

M. Caitlin Fisher-Reid
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Associate Professor
Department of Biological Sciences
Bridgewater State University
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EDUCATION

Doctorate of Philosophy in Ecology and Evolution, August 2012.

Department of Ecology and Evolution
Stony Brook University, Stony Brook, NY
Dissertation: *Speciation, ecological divergence, and phylogeny in plethodontid salamanders*
Advisor: Dr. John J. Wiens

Bachelor of Science in Biology; Minor: Internet Studies, May 2005.

Brandeis University, Waltham, MA
Advisor: Dr. Dan L. Perlman

PROFESSIONAL EXPERIENCE

Associate Professor of Biological Sciences, September 2020 – present.

Department of Biological Sciences
Bridgewater State University, Bridgewater, MA

Assistant Professor of Biological Sciences, September 2014 – August 2020.

Department of Biological Sciences
Bridgewater State University, Bridgewater, MA

Adjunct Lecturer of Field Herpetology, June 2014 – July 2014.

Mountain Lake Biological Station, Pembroke, VA
University of Virginia, Charlottesville, VA

Visiting Lecturer of Ecology and Evolutionary Biology, August 2012 – May 2014.

Department of Biology
University of Richmond, Richmond, VA

TEACHING INTERESTS

evolution, Darwinian medicine, molecular ecology, ecology, animal behavior, conservation genetics, field biology, herpetology, and ichthyology.

RESEARCH INTERESTS

population ecology, population genetics, speciation, phylogenetics, animal behavior, responses to climate change.

TEACHING EXPERIENCE

Instructor, Bridgewater State University, Department of Biological Sciences

BIOE 515: *Advanced Topics: Biological Evolution*. Summer 2018, Spring 2021, 2022, 2023

BIOL 123: *Becoming a Biologist*. Spring 2020, 2021; Fall 2021, 2022

BIOL 199: *Seeing the Forest for the Trees*. Fall 2017.

BIOL 225: *General Ecology (with lab)*. Fall semesters, 2014 – present (except Fall 2020, on sabbatical).

BIOL 329L: *Winter Ecology Lab*. January Intersession 2018, 2020, 2023.

BIOL 340: *Darwinian Medicine*. Fall 2016, 2019, 2021, 2023; Spring 2018, 2019, 2021.

BIOL 372: *Behavioral Ecology*. Fall 2017.

BIOL 396: *Research Problems in Biology*. Spring semesters, 2015 – present; Summer Session I, 2015 – 2019; Fall semesters, 2016 – present.

BIOL 422: *Biological Evolution*. Spring semesters, 2015 – present; Summer 2020.

BIOL 424: *Molecular Ecology (with lab)*. Spring semesters, 2015 – 2017.

BIOL 485: *Honors Thesis*. Fall 2016, 2018, 2023; Spring 2017, 2021, 2023.

BIOL 497: *Undergraduate Biological Research*. Fall 2015.

BIOL 503: *Directed Study (graduate level)*. Summer 2022, 2023, Fall 2022, Spring 2023

Details of additional instructor-of-record teaching experience at University of Virginia (2014), University of Richmond (2012-2014), and Stony Brook University (2009-2012) are available upon request.

PEER-REVIEWED PUBLICATIONS (* indicates undergraduate co-author)

1. Kays, R., M.H. Snider, G. Hess, M.V. Cove, A.J. Jensen, H. Shamon, W.J. McShea, B. Rooney... **M.C. Fisher-Reid**... et al. (114 authors total; **submitted**). Climate, food, and humans predict mammal communities in the United States. *Proceedings of the National Academy of Sciences USA*.
2. Shamon, H., R. Maor, M. Cove, R. Kays... **M.C. Fisher-Reid**... A. Gonatas*... B. Page*... et al. (142 authors total; **submitted**) Snapshot USA 2021: A third coordinated national camera trap survey of the United States – first trends. *Ecology*.
3. Burton, C., C. Beirne, K. Gaynor, C. Sun, A. Granados... **M.C. Fisher-Reid**... et al. (223 authors total; **submitted**) Mammal responses to global changes in human activity vary by trophic group and landscape. *Nature Ecology & Evolution*.
4. Muñoz, D., E.H.C. Grant, C. Dinsmore, C. Sutherland, T.H. Matlaga, S. Sterrett, K. Grayson, L. Thompson, **M.C. Fisher-Reid**, A.M. Hyde, C. Devlin, A. Warwick, L. Mead, K. Epp, K. Yurewicz, M. Losito, E. Bastiaans, J. Fleming, W. Peterman, V. Puza, A. Wright, C. Davis, D.A.W. Miller. (**accepted pending revisions**). Seasonality and local climate predict range-wide variation in body size and individual growth rates of a widespread salamander. *Ecography*.
5. Fusco, N., B. Cosentino, J. Gibbs, M. Allen, A. Blumenfeld, G. Boettner, K. Briggs, E. Carlen, M. Collins, C. Dennison, D. DiGiacopo, A.-P. Drapeau Picard, J. Edmonson, **M.C. Fisher-Reid**, R. Fyffe, T. Gallo, A. Grant, W. Harbold, S. Heard, D. Lafferty, R. Lehtinen, S. Marino, J. McDonald, A. Mortelliti, M. Murray, A. Newman, K. Oswald, C. Ott-Conn, J. Richardson, R. Rimbach, P. Salaman, M. Steele, M. Stothart, M. Urban, K. Vandegrift, J.

