

ELIZABETH K. PETERSON

Curriculum Vitae

Eastern Illinois University
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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

- 2023-present Tenure-track Assistant Professor, Department of Biological Sciences, Eastern Illinois University (EIU)
- 2022-2023 Faculty Research Associate, Department of Biology, CSU Pueblo
- 2021-2023 Research Faculty, College of STEM, CSU Pueblo
- 2021-2022 Program Director, MAPS Program (Mentorship, Access, and Platforms in STEM):
Experiences and Support to Build Hispanic and Underrepresented STEM Graduates,
CSU Pueblo
- 2017-2021 Postdoctoral Researcher, CBASE Program (Communities to Build Active STEM
Engagement), CSU Pueblo
- 2017 Postdoctoral Researcher, Department of Biology, Union College
- 2015-2017 Instructor, Part-time, Department of Biological Sciences, SUNY-Albany

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

PUBLICATIONS (¶graduate and *undergraduate authorship; ‡corresponding/ senior author)

Peer-Reviewed Research Manuscripts

- In prep* Jones C, Troy J, *Back CA, *Downey S, *Gorski J, *Morales J, *Si K, *Ulrich S,
Jones R, and ‡Peterson EK. Improving visual counts of a burrowing mammal for
conservation management. *Methods in Ecology and Evolution*.
- 2023 ‡Peterson EK, Carsella J, Varian-Ramos CW, *Schiffer T, *Staples SK, and Diawara

- M. Effects of lead (Pb) from smelter operations in an urban terrestrial food chain at a Colorado Superfund site. *Bulletin of Environmental Contamination and Toxicology*, 112(1):17. DOI: 10.1007/s00128-023-03846-x
- 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, and 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
- 2021 ‡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, and Toni P. Evaluating potential effects of solar power facilities on wildlife from an animal behavior perspective. *Conservation Science and Practice Journal*, e319. DOI: 10.1111/csp2.319
- 2020 *Back C, *Healey K, *Staples SK, **Peterson EK**, and ‡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, and Possidente B. Exposure to lead (Pb²⁺) 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, and Carrico P. Intraspecific genetic variation in reproductive strategies in susceptibility to developmental lead (Pb²⁺) 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, and **Peterson EK**. The evolution of male and female mating preferences in *Drosophila* speciation. *Evolution*, 73(9): 1759-1773. DOI: <https://doi.org/10.1111/evo.13752>
- 2018 ‡**Peterson EK**, and *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, and Hirsch HVB. Accumulation, elimination, sequestration, and genetic variation of lead (Pb²⁺) loads within and between generations in a model system, *Drosophila melanogaster*. *Chemosphere*, 181: 368-375. DOI: <https://doi.org/10.1016/j.chemosphere.2017.04.091>
- 2017 ‡**Peterson EK**, Yukilevich R, Kehlbeck J, LaRue KM, *Ferraiolo K, Hollocher K, Hirsch HVB, and Possidente B. Asymmetrical positive assortative mating induced by developmental lead (Pb²⁺) exposure in a model system, *Drosophila melanogaster*. *Current Zoology*, 63(2): 195-203. DOI: <https://doi.org/10.1093/cz/zox016>
- 2017 **Peterson EK**, Buchwalter DB, Kerby JL, Lefauve MK, Varian-Ramos CW, and ‡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**, and 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: <https://doi.org/10.1111/j.1936-704X.2016.03212.x>

Peer-Reviewed STEM Education Manuscripts

- 2020 [‡]Bickford N, **Peterson EK**, Jensen PA, and Thomas DA. Undergraduates who are merely interested in research are better students than their peers. *Education Sciences*, 10(6): 150.
- 2015 [‡]**Peterson EK**, and Carrico P. Laboratory exercise in behavioral genetics using team-based learning. *Journal of College Biology Teaching*, 41(2): 33-40.

Editor-Reviewed Book Chapters

- 2021 [‡]Seymour B, [‡]**Peterson EK**, and [‡]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.

