evolution
000	Frontiers of Biology
310	Human Genetics (course re-design to "flipped" classroom)
010	Fundamentals of Biology
	261 261 260 330 400 600 350 250 230-35 250-60 s 350 220 200 200 200 200 200 200 2

Graduate Teaching Assistant: Purdue University

Department of Biological Sciences, 2002-2009

Teaching assistance for lecture courses, responsible for grading assessment instruments.Taught laboratory sections using active learning approaches such as small group discussions and in-class laboratoryactivities. Responsible for designing and grading assessment instruments.BIOL 111, 131Fundamentals of BiologyBIOL 585EcologyBIOL 592Evolution of Behavior

Department of Anthropology 1999-2001

Teaching assistance for lecture courses, responsible for grading assessment instruments.

ANTH 204 Introduction to Human Evolution

ANTH 100 Introduction to Anthropology

RESEARCH AT CSU STANISLAUS, 2015-current

My student-driven research program uses the California ground squirrel as a model to address questions about the evolution of mammals within a human-modified landscape. The Central Valley of California is a drastically altered environment, with almost every square mile of arable land dedicated to food production, but CGS population densities are very high in the Valley

even after years of drought. CGS are deserving of special attention because they have maintained historical ranges in the face of extensive and extreme modifications to their habitat. What traits allow this species to adapt to a human-modified landscape, and what factors influence the persistence of CGS populations? Graduate and undergraduate research students work on a diverse array of projects which address these questions, using ecological, behavioral, microbiological and genetic approaches.

We have been live-trapping CGS in three National Wildlife Refuges in the Central Valley since 2015, and we have collected data from almost 1000 individual CGS. We have generated the first population genetic data for this species using microsatellite markers, which allowed us to describe the mating system and dispersal pattern in CGS.

Now we have extended our genetic data collection to include gut microbiome sequencing and MHC gene sequencing, which we will couple with microsatellite data to explore how individual genotype and microbiome profile are correlated with traits important for fitness, such as parasite resistance, bilateral symmetry and body condition.

In addition to genetic analyses, we also perform vegetation surveys in wildlife refuges, and use ArcGIS to create landscapebased maps of CGS food availability based on the distribution of natural forage foods compared to human crops in nearby orchards and farmlands. Recently, we have employed remote cameras to record field experiments, in which we manipulate food availability to address how individual traits and genotype influence social hierarchy and foraging effort.

PREVIOUS RESEARCH EXPERIENCE

Ph.D. Research, Purdue University, 2003-2009 (jointly advised by Peter Waser and Andrew DeWoody)

- My doctoral research focused on the population genetics of *Pecari tajacu*, the collared peccary. I sampled 264 individuals from 30 herds in 3 Texas populations, and used genetic approaches to estimate sex-bias in dispersal patterns, reconstruct genetic relatedness within herds and assign parentage to 75 offspring.
- For this project, I used bacterial cloning approaches to prepare a library of nuclear microsatellite markers for multi-locus genotyping of individuals. I also performed direct sequencing of the mtDNA d-loop control region, and used haplotypes to reconstruct the recent expansion of this species into North America.

Graduate Research Assistant: Melissa Remis, Purdue University, 2003

Field-based research in the Central African Republic to estimate the impact of human activities on forest mammal communities.

M.S. Research, 1999-2001 (advised by Melissa Remis)

Research focused on social behavior of captive western lowland gorillas (*Gorilla g. gorilla*) in several North American zoos (Bronx Zoo, San Diego Zoo, Zoo Atlanta, Lincoln Park Zoo).