- Vanek, S. Vanderluit, L. Vezina, and A. Caccone. 2023. Population genomic structure of a widespread mammal after three centuries of landscape change. *Molecular Ecology*. Early View.
6. Rega-Brodsky, C.C., K.C.B. Weiss, A.M. Green, F. Iannarilli, J. Tleimat, S. Fritts, D.J. Herrera, **M.C. Fisher-Reid**, J.A. Compton, D.J.R. Lafferty, and M.L. Allen. 2023. Mammalian functional trait responses to anthropogenic and environmental factors across the contiguous USA. *Urban Ecosystems* 26:309–322.
 7. Mohl, E.K., A.C. McCall, M. Wood*, L. Sherman*, M. Reid*, P.A. Saunders, S.E. Scanga, C. Danielson, **M.C. Fisher-Reid**, H. Marella, D.E. Garneau, K.S. Whitney, K. Cipollini, J.N. Styrsky, J.D. Styrsky, S. Rasmussen*, K.N. Hopfensperger. 2023. Common milkweed seeds exhibit latitudinal clines more consistent with adaptation to growing season length than temperature. *Restoration Ecology* 31:e13878.
 8. Buckingham, E., J.W. Streicher, **M.C. Fisher-Reid**, T. Ježková, J.J. Wiens. 2022. Population genomic analyses support sympatric origins of parapatric morphs in a salamander. *Ecology and Evolution*. 12:e9537.
 9. Kays, R., M.V. Cove. . . **M.C. Fisher-Reid**, D. Rezendes*, S.M. King* . . . et al. (153 authors total). 2022. Snapshot USA 2020: A second coordinated national camera trap survey of the United States during the COVID-19 pandemic. *Ecology* 103: e3775.
 10. **Fisher-Reid, M.C.**, K.L. Grayson, S.R. Grouleff*, M.A. Hair*, T.J.H. Matlaga, A.K. Ireland*, L.S. Mead, A. St John*, M. Starr*, S.C. Sterrett, K.N. Streeter*. (**accepted pending revisions**). Eastern red-backed salamanders: A comprehensive review of an undervalued model in evolution, ecology, & behavior. *Herpetological Monographs*. ***preprint available at <https://doi.org/10.22541/au.162799763.31682981/v1>. Note: Preprint has not been peer-reviewed***
 11. Cove, M.V., R. Kays, H. Bontrager. . . **M.C. Fisher-Reid**, S.M. King*, A.J. Bebko* . . . et al. (150 authors total). 2021. Snapshot USA 2019: the first coordinated national camera trap survey of the United States. *Ecology* 102: e03353.
 12. Bloch, C.P., K.D. Curry, **M.C. Fisher-Reid**, and T.D. Surasinghe. 2019. Population Decline of the Invasive Asian Shore Crab (*Hemigrapsus sanguineus*) and Dynamics of Associated Intertidal Invertebrates on Cape Cod, Massachusetts. *Northeastern Naturalist* 26:772–784.
 13. Lambert, S.M., J.W. Streicher, **M.C. Fisher-Reid**, F.R. Méndez-de la Cruz, N. Martínez-Méndez, U.O. García Vázquez, A. Nieto Montes de Oca, and J.J. Wiens. 2019. Inferring introgression using RADseq and D_{FOIL} : power and pitfalls revealed in a case study of spiny lizards (*Sceloporus*). *Molecular Ecology Resources* 19:818–837.
 14. **Fisher-Reid, M.C.** and J.J. Wiens. 2015. Is geographic variation within species related to macroevolutionary patterns between species? *Journal of Evolutionary Biology* 28:1502–1515.
 15. Cahill, A.E., M.E. Aiello-Lammens (the first two authors contributed equally), **M.C. Fisher-Reid**, X. Hua, C. Karanewsky, H.Y. Ryu, G. Sbeglia, F. Spagnolo, J. Waldron, and J.J. Wiens. 2014. Causes of warm-edge range limits: systematic review, proximate factors, and implications for climate change. *Journal of Biogeography* 41: 429–442.
 16. **Fisher-Reid, M.C.**, T.N. Engstrom, C.A. Kuczynski, P.R. Stephens, and J.J. Wiens. 2013. Parapatric divergence of sympatric morphs in a salamander: incipient speciation on Long Island? *Molecular Ecology* 22:4681–4694.
 17. Cahill, A.E., M.E. Aiello-Lammens (the first two authors contributed equally), **M.C. Fisher-Reid**, X. Hua, C. Karanewsky, H.Y. Ryu, G. Sbeglia, F. Spagnolo, J. Waldron, O.

Warsi, and J.J. Wiens. 2013. How does climate change cause extinction? *Proceedings of the Royal Society of London B* 280: 20121890.

Cover article, picked up by many general news outlets (including The Guardian (UK), Daily Mail (UK), MSN News (UK), YahooNews (UK), Business Insider), science news websites (including ScienceDaily, physorg, Royal Society Website, EarthTimes, and SciTechDaily), and climate change and environmental websites and blogs.