Technical Reports

- 2023 [§]Liao A, [§]Loftin M, ^{*}McGuin T, ^{*}Martell M, [‡]**Peterson EK**. Raton Pass Wildlife Study Progress Report, December 2023. Technical Report to Colorado Department of Transportation.
- 2023 [§]Liao A, ^{*}Martell M, ^{*}McGuin T, ^{*}Loftin M, and [‡]**Peterson EK**. Raton Pass Wildlife Study Progress Report, June 2023. Technical Report to Colorado Department of Transportation.
- 2023 ^{*}Liao A, ^{*}Martell M, and [‡]**Peterson EK**. Raton Pass Wildlife Study Progress Report, January 2023. Technical Report to Colorado Department of Transportation.

Science Publications for General Public

- 2013 [‡]**Peterson EK**. 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 [‡]**Peterson EK**. Hybridization within canine species: the problem and its implications for conservation behavior research. *The Conservation Behaviorist*, 11(1): 6.
- 2012 [‡]**Peterson EK**. Orangutans and Palm Oil. *The Conservation Behaviorist*, 10(2): 5.

EXTERNAL GRANT FUNDING

Grants *in review*

- In review* PI, “Restoring and maintaining existing functional shortgrass prairie habitat for sustainable species populations in southeastern Colorado”, National Fish and Wildlife Federation (\$276,926)

Grants Awarded, in progress

- 2023-current Co-PI, “Understanding wildlife response to I-25 in Raton Pass to mitigate wildlife-vehicle collisions”, Colorado Department of Transportation (\$30,874)
- 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 (\$150,000)

Grants Completed

- 2021-2023 Co-PI, “Project CUATRO (Creating Connected College Research Communities)”, Improving Undergraduate STEM Education: Hispanic-Serving Institutions (HSI Program), National Science Foundation (\$699,442)
- 2021 PI, “Relocating prairie dogs to conservation management land at the U.S. Army Pueblo Chemical Depot”, NextEra Energy Foundation (\$20,000)
- 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 (Pb²⁺) 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 (Pb²⁺) 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

Eastern Illinois University, Instructor of Record

Graduate Courses

- Special Topics: Wildlife Management, lecture and laboratory (spring 2024)
- Conservation, lecture (spring 2024)
- Special Topics: Mammalogy, lecture (spring 2024)
- Wildlife Techniques, lecture and laboratory (fall 2023)
- Mammalogy, lecture (fall 2023)
- Research in Biological Science (fall 2023, spring 2024)

Undergraduate Courses

- Wildlife Techniques, lecture and laboratory (fall 2023)
- Conservation, lecture (spring 2024)
- Special Topics: Mammalogy, lecture (fall 2023)
- Undergraduate Research I (spring 2024)

CSU-Pueblo, Instructor of Record

Undergraduate Courses

- 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)
- Research, BIOL 292, BIOL 392, BIOL 492, BIOL 592, and BIOL 599 (fall 2022, spring 2023)

SUNY-Albany, Instructor of Record

Undergraduate Courses

Animal Behavior, lecture (spring 2017)

Animal Behavior, laboratory (summer 2014)

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

SUNY-Albany, Teaching Assistant

Undergraduate Courses

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)

PRESENTATIONS (*student co-authors)

Invited Scholarly Presentations

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| 2023 | Ansaf B, Peterson EK , “Wildlife-Infrastructure Interaction at Raton Pass Study: Transition from Phase One to Phase Two”, Colorado Department of Transportation Planning Meeting, Pueblo CO, July 27 |
| 2023 | Peterson EK , “Using conservation behavior to conserve species during the Anthropocene”, Symposium title: “Conservation behavior as a tool to reduce the effects of anthropogenic stressors”, Animal Behavior Society 2023 Conference, Portland OR, July 11-15 |
| 2023 | Peterson EK , “Using conservation behavior to solve conservation crises caused by invasive species and human predation”, Symposium title: “Conservation behavior as a tool to reduce the effects of anthropogenic stressors”, Animal Behavior Society 2023 Conference, Portland OR, July 11-15 |
| 2022 | Peterson EK , “Combating anthropogenic stressors using conservation behavior to improve environmental health and species conservation,” Women at Work Symposium, The 29 th Annual Conference of The Wildlife Society, Spokane, WA, November 10 |
| 2022 | Peterson EK , Panelist, Women at Work Symposium, The 29 th Annual Conference of The Wildlife Society, Spokane, WA, November 10 |
| 2022 | Peterson EK , “The impacts of anthropogenic stressors on mammals in southern Colorado”, Department of Biology, University of Colorado Colorado Springs, November 3 |
| 2022 | Peterson EK , *Liao A, “Determining wildlife motivations for crossing I-25 in response to the New Mexico wildlife fence to mitigate loss”, Joint Colorado Parks |

