

DR. JUNIPER L. SIMONIS

(they/them pronouns)

Quantitative Ecological Scientist

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EDUCATION

PhD Ecology and Evolutionary Biology, Cornell University 2013
BS Integrative Biology, University of Illinois: Urbana-Champaign 2006

RESEARCH AND PROFESSIONAL EXPERIENCE

DAPPER Stats

Founder, Owner, Lead Scientist: 2015-Present

University of Florida

Data Analyst, Weecology Laboratory: 2017-2019

Edanz Editing

Expert Language Editor: 2016-2017

Cramer Fish Sciences

Biometrician: 2015-2016

Lincoln Park Zoo

Adjunct Scientist, Alexander Center for Applied Population Biology and Urban Wildlife Institute: 2015-Present

Research Scientist, Alexander Center for Applied Population Biology: 2015

Postdoctoral Fellow, Alexander Center for Applied Population Biology: 2013-2015

Cornell University

National Science Foundation Graduate Research Fellow: 2007-2013

Florida State University

Research Technician, Underwood Laboratory: 2006-2007

University of Illinois: Urbana-Champaign

Independent Undergraduate Researcher, Shearer Laboratory: 2005-2006

Research Assistant, Suarez Laboratory: 2005-2006

REU Researcher, Cáceres Laboratory and Kellogg Biological Station: 2005

TEACHING, ADVISING, AND SUPERVISING EXPERIENCE

Course Instructor

Statistics and Coding for Resource Managers [Professional Development Workshop], The Freshwater Trust, Portland OR: Spring 2018

Science Coding in the Classroom [Middle School Teacher Professional Development Course], Chicago Public Schools: Summer 2015

Ecological Design and Analysis Using R [Graduate Course], Cornell University: Spring 2010 and Fall 2011

Introduction to Programming in R [Intensive Workshop], Cornell University: Fall 2010

Evolutionary Biology, Writing-in-the-Majors Track, Cornell University: Fall 2009

Teaching Assistant

Evolutionary Biology and Diversity, Cornell University: Fall 2012

Limnology [Lecture and Laboratory Courses], Cornell University: Spring 2012

Advisor

Population Biology Internship, Lincoln Park Zoo: 2014

Kara Pellowe-Wagstaff, Cornell University Undergraduate, B.S. with High Honors: 2012

Research Internships in Field Sciences, Shoals Marine Laboratory: 2010-2011

Manager

Alexander Center Staff [Three Full-Time Employees, One Intern], Lincoln Park Zoo: 2014-2015

PUBLICATIONS

† Undergraduate co-author

Work prior to 2017-10-01 authored as "Joseph L. Simonis"

Preprints

Meiners, J. M., M. C. Orr, K. Riemer, T. L. Griswold, and J. L. Simonis. 2020. The influence of data type and functional traits on native bee phenology metrics: Opportunistic versus inventory records. *bioRxiv*. DOI: [10.1101/2020.04.16.044750](https://doi.org/10.1101/2020.04.16.044750)

Journal Publications

Simonis, J. L. and J. E. Merz. 2019. Prey availability, environmental constraints, and aggregation dictate distribution of an imperiled fish. *Ecosphere* **10**:e02634. DOI: [10.1002/ecs2.2634](https://doi.org/10.1002/ecs2.2634)

White, E. P., G. M. Yenni, S. Taylor, E. Christensen, E. Bledsoe, J. L. Simonis, and S. K. M. Ernest. 2019. Developing an automated iterative near-term forecasting system for an ecological study. *Methods in Ecology and Evolution* **10**:332-344. DOI: [10.1111/2041-210X.13104](https://doi.org/10.1111/2041-210X.13104)

Christensen, E., G. M. Yenni, H. Ye, J. L. Simonis, E. K. Bledsoe, R. M. Diaz, S. D. Taylor, E. P. White, and S. K. M. Ernest. 2019. portalr: an R package for summarizing and using the Portal Project Data. *Journal of Open Source Software* **4**(33):1098. DOI: [10.21105/joss.01098](https://doi.org/10.21105/joss.01098)