18. **Fisher-Reid, M.C.**, K.H. Kozak, and J.J. Wiens. 2012. How is the rate of climatic-niche evolution related to climatic-niche breadth? *Evolution* 66:3836–3851.
19. **Fisher-Reid, M.C.**, and J.J. Wiens. 2011. What are the consequences of combining nuclear and mitochondrial data for phylogenetic analysis? Lessons from *Plethodon* salamanders and 13 other vertebrate clades. *BMC Evolutionary Biology* 11:300.
Published 10/13/11, listed as **Highly Accessed** on 10/27/11

OTHER PUBLICATIONS (* indicates undergraduate co-author)

1. Sevin, J., A. Warwick, **M.C. Fisher-Reid**. 2021. Human dimensions in amphibian conservation: addressing threats. QUBES Educational Resources. doi:10.25334/JES3-V748; <https://qubeshub.org/publications/2461/1>.
2. **Fisher-Reid, M.C.** 2021. Ecology of Infectious Disease: Data Mining the National Notifiable Diseases Surveillance System (NNDSS) for Ecological Patterns. QUBES Educational Resources. doi:10.25334/TPNZ-Q261; <https://qubeshub.org/publications/2453/1>.
3. Jahoda, J.C., K.D. Curry, C.P. Bloch, and **M.C. Fisher-Reid**. 2020. *A Case Study Approach to Ecology Field Studies*. 6th Ed. Dubuque: Kendall Hunt Publishing Company.
MCFR took the lead on 6th edition revisions and contributed new chapter
4. **Fisher-Reid, M.C.** 2017. One species, two species, red species, lead species? Phylogenetics and species concepts with *Plethodon* salamanders. SPARCnet: Educational Resources, QUBES Educational Resources. doi:10.25334/Q4N66K; <https://qubeshub.org/publications/189/1>.
5. Warwick, A., L. Mead, **M.C. Fisher-Reid**, E. Grant, C. Sutherland, A. Wills*, and E. Perry*. 2018. Claymander Field Experiment. SPARCnet: Educational Resources, QUBES Educational Resources. doi:10.25334/Q46Q4Z; <https://qubeshub.org/publications/372/1>.
6. Jahoda, J.C., K.D. Curry, C.P. Bloch, and **M.C. Fisher-Reid**. 2016. *A Case Study Approach to Ecology Field Studies*. 5th Ed. Dubuque: Kendall Hunt Publishing Company.
7. **Fisher-Reid, M.C.** 2016. Book Review: Genetics for everyone. *Bridgewater Review* 35(2):35-36.

CONFERENCE PRESENTATIONS AND WORKSHOPS (* indicates undergraduate student co-author; ^ indicates BSU graduate student co-author; † indicates presenter)

Warwick, A.†, L. Mead, T. Melvin, K. Grayson, **M.C. Fisher-Reid**, R. Hernández Pacheco, T. Matlaga, S. Sterrett, D. Miller, E. Grant. Testing a Connected Classroom Course-based Research Experience Using a Large-scale Salamander Research Network, SPARCnet. Contributed poster presentation. The Wildlife Society Annual Meeting. November 2023. Louisville, KY.

- Mohl, E.[†], M. Gines, **M.C. Fisher-Reid**, D. Garneau, H. Marella, A. McCall. Responses to temperature cycling may explain latitudinal clines in milkweed seed dormancy. Contributed poster presentation. Ecological Society of America. August 2023. Portland, OR.
- Warwick, A.[†], L. Mead, T. Melvin, K. Grayson, **M.C. Fisher-Reid**, R. Hernández Pacheco, T. Matlaga, S. Sterrett, D. Miller, E. Grant. Testing a Connected Classroom Course-based Research Experience Using a Large-scale Salamander Research Network, SPARCnet. Contributed poster presentation. Joint Meetings of Ichthyology and Herpetology. July 2023. Norfolk, VA.
- Mead, L.[†], A. Warwick[†], K. Grayson[†], **M.C. Fisher-Reid**[†]. Engaging Undergraduates in Monitoring Salamanders. Contributed in-person workshop (half-day). Joint Meetings of Ichthyology and Herpetology. July 2023. Norfolk, VA.
- Fisher-Reid, M.C.**[†], T.J. Hawley Matlaga, D.A.W. Miller, S.C. Sterrett, A. Warwick. SPARCnet RaMP: Training the next generation of interdisciplinary scientists to collaboratively address species responses to climate change with SPARCnet. Contributed oral presentation. SPARCnet Annual Meeting. July 2023. Norfolk, VA.
- Barclay, A.*[†], R. Harris*[†], **M.C. Fisher-Reid**, H. Marella. Impacts of Manganese and Iron on Common Milkweed. Contributed poster presentation. Contributed poster presentation. Northeast Natural History Conference. April 2023. Burlington, VT.
- Cadd, M.*[†], **M.C. Fisher-Reid**, C.P. Bloch, S.J. Sawyer. Effects of Carrion Decomposition on Arthropod Community Structure and Habitat Seeking Behavior, Seven Years Later. Contributed poster presentation. Northeast Natural History Conference. April 2023. Burlington, VT.
- Driscoll-Gomez, S.^{^†}, **M.C. Fisher-Reid**, H. Marella. Genetic diversity of Oleander aphids *Aphis nerii*. Contributed poster presentation. Northeast Natural History Conference. April 2023. Burlington, VT.
- Gonatas, A.*[†], **M.C. Fisher-Reid**. Smile for the Camera: Patterns of Mammal Abundance in Great Hill Forest Through Four Years of Camera Trapping. Contributed poster presentation. Northeast Natural History Conference. April 2023. Burlington, VT.
- Lawrence, A.*[†], B. Page*[†], A. Gonatas*, **M.C. Fisher-Reid**. Biodiversity of Great Hill Forest: A Baseline Inventory. Contributed poster presentation. Northeast Natural History Conference. April 2023. Burlington, VT.
- Leopold, G.*[†], **M.C. Fisher-Reid**. Creating Accurate Clay Salamander Molds for In-Class Learning Modules on Polymorphism and Predation. Contributed poster presentation. Northeast Natural History Conference. April 2023. Burlington, VT.
- Mohl, E.[†], M. Reid*, M. Wood*, L. Sherman*, A. McCall, J.N. Styrsky, J.D. Styrsky, D.E. Garneau, K.S. Whitney, K. Cipollini, S. Scanga, H.H. Marella, **M.C. Fisher-Reid**, K. Hopfensperger, and P. Saunders. Common Milkweed (*Asclepias syriaca*) exhibits latitudinal clines in germination and early growth traits. Contributed oral presentation. Ecological Society of America. August 2022. Ecological Society of America, Montreal, ON, Canada.
- Fisher-Reid, M.C.**[†], T.J. Hawley Matlaga, D.A.W. Miller, S.C. Sterrett, A. Warwick. SPARCnet Funding Update. Contributed oral presentation. SPARCnet Annual Meeting. July 2022. Virtual.
- Leopold, G.*[†], **M.C. Fisher-Reid**. Building Clay Models for Predation Experiments. SPARCnet Annual Meeting. July 2022. Virtual.

