ELIZABETH K. PETERSON

Curriculum Vitae

College of STEM
Colorado State University-Pueblo
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EDUCATION

Ph.D.	Department of Biological Sciences (Program in Ecology and Evolutionary Biology), University at Albany-State University of New York (SUNY-Albany), 2016
B.A.	Biology, Environmental Studies minor, Ithaca College, 2004

PROFESSIONAL APPOINTMENTS

2021-current	Research Faculty, College of Science, Technology, Engineering and Mathematics, Colorado State University-Pueblo (CSU Pueblo)
2021-current	Program Director, MAPS Program (Mentorship, Access, and Platforms in STEM): Experiences & Support to Build Hispanic and Underrepresented STEM graduates, CSU Pueblo
2017-2021	Postdoctoral Researcher, Communities for Building Active STEM Engagement, CSU Pueblo
2017	Postdoctoral Researcher, Department of Biology, Union College

PUBLICATIONS (*student co-authors)

Peer-Reviewed Research Manuscripts

In prep	Verdolin J, **Peterson EK**. Novel cultural adaptation in response to rattlesnakes in a local population of Black-tailed prairie dogs. *Science*.
2021	**Peterson EK**, Jones CD, Sandmeier FC, *Arellano Rivas AP, *Back CA, *Canney A, *Fender J, *Gomez M, *Gorski J, *Heintzelman N, *Healey K, *Kester M, *Klinger D, *Liao A, Varian-Ramos CW, Vanden Heuvel B. Drought influences biodiversity in a semi-arid shortgrass prairie in southeastern Colorado. *Journal of Arid Environments*, 195:104633. DOI: 10.1016/j.jaridenv.2021.104633
2020	Chock RY, Clucas B, **Peterson EK**, Blackwell BF, Blumstein DT, Church K, Fernandez-Juricic E, Francescoli G, Greggor A, Kemp P, Pinho G, Sanzenbacher P, Schulte BA, Toni P. Potential impacts of solar power facilities on wildlife from an animal behavior perspective. *Conservation Science and Practice Journal,* e319. DOI: 10.1002/csp2.319
2020	*Back C, *Healey K, *Staples SK, **Peterson EK**, Vanden Heuvel B. Natural history of plant species at the Pueblo Chemical Depot. *El Rio,* 1(1):43-50.

2020 **Peterson EK**, *Stark A, Hollocher KT, Varian-Ramos CW, Possidente B. Exposure to lead (Pb^{2+}) eliminates avoidance of Pb-treated oviposition substrates in a dose-dependent manner in female vinegar flies. *Bulletin of Environmental Contamination and Toxicology,* 104(5):588-594. DOI: 10.1007/s00128-020-02825-w

2019 **Peterson EK**, Possidente B, *Stark A, Hollocher KT, Carrico P. Intraspecific genetic variation in reproductive strategies in susceptibility to developmental lead (Pb^{2+}) exposure in a model system, *Drosophila melanogaster*. *Bulletin of Environmental Contamination and Toxicology*, 103(2): 233-239. DOI*:* 10.1007/s00128-019-02650-w

2019 Yukilevich R, **Peterson EK**. The evolution of male and female mating preferences in *Drosophila* speciation. *Evolution*, 73(9): 1759-1773. DOI: 10.1111/evo.13752

2018 **Peterson EK**, *Long HE**.*** Experimental protocol for using *Drosophila* as an invertebrate model system for toxicity testing in the laboratory. *Journal of Visualized Experiments*, 137: e57450. DOI: 10.3791/57450

2017 **Peterson EK**, Wilson DT, Possidente B, Possidente D, McDaniel P, Morley E, Possidente D, Hollocher KT, Ruden DM, Hirsch HVB. Accumulation, elimination, sequestration, and genetic variation of lead (Pb^{2+}) loads within and between generations in a model system, *Drosophila melanogaster*. *Chemosphere*, 181: 368-375. DOI: 10.1016/j.chemosphere.2017.04.091

2017 **Peterson EK**, Yukilevich R, Kehlbeck J, LaRue KM, *Ferraiolo K, Hollocher K, Hirsch HVB, Possidente B. Asymmetrical positive assortative mating induced by developmental lead (Pb^{2+}) exposure in a model system, *Drosophila melanogaster*. *Current Zoology*, 63(2): 195-203. DOI: 10.1093/cz/zox016

2017 **Peterson EK**, Buchwalter DB, Kerby JL, Lefauve MK, Varian-Ramos CW, Swaddle JP. Integrative behavioral eco-toxicology (IBET): Bringing together fields to establish new insight to behavioral ecology, toxicology, and conservation. *Current Zoology*, 63(2): 185-194. DOI: 10.1093/cz/zox010

2016 **Peterson EK**, Schulte BA. Impacts of anthropogenic pollutants on beavers and otters with implications for ecosystem ramifications. *Journal of Contemporary Water Research & Education*, 157:33-45. DOI: 10.1111/j.1936-704X.2016.03212.x

Peer-Reviewed STEM Education Manuscripts

2020 Bickford N, **Peterson EK**, Jensen PA, Thomas DA. Undergraduates who are merely interested in research are better students than their peers. *Education Sciences*, 10(6): 150. https://doi.org/10.3390/educsci10060150

2015 **Peterson EK**, Carrico P. Laboratory exercise in behavioral genetics using team-based learning. *Journal of College Biology Teaching*, 41(2): 33-40. https://eric.ed.gov/?id=EJ1086540

Editor-Reviewed Book Chapters

2021 Seymour B, **Peterson EK**, Chock RY. Conservation behavior: The effects of light pollution on insects. *Exploring Animal Behavior in Laboratory and Field.* Eds. Zimbler-DeLorenzo H, Margulis SW, 2nd edition, Elsevier Academic Press, San Diego CA.