Faust, L. J., S. T. Long, K. Perišin, and J. L. Simonis. 2019. Uncovering challenges to sustainability of AZA Animal Programs by evaluating the outcomes of breeding and transfer recommendations with PMCTrack. *Zoo Biology* **38**:24-35. DOI: [10.1002/zoo.21470](https://doi.org/10.1002/zoo.21470)

Fidino, M. A., J. L. Simonis, and S. B. Magle. 2019. A multistate dynamic occupancy model to estimate local colonization–extinction rates and patterns of co-occurrence between two or more interacting species. *Methods in Ecology and Evolution* **10**:233-244. DOI: [10.1111/2041-210X.13117](https://doi.org/10.1111/2041-210X.13117)

Simonis, J. L., R. B. Harrison, S. T. Long, D. R. Rabon, Jr., W. T. Waddell, and L. J. Faust. 2018. Movement and mixing in a managed metapopulation of the critically endangered red wolf. *The Journal of Wildlife Management* **82**:573-582. DOI: [10.1002/jwmg.21397](https://doi.org/10.1002/jwmg.21397)

Zaringhalam, M., R. Vijayaraghavan, J. L. Simonis, K. Ramirez, and J. Zelikova, on behalf of 500 Women Scientists. Journal editors should not divide scientists. 2018. *Science* **360**: 163-164. DOI: [10.1126/science.aat6288](https://doi.org/10.1126/science.aat6288)

Ramirez, K. S., A. A. Berhe, J. Burt, G. Gil-Romera, R. F. Johnson, A. Koltz, I. Lacher, T. McGlynn, K. J. Nielsen, R. Schmidt, J. L. Simonis, C. P. terHorst, and K. Tuff. 2017. The future of ecology is collaborative, inclusive, and deconstructs biases. *Nature Ecology and Evolution* **2**:200. DOI: [10.1038/s41559-017-0445-7](https://doi.org/10.1038/s41559-017-0445-7)

Merz, J., P. S. Bergman, J. L. Simonis, D. Delaney, J. Pierson, P. Anders. 2016. Long-term seasonal trends in the prey community of Delta smelt (*Hypomesus transpacificus*) within the Sacramento-San Joaquin Delta, California. *Estuaries and Coasts* **39**:1526-1536. DOI: [10.1007/s12237-016-0097-x](https://doi.org/10.1007/s12237-016-0097-x)

Pellowe-Wagstaff, K. E.† and J. L. Simonis. 2014. The ecology and mechanisms of overflow-mediated dispersal in a rock-pool metacommunity. *Freshwater Biology* **59**:1161-1172. DOI: [10.1111/fwb.12337](https://doi.org/10.1111/fwb.12337)