PEER-REVIEWED PUBLICATIONS

- **Cooper JD**, Waser PM, DeWoody JA. 2011. Is sexual monomorphism a predictor of polygynandry? Evidence from a social mammal, the collared peccary. Behavioral Ecology and Sociobiology. 65: 775-785.
- Gongora J, Biondo C, Cooper JD, Taber A, Keuroghlian A, Altrichter M, Ferreira do Nascimento F, Chong AY, Miyaki CY, Bodmer R, Mayor P, González S. 2011. Revisiting the species status of *Pecari maximus* van Roosmalen et al., 2007 (*Mammalia*) from the Brazilian Amazon. Bonn Zoological Bulletin. 60: 95-101.
- **Cooper JD**, Vitalis R, Waser PM, Gopurenko D, Hellgren EC, Gabor TM, DeWoody JA. 2010. Quantifying male-biased dispersal among social groups in the collared peccary (*Pecari tajacu*) using analyses based on mtDNA variation. Heredity. 104: 79-87.
- **Cooper JD**, Waser PM, Hellgren EC, Gabor TM, DeWoody JA. 2010. Genetic estimates of natal dispersal, kin structure and parentage in collared peccary (*Pecari tajacu*) herds in Texas. Journal of Mammalogy. 91: 1413-1424.
- Shapiro LJ, Demes B, **Cooper JD**. 2001. Lateral bending of the lumbar spine during quadrupedalism in strepsirhines. Journal of Human Evolution. 40 (3): 231-259.

MANUSCRIPTS SUBMITTED OR IN PREPARATION

- Ulm KN, **Cooper JD**, Olivas CL. *Submitted to Landscape Ecology*. The influence of agricultural food subsidies on body size, body condition and developmental rate in the California ground squirrel (*Otospermophilus beecheyi*).
- Glover AN, **Cooper JD**, Smith JE. In prep for Heredity. Genetic estimates of population structure and dispersal in California ground squirrels (*Otospermophilus beecheyi*).
- Glover AN, **Cooper JD**, Williams MC. *In prep. for Behavioral Ecology and Sociobiology*. Relatedness and grouping behavior in three Central Valley populations of California ground squirrels (*Otospermophilus beecheyi*).
- Hablutzel LK, **Cooper JD** Machado JR, Jara MC, Johal RK. *In prep for Ecology and Evolution*. Factors affecting parasite infection in California ground squirrels, and the effects of genetic heterozygosity on parasite load.

INVITED TALKS AND PRESENTATIONS

Cooper JD. 2018. Estimating sex-bias in dispersal in three Central Valley populations of California ground squirrels (*Otospermophilus beecheyi*) using microsatellite-based analyses. Presented to U.S. Fish and Wildlife, Los Banos.

Cooper JD. 2018. "A Ground Squirrel Odyssey": Studying dispersal in California ground squirrels. Dinner with a Scientist, California State University, Stanislaus.

- Cooper JD. 2014. "Undergraduate involvement in research: increasing student engagement and commitment to research outcomes." Organized roundtable discussion at the annual meeting of EVO-WIBO.
- Cooper JD. 2010. Using genetic data to characterize dispersal patterns, relatedness and the mating system in the collared peccary (*Pecari tajacu*). San Jose State University.
- Cooper JD. 2010. Using genetic data to characterize dispersal patterns, relatedness and the mating system in the collared peccary (*Pecari tajacu*). California State University, Stanislaus.
- Cooper JD. 2008. Using AMOVA to measure sex-specific dispersal rates: A novel method tested on empirical data. Paper presented at Purdue University.
- Cooper JD, Waser PM, DeWoody JA. 2007. Genetic detection of sex bias in dispersal: the effect of social organization and hierarchical design. Paper presented at the annual conference of the American Society of Mammalogists.
- Cooper JD. 2006. Using molecular markers to study sex-bias in natal dispersal in the collared peccary (*Pecari tajacu*). Ball State University.
- Cooper JD. 2005. Genetic detection of sex-biased dispersal in the collared peccary (*Tayassu tajacu*): preliminary population-level data. Poster presented at the annual conference of the American Society of Mammalogists.
- Cooper JD. 2004. The evolution of disparate male and female dispersal strategies: Testing predictions of inbreeding avoidance, resource competition and kinship effects using sex-specific genetic markers. Paper presented at Purdue University.
- Cooper JD. 2003. Using molecular techniques to address Issues in western lowland gorilla socioecology and conservation. Paper presented at the annual Midwest Ecology and Evolution Conference.
- Cooper JD. 2003. Testing Hamilton's kin selection model and Wasser's associate quality model of reciprocity in the collared peccary (*Tayassu tajacu*). Paper presented at Purdue University.
- Cooper JD. 2001. The influence of group size on group cohesion and social behavior in captive western lowland gorillas (*Gorilla g. gorilla*). Paper presented at the annual meeting of the American Society of Primatologists.
- Shapiro LJ, Demes B, Cooper JD. 2000. The role of lateral bending of the spine in prosimian quadrupedalism. Paper presented at the annual meeting of the American Association of Physical Anthropologists.