Science Publications for General Public

2013 Using grazing for management of invasive plants: an interview with conservation biologists Dr. Gary Kleppel and Caroline Girard-Cartier, M.S. *The Conservation Behaviorist*, 11(2): 5-6.

2013 Hybridization within canine species: the problem and its implications for conservation behavior research. *The Conservation Behaviorist*, 11(1): 6.

2012 Orangutans and Palm Oil. *The Conservation Behaviorist*, 10(2): 5.

EXTERNAL GRANT FUNDING

Grants Submitted

In review PI, "Using prairie dog translocations to restore endangered grassland habitat and populations of black-footed ferrets in southeastern Colorado", National Fish and Wildlife Federation ($389,381)

Grants Awarded, in progress

2021-current PI, "MAPS Program (Mentorship, Access and Platforms in STEM): Experiences & Support to Build Hispanic and Underrepresented STEM graduates", Department of Education ($4,949,758.00)

2021-current PI, "Determining wildlife motivations for crossing I-25 in response to the New Mexico wildlife fence to mitigate loss", Colorado Department of Transportation ($120,000)

2021-current Co-PI, "Project CUATRO (Creating Connected College Research Communities)", Improving Undergraduate STEM Education: Hispanic-Serving Institutions (HSI Program), National Science Foundation ($699,442)

2021-current PI, "Relocating prairie dogs to conservation management land at the U.S. Army Pueblo Chemical Depot", NextEra Energy Foundation ($20,000)

Grants Completed

2020 PI, "Developing and Sustaining a Department of Biology Research Seminar Series." Colorado-Wyoming Alliance for Minority Participation Grant ($10,000)

2019 PI, Society of Toxicology Domestic ToxScholar Outreach Grant ($500)

2019 PI, "Developing and Sustaining a Department of Biology Research Seminar Series." Colorado-Wyoming Alliance for Minority Participation Grant ($10,000)

INTERNAL GRANT FUNDING

Grants Completed

2020-21 Co-PI, "Improving the efficacy of prairie dog translocations to improve the health of grassland ecosystems in southeastern Colorado." CSU Pueblo Faculty SEED

	Grant ($5,209)
2020-21	Co-PI, "Kiss and tell: What chemicals are exchanged during the greet kissing behavior in squirrels?" CSU Pueblo Faculty SEED Grant ($5,497)
2020-21	Co-PI, "Using radio telemetry to improve the efficacy of translocations of prairie dogs." CSU Pueblo Faculty SURP Grant ($2,500)
2019	Co-PI, "Building new conservation tools to protect America's prairie keystone species." CSU Pueblo Faculty SEED Grant ($7,000)
2018-19	Co-PI, "The impact of vegetation clipping by Black-tailed prairie dogs on biodiversity in a grassland ecosystem." CSU Pueblo College of Science and Mathematics Scholarly Works Support Program for Student Travel ($500)
2018-19	Co-PI, "The effects of developmental lead (Pb^{2+}) on mate choice." CSU Pueblo College of Science and Mathematics Scholarly Works Support Program for Student Travel ($500)
2018	Co-PI, "Biomagnification of lead (Pb) in a terrestrial ecosystem in Pueblo CO, a superfund site." CSU Pueblo Faculty SEED Grant ($7,998)
2016	PI, "Bioaccumulation of developmental lead (Pb^{2+}) in a model system, *Drosophila melanogaster*." SUNY-Albany Graduate Student Association Research Grant ($83)
2015	PI, "Fitness costs induced by anthropogenic exposure to the neurotoxin lead (Pb)." SUNY-Albany Benevolent Research Grant ($300)
2013	PI, "Female *Drosophila melanogaster* prefer males with similar toxin exposure history." SUNY-Albany Graduate Student Association Professional Development Grant ($500)

AWARDS

2013	Graduate Outstanding Leadership Award, SUNY-Albany, President's Award for Leadership and Service to the Graduate Student Community
2011	Teaching Assistant of the Year, Department of Biological Sciences, SUNY-Albany

TEACHING EXPERIENCE

CSU-Pueblo, Instructor of Record

College Biology I, lecture (fall 2017, spring 2018/2019)

Special Topics in Scientific Literacy and Writing, lecture (spring/fall 2019)

Special Topics in Research and Experimental Design, lecture (spring 2020)

SUNY-Albany, Instructor of Record

Animal Behavior, lecture (spring 2017)

Animal Behavior, laboratory (summer 2014)

Animal Behavior, lecture, and laboratory (summer 2010/2011)