- Simonis, J. L. and J. C. Ellis. 2014. Bathing birds bias β -diversity: frequent dispersal by gulls homogenizes fauna in a rock-pool metacommunity. *Ecology* **95**:1545-1555. [DOI: 10.1890/13-1185.1](https://doi.org/10.1890/13-1185.1)
- Bell, R. C., A. Belmaker, J. M. Brown, C. Couch, K. Francisco, M. E. Manuel, K. M. Marchetto, J. L. Simonis, R. Q. Thomas, and J. P. Sparks. 2013. Effectiveness of bio-control in mediating *Erythrina* gall wasp (*Quadrastichus erythrinae*) infestations of Wiliwili trees (*Erythrina sandwicensis*). *Journal of the Torrey Botanical Society* **140**:215-224. [DOI: 10.3159/TORREY-D-12-00069.1](https://doi.org/10.3159/TORREY-D-12-00069.1)
- Simonis, J. L. 2013. Predator ontogeny determines trophic cascade strength in freshwater rock pools. *Ecosphere* **4**:art62. [DOI: 10.1890/ES13-00019.1](https://doi.org/10.1890/ES13-00019.1)
- Simonis, J. L. 2013. Prey (*Moina macrocopa*) population density drives emigration rate of its predator (*Trichocorixa verticalis*) in a rock-pool metacommunity. *Hydrobiologia* **715**:19-27. [DOI: 10.1007/s10750-012-1268-9](https://doi.org/10.1007/s10750-012-1268-9)
- Simonis, J. L. 2012. Demographic stochasticity reduces the synchronizing effect of dispersal in predator-prey metapopulations. *Ecology* **93**:1517-1524. [DOI: 10.1890/11-0460.1](https://doi.org/10.1890/11-0460.1)
- Simonis, J. L., D. Neuharth-Keusch†, and I. Hewson. 2012. Aquatic bacterial assemblage variability in the supra littoral zone of Appledore Island, Gulf of Maine. *FEMS Microbiology Ecology* **80**:501-508. [DOI: 10.1111/j.1574-6941.2012.01318.x](https://doi.org/10.1111/j.1574-6941.2012.01318.x)
- Capps, K. A., M. T. Booth, S. M. Collins, M. A. Davison, J. M. Moslemi, R. W. El-Sabaawi, J. L. Simonis, and A. S. Flecker. 2011. Nutrient diffusing substrata: a field comparison of commonly used methods to assess nutrient limitation. *Journal of the North American Benthological Society* **30**:522-532. [DOI: 10.1899/10-146.1](https://doi.org/10.1899/10-146.1)
- Hall, S. R., J. L. Simonis, R. M. Nisbet, A. J. Tessier, and C. E. Cáceres. 2009. Resource ecology of virulence in a planktonic host-parasite system: an explanation using dynamic energy budgets. *American Naturalist* **174**:149-162. [DOI: 10.1086/600086](https://doi.org/10.1086/600086)
- Hall, S. R., C. Becker, J. L. Simonis, M. A. Duffy, A. J. Tessier, and C. E. Cáceres. 2009. Friendly competition: evidence for a dilution effect among competitors in a planktonic host-parasite system. *Ecology* **90**:791-801. [DOI: 10.1890/08-0838.1](https://doi.org/10.1890/08-0838.1)
- Simonis, J. L., H. A. Raja, and C. A. Shearer. 2008. Extracellular enzymes and soft-rot decay: are ascomycetes important degraders in freshwater? *Fungal Diversity* **31**:135-146. [EID: 2-s2.0-53549129355](https://doi.org/10.1007/s10541-008-9293-5)

Technical Reports

- Simonis, J. L. 2020. Crescent Dunes Solar Project avian mortality analyses with multi-year rates. Prepared for Great Basin Bird Observatory. DAPPER Stats, Portland, OR. 12 pp.
- Simonis, J. L. and M. L. Larsen. 2020. American Wind Wildlife Information Center Analysis Software. Prepared for American Wind Wildlife Institute. DAPPER Stats, Portland, OR. 6 pp.
- Flaherty, R. J., L. K. Caldwell, D. Bingham, L. Belcher, J. L. Simonis, C. R. Contor, and M. Sheoships. 2020. Juvenile steelhead and chinook production and smolt survival. 2019 Annual Progress Report for the Umatilla Basin Natural Production Monitoring and Evaluation Project. Prepared for the Confederated Tribes of the Umatilla Indian Reservation. Cramer Fish Sciences, Gresham, OR. 39 pp.
- Simonis, J. L. 2019. American Wind Wildlife Information Center Analysis Framework. Prepared for American Wind Wildlife Institute. DAPPER Stats, Portland, OR. 13 pp.
- Simonis, J. L. 2019. Mesquite effects on understory plants. Prepared for Dr. Elise Gornish, University of Arizona. DAPPER Stats, Portland, OR. 13 pp.
- Simonis, J. L. 2019. Pinyon Jay site selection analyses. Prepared for US Forest Service and Great Basin Bird Observatory. DAPPER Stats, Portland, OR. 12 pp.
- Simonis, J. L. 2019. Crescent Dunes Solar Project avian mortality analyses. Prepared for Great Basin Bird Observatory. DAPPER Stats, Portland, OR. 10 pp.
- Simonis, J. L. 2019. Bendire's and Le Conte's thrasher territory site selection analysis. Prepared for Great Basin Bird Observatory. DAPPER Stats, Portland, OR. 8 pp.
- Simonis, J. L. 2019. Population viability analysis modeling to support releases of sihek (*Todiramphus cinnamominus*). Prepared for Division of Aquatic & Wildlife Resources, Department of Agriculture, Government of Guam. DAPPER Stats, Portland, OR. 12 pp.