DIRECT FUNDING

2020	Stanislaus State University, FCETL Mini-grant, \$500
2018	CSU Stanislaus, Research, Scholarship and Creative Activity Grant, \$6500
	CSU Stanislaus, FCETL Mini-grant, \$500
2017	CSU Stanislaus, Biology Research Fund Award, \$1071
	CSU Stanislaus, FCETL Mini-grant, \$500
2016	CSU Stanislaus, FCETL Mini-grant, \$500
	CSU Stanislaus, Research, Scholarship and Creative Activity Grant, \$5494
	CSU Stanislaus, Biology Research Fund Award, \$2257
2015	CSU Stanislaus, Biology Research Fund Award, \$2000
2013	CSU Stanislaus, Research, Scholarship and Creative Activity Grant, \$5000
	CSU Stanislaus, Biology Research Fund Award, \$6000
	CSU Stanislaus, President's Travel Award, \$1000
2002-2008	Rob and Bessie Welder Wildlife Foundation Graduate Fellowship \$67,200
	American Society of Mammalogists, Grant in Aid of Research \$1500
	Indiana Academy of Science, Research Grant \$1259
	Purdue Department of Biological Sciences, Achieve Excellence Fund \$100
	Primate Conservation, Inc., Research Grant \$1000
	Purdue Department of Biological Sciences, Graduate Research Incentive Grant \$500

GRADUATE COMMITTEES

Thesis Committee Chair, Advisor

Meghan Williams, MS Biological Sciences Program, Fall 2020 – current

Thesis project: Characterizing gut microbiome diversity in the California ground squirrel (Otospermophilus beecheyi) in relation to agriculture.

Thesis Committee Chair, Advisor

Lalayna Hablutzel, MS Biological Sciences Program, Fall 2020 – current

Thesis project: MHC heterozygosity and fitness related traits in California ground squirrels (*Otospermophilus beecheyi*).

Thesis Committee Chair, Advisor

Katherine Russell, MS Biological Sciences Program, Fall 2019 - current

Thesis project: How do bold/shy personalities covary with body condition and parasite load in the California ground squirrel (*Otospermophilus beecheyi*)?

Thesis Committee Member

Christina Robinson, MSES Program, Fall 2016 - Fall 2019

Thesis project: Distribution and population dynamics of the New Zealand mud snail (*Potamopygrus antipodarum*) in the Corte Madera Creek watershed, CA.

Thesis Committee Chair, Advisor

Kandiss Ulm, MSES Program, Fall 2016 - Spring 2019

Thesis project: Environmental factors influencing body condition, development, and home range size of California ground squirrels (*Otospermophilus beecheyi*).

Thesis Committee Chair, Advisor

Ashleigh Glover, MSES Program, Fall 2016 - Spring 2018

Thesis project: Estimating sex-bias in dispersal, relatedness and grouping behavior in three Central Valley populations of California ground squirrels (*Otospermophilus beecheyi*) using microsatellite-based analyses.

UNDERGRADUATE STUDENT RESEARCH PROJECTS

Sediqa Zamani, 2021 - current

Mini-project: Testing for a correlation between ectoparasite (flea) load and endoparasite (*Eimeria*) load, using 6 years of archival data on individual flea counts coupled with laboratory fecal analysis of *Eimeria* counts.

Tre McClellan, 2018 - current

Mini-project: Using controlled experiment in behavioral arena to test the hypothesis that foraging behavior (as measured by giving-up densities) is influenced by perceived predation risk, in the form of a predator scent cue.

Jessica Pacheco Cordova, 2018 - current

Mini-project: Using genetic parentage assignments to assess how female mate choice is influenced by male traits (body condition, parasite load) or genetic relatedness.

Meghan Williams, 2018 - 2020

Mini-project: Genotyped 100 CGS across 7 microsatellite loci to reconstructing kinship relationships and sibling-cohort dispersal in San Luis NWR. Also began fecal sampling to address gut microbial diversity in populations near agriculture; this second project grew into a M.S. thesis project under my supervision.

Lalayna Hablutzel, 2018 - 2020

Mini-project: Used bioinformatic approaches (BLAST in NCBI GenBank) to design primers to amplify two immunity genes in CGS, to address the hypothesis that genotype influences parasite resistance. This project grew into a M.S. thesis project under my supervision.