SUNY-Albany, Teaching Assistant

Behavioral Genetics, laboratory (spring 2014)

Introduction to Biological Investigations I, laboratory (fall 2013/2015)

Introduction to Biological Investigations II, laboratory (spring 2016)

Neurophysiology, laboratory (spring 2012)

General Biology I, laboratory (fall 2008-2011)

General Biology II, laboratory (spring 2009-2011)

INVITED SCHOLARLY PRESENTATIONS

2020 "Restoring endangered grassland habitats with keystone ecosystem engineers and prescribed burns", Department of Biology, Ithaca College, Virtual, December 3

2020 "Restoring endangered grassland habitats with keystone ecosystem engineers and prescribed burns", Department of Biology, University of Colorado Colorado Springs, Virtual, November 19

2019 "Ithaca College Department of Biology Career Panel", Department of Biology, Ithaca College, November 15

2016 **"**Using Tinbergen's Four Questions to Understand Emerging Conservation Concerns in Behavioral Toxicology", Concluding Remarks Symposium, Animal Behavior Society Conference, Columbia MO, July 31

CONFERENCE PRESENTATIONS (*student co-authors)

Oral Presentations

2021 **Peterson EK**. "Job Opportunities in Conservation Behavior." ABS Conservation Behavior Workshop: "So you want to be a conservation behaviorist? A professional development workshop for all career stages," Animal Behavior Society 2021 Virtual Meeting, August 2-6

2020 Carsella J, **Peterson EK**, *Schiffer T, *Staples SK, Varian-Ramos CW, Diawara M. "Partitioning of mercury, lead, arsenic, zinc and select other metals in plants, birds and arthropods found on the Colorado Smelter superfund site in Pueblo, Colorado." American Chemistry Society Rocky Mountain Regional Meeting 2020, Virtual, November 12-13

2020 Chock RY, Clucas B, **Peterson EK**, Blackwell BF, Blumstein DT, Church K, Fernández-Juricic E, Francescoli G, Greggor A, Kemp P, Pinho GM, Sanzenbacher PM, Schulte BA, Toni P. "Utilizing Animal Behavior to Assess Potential Impacts of Solar Power Facilities on Wildlife." 57th Annual Conferences of the Animal Behavior Society, Virtual, July 28-31

2019 **Peterson EK**, Possidente B, *Stark AJ, Hollocher KT, Carrico P. "Intraspecific genetic variation for lead-induced changes in reproductive strategies", Behaviour, Chicago IL, July 23-27

2019 Jones CD, Conway CJ, *Gorski J, **Peterson EK**, Varian-Ramos CW. "Patterns of occupancy and migratory movements of burrowing owls at the Pueblo Chemical Depot," Colorado Chapter of the Wildlife Society Conference, Pueblo CO, January 29-February 1

2018 **Peterson EK**, *Harvey TM, *Long HE. "Quantifying aggression in wild-caught *Drosophila pseudoobscura*", Animal Behavior Society Conference, Milwaukee WI, August 2-5

2017 **Peterson EK**, Possidente B, *Waterhouse M, *Stark A, Carrico P. "Intraspecific genetic variation for lead-induced changes in reproductive strategies", Society for Environmental Toxicology and Chemistry North America 38th Meeting, Minneapolis MN, November 12-16

2017 Yukilevich R, **Peterson EK**. "Battle of the sexes: The relative importance of male versus female mate preferences in speciation", Evolution, Portland OR, June 23-27

2016 **Peterson EK**, Yukilevich R, *Harvey T, Kehlbeck J, LaRue K, *Ferraiolo K, Hollocher K, Possidente B, Lnenicka GA. "Positive assortative mating induced by developmental lead (Pb^{2+}) exposure", Animal Behavior Society Conference, Columbia MO, July 30-August 3

2015 **Peterson EK**. "The disruption of essential behavioral systems by anthropogenic pollutants: A model for conservation behavior research", Clarkson Early Career Colloquium in Biosciences Crossing Disciplines, Clarkson University, June 24-26

2014 **Peterson EK**, Carrico P. "Using team-based learning strategies to effectively teach undergraduates Animal Behavior in teaching laboratories", Animal Behavior Society Conference, Princeton NJ, August 9-13

2012 **Peterson EK**. "Transgenerational epigenetic effects of the neurotoxin lead on behavior in *Drosophila melanogaster*", Animal Behavior Society Conference, Albuquerque NM, June 10-14

Poster Presentations

2017 **Peterson EK**, Varian-Ramos CW, Swaddle JP. "Integrative behavioral eco-toxicology (IBET): Bringing together fields to establish new insight to behavioral ecology, toxicology, and conservation", Society for Environmental Toxicology and Chemistry North America 38th Meeting, Minneapolis MN, November 12-16

2016 **Peterson EK**, *Stark A, Possidente B, Lnenicka GA. "Female vinegar flies reared in leaded environments do not avoid leaded (Pb^{2+}) egg-laying substrates", 7th Society for Environmental Toxicology and Chemistry World Congress/Society for Environmental Toxicology and Chemistry North America 37th Meeting, Orlando FL, November 6-10