- Fisher-Reid, M.C.†**, and H.H. Marella†. How to Grow a Weed: Exploring the Basics of Milkweed Restoration. Contributed oral presentation (pre-recorded). CARS May Celebration. Bridgewater State University. May 2022. Hybrid.
- Fisher-Reid, M.C.†** and H.H. Marella†. MAREN: Leveraging EREN to Improve Milkweed Restoration. Contributed oral presentation. Northeast Natural History Conference. April 2022. Albany, NY.
- Fisher-Reid, M.C.†**, K.L. Grayson, S.R. Grouleff*, M.A. Hair*, T.J.H. Matlaga, A.K. Ireland*, L.S. Mead, A. St John*, M. Starr*, S.C. Sterrett, K.N. Streeter*. Red-backed salamanders (*Plethodon cinereus*): A comprehensive review of an undervalued model in evolution, ecology, & behavior. Contributed oral presentation. SPARCnet Annual Meeting. July 2021. Virtual.
- St. John, A.* and **M.C. Fisher-Reid†**. Hints at morph specific differences in skin microbial diversity for *Plethodon cinereus*. Contributed oral presentation. SPARCnet Annual Meeting. July 2021. Virtual.
- Fisher-Reid, M.C.†**, J. Fleming, E.H. Campbell Grant, K.L. Grayson, T. Hawley Matlaga, M. MacKnight, L. S. Mead, D.A.W. Miller, B. Shaw, S.C. Sterrett, C. Sutherland, A. Warwick. SPARCnet: The Salamander Population and Adaptation Research Collaboration Network. Contributed oral presentation. Northeast Natural History Conference. April 2021. Virtual.
- St. John, A.*†, A. O’Roak*†, C. Graziano*, S. King*, D. Rezendes*, **M.C. Fisher-Reid**. SPARCnet Year 4: Seasonal Differences in Abundance of *Plethodon cinereus* in SE Massachusetts. Contributed poster presentation. Northeast Natural History Conference. April 2021. Virtual.
- King, S.*†, D. Rezendes*†, A. Bebko*, **M.C. Fisher-Reid**. A Comparison of Mammal Diversity and Abundance in Two Forests in Massachusetts. Contributed poster presentation. Northeast Natural History Conference. April 2021. Virtual.
- Mohl, E.†, C. Danielson*, C. Gilbert*, M. Groskreutz*, D. Vargas*, H.H. Marella and **M.C. Fisher-Reid**. Clines in Germination of Common Milkweed (*Asclepias syriaca*) are Consistent with Adaptation to Growing Season Length Rather than Temperature. Contributed oral presentation. Ecological Society of America, August 2020. Virtual
- Grayson, K. L.†, **M. C. Fisher-Reid**, L. S. Mead, H. Coovert, R. Hernández Pacheco, J. Sevin, A. Warwick, T. Matlaga, S. Sterrett, C. Sutherland, J. Fleming, D. Muñoz, D. A. W. Miller, and E. H. Campbell Grant. Research and Teaching Opportunities with a Large-scale Salamander Collaboration Network (SPARCnet). Contributed poster presentation. The Wildlife Society Annual Meeting. September 2020. Virtual.
- Fisher-Reid, M.C.†** SPARCnet @ BSU. Contributed oral presentation. SPARCnet Annual Meeting. 2020. Virtual.
- Vasapollo, A.*†, W. Riendeau*, J. Whalen*, **M.C. Fisher-Reid**, H.H. Marella. Testing for Local Adaptation in a Common Garden Experiment with *Asclepias syriaca* (Common Milkweed) and Arbuscular Mycorrhizal Fungi. Contributed poster presentation. Plant Biology Worldwide Summit, July 2020. Virtual.
- Fisher-Reid, M.C.†**, K.L. Grayson, L. S. Mead, H. Coovert, R. Hernández Pacheco, J. Sevin, A. Warwick, T. Matlaga, S. Sterrett, C. Sutherland, J. Fleming, D. Muñoz, D. A. W. Miller, and E. H. Campbell Grant. SPARCnet: The Salamander Population and Adaptation Research Collaboration Network. Contributed oral presentation. 8th Biology of Plethodontid Salamanders, May 2020. Athens, OH. (*canceled due to COVID-19*).