- Caldwell, L. K., J. L. Simonis, C. R. Contor, and M. Sheoships. 2019. Juvenile steelhead and chinook production and smolt survival. 2018 Annual Progress Report for the Umatilla Basin Natural Production Monitoring and Evaluation Project. Prepared for the Confederated Tribes of the Umatilla Indian Reservation. Cramer Fish Sciences, Gresham, OR. 46 pp.
- Simonis, J. L. 2018. Statistical Review of Quantitative Vegetation Monitoring. Prepared for The Freshwater Trust. DAPPER Stats, Portland, OR. 16 pp.
- Dalthorp, D., L. Madsen, M. Huso, R. Wolpert, P. Rabie, J. Studyvin, J. L. Simonis, and J. Mintz. 2018. GenEst Statistical Models—A Generalized Estimator of Mortality. United States Geological Survey: Techniques and Methods:7-A2. 22 pp. [DOI: 10.3133/tm7A2](https://doi.org/10.3133/tm7A2)
- Simonis, J. L., M. Huso, D. Dalthorp, J. Mintz, L. Madsen, P. Rabie, and J. Studyvin. 2018. GenEst User Guide—Software for a Generalized Estimator of Mortality. United States Geological Survey: Techniques and Methods:7-C19. 84 pp. [DOI: 10.3133/tm7C19](https://doi.org/10.3133/tm7C19)
- Simonis, J. L. 2018. Crescent Dunes Solar Project Avian Mortality Analyses. Prepared for Great Basin Bird Observatory. DAPPER Stats, Portland, OR. 11 pp.
- Simonis, J. L. 2018. Kawaiola Wind Farm fatality estimation evaluation. Prepared for Tetra Tech, Inc. DAPPER Stats, Portland, OR. 3 pp.
- Simonis, J. L. 2018. Pinyon Jay Nest Site Selection Analyses. Prepared for Great Basin Bird Observatory. DAPPER Stats, Portland, OR. 13 pp.
- Caldwell, L. K., J. L. Simonis, C. R. Contor, and M. Sheoships. 2018. Juvenile steelhead and chinook production and smolt survival. 2017 Annual Progress Report for the Umatilla Basin Natural Production Monitoring and Evaluation Project. Prepared for the Confederated Tribes of the Umatilla Indian Reservation. Cramer Fish Sciences, Gresham, OR. 55 pp.
- Simonis, J. L. 2017. Crescent Dunes Solar Project Avian Use and Mortality Analyses. Prepared for Great Basin Bird Observatory. DAPPER Stats, Portland, OR. 18 pp.
- Simonis, J. L. 2017. Gunsight Fatality Estimation Analysis. Prepared for Tetra Tech, Inc. DAPPER Stats, Portland, OR. 3 pp.
- Simonis, J. L. 2017. Clifton Court Forebay Predator Removal Consumption Analysis Methods. Prepared for Environmental Science Associates. DAPPER Stats, Portland, OR. 4 pp.
- Simonis, J. L. 2017. Estimation of Fatalities at Renewable Wind Facilities. Prepared for United States Fish and Wildlife Service. DAPPER Stats, Portland, OR. 159 pp.
- Merz, J. E., L. K. Caldwell, and J. L. Simonis. 2017. Dry Creek Temperature Modeling and Bioenergetics Report. Prepared for Environmental Science Associates. Cramer Fish Sciences, Gresham, OR. 50 pp.
- Caldwell, L. K., J. L. Simonis, C. R. Contor, and M. Sheoships. 2016. Juvenile steelhead and chinook production and smolt survival. 2016 Annual Progress Report for the Umatilla Basin Natural Production Monitoring and Evaluation Project. Prepared for the Confederated Tribes of the Umatilla Indian Reservation. Cramer Fish Sciences, Gresham, OR. 40 pp.
- Stroud, D. and J. L. Simonis. 2016. Clifton Court Forebay Predator Study: Bioenergetics Feasibility and Sensitivity Analysis. Cramer Fish Sciences, Gresham, OR. 38 pp.
- Simonis, J. L., S. Zeug, and K. Ross. 2016. Estimating Loss of Chinook Salmon and Natural-Origin steelhead at the Central Valley Project and State Water Project. Prepared for California Department of Water Resources. Cramer Fish Sciences, Gresham, OR. 62 pp.
- Faust, L., J. L. Simonis, R. Harrison, W. Waddell, and S. Long. 2016. Red Wolf (*Canis rufus*) Population Viability Analysis. Prepared for US Fish and Wildlife Service. Lincoln Park Zoo, Chicago, IL. 62 pp.
- Caldwell, L. K., J. L. Simonis, F. Carpenter, and L. Belcher. 2016. North Pacific Fisheries Management Council High Seas Coded Wire Tag Database Overhaul. Prepared for North Pacific Fisheries Management Council. Cramer Fish Sciences, Gresham, OR. 25 pp.
- Caldwell, L. K., S. Cramer, J. L. Simonis, L. Belcher, and F. Carpenter. 2015. Drift Creek cutthroat trout rearing capacity analysis. Prepared for Integrated Water Solutions, LLC. Cramer Fish Sciences, Gresham, OR. 24