2015 **Peterson EK**, Wilson DT, Possidente B, McDaniel P, Morley E, Possidente D, Hollocher KT, Ruden DM, Lnenicka GA, Hirsch HVB. "Lead (Pb^{2+}) accumulation, elimination, sequestration, and genetic variation within and between generations in a

model system, *Drosophila melanogaster*", Society for Environmental Toxicology and Chemistry North America 36th Meeting, Salt Lake City UT, November 1-5

2013 **Peterson EK**, *Ferraiolo K, Possidente B, Hirsch HVB. "Female *Drosophila melanogaster* selectively prefer males with similar toxin exposure history", Animal Behavior Society Conference, Boulder CO, July 28-August 2

2012 **Peterson EK**, Ghiradella H, Possidente B, Hirsch HVB. **"**Transgenerational epigenetic effects of lead exposure on behavior in *Drosophila melanogaster*", International Behavioural and Neural Genetics Society Genes, Brain, and Behavior Conference, Boulder CO, May 15-19

2011 **Peterson EK**, Ghiradella H, Possidente B, Hirsch HVB. "Transgenerational effects of lead on behavior in *Drosophila melanogaster", ,* Animal Behavior Society Conference, Bloomington IN, July 25-30

2011 **Peterson EK**, Ghiradella H, Possidente B, Hirsch HVB. "Transgenerational effects of lead on behavior in *Drosophila melanogaster",* East Coast Nerve Net, Woods Hole MA, March 25-27

Conference Panels and Workshops Organized

2020-21 Workshop Lead Organizer, "So you want to be a conservation behaviorist? A professional development workshop for all career stages", Conservation Behavior Committee Professional Development Workshop, Animal Behavior Society 2021 Virtual Meeting, August 2-6

2018-19 Workshop Co-organizer, "Animal Behavior Conservation Committee Workshop", Animal Behavior Society Conference, Chicago IL, July 23

2015-16 Symposium Co-organizer, "Using Tinbergen's Four Questions to Understand Emerging Conservation Concerns in Behavioral Toxicology", Animal Behavior Society Conference, Columbia, July 31

STUDENT MENTORING

Thesis Graduate Adviser

Sara Colby (M.S., CSU-Pueblo, in progress), "Social network breakdown post-release inhibits habitat anchoring in prairie dogs"

Adam Liao (M.S., CSU-Pueblo, in progress), "Consequences of wildlife fences for animal vehicle collisions in Colorado"

Undergraduate Research Mentor/Supervisor

30 students at CSU-Pueblo and SUNY-Albany since 2010

Research Awards by Mentored Students

2019 Stephanie Dudley, 3rd Place for Best Poster Presentation at CSU Pueblo 15th Annual Science and Mathematics Student Research Symposium 2019

Samantha Ulrich and Makenzie Randall, 2nd Place for Best Poster Presentation at CSU Pueblo 15th Annual Science and Mathematics Student Research Symposium 2019

Jenna Morales, Charles H. Turner Award at Behaviour 2019 Conference (Chicago IL)

Teyah Schiffer, 2nd Place for John C. Johnson Award for Excellence in Student Research at Western Region District *Beta Beta Beta* Convention (Fort Collins CO)

2018 Rachel Ruiz, Honorable Mention for Genesis Award for Outstanding Undergraduate Poster Presentation at Animal Behaviour Conference 2018 (Milwaukee WI)

Rachel Ruiz, Award for Excellence in Presentation of Scientific Data for Poster Presentation at Metabolism of Infectious Diseases Conference (Fort Collins CO)

2011 Brandon King, SUNY-Albany Department of Biological Sciences Excellence in Research Award for Poster Presentation at Life Sciences Undergraduate Research Symposium 2011

Excellence Awards by Mentored Students

2020 Cody Back, Jack Seilheimer Memorial Award in Wildlife and Natural Resources, Department of Biology, CSU Pueblo

2018 Hugh Long, CSU Pueblo Department of Biology Excellence Award

Conference Poster Presentations by Research Students (*student co-authors)

2021 *Klow Si, *Brianna Montoya, Clark D. Jones, Jeff R. Troy, Rickey Jones, **Elizabeth Peterson**. Prairie Dog Call Playbacks Improve Detection during Visual Counts. CSU Pueblo College of Science, Technology, Engineering and Mathematics Research Symposium, October 21

2021 *Adam Liao, Gabriel Cosyleon, **Elizabeth Peterson**. Why did the elk cross the road?: Highway habitat, permeability, and wildlife-vehicle collisions. CSU Pueblo College of Science, Technology, Engineering and Mathematics Research Symposium, October 21

2021 *Izabella Sheppard, *Sara Colby, Jennifer Verdolin, Rickey Jones, **Elizabeth K. Peterson**. Does a Prairie Dog's Personality Affect Their Trapability? CSU Pueblo College of Science, Technology, Engineering and Mathematics Research Symposium, October 21

2021 *Noah Robison, *Sara Colby, *Stephanie Dudley, Rickey Jones, Jennifer Verdolin, **Elizabeth K. Peterson**. A family that moves together stays together: determining the optimal method for identifying coteries for translocation. CSU Pueblo College of Science, Technology, Engineering and Mathematics Research Symposium, October 21

2021 *Gabriela Hall, *Adam Liao, Rickey Jones, **Elizabeth Peterson**. Badger identification using dorsal facial markings is ineffective in the field**.** CSU Pueblo College of Science, Technology, Engineering and Mathematics Research

Symposium, October 21.