Cassandra Olivas, McNair Scholar, 2018-2020

McNair project: Used ArcGIS to quantify square acreage of specific crops near each refuge, and analyzed 4 years of markrecapture data to test the effect of home-range distance to agriculture on individual body condition.

Cesar Estrada Aguila, 2017-2020

Mini-project: Used an experimental approach to test whether giving-up densities (a metric of foraging effort) are influenced by the risk of predation or food quality.

David Son, 2017-2018

Mini-project: Analyzed 3 years of morphometric data to test the hypothesis that drought years negatively impact body condition.

Cassandra Olivas, Sarah Zimmerman and Sarah Shipe, 2016-2018

Mini-project: Used ArcGIS to produce a map of burrow entrances, to demonstrate that burrow system density is constrained by landscape features, including water and agricultural plots.

Mary Candy Jara, Johnee Machado and Rajnee Johal, 2016-2019

Mini-project: Examined whether sex and age influence *Eimeria* endoparasite load, and the influence of heterozygosity assessed across 7 microsatellite loci on *Eimeria* load and fluctuating asymmetry.

Ashleigh Glover, 2015-2016

Mini-project: Genotyped 100 CGS across 7 microsatellite loci to assess population genetic structure. This project grew into a M.S. thesis project under my supervision.

Individual Study Projects

Michael Able "Pharmacogenetics and Lab Techniques", Spring 2014 Simranjit Grewal "Genes and Economic Behavior", Spring 2013

FUNDING TO SUPPORT STUDENT RESEARCH

A total of \$87,540 awarded to support original research proposals written by the students themselves, with my guidance and feedback. \$71,840 of these monies went directly to student stipends.

2021

- CSU Stanislaus Biology Research Fund, \$1000, Meghan Williams
- CSU Stanislaus Biology Research Fund, \$1000, Lalayna Hablutzel
- CSU Stanislaus, LSAMP Internship (1 in Spring) \$1600, Tre McClellan
- CSU Stanislaus SERSCA Graduate Assistantships (2 in Spring & 2 in Fall), \$4000 total, Lalayna Hablutzel and Meghan Williams
- CSU Stanislaus SERSCA Undergraduate Assistantship (1 in Spring & 1 in Fall), \$2620, Jessica Pacheco
- CSU Stanislaus, SERSCA Minigrants (2), \$1000 total, Jessica Pacheco, Sediqa Zamani
- CSU Stanislaus, STEM Success RISE Internships (3 in Fall) \$3900 total, Kylie Cox, Lynn Breithaupt, Elena Calvillo
- CSU Stanislaus, STEM Success RISE Internships (2 in Spring, 1 in Summer) \$3900 total, Shaheen Khan, Elena Calvillo

2020

- CSU Stanislaus Biology Research Fund, \$1000, Lalayna Hablutzel
- CSU Stanislaus Biology Research Fund, \$1000, Katherine Russell
- CSU Stanislaus, LSAMP Internships (2 in Spring & 1 in Fall) \$2700 total, Cesar Estrada Aguila, Lalayna Hablutzel, Tre McClellan
- CSU Stanislaus, SERSCA Minigrants (3), \$1500 total, Meghan Williams, Katherine Russell, Jessica Pacheco
- CSU Stanislaus, STEM Success RISE Internships (3 in Fall) \$3900 total, Elena Calvillo, Nissi Wells, Shaheen Khan
- CSU Stanislaus, STEM Success RISE Internships (2 in Spring & 1 in Summer) \$3900 total, Jessica Pacheco, Megan Howard

2019

- CSU Stanislaus SERSCA Graduate Assistantship, \$2000, Katherine Russell
- CSU Stanislaus SERSCA Undergraduate Assistantship, \$1120, Meghan Williams
- CSU Stanislaus Biology Research Fund, \$1000, Katherine Russell
- CSU Stanislaus, LSAMP Internships (2 in Fall) \$1800 total, Cesar Estrada Aguila and Lalayna Hablutzel
- CSU Stanislaus, LSAMP Internships (2 in Spring) \$1800 total, Cesar Estrada Aguila and Cassandra Olivas
- CSU Stanislaus, STEM Success RISE Internships (3 in Fall & Spring) \$7800 total, Paola Pelayo, Tre McClellan, Jessica Pacheco
- CSU Stanislaus, SERSCA Minigrants (3), \$900 total, Cesar Estrada Aguila, Lalayna Hablutzel, Katherine Russell