pp.

- Cramer, S. P., K. Sellheim, P. J. Haverkamp, K. Ceder, and J. L. Simonis. 2015. Lassen Lodge hydroelectric project: fish habitat survey and capacity modeling final report, South Fork Battle Creek. Prepared for Rugraw, LLC. Cramer Fish Sciences, Gresham, OR. 88 pp.
- Johnson, B. J., J. L. Simonis, B. Bahner, P. Schultz, and R. Sweeney. 2015. Guam Kingfisher AZA Animal Program Population Viability Analysis Report. Association of Zoos and Aquariums. Lincoln Park Zoo, Chicago, IL. 29 pp.
- Simonis, J. L., L. J. Faust, R. B. Harrison, S. T. Long, D. R. Rabon Jr., and W. T. Waddell. 2015. Red Wolf AZA Animal Program Population Viability Analysis Report. Association of Zoos and Aquariums. Lincoln Park Zoo, Chicago, IL. 30 pp.
- Simonis, J. L., E. Reynolds, P. M. Stevens, C. R. Contor, and M. Sheoships. 2015. Juvenile steelhead and chinook production and smolt survival. 2015 Annual Progress Report for the Umatilla Basin Natural Production Monitoring and Evaluation Project. Prepared for the Confederated Tribes of the Umatilla Indian Reservation. Cramer Fish Sciences, Gresham, OR. 45 pp.

SOFTWARE

Applications

- Dalthorp, D., J. L. Simonis, M. Huso, L. Madsen, P. Rabie, J. Mintz, R. Wolpert, J. Studyvin, and F. Korner-Nievergelt. 2018. GenEst: Generalized Mortality Estimator. Web Application v1.3.1. [URL](#)
- Simonis, J. L., S. Zeug, and K. Ross. 2017. Loss Calculator: Estimating Loss of Chinook Salmon and Natural-Origin Steelhead at the Central Valley Project and State Water Project. Web Application v0.1.0. [URL](#)

Packages

- Simonis, J. L. and M. L. Larsen. 2020. American Wind Wildlife Information Center Analyses. R Software Package. v.1.0.0.
- Simonis, J. L. 2020. accessor. Access Access Databases without Access to Access. bash and R Software Package. v.0.4.1. [DOI: 10.5281/zenodo.3611911](https://doi.org/10.5281/zenodo.3611911).
- Simonis, J. L. 2020. salvage: tools for the California Delta Fish Salvage Database. bash and R Software Package. v.0.8.0. [DOI: 10.5281/zenodo.3628045](https://doi.org/10.5281/zenodo.3628045).
- Simonis, J. L., E. M. Christensen, D. J. Harris, R. M. Diaz, H. Ye, E. P. White, and S. K. M. Ernest. 2019. LDATS. R Software Package. v.0.2.5. [DOI: 10.5281/zenodo.3286117](https://doi.org/10.5281/zenodo.3286117). [CRAN](#)
- Simonis, J. L. 2019. gendrendr. R Software Package. v.0.1.4. [DOI: 10.5281/zenodo.3525595](https://doi.org/10.5281/zenodo.3525595)
- Simonis, J. L., G. M. Yenni, E. K. Bledsoe, E. M. Christensen, S. D. Taylor, H. Ye., E. P. White, and S. K. M. Ernest. 2019. portalcasting. R Software Package. v.0.17.0. [DOI: 10.5281/zenodo.3332973](https://doi.org/10.5281/zenodo.3332973)
- Ye, H., E. K. Bledsoe, E. M. Christensen, R. Diaz, S. K. M. Ernest, J. L. Simonis, E. P. White, and G. M. Yenni. 2019. Macroecological Analyses of Time Series Structure. R Software Package. v0.1.2. [DOI: 10.5281/zenodo.3333008](https://doi.org/10.5281/zenodo.3333008)
- Yenni, G. M., H. Ye, E. Christensen, J. L. Simonis, E. K. Bledsoe, R. M. Diaz, S. D. Taylor, E. P. White, and S. K. M. Ernest. 2019. portalar. R Software Package. v.0.3.0. [DOI: 10.5281/zenodo.1429290](https://doi.org/10.5281/zenodo.1429290). [CRAN](#)
- Dalthorp, D., J. L. Simonis, M. Huso, L. Madsen, P. Rabie, J. Mintz, R. Wolpert, J. Studyvin, and F. Korner-Nievergelt. 2018. GenEst: Generalized Mortality Estimator. R Software Package. v1.4.0.1. [DOI: 10.5066/P9O9BATL](https://doi.org/10.5066/P9O9BATL). [CRAN](#)