2021 *Liao A, Cosyleon G, **Peterson EK**. "Why did the elk cross the road? Highway habitat, permeability, and wildlife-vehicle collisions." Animal Behavior Society 2021 Virtual Meeting, August 2-6

2021 *Colby S, *Dudley S, *Robison N, Jones R, Verdolin J, **Peterson EK**. "A family that moves together stays together: Determining the optimal method for identifying coteries for translocation." Animal Behavior Society 2021 Virtual Meeting, August 2-6

2020 *Bohn B, **Peterson EK**. "Using conservation behavior to improve translocation success." College of Science, Technology, Engineering and Mathematics Virtual Research Symposium, November 10-12

2020 *Bryant-Watkins A, *Colby S, *Dudley S, Jones R, **Peterson EK**. Reporting progress data on the translocation of the black-tailed prairie dogs to the Pueblo Chemical Depot. College of Science, Technology, Engineering and Mathematics Virtual Research Symposium, November 10-12

2020 *Colby S, *Espinoza K, *Jackson K, *Dudley S, *Knieriem C, Verdolin J, Carsella J, Jones R, **Peterson EK**. "Kiss and Tell: Kin Recognition in Black-tailed Prairie Dogs." College of Science, Technology, Engineering and Mathematics Virtual Research Symposium, November 10-12

2020 *Dudley S, *Knieriem C, *Colby S, *Espinoza K, Verdolin J, Jones J, **Peterson EK**. "Improving translocation methods by understanding the social behaviors of black-tailed prairie dogs: Investigating social networks as habitat anchors post-release." College of Science, Technology, Engineering and Mathematics Virtual Research Symposium, November 10-12

2020 *Heintzelman N, *Arellano A, Sandmeier F, **Peterson EK**, Jones C, Vanden Heuvel B. Orders of arthropods found on and off black-tailed prairie dog colonies. College of Science, Technology, Engineering and Mathematics Virtual Research Symposium, November 10-12

2020 *Schiffer T, *Ray D, *Inman A, *Staples SK, Varian-Ramos C, Diawara M, Carsella J, **Peterson EK**, Garcia Costas A. "Characterization of microbial communities in soils with varying lead concentrations. College of Science, Technology, Engineering and Mathematics Virtual Research Symposium, November 10-12

2020 *Ulrich S, *Si K, Jones R, **Peterson EK**. "Determining the best method for measuring population abundance in black-tailed prairie dogs." College of Science, Technology, Engineering and Mathematics Virtual Research Symposium, November 10-12

2019 *Back C, *Healey K, Jones CD, Varian-Ramos CW, Sandmeier FC, Vanden Heuvel B, **Peterson EK.** "The impact of Black-tailed prairie dogs on plant biodiversity in a short-grass prairie ecosystem." CSU Pueblo College of Science and Mathematics Symposium, Pueblo CO, October 17

2019 *Colby S, *Oloyede O, *Giltner Z, *Jensen M, **Peterson EK**, Vanden Heuvel B. "The behavioral effects of carbamazepine (CBZ) on *Drosophila melanogaster*." CSU Pueblo College of Science and Mathematics Symposium, Pueblo CO, October 17

2019 *Dudley SL, Cuttrell R, Jones R, Jones CD, **Peterson EK.** "The impact of sylvatic plague and drought on vigilance behavior in fragmented populations of Black-tailed prairie dogs (*Cynomys ludovicianus*)." CSU Pueblo College of Science and Mathematics Symposium, Pueblo CO, October 17

2019 *Espinoza KJ, *Harvey TA, **Peterson EK.** "The effects of developmental lead (Pb^{2+}) exposure on activity in a wild-caught *Drosophila pseudoobscura*." CSU Pueblo College of Science and Mathematics Symposium, Pueblo CO, October 17

2019 *Ulrich S, *Randall M, Garcia Costas A, **Peterson EK.** "The effects of developmental lead (Pb^{2+}) exposure on mate choice." CSU Pueblo College of Science and Mathematics Symposium, Pueblo CO, October 17

2019 *Arellano A, *Heintzelman N, Jones CD, Varian-Ramos CW, **Peterson EK**, Sandmeier FC. "The effects of Black- tailed prairie dogs on arthropod biodiversity." CSU Pueblo College of Science and Mathematics Symposium, Pueblo CO, October 17

2019 *Kester M, *Gomez M, *Heintzelman N, *Arellano A, Jones CD, Varian-Ramos CW, **Peterson EK**, Sandmeier FC. "Testing the effect of the Black-tailed prairie dog on herptile biodiversity at the Pueblo Chemical Depot." CSU Pueblo College of Science and Mathematics Symposium, Pueblo CO, October 17