and Wildlife and Colorado Department of Transportation Interstate-25 Raton Pass Project Meeting, Colorado Department of Transportation Pueblo Office, September 12

- 2020 **Peterson EK**, “Restoring endangered grassland habitats with keystone ecosystem engineers and prescribed burns”, Department of Biology, Ithaca College, Virtual, December 3
- 2020 **Peterson EK**, “Restoring endangered grassland habitats with keystone ecosystem engineers and prescribed burns”, Department of Biology, University of Colorado Colorado Springs, Virtual, November 19
- 2019 **Peterson EK**, “Ithaca College Department of Biology Career Panel”, Department of Biology, Ithaca College, November 15
- 2016 **Peterson EK**, “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 Oral Presentations

- 2022 **Peterson EK**, Carsella J, *Schiffer T, *Staples K, Varian-Ramos CW, Diawara M. “Taxa living within a Superfund site accumulate disproportionately higher levels of Pb,” North American Congress for Conservation Biology Conference 2022, Reno NV, July 16-21
- 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 (Pb²⁺) 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

Conference Poster Presentations

- 2017 **Peterson EK**, Varian-Ramos CW, Swaddle JP. “Integrative behavioral ecotoxicology (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 (Pb²⁺) 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 (Pb²⁺) 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

- 2023 Symposium Co-Organizer, “Conservation behavior as a tool to reduce the effects of anthropogenic stressors”, Animal Behavior Society 2023 Conference, Portland OR, July 11-15
- 2023 Panel, Women in Wildlife Panel, The Colorado and Utah Chapters and the Central Mountains and Plains Section of the Wildlife Society Annual Conference, Grand Junction CO, March 8-10
- 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

Presentations for the Public

- 2023 Jones R, **Peterson EK**, “Prairie dogs as keystone ecosystem engineers in local short-grass prairie habitat”, Colorado Parks and Wildlife Pueblo TEN Course, June 14
- 2022 **Peterson EK**, “Using conservation behavior to inform prairie dog management”, Prairie Dog Coexistence Clinic, Boulder CO, October 11-12
- 2022 **Peterson EK**, “Rebuilding populations of a local keystone ecosystem engineer using conservation translocations”, Pueblo City-County Library, Pueblo CO, September 5
- 2022 **Peterson EK**, “Conserving a local keystone ecosystem engineer to protect prairie habitat”, Lake Pueblo State Park Visitor Center, Pueblo CO, August 5
- 2013 **Peterson EK**, “Behavioral Toxicology”, Latham Middle School, Latham NY, February 25
- 2012 **Peterson EK**, “Animal Behavior”, Huyck Preserve, Rensselaerville NY, July 13

STUDENT MENTORING

Thesis Graduate Adviser

Chinelo Ogwu (M.S., EIU, in progress), “The impact of prairie dog translocations on large mammal

predator presence in a short-grass prairie”

Sara Colby (M.S., CSU-Pueblo, in progress), “Post-translocation survival analysis for black-tailed prairie dogs”

Adam Liao (M.S., CSU-Pueblo, in progress), “Determining wildlife cues for crossing I-25 to mitigate loss”

Undergraduate Research Mentor/Supervisor

2 students at EIU since 2023

33 students at CSU Pueblo since 2017

3 students at SUNY-Albany (2010-2016)

Graduate Committee Member

Sarah Zoppa (M.S., EIU, in progress)

Research Awards by Mentored Students

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| 2019 | Jenna Morales, Charles H. Turner Award at Behaviour 2019 Conference (Chicago IL) |
| | Teyah Schiffer, 2 nd Place for John C. Johnson Award for Excellence in Student Research at Western Region District <i>Beta Beta Beta</i> 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