PRESENTATIONS

Invited Presentations

- Ecological Society of America: 2013, 2016, 2020
- Interagency Ecological Program Data Science Project Working Team: 2020
- Ecological Forecasting Initiative: 2019

Science Seminar Series, Washington State University-Vancouver: 2019
American Fisheries Society (OR Chapter): 2019
Women in Marine Sciences, Oregon State University: 2017
Department of Forestry and Natural Resources, Purdue University: 2015
Graduate Student Union and Gender Studies Department, University of Notre Dame: 2014
Conservation and Science Department, Lincoln Park Zoo: 2014
Department of Biology, University of South Dakota: 2013

Contributed Presentations

Hairston Hoopla, Cornell University: 2019
R Ladies: Gainesville (FL): 2019
Carpentries Research Bazaar, University of Florida: 2018
Ecological Society of America: 2008, 2011, 2012, 2015, 2016, 2017, 2018
Urban Ecology and Conservation Symposium: 2016
Red Wolf Species Survival Plan Working Group Annual Meeting: 2014, 2015
International Urban Wildlife Conference: 2015
Association of Zoos and Aquariums: 2013, 2014, 2015
The Wildlife Society: 2014
North American Congress for Conservation Biology: 2012
Department of Ecology and Evolutionary Biology, Cornell University: 2008, 2009, 2010, 2011, 2012
Heiserfest, Shoals Marine Laboratory: 2012
Frontiers in the Life Sciences, Cornell University: 2012
Biogeochemistry and Environmental Biocomplexity Program, Cornell University: 2009, 2010, 2011
Ninth International Symposium on Cladocera: 2011
American Society for Limnology and Oceanography: 2010
Celebration of a Centennial of Limnology, Cornell University: 2009
Mycological Society of America: 2006

PROFESSIONAL ACTIVITIES

Peer Reviews

Auk, *American Naturalist*, *Ecology Letters*, *Ecology and Evolution*, *Ecosphere*, *Freshwater Science*, *Frontiers in Marine Science*, *Hydrobiologia*, *Journal of Ecology*, *Proceedings of the Royal Society B: Biological Sciences*, *Royal Society Open Science*, United States Geological Survey, *Zoo Biology*

Society Memberships

American Society for Limnology and Oceanography, Association of Zoos and Aquariums, Ecological Society of America, Sigma Xi, Society for Conservation Biology, The Wildlife Society

Board and Committee Positions

Rowan Institute [Fiduciary Board Member]: 2019-Present
500 Women Scientists [Leadership Board Member, Portland Pod Member]: 2018-Present
Cornell University Gay and Lesbian Alumni Association [Board Member, Participation Committee Co-Chair]: 2016-2018
United States Fish and Wildlife Service Micronesian Kingfisher Species Recovery Committee: 2014-2016
Small Population Management Advisory Group, Association of Zoos and Aquariums: 2013-2016
Research Committee, Lincoln Park Zoo: 2013-2015
Student Library Advisory Council, Cornell University: 2011-2012