- Babicz, E.*†, A. O’Roak*†, A. Bebko*, S. King*, A. St. John*, **M.C. Fisher-Reid**. SPARCnet Year 3: Seasonal Differences in Abundance of *Plethodon cinereus* in SE Massachusetts. Contributed poster presentation. Northeast Natural History Conference. April 2020. Stamford, CT. (*canceled due to COVID-19*).
- Bebko, A.*†, S. King*†, D. Rezendes*, **M.C. Fisher-Reid**. Camera Trap Survey of Mammal Diversity and Relative Abundance in a Suburban Campus Setting. Contributed poster presentation. Northeast Natural History Conference. April 2020. Stamford, CT. (*canceled due to COVID-19*).
- Fisher-Reid, M.C.**†, E. Babicz*, A. Bebko*, S. Couto*, S. King*, A. O’Roak*, E. Perry*, J. Whalen*. SPARCnet Year 2.5: Mark-recapture reveals variation in abundance of *Plethodon cinereus* within a suburban forest. Contributed poster presentation. Evolution Meetings. June 2019. Providence, RI.
- Evans, A.†, E. Jockusch, M.C. Urban, B. Forester, **M.C. Fisher-Reid**, and B. Cosentino. Can land use buffer the evolutionary response of terrestrial salamanders to climate change? Contributed oral presentation. Evolution Meetings. June 2019. Providence, RI.
- Babicz, E.*†, A. O’Roak*†, S. Couto*, E. Perry*, J. Whalen*, and **M.C. Fisher-Reid**. SPARCnet Year 2: Mark-recapture reveals variation in abundance of *Plethodon cinereus* within a suburban forest. Contributed poster presentation. Northeast Natural History Conference. April 2019. Springfield, MA.
- Whalen, J.*†, H.H. Marella, and **M.C. Fisher-Reid**. Preliminary Results of a Common Garden Experiment with *Asclepias syriaca* (Common Milkweed). Contributed poster presentation. Northeast Natural History Conference. April 2019. Springfield, MA.
- Babicz, E.*† and **M.C. Fisher-Reid**. SPARCnet Year 1.5: Preliminary Results of a Long-Term Mark-Recapture Study on *Plethodon cinereus* in Bridgewater, MA. Contributed poster presentation. Northeast Partners in Amphibians and Reptile Conservation Annual Meeting. August 2018. Amherst, MA.
- Evans, A.†, E. Jockusch, M.C. Urban, B. Forester, **M.C. Fisher-Reid**, J. Gibbs, and B. Cosentino. Does land use buffer the evolutionary responses of a polymorphic salamander to climate change? Contributed oral presentation. Northeast Partners in Amphibian and Reptile Conservation Annual Meeting. August 2018. Amherst, MA.
- Evans, A.†, E. Jockusch, M.C. Urban, B. Forester, **M.C. Fisher-Reid**, J. Gibbs, and B. Cosentino. Does land use buffer the evolutionary responses of a polymorphic salamander to climate change? Contributed oral presentation. Joint Meetings of Ichthyology and Herpetology. July 2018. Rochester, NY.
- Couto, S.*†, E. Babicz*†, and **M.C. Fisher-Reid**. SPARCnet Year 1: Preliminary Results of a Long-Term Mark-Recapture Study on *Plethodon cinereus* in Bridgewater, MA. Contributed poster presentation. Northeast Natural History Conference. April 2018. Burlington, VT.
- Perry, E.*† and **M.C. Fisher-Reid**. Predation on the Eastern Red-Backed Salamander. Contributed poster presentation. Northeast Natural History Conference. April 2018. Burlington, VT.
- Fossella, M.*† and **M. C. Fisher-Reid**. Distribution of *Plethodon cinereus* color morphs in New England: 40 years later. Contributed oral presentation. Northeast Natural History Conference. April 2017. Cromwell, CT.
- Tucker, M.*† and **M. C. Fisher-Reid**. Effects of habitat fragmentation on the population genetics of *Plethodon cinereus*. Contributed oral presentation. Northeast Natural History Conference. April 2017. Cromwell, CT.

- Back, A.*† M. Fossella,* and **M. C. Fisher-Reid**. Distribution of *Plethodon cinereus* color morphs in Massachusetts: 40 years later. Contributed poster presentation. Northeast Partners in Amphibians and Reptile Conservation Annual Meeting. August 2016. Poultney, VT.
- Pierce, N.,*† M. Tucker,*† and **M. C. Fisher-Reid**. Effects of habitat fragmentation on the population genetics of *Plethodon cinereus*. Contributed poster presentation. Northeast Partners in Amphibians and Reptile Conservation Annual Meeting. August 2016. Poultney, VT.
- Pierce, N.,*† A. Back,*† M. Fossella,*† M. Tucker,*† and **M. C. Fisher-Reid**. Preliminary monitoring of terrestrial amphibians in southeastern Massachusetts. Contributed poster presentation. Northeast Natural History Conference. April 2016. Springfield, MA.
- Ribeiro, R.*† and **M. C. Fisher-Reid**. Are terrestrial salamanders impacted by soil salinity? A pilot study. Contributed poster presentation. Northeast Natural History Conference. April 2016. Springfield, MA.
- Fisher-Reid, M. C.**† and J. J. Wiens. How is geographic variation within species related to macroevolutionary patterns between species? Contributed oral presentation. Evolution. June 2014. Raleigh, NC.
- Fisher-Reid, M. C.**†, T. N. Engstrom, C. A. Kuczynski, P. R. Stephens, and J. J. Wiens. Parapatric divergence of sympatric morphs in a salamander: incipient speciation on Long Island? Contributed oral presentation. 1st Joint Congress on Evolutionary Biology. June 2012. Ottawa, ON, Canada.
- Fisher-Reid, M. C.**† and J. J. Wiens. A multi-locus phylogeny of genus *Plethodon* (Caudata: Plethodontidae). Contributed oral presentation. Joint Meeting of Ichthyologists and Herpetologists. July 2010. Providence, RI.