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| 2022 | Klow Si, Allen E. Anderson Award for Outstanding Wildlife Undergraduate Student, The Colorado Chapter of the Wildlife Society |
| 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)

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| 2023 | *Colby S, *Sheppard I, *Dudley S, *Robison N, Jones R, Vanden Heuvel B, Peterson EK . “Clip you down to build you back up: Prairie dog herbivorous behaviors impacts on vegetation within colony boundaries.” Animal Behavior Society Conference 2023, Portland OR, July 11-15 |
| 2023 | *McGuin T, *Liao A, *Martell M, Cosyleon G, Peterson EK . “Will predator and prey usage differ at culvert locations across a major interstate?” Animal Behavior |

Society Conference 2023, Portland OR, July 11-15

- 2023 *Randolph K, Dredla A, *Liao A, *Martell M, Schulte BA, Jones R, **Peterson EK**. “Quit badgering the prairie dogs: Determining a natural deterrent for North American badgers.” Animal Behavior Society Conference 2023, Portland OR, July 11-15
- 2023 *Sheppard I, *Colby S, *Dudley S, *Robison N, Jones R, **Peterson EK**. “Different methods of prairie dog social group boundary identification result in different spatial boundaries.” Animal Behavior Society Conference 2023, Portland OR, July 11-15
- 2023 *Sheppard I, *Colby S, *Dudley S, *Robison N, Jones R, **Peterson EK**. “Different methods of prairie dog social group boundary identification result in different spatial boundaries.” Colorado Tri-Beta Conference, Pueblo CO, April 14-15
- 2023 *Martell M, *Liao A, Cosyleon G, **Peterson EK**. “Species composition and wildlife infrastructure use in response to Interstate 25 in Raton Pass.” The Colorado and Utah Chapters and the Central Mountains and Plains Section of the Wildlife Society Annual Conference, Grand Junction CO, March 8-10
- 2023 *Liao A, Jackson S, Langen T, Cosyleon G, **Peterson EK**. “Understanding wildlife motivations to cross an interstate in southeastern Colorado to mitigate wildlife-vehicle collisions.” The Colorado and Utah Chapters and the Central Mountains and Plains Section of the Wildlife Society Annual Conference, Grand Junction CO, March 8-10
- 2022 *Colby S, Verdolin J, *Sheppard I, *Dudley S, *Robison N, Jones R, Vanden Heuvel B, **Peterson EK**. “Improving management strategies through understanding post-translocation coterie breakdown in black-tailed prairie dogs.” North American Congress for Conservation Biology Conference 2022, Reno NV, July 16-21
- 2022 *Liao A, Jackson S, Langen TA, *Hall G, Cosyleon G, **Peterson EK**. “Identifying hotspots of wildlife vehicle collisions in the Southern Colorado Interstate Terminus.” North American Congress for Conservation Biology Conference 2022, Reno NV, July 16-21
- 2022 *Sheppard I, *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 coterie for translocation.” North American Congress for Conservation Biology Conference 2022, Reno NV, July 16-21
- 2022 *Si K, *Montoya B, Jones CD, Troy JR, Jones R, **Peterson EK**. “Prairie dog call playbacks improve detection during visual counts.” North American Congress for Conservation Biology Conference 2022, Reno NV, July 16-21
- 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 coterie for translocation.” Animal Behavior Society 2021 Virtual Meeting, August 2-6

- 2019 *Dudley SL, *Weiter CL, *Back C, *Morales J, Cuttrel 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 *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, Cuttrel 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-February 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-February 1
- 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
- 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