2019 *Mohalla M, *Back C, *Ulrich S, *Jones D, **Peterson EK**, Vanden Heuvel B, Park S-H. "The developmental effects of cannabidiol (CBD) in *Drosophila*." CSU Pueblo College of Science and Mathematics Symposium, Pueblo CO, October 17

2019 *Schiffer T, *Inman A, *Staples SK, Carsella J, Varian-Ramos CW, **Peterson EK**, Garcia Costas A. "The effects of anthropogenic lead (Pb) pollution on the richness, evenness, and biodiversity of microbial communities." CSU Pueblo College of Science and Mathematics Symposium, Pueblo CO, October 17

2019 *Dudley SL, *Weiter CL, *Back C, *Morales J, Cuttrell R, Jones CD, **Peterson EK.** "The impact of stressors on parental behavior in Black-tailed prairie dogs (*Cynomys ludovicianus*)." Behaviour 2019, Chicago IL, July 23-27

2019 *Back C, *Morales JR, *Dudley SL, *Weiter CL, Jones CD, Varian-Ramos CW, Sandmeier F, Vanden Heuvel B, **Peterson EK.** "The impact of vegetation clipping by Black-tailed prairie dogs on biodiversity in a grassland ecosystem." Behaviour 2019, Chicago IL, July 23-27

2019 *Ulrich S, *Randall M, Garcia Costas A, **Peterson EK.** "The effects of developmental lead (Pb^{2+}) exposure on mate choice." Behaviour 2019, Chicago IL, July 23-27

2019 *Espinoza KJ, *Harvey TA, *Long HE, **Peterson EK.** "The effects of developmental lead (Pb^{2+}) exposure on aggression in a model system, *Drosophila melanogaster*." Behaviour 2019, Chicago IL, July 23-27

2019 *Oloyede O, *Colby S, *Giltner Z, *James G, *Jansen M, Carsella J, **Peterson EK,** Vanden Heuvel B. The effect of carbamazepine on the activity of *Drosophila melanogaster*. Behaviour 2019, Chicago IL, July 23-27

2019 *Dudley SL, *Weiter CL, *Back C, *Morales JR, Cutrell R, Jones CD, **Peterson**

EK. "The effect of climate change on the reproductive and parental behaviors in the Black-tailed prairie dog (*Cynomys ludovicianus*)." CSU Pueblo Student Symposium, Pueblo CO, April 5

2019 *Back C, *Morales JR, *Dudley SL, Weiter CL, Jones CD, Varian-Ramos CW, Sandmeier FC, Vanden Heuvel B, **Peterson EK.** "The impact of vegetation clipping by Black-tailed prairie dogs on biodiversity in a grassland ecosystem." CSU Pueblo Student Symposium, Pueblo CO, April 5

2019 *Ulrich S, *Randall M, Garcia Costas A, **Peterson EK.** "The effects of developmental lead (Pb^{2+}) exposure on mate choice." CSU Pueblo Student Symposium, Pueblo CO, April 5

2019 *Harvey TM, Espinoza K, Long HE, **Peterson EK.** "The effects of developmental lead (Pb^{2+}) exposure on aggression in a model system, *Drosophila pseudoobscura*." CSU Pueblo Student Symposium, Pueblo CO, April 5

2019 *Kester M, *Klinger D, *Fender J, *Argon J, **Peterson EK,** Jones CD, Varian-Ramos CW, Sandmeier FC. Testing the effect of Black-tailed prairie dog on herpetological biodiversity at the Pueblo Chemical Depot. CSU Pueblo Student Symposium, Pueblo CO, April 5

2019 *Liao A, *Fender J, Jones CD, Sandmeier FC, **Peterson EK**, Varian-Ramos CW. Effects of prairie dog colony activity on small mammal diversity and abundance. CSU Pueblo Student Symposium, Pueblo CO, April 5

2019 *Schiffer T, *Staples SK, Varian-Ramos CW, Carsella J, Diawara M, **Peterson EK.** "The effects of anthropogenic pollution of lead (Pb^{2+}) on biomagnification in the food chain at the Pueblo Superfund Site." Western Region District *Beta Beta Beta* Convention, Fort Collins, CO

2019 *Dudley S, *Weiter C, Cutrell R, Jones CD, **Peterson EK.** "The impact of stressors on fitness and conservation behavior in Black-tailed prairie dogs." Colorado Chapter of The Wildlife Society Conference, Pueblo CO, January 29-Febraury 1

2019 *Schiffer T, *Staples SK, Varian-Ramos CW, Carsella J, Diawara M, **Peterson EK. "**The effects of anthropogenic pollution of lead (Pb) on biomagnification in the food chain at the Pueblo Superfund Site." Colorado Chapter of The Wildlife Society Conference, Pueblo CO, January 29-Febraury 1

2019 *Kester M, *Klinger D, *Fender J, *Argon J, **Peterson EK,** Jones CD, Varian-Ramos CW, Sandmeier FC. Testing the effect of Black-tailed prairie dog on herpetological biodiversity at the Pueblo Chemical Depot. Colorado Chapter of The Wildlife Society Conference, Pueblo CO, January 29-Febraury 1