INVITED TALKS and DISCUSSION PANELS

- Stony Brook University**. Discussion Panel: New student orientation teaching assistant workshop. August 2010.
- University of Richmond**. Research Seminar. Department of Biology. March 2012.
- Emory University**. Research Seminar. Department of Biology. May 2012.
- University of Virginia**. Research Seminar. Mountain Lake Biological Station. June 2013.
- Bridgewater State University**. Research Seminars. Department of Biological Sciences. December 2013; October 2014.
- Bridgewater State University**. Outreach Seminar. Department of Biological Sciences. February 2015.
- Northeast Natural History Conference**. Discussion Panel: Publishing your work. April 2016.
- University of New Hampshire**. Research Seminar. Department of Biological Sciences. March 2017.
- Bridgewater State University**. Discussion Panel: Scientists in Society. April 2017.
- Bridgewater State University**. Research Seminar. Center for the Advancement of Research and Scholarship, April 2017.
- Bridgewater State University**. Keynote Address. Greenlight4girls. April 2017.
- Bridgewater State University**. Discussion Panel: Animal Research at BSU. Center for the Advancement of Research and Scholarship May Celebration. May 2017.
- Michigan State University**. Teaching Seminar. Avida-ED Workshop. July 2017.
- Plimoth Plantation**. Research Seminar. Lunch and Learn Lecture Series. August 2017.
- Pennsylvania State University**. Research Seminar. SPARCnet Annual Meeting. July 2018.

- Bridgewater State University.** Outreach Seminar. Darwin Day @ BSU. February 2019, February 2020, February 2021, February 2022.
- Brockton High School.** Outreach Seminar. Science Seminar Program. December 2019.
- Sacramento Country Day School, California.** Skype-a-Scientist Scientists in the Field presentation to 6th graders. December 2019.
- University of Richmond.** Guest Lecture in Amphibian Ecology course. January 2020
- Mount Vernon High School, Ohio.** Skype-a-Scientist Evolutionary Biology presentation to AP Biology students. February 2020.
- Bridgewater State University.** Discussion Panel. Coronavirus: Facts, Fears, and Information. February 2020.
- CUNY Macaulay Honors College.** Remote BioBlitz Herpetology Guest Lecture. September 2020, September 2021.
- Raritan Valley Community College.** Virtual Guest Lecture. General Biology Honors. March 2021.
- Bridgewater State University.** SEISMIC Shake Guest Lecture. April 2021.
- Bridgewater-Raynham High School.** STEAM Careers Day Live Stream. October 2021.
- Michigan State University.** Virtual Pedagogy Talk. Active LENS Congress. August 2022.
- Friends of Boyden Refuge, Taunton, MA.** Guided nature walks. October 2022, April 2023.

MENTORING

2 M.S. students mentored at Bridgewater State University

Sarah Couto – 9/2022 – present.

Shawn Driscoll-Gomez – 9/2022 – present. Co-mentored by Dr. Heather Marella

45 undergraduate research students mentored at Bridgewater State University

1. *Darlene Andrade Fonseca* – 9/2020 – 12/2021. Co-mentored by Dr. Heather Marella. Funded by ATP Semester Group Grant for supplies for \$525 per semester (Fall 2020, Spring 2021, Fall 2021). Funded by ATP Summer Group Grant of \$4500 + \$1125 for supplies (Summer 2021).
2. *Elena Babicz* – 1/2017 – 5/2020. Funded by ATP Semester Group Grants for supplies \$525 (Spring 2017; Spring 2020) and \$350 (Summer 2017). Funded by ATP Semester Individual Grant for supplies \$300 per semester (Fall 2017; Spring 2018; Fall 2018; Spring 2019; Fall 2019). Funded by ATP Summer Grant of \$4000 + \$500 for supplies (Summer 2018). Funded by NSF REU Program at the American Museum of Natural History (Summer 2019).
3. *Anna Back* – 5/2015 – 8/2016. Funded by ATP Semester Individual Grant for supplies per semester \$300 (Fall 2015; Spring 2016). Funded by ATP Summer Grant of \$4000 + \$325 for supplies (Summer 2016).
4. *Annique Barclay* – 1/2022 – 5/2023. Co-mentored by Dr. Heather Marella. Funded by ATP Semester Group Grant for supplies per semester (\$350 Spring 2021, \$525 Fall 2022, \$350 Spring 2023).
5. *Alexandra Bebko* – 1/2019 – 5/2020. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Spring 2019, Fall 2019). Funded by ATP Semester Group Grant for supplies \$525 (Spring 2020).
6. *Emmalee Bent* – 1/2023 – present. Funded by ATP Semester Group Grant for supplies \$700 (Spring 2023).