SERVICE

Departmental Service

- Committee Member, Department of Biological Sciences Zoology Scholarship Committee, EIU, 2023-present
- Committee Member, Department of Biological Sciences Departmental Application of Criteria (DAC) Committee, EIU, 2023-present
- Committee Member, Department of Biological Sciences Animal Care Committee, EIU, 2023-present
- Committee Member, Department of Biological Sciences Honors Program Committee, EIU, 2023-present
- Committee Member, Department of Biological Sciences Vehicle Use Committee, EIU, 2023-present
- Committee Member, Department of Biological Sciences Natural Areas Committee, EIU, 2023-present
- Committee Member, Unit A Search for Animal Physiologist, Department of Biological Sciences, EIU, 2023-present
- Seminar Coordinator, Department of Biology Research Seminar Series, CSU Pueblo, 2018-2019
- Judge, Undergraduate Research Symposium, SUNY-Albany, 2016, 2015

College and University Service

- Committee Member, Darwin Day Committee, EIU, 2023-present
- Committee Member, Search Committee for Postdoctoral Researcher for Institute of Cannabis Research in Department of Chemistry, CSU Pueblo, 2020
- Committee Member, Search Committee for Postdoctoral Researcher for Chemistry Community of Communities to Build Active STEM Engagement, CSU Pueblo, 2019-2020
- Committee Member, Search Committee for Postdoctoral Researcher for Engineering Community of Communities to Build Active STEM Engagement, CSU Pueblo, 2019
- Department of Biological Sciences Graduate Student Representative, Future Faculty Leadership Council, SUNY-Albany, 2011-13

Professional Service

- Co-organizer, Podcast Mini-Series, 2023-current
- Guest Editor, Special Edition in Conservation Behavior, *Animal Behavior*, 2023-current
- Committee Member, IDEA (Inclusion Diversity Equity and Access) Committee, The Colorado Chapter of the Wildlife Society, 2021-2023
- Chair, Membership Development Committee, Colorado Chapter of The Wildlife Society, 2020-2023

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 Memberships

Association of Zoos and Aquariums, 2021-2023

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

2023	“Pueblo Depot is new home to 22 endangered Black-footed ferrets.” <i>The Pueblo Chieftain</i> , https://www.chieftain.com/story/news/2023/11/21/pueblo-depot-is-new-home-to-22-endangered-black-footed-ferrets/71619867007/
2021	“Teaching the ABT.” The ABT Time Podcast, https://www.youtube.com/watch?v=E9wzpzs-xzg
2020	“Welcome to the Neighborhood: Prairie Dog Colonies Find a New Home at the

Pueblo Chemical Depot.” *USFWS News*

- 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

- 2023 EIU Faculty Development and Innovation Center Event, “Authentic Assessment with AI”, August 11
- 2023 EIU Faculty Development and Innovation Center Webinar, “Supporting Students with Turnitin”, August 9
- 2022 The Wildlife Society Conference Workshop, “Close-kin mark-recapture: Theory and Practice”
- 2022 The Wildlife Society Conference Workshop, “An overview of genomic approaches for wildlife conservation and management”
- 2022 The Colorado Chapter of the Wildlife Society Workshop, “Racial Equity and Environmentalism Workshop”
- 2022 Center for Wildlife Studies Course, “Introduction to Occupancy Modeling”
- 2022 The Colorado Chapter of the Wildlife Society IDEA Workshop
- 2022 The National Academies of Sciences, Engineering, and Medicine Workshop, “Discussing and Understanding Animal Welfare Challenges in Research and Education on Wildlife, Non-Model Species and Biodiversity: A Workshop”
- 2022 North Dakota Chapter of The Wildlife Society Workshop, “Diversity, Equity, and Inclusion Workshop”
- 2022 The Wildlife Society Webinar, “Parenthood in the Field: Challenges and Advice for Raising Your Own Brood”

- 2022 The Wildlife Society Conference Panel Discussion, “A Future PI Training Session: How Do I Get the Job and What Do I Do Once I Have It”
- 2022 The Wildlife Society Conference Panel Discussion, “Parenthood in the field: Challenges and Advice for Raising Your Own Brood”
- 2022 Great Plains Conservation Network Webinar, “Homes on the Range”
- 2022 Ecological Society of America Webinar, “Statistical Methods Series: Multi-Species (Species Interactions) Occupancy Modeling”
- 2022 Ecological Society of America Webinar, “Gatekeeping to Grounds Keeping: Inclusive Facilitation for Diverse Groups”
- 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”