2018

- CSU Stanislaus SERSCA Graduate Assistantship, \$2000, Kandiss Ulm
- CSU Stanislaus Biology Research Fund, \$1000, Kandiss Ulm
- CSU Stanislaus, STEM Success RISE Internships (3 in Fall & Spring) \$7800 total, Paola Pelayo, Tre McClellan, Jessica Pacheco
- CSU Stanislaus, STEM Success RISE Internships (2 in Summer) \$1560 total, Parjot Kahlon and Paola Pelayo
- CSU Stanislaus SERSCA Undergraduate Assistantships (2), \$1000 total, Meghan Williams and Cesar Estrada
- CSU Stanislaus, SERSCA Minigrants (3), \$900 total, Rajnee Johal, Cassandra Olivas and Meghan Williams
- CSU Stanislaus, LSAMP Internships (2 in Fall & Spring) \$3600 total, Cesar Estrada Aguila, Cassandra Olivas, Rajnee Johal

2017

- CSU Stanislaus SERSCA Graduate Assistantships (2), \$2000 total, Ashleigh Glover and Kandiss Ulm
- CSU Stanislaus CEGE Grant (2) \$2000 total, Ashleigh Glover and Kandiss Ulm
- CSU Stanislaus Biology Research Fund, \$3000, Ashleigh Glover and Kandiss Ulm
- CSU Stanislaus, STEM Success RISE Internship, \$1040, Micaela Vanderpool
- CSU Stanislaus SERSCA Undergraduate Assistantship, \$1000, Rajnee Johal
- CSU Stanislaus, SERSCA Minigrants (3), \$900 total, Johnee Machado, Sarah Zimmerman and Ashleigh Glover
- CSU Stanislaus, LSAMP Internships (2 in Spring) \$1800, Sarah Zimmerman and Sarah Shipe
- CSU Stanislaus, LSAMP Internships (2 in Fall) \$1800, Sarah Zimmerman and Cassandra Olivas

2016

CSU Stanislaus SERSCA Undergraduate Assistantships (2), \$1000 total, Johnee Machado and Mary Candy Jara CSU Stanislaus, SERSCA Minigrants (3), \$900 total, Kandiss Ulm, Johnee Machado and Sarah Zimmerman CSU Stanislaus, LSAMP Internships (2 in Spring, 2 in Fall) \$3200, Sarah Zimmerman and Sarah Shipe

2015

- CSU Stanislaus SERSCA Undergraduate Assistantship, \$1000, Mary Candy Jara
- CSU Stanislaus, SERSCA Minigrants (2), \$600 total, Janeice Villanueva and Sarah Zimmerman

STUDENT PRESENTATIONS

Regional and National Conferences

- Ulm K*, Cooper JD. Does agriculture influence demography, development and activity patterns in California ground squirrels (*Otospermophilus beecheyi*)? Poster presentation at the 97th Annual Meeting of the American Society of Mammalogists 2018.
- Machado J, Jara MC, Johal R. Factors affecting parasite infection in California ground squirrels, and the effect of heterozygosity on parasite load. Oral presentation at the 43rd Annual West Coast Biological Sciences Undergraduate Research Conference (WCBURC) 2018.
- Zimmerman S, Olivas C. Geospatial analysis of burrow residency in California ground squirrels of the Central Valley. Poster presentation at the 43rd Annual West Coast Biological Sciences Undergraduate Research Conference (WCBURC) 2018.

Stanislaus State University

- Olivas C, Bhatti A, Hunt E, Garcia Deleon G, Hatem A, Cooper JD. ACORN: Image recognition processing for objective behavioral analysis of animals in controlled simulated environments. Presented at Stanislaus State Student Research Competition 2021.
- Olivas C. The impact of agriculture on body condition in the California ground squirrel. McNair Scholars Program, Stanislaus State University Chapter, 19th Annual Capstone Conference 2020.
- Ulm K. Body condition and food-related behavior in California ground squirrels (*Otospermophilus beecheyi*). Presented at Stanislaus State Student Research Competition 2019.
- Glover A. Estimating sex-bias in dispersal in three Central Valley populations of California ground squirrels (Otospermophilus beecheyi) using microsatellite-based analyses. Stanislaus State Student Research Competition 2018.
- Machado J, Jara MC, Johal R. Factors affecting parasite infection in California ground squirrels, and the effect of heterozygosity on parasite load. Presented at Stanislaus State Student Research Competition 2018, 2nd Place Award Biological & Natural Sciences Session.
- Glover A, Goodfellow S, Villanueva J. Genetic analysis of dispersal in California ground squirrels in the Central Valley: Sampling approach and preliminary results. Presented at Stanislaus State Student Research Competition 2016.