7. *Morgan Cadd* – 9/2022 – present. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Fall 2022). Funded by ATP Semester Group Grant for supplies \$700 (Spring 2023).
8. *Alexandrea Carreiro* – 1/2015 – 6/2015. Funded by ATP Individual Semester Grant for supplies \$300 per semester (Spring 2015).
9. *Sarah Couto* – 5/2016 – 5/2018. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Fall 2016; Fall 2017; Spring 2018). Funded by ATP Semester Group Grant for supplies \$525 (Spring 2017).
10. *Mohamed Diagne* – 9/2021 – 5/2022. Funded by ATP Semester Group Grant for supplies \$525 per semester (Spring 2022).
11. *Shawn Driscoll-Gomez* – 9/2021 – 12/2021. Co-mentored by Dr. Heather Marella
12. *Mariah Fossella* – 1/2015 – 5/2018. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Spring 2015; Fall 2015; Fall 2016; Fall 2017; Spring 2018). Funded by ATP Summer Grant of \$4000 + \$325 for supplies (Summer 2016).
13. *Alexandra Gay* – 5/2018 – 6/2018.
14. *Janea Gomes-Pires* – 9/2019 – 12/2019. Co-mentored by Dr. Melinda LeBranche.
15. *Alexander Gonatas* – 9/2021 – 5/2023. Funded by ATP Summer Group Grant for \$4500 + \$350 for supplies (Summer 2022).
16. *Charles Graziano* – 9/2020 – 12/2020. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Fall 2020).
17. *Ruth Harris* – 1/2022 – present. Co-mentored by Dr. Heather Marella. Funded by ATP Semester Group Grant for supplies per semester (\$350 Spring 2021, \$525 Fall 2022, \$350 Spring 2023)
18. *Nicholas Hathaway* – 1/2016 – 5/2016. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Spring 2016). Co-mentored by Dr. Christopher Bloch.
19. *Emma Jaffe* – 1/2018 – 5/2018. Co-mentored by Dr. Melinda LeBranche.
20. *Sean King* – 1/2019 – 5/2021. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Spring 2019; Fall 2019, Fall 2020, Spring 2021). Funded by ATP Semester Group Grant for supplies \$350 (Summer 2019; Spring 2020). Funded by ATP Summer Group Grant of \$4500 + \$325 for supplies (Summer 2020).
21. *Audrey Lawrence* – 9/2021 – 5/2023. Funded by ATP Semester Group Grant for supplies \$525 in Spring 2022; \$700 in Spring 2023 and ATP Semester Individual Grant for supplies \$300 per semester (Fall 2022). Funded by ATP Summer Group Grant for \$4500 + \$350 for supplies (Summer 2022).
22. *Grace Leopold* – 1/2022 – present Funded by ATP Semester Individual Grant for supplies \$300 per semester (Spring 2022, Fall 2022). Funded as Undergraduate Employee by NSF IUSE Grant from 1/2022 – present.
23. *Darren LePage* – 1/2022 – 5/2022. Funded by ATP Semester Group Grant for supplies \$525 per semester (Spring 2022). Funded as Undergraduate Employee by NSF IUSE Grant from 1/2022 – 5/2022.
24. *Caroline McDonough* – 1/2023 – present. Funded by ATP Semester Group Grant for supplies \$700 (Spring 2023).
25. *Alexander O’Roak* – 5/2018 – 5/2021. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Fall 2018, Spring 2019, Fall 2020) and ATP Semester Group Grant for supplies \$525 per semester (Spring 2021). Funded by ATP Summer Grant of \$4500 + \$500 for supplies (Summer 2019).

26. *Blake Page* – 9/2021 – 5/2023. Funded by ATP Summer Group Grant for \$4500 + \$350 for supplies (Summer 2022).
27. *Emma Perry* – 9/2016 – 5/2019. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Fall 2016; Fall 2017; Spring 2018). Funded by ATP Semester Group Grant for supplies \$525 (Spring 2017) and \$350 (Summer 2017).
28. *Nathan Pierce* – 1/2015 – 12/2016. Funded by ATP Semester Individual Grant for supplies \$300 (Spring 2015, Fall 2015, Spring 2016, Fall 2016). Funded by ATP Summer Grant of \$4000 + \$325 for supplies (Summer 2016).
29. *Kristina Pizzi* – 9/2023 – present. Co-mentored by Dr. Heather Marella.
30. *Alex Reed* – 9/2023 – present.
31. *Drew Rezendes* – 1/2020 – 5/2022. Funded by ATP Semester Group Grant for supplies \$350 per semester (Spring 2020), \$525 per semester (Spring 2021, Spring 2022), and ATP Semester Individual Grant for supplies \$300 per semester (Fall 2020). Funded by ATP Summer Group Grant of \$4500 + \$325 for supplies (Summer 2020). Funded as Undergraduate Employee by NSF IUSE Grant during Summer 2021.
32. *William Riendeau* – 9/2019 – 5/2022. Co-mentored by Dr. Heather Marella. Funded by ATP Semester Group Grant for supplies \$350 per semester (Fall 2019; Spring 2020) and \$525 per semester (Fall 2020; Spring 2021). Funded by ATP Summer Group Grant of \$4500 + \$350 for supplies (Summer 2021).
33. *Rayssa Ribeiro* – 5/2015 – 5/2016. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Fall 2015, Spring 2016).
34. *Bethany Roderick* – 9/2022 – present.
35. *Mia Sarkisian* – 1/2018 – 5/2018. Funded by ATP Summer Grant of \$4000 + \$500 for supplies (Summer 2018). Co-mentored by Dr. Ellen Ingmanson.
36. *Madisen Semple* – 1/2019 – 5/2019. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Spring 2019). Co-mentored by Dr. Melinda LeBranche.
37. *Allison Slaney* – 1/2020 – 5/2020. Co-mentored by Dr. Melinda LeBranche.
38. *Alyssa St John* – 1/2020 – 5/2021. Funded by ATP Semester Group Grant for supplies \$525 (Spring 2020, Spring 2021) and ATP Semester Individual Grant for supplies \$300 per semester (Fall 2020). Funded by ATP Summer Grant of \$4500 + \$500 for supplies (Summer 2020). Funded as Undergraduate Employee by NSF IUSE Grant during Spring 2020 semester.
39. *Kevin Scott* – 9/2023 – present. Co-mentored by Dr. Heather Marella
40. *Tanya Stanford* – 9/2022 – 12/2022. Co-mentored by Dr. Heather Marella. Funded by ATP Semester Group Grant for supplies for \$525 per semester (Fall 2022).
41. *Katie Sylvia* – 1/2021 – 12/2021. Co-mentored by Dr. Heather Marella. Funded by ATP Semester Group Grant for supplies for \$525 per semester (Spring 2021, Fall 2021). Funded by ATP Summer Group Grant of \$4500 + \$1125 for supplies (Summer 2021).
42. *Erika Tierney* – 1/2020 – 5/2020. Co-mentored by Dr. Melinda LeBranche.
43. *Matthew Tucker* – 9/2015 – 12/2017. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Fall 2015, Spring 2016, Fall 2016; Fall 2017). Funded by ATP Summer Grant of \$4000 + \$325 for supplies (Summer 2016).
44. *Anne Marie Vasapollo* – 5/2019 – 12/2020. Co-mentored by Dr. Heather Marella. Funded by ATP Semester Group Grant for supplies \$350 per semester (Summer 2019; Fall 2019; Spring 2020).
45. *Julia Whalen* – 1/2018 – 12/2019. Funded by ATP Semester Individual Grant for supplies \$300 per semester (Spring 2018, Summer 2018, Fall 2018, Spring 2019, Summer 2019).