Biogeochemistry and Environmental Biocomplexity Seminar Committee, Cornell University [Chair]: 2009-2012
 Department of Ecology and Evolutionary Biology Graduate Student Association, Cornell University: 2007-2012
 Biogeochemistry and Biocomplexity Graduate Student Association, Cornell University: 2007-2012

Additional Service

oSTEM (out in STEM) Mentorship Program [Mentor]: 2019-Present
 Rose City Rollers (Non-Profit), Inc. [Junior Team Coach, Trainer, Training Committee Member]: 2015-Present
 Skype-A-Scientist [Participant]: 2019
 Portland Public School Board Candidate [Zone 6]: 2017
 ESA SEEDS (Strategies for Ecology, Education, Diversity, and Sustainability) [Mentor]: 2016, 2017
 Oregon Metro: Nature-in-Neighborhoods Restoration Grants [Reviewer]: 2016
 Purdue University Transgender Day of Remembrance Keynote Speaker: 2015
 Diversity and Inclusion Employee Taskforce, Lincoln Park Zoo [Founding Member]: 2014-2015
 Windy City Rollers (Non-Profit), Inc. [Trainer, Training Committee Co-Chair]: 2013-2015
 Trans, Gender-Non-Conforming, and Intersex Athlete Network [Founder]: 2013
 Planned Parenthood Transgender Youth Support Group, Ithaca, NY [Mentor]: 2012
 Peer Educators of Gender and Sexuality, Cornell University: 2012
 EnviroMentors Mentoring Program, Cornell University: 2011-2012
 Expanding Your Horizons Conference, Cornell University [Volunteer]: 2010-2012
 Floating Classroom, Ithaca, NY [Volunteer]: 2010-2012
 Quantitative Biology with R Lunch Bunch [Coordinator]: 2008-2012
 Biogeochemistry and Biocomplexity Grant Reviewer, Cornell University: 2008-2012
 Campus-to-Coast Program, Cornell University [Volunteer]: 2007
 Students for Environmental Concerns, University of Illinois: Urbana-Champaign [Environmental Education Chair]: 2004-2006

RESEARCH FUNDING

Competitive Research Grants and Fellowships

2019 National Science Foundation, Long-Term Research in Environmental Biology; Senior Personnel and co-author [\$637,157]
 2011-2012 National Science Foundation, Doctoral Dissertation Improvement Grant [1110545](#); Co-PI [\$14,773]
 2010 A.W. Mellon Foundation, Research Grant [\$1,500]
 2009 Sigma Xi, Research Grant [\$800]
 2008-2011 Cornell University Program in Biogeochemistry and Environmental Biocomplexity, Research Grants [total \$15,000]
 2008-2011 Shoals Marine Laboratory, Summer Research Awards [total \$10,000]
 2008-2009 Cornell Department of Ecology and Evolutionary Biology, Research Awards [total \$1,250]
 2007-2012 National Science Foundation, Graduate Research Fellowship [\$178,500]

Research Contracts

2020-2022 Tetra Tech, Effect of Turbine Size
 2020-2021 University of Florida, Forecasting Rodent and Plant Dynamics
 2020-2021 University of Florida, Data-intensive Ecological Forecasting
 2019-2020 American Wind Wildlife Institute, American Wind Wildlife Information Center
 2019-2020 Cramer Fish Sciences, Long-term Smelt and Silverside Interactions
 2019-2020 Cramer Fish Sciences, Multihabitat Aquatic Sampling Platform Analysis