Stanislaus State Biology Colloquium

Ulm K, Estrada Aguila C. Analysis of diet, food preference and body condition. Presented at Biology Colloquium 2018.
Williams M. Microbiological survey of the CGS gastrointestinal tract. Presented at Biology Colloquium 2018.
Machado J, Jara MC, Johal R. Factors affecting parasite infection in California ground squirrels, and the effect of heterozygosity on parasite load. Presented at Presented at Biology Colloquium 2018.

- Zimmerman S, Olivas C. Geospatial analysis of burrow residency in California ground squirrels of the Central Valley. Presented at Biology Colloquium 2018.
- Glover A, Jara MC, Johal R, Machado J, Shipe S, Zimmerman S, Son D, Ulm K. Dispersal and demographics in CGS in the Central Valley: Sampling approach & preliminary results. Presented at Biology Colloquium 2017.

Stanislaus State CoS Poster Celebration

- McClellan T, Pacheco Cordova J. Studying foraging and social behavior in California ground squirrels. Presented at CoS Poster Celebration 2019.
- Olivas C. Estimating foraging distance and the impact of agriculture on body condition in California ground squirrels. Presented at CoS Poster Celebration 2019.
- Machado J, Jara MC, Johal R. Factors affecting parasite infection in California ground squirrels, and the effect of heterozygosity on parasite load. Presented at CoS Poster Celebration 2018.
- Jara MC, Machado J, Son D. Prevalence and intensity of *Eimeria* spp. in *Otospermophilus beecheyi* & drought effect on body condition. Presented at CoS Poster Celebration 2017.
- Shipe S, Zimmerman S. GPS mapping and burrow density of the California ground squirrel. Presented at CoS Poster Celebration 2017.
- Jara MC, Johal R, Machado J, Shipe S, Son D, Thomas C, Zimmerman S. Trapping California ground squirrels in the Central Valley for DNA analysis. Presented at CoS Poster Celebration 2016.

HONORS AND AWARDS

Featured Female Scientist, Women's History Month Highlight for STEM Success, March 2021 Outstanding SERSCA Contributions Award: Graduate Assistantship Sponsorship, 2019 Outstanding SERSCA Contributions Award: Undergraduate Assistantship Sponsorship, 2019 Outstanding SERSCA Contributions Award: Mini Grant Sponsorship, 2019 Faculty Appreciation Award, CSU Stanislaus Student Athlete Advisory Committee, 2012

SERVICE

Departmental

Graduate Committee, 2021 Biology Research Committee, 2019 to present Course committees for BIOL 4400, BIOL 3350, BIOL 1050, 2016 to present 3rd Floor Space Use sub-committee for N330 re-design, 2021 to present Master's Program Development Committee, 2015-2016 Capstone Undergraduate Research Experience Development Committee, 2015

University

CSU Stanislaus ad hoc Committee on Pathways to Tenure for Lecturers, 2019

CSU Stanislaus Faculty Development Committee, Lecturer Representative, 2013-2015

Served on Search Committees for Interim Director and Director of the FCETL, 2014 and 2015

CSU Stanislaus Annual Student Research Competition, Judge, 2014 and 2015

CSU Stanislaus "Dinner with a Scientist", Biology Faculty Representative 2011, 2012, 2014, 2015, 2016, 2017, 2018

Professional

Ad hoc reviewer for:	Molecular Ecology
	Behavioral Ecology and Sociobiology
	Animal Reproduction Science
	Behavioral Processes
	Mammalian Biology

Animal Behaviour Conservation Genetics Biology Letters Journal of Wildlife Management

PROFESSIONAL AFFILIATIONS

Society for the Study of Evolution Genetics Society of America