2019 *Liao A, *Fender J, Jones CD, Sandmeier FC, **Peterson EK**, Varian-Ramos CW. "Effects of prairie dog colony activity on small mammal diversity and abundance." Colorado Chapter of The Wildlife Society Conference, Pueblo CO, January 29-Febraury 1

2018 *Schiffer T, *Staples SK, Varian-Ramos CW, Carsella J, Diawara M, **Peterson EK**. "The effects of anthropogenic pollution of lead (Pb) on biomagnification in the food chain at the Pueblo Superfund Site." CSU Pueblo 14th Annual Science and Mathematics Student Research Symposium, Pueblo CO

2018 *Harvey TM, *Long HE, **Peterson EK.** "The effects of developmental lead (Pb^{2+}) exposure on aggression in a model system, *Drosophila pseudoobscura*." CSU Pueblo 14th Annual Science and Mathematics Student Research Symposium, Pueblo CO

2018 *Ruiz RM, *Ulrich SR, *Losch AE, Steel JJ, **Peterson EK.** "The impact of Sindbis on behavioral and immunological response in vinegar flies. CSU Pueblo 14th Annual Science and Mathematics Student Research Symposium, Pueblo CO

2018 *Gorski JL, Jones CD, Varian-Ramos CW, Sandmeier FC, **Peterson EK.** Estimating abundance of Black-tailed prairie dogs while accounting for imperfect detection. CSU Pueblo 14th Annual Science and Mathematics Student Research Symposium, Pueblo CO

2018 *Kester M, *Klinger D, *Fender J, *Argon J, **Peterson EK,** Jones CD, Varian-Ramos CW, Sandmeier FC. The effect of *Cynomys ludovicianus* on herpetological biodiversity at the Pueblo Chemical Depot. CSU Pueblo 14th Annual Science and Mathematics Student Research Symposium, Pueblo CO

2018 *Liao A, *Fender J, Jones CD, Sandmeier FC, **Peterson EK,** Varian-Ramos CW. "Effects of prairie dog colony activity on small mammal diversity and abundance." CSU Pueblo 14th Annual Science and Mathematics Student Research Symposium, Pueblo CO

2018 *Ruiz RM, *Ulrich S, *Losch AE, Steele JJ, **Peterson EK**. "The impact of multiple stressors on behavioral and immunological responses in vinegar flies." Animal Behavior Society Conference, Milwaukee WI, August 2-5

2018 *Ruiz RM, *Ulrich S, Steele JJ, **Peterson EK.** "Dietary exposure to environmental pollutants and fatty acids effects on viral infection." Metabolism of Infectious Diseases Conference, Fort Collins CO

2018 *Long HE, *Harvey TA, **Peterson EK.** "Quantifying aggressive behaviors in a wild-caught *Drosophila pseudoobscura*." Beta Beta Beta National Biological Honors Society Western District-1 Regional Convention 2018, Greeley CO, April 13-15

2018 *Long HE, *Harvey TA, **Peterson EK.** "Quantifying aggressive behaviors in a wild-caught *Drosophila pseudoobscura*." CSU Pueblo Student Symposium, Pueblo CO

2017 *Long HE, **Peterson EK.** "The impact of developmental lead (Pb^{2+}) exposure on aggression in a model organism, *Drosophila pseudoobscura*." CSU Pueblo 13th Annual Science and Mathematics Student Research Symposium, Pueblo CO

2017 *Long HE, **Peterson EK**. "Drosophila: An emerging model for integrative behavioral ecotoxicology (IBET) and risk assessment." Society for Environmental Toxicology and Chemistry North America 38th Meeting, Minneapolis MN, November 12-16

2011 *King B, **Peterson EK**, Hirsch HVB. "Territoriality over resources does not equate to mating success in *Drosophila melanogaster*." National Conference on Undergraduate Research, Ithaca NY

2010 *Fini A, Wilson H, **Peterson EK.** "Sleep deprivation decreases locomotion and sexual behavior in *Drosophila melanogaster*." Third Annual Summer Research Event, SUNY-Albany, Albany NY

2010 *Conroy S, **Peterson EK**, Wilson H. Starvation affects mating behavior in male and female *Drosophila melanogaster*. Third Annual Summer Research Event, SUNY-Albany, Albany NY

SERVICE

Departmental and University Service

Search Committee, New hire for Postdoctoral Researcher for Institute of Cannabis Research in Department of Chemistry, CSU Pueblo, 2020

Search Committee, New hire for Postdoctoral Researcher for Chemistry Community of Communities to Build Active STEM Engagement, CSU Pueblo, 2019-2020

Seminar Coordinator, Department of Biology Research Seminar Series, CSU Pueblo, 2018-2019

Search Committee, New hire for Postdoctoral Researcher for Engineering Community of Communities to Build Active STEM Engagement, CSU Pueblo, 2019

Judge, Undergraduate Research Symposium, SUNY-Albany, 2016, 2015

Department of Biological Sciences Graduate Student Representative, Future Faculty Leadership Council, SUNY-Albany, 2011-13

Professional Service

Committee Member, IDEA (Inclusion Diversity Equity and Access) Committee, The Colorado Chapter of the Wildlife Society, 2021-present

Chair, Membership Development Committee, Colorado Chapter of The Wildlife Society, 2020-present