- 2019-2020 University of Wyoming, ATTA Project Public Database
- 2019-2020 Virginia Commonwealth University, Phenological Impacts of Hurricane Maria
- 2019 Cramer Fish Sciences, Umatilla Smolt Outmigration
- 2019 University of Arizona, Impacts of Lehmann Lovegrass on Agave
- 2019 University of Arizona, Analysis of Mesquite Impacts on Understory Plants
- 2019 Great Basin Bird Observatory, Avian Mortality and Crescent Dunes Solar Project
- 2018- Freshwater Trust, Monitoring Site Selection Model
- 2018- REEF, Embedded Assessment of Public Participation in Reef Fish Surveys
- 2018-2019 Great Basin Bird Observatory, Thrasher Territory Analysis
- 2018-2019 US Forest Service & Great Basin Bird Observatory, Pinyon Jay Site Selection Analyses
- 2018-2019 Great Basin Bird Observatory, Waterbird Trend Analysis
- 2018 Cramer Fish Sciences, Umatilla Smolt Outmigration
- 2018 Great Basin Bird Observatory, Avian Mortality and Crescent Dunes Solar Project
- 2018 Tetra Tech, Kawailoa Wind Farm Fatality Estimation Evaluation
- 2017-2018 Bat Conservation International, Development of a Generalized Estimator of Bird and Bat Fatality at Renewable Energy Facilities
- 2017-2018 Freshwater Trust, Snake River Vegetation Monitoring Plan Evaluation
- 2017-2018 Great Basin Bird Observatory, Pinyon Jay Habitat Use and Nesting Analysis
- 2017 Tetra Tech, Gunsight Wind Energy Project Analysis
- 2017 Cramer Fish Sciences, Umatilla Smolt Outmigration
- 2017 Environmental Science Associates, Clifton Court Forebay Predator Removal Bioenergetics
- 2017 Great Basin Bird Observatory, Evaluation of BLM Vegetation Survey Data
- 2017 Great Basin Bird Observatory, Avian Use and Mortality and Crescent Dunes Solar Project
- 2017 Great Basin Bird Observatory, Road-Based Survey Population Estimator Evaluation
- 2016-2019 Cramer Fish Sciences, Delta Smelt Population Distribution Modeling
- 2016-2017 US Fish and Wildlife Service, Estimating Project-Specific Mortality Estimates from Post-Construction Survey Data and Refinement of Eagle Bayesian Risk Model
- 2016 Cramer Fish Sciences, Clifton Court Forebay Predator Bioenergetics
- 2016 Cramer Fish Sciences, Umatilla Smolt Outmigration
- 2016 Cramer Fish Sciences, Dry Creek Temperature Modeling
- 2015-2017 Guam Department of Agriculture, Population Viability Analysis (PVA) Modeling to Support Releases of Sihek (*Todiramphus cinnamominus*)
- 2015-2017 Lincoln Park Zoo, Red Wolf Population Viability Analysis

Travel Grants

- 2012 Society for Conservation Biology, Graduate Student Travel Grant [\$500]
- 2011 Cornell Department of Ecology and Evolutionary Biology, Orenstein Award [\$750]
- 2011 Ninth International Symposium on Cladocera, Graduate Student Travel Grant [\$700]
- 2010 Cornell University Graduate School, Research Travel Grant [\$2,000]
- 2008-2012 Cornell University Graduate School, Conference Grants [total \$1,600]

AWARDS AND RECOGNITION

- 2019 Women's Flat Track Derby Association, Champion [Rose City Rollers' Wheels of Justice]
- 2018 Women's Flat Track Derby Association, Champion [Rose City Rollers' Wheels of Justice]
- 2018 Distinguished Alumna, Mundelein High School
- 2017 Women's Flat Track Derby Association, Runner-Up [Rose City Rollers' Wheels of Justice]
- 2016 Women's Flat Track Derby Association, Champion [Rose City Rollers' Wheels of Justice]

- 2015 Women's Flat Track Derby Association, Champion [Rose City Rollers' Wheels of Justice]
- 2015 United States Trans100 Honoree [Excellence in Service to the Transgender Community]
- 2014 Lamont C. Cole Award [Outstanding Graduate Student Publication], Department of Ecology and Evolutionary Biology, Cornell University
- 2011 Robert H. Whittaker Award [Outstanding Graduate Student Presentation], Department of Ecology and Evolutionary Biology, Cornell University
- 2011 1st Place, Harry W. Greene Grilled Cheese Competition, Department of Ecology and Evolutionary Biology, Cornell University
- 2006 Bronze Tablet and *Summa Cum Laude* [University Honors] University of Illinois: Urbana-Champaign
- 2006 Harriett Long Award [Outstanding Undergraduate Research], School of Integrative Biology, University of Illinois: Urbana-Champaign
- 2006 Thesis Honors with High Distinction, School of Integrative Biology, University of Illinois: Urbana-Champaign