Scientific Program Committee Member, North American Congress for Conservation Biology Conference, Society of Conservation Biology, Denver CO, 2018-2019

Steering Committee Member, North American Congress for Conservation Biology Conference, Society of Conservation Biology, Denver CO, 2018-2019

Judge, Founders Poster Competition, Animal Behavior Society Conference, Milwaukee WI, 2018

Reviewer, *Chemosphere*, 2018

Interviewed by *Scientific American*, Lockwood, D. (2018) "Otter poop helps scientists track pollution at a superfund site", *Scientific American*, April 18, 2018

Liaison for Education and Conservation Committees, Animal Behavior Society Education Committee, 2017-19

Reviewer, *Current Zoology*, 2017

Guest Editor, Special Edition in "Conservation Concerns in Behavioral Toxicology", *Current Zoology*, 2016-17

Committee Member, Animal Behavior Society Conservation Behavior Committee, 2015-present

Volunteer, Animal Behavior Society Conservation Committee, 2012-15

Professional Certifications

Certified Ecologist, Ecological Society of America, 2020-present

Future Faculty and Teaching Development Program, Institute for Teaching Learning and Academic Leadership, SUNY-Albany, 2013-16

Professional Memberships

Association of Zoos and Aquariums, 2021-present

Ecological Society of America, 2020-present

National Military Fish and Wildlife Association, 2019-present

The Wildlife Society, 2018-present

Colorado Chapter of The Wildlife Society, 2018-present

Society for Conservation Biology, 2018-present

Animal Behavior Society, 2010-present

American Association for the Advancement of Science, 2016-19

Society of Environmental Toxicology and Chemistry, 2014-17

Community Service and Outreach

Volunteer, Colorado Science Alliance, Denver CO, 2018-19

Lead for Science Fair, Denver March for Science, Denver CO, 2018

Southern Colorado Science Olympiad Event Supervisor, Pueblo CO, 2018

MEDIA COVERAGE

2021	"$5 Million Grant to Help Hispanic & Low Income Students Achieve STEM Degrees." CSU Pueblo, https://www.csupueblo.edu/news/2021/10-01-stem-grant.html
2021	"Teaching the ABT." The ABT Time Podcast, https://www.youtube.com/watch?v=E9wzpzs-xzg
2019	"Rodent reprieve: Prairie dog relocation project saves Pueblo West rodents from annihilation." *The Pueblo Chieftain*, https://www.chieftain.com/news/20191224/rodent-repreive-prairie-dog-relocation-program-saves-pueblo-west-rodents-from-annihilation
2019	"Prairie Dogs in Pueblo West Getting a New Home", *KOAA* Local News, https://www.koaa.com/news/covering-colorado/prairie-dogs-in-pueblo-west-getting-a-new-home

ADDITIONAL WORK EXPERIENCE

2005-2007	Chimpanzee and Orangutan Caregiver, Center for Great Apes
2004	Intern Primate Caretaker, Center for Great Apes

2004	Intern Primate Caretaker, Jungle Friends Primate Sanctuary
2004	Undergraduate Research Assistant, Department of Biology, Arcadia University and the Bioko Biodiversity Protection Program
2002-2004	Undergraduate Student Researcher, Department of Biology, Ithaca College

PROFESSIONAL DEVELOPMENT

2021	Center for Wildlife Studies Course, "Capture-Mark-Recapture"
2021	ABT Framework Workshop, "The Narrative Blitz"
2021	ABT Framework Course for the Ecological Society of America, "SBI Persuasive Proposals: The Power of Narrative"
2021	GIS in Ecology Workshop, "Introduction to Integrating QGIS and R for Spatial Analysis"
2019	esri Instructor-Led Workshop, "Introduction to GIS Using ArcGIS"
2019	Colorado Chapter of The Wildlife Society Conference Workshop, "Community-based Social Marketing: A Five Step Approach to Motivating Human Behavioral Change"
2019	Colorado Chapter of The Wildlife Society Conference Workshop, "Camera Trapping Workshop"
2018	Animal Behavior Society Conference Workshop, "Genomics for Animal Behaviorists Workshop"
2018	La Kretz Center for California Conservation Science Workshop, "UCLA/LaKretz Workshop in Conservation Genomics", University of California-Las Angeles
2017-18	CSU Pueblo CBASE Curricular Redesign Program, College Biology I (BIOL 181) and Special Topics in Scientific Literacy & Writing (CBASE 291 and CBASE 491)
2016	SETAC World Congress/SETAC North America 37th Annual Meeting Professional Training Course, "Making Good Scientific Presentations Great"
2016	SETAC World Congress/SETAC North America 37th Annual Meeting Professional Training Course, "Communication and Collaboration: A Scientist's Guide to Improving Professional Presence and Leadership in any Setting"
2015	SETAC North America 36th Annual Meeting Professional Training Course, "Assessing Chemical Risks to Threatened and Endangered Species Using Population Models"
2015	Clarkson Early Career Colloquium in Bioscience Crossing Disciplines
2014	Animal Behavior Society Conference Workshop, "Vision and Change in Animal Behavior Education"