Mentor for undergraduate honors thesis, Bridgewater State University

2017. *Mariah Fossella*. Distribution of *Plethodon cinereus* color morphs in New England: 40 years later. Committee: Dr. Kenneth Adams and Dr. Christopher Bloch.
2017. *Matthew Tucker*. Effects of habitat fragmentation on the population genetics of *Plethodon cinereus*. Committee: Dr. Christopher Bloch and Dr. Jonathan Roling.
2018. *Emma Perry*. Using clay models to measure seasonal predation on eastern red-backed salamanders. Committee: Dr. Kenneth Adams and Dr. Kevin Curry.
2020. *Alyssa St John*. Comparison of Skin Microbial Communities Between Striped and Unstriped Morphs of *Plethodon cinereus* in Massachusetts. Committee: Dr. Jenna Mendell and Dr. Don Padgett.
2023. *Alexander Gonatas*. Smile For the Camera: Patterns of Mammal Abundance in Great Hill Forest Through Four Years of Camera Trapping. Committee: Dr. Merideth Krevosky and Ms. Maria Armour.
2023. *Grace Leopold*.

Committee member for undergraduate honors thesis, Bridgewater State University

2015. *Nara F. Nascimento*. The Effects of Running Wheel Access on the Symptoms of Type-2 Diabetes in TallyHo/JngJ Mice. Mentor: Dr. Joseph Seggio.
2017. *Rachel Gelineau*. Combined consumption of alcohol and a high-fat diet: effects on behavior and health in male and female C57Bl/6J mice. Mentor: Dr. Joseph Seggio.
2017. *Michelle Jennette*. High Fructose Corn Syrup Down-Regulates Glycolysis Pathway in *Apis mellifera*. Mentor: Dr. Jonathan Roling.
2019. *Emily Green*. The Effects of *Meloidogyne incognita* on JAZ1, JAZ12, and JAZ13 Gene Expression in *Arabidopsis*. Mentor: Dr. Heather Marella.
2019. *Mia Sarkisian*. Orangutan infant behavior: A critical component for primate conservation. Mentor: Dr. Ellen Ingmanson (Anthropology).
2019. *Kaitlin Cook*. Bridging the Gaps in Elementary Life Sciences Lessons. Mentors: Dr. Nicole Glen (Education) and Dr. Heather Marella.
2022. *Courtney McEneaney*. Characterization of exosomes and their role in migration in chemosensitive and chemoresistant ovarian cancer cells. Mentor: Dr. Merideth Krevosky.

Student Presentations at Bridgewater State University

2023. *Annique Barclay, Ruth Harris*. Impacts of Manganese and Iron on Common Milkweed. Student Arts and Research Symposium (StARS), Bridgewater State University. *Online poster presentation*.
2023. *Morgan Cadd*. Effects of Carrion Decomposition on Arthropod Community Structure and Habitat Seeking Behavior, Seven Years Later. Student Arts and Research Symposium (StARS), Bridgewater State University. *Online poster presentation*.
2023. *Shawn Driscoll-Gomez*. Genetic diversity of Oleander aphids *Aphis nerii*. Student Arts and Research Symposium (StARS), Bridgewater State University. *Online poster presentation*.
2023. *Alexander Gonatas*. Smile for the Camera: Patterns of Mammal Abundance in Great Hill Forest Through Four Years of Camera Trapping. Student Arts and Research Symposium (StARS), Bridgewater State University. *Online poster presentation*.

2023. *Audrey Lawrence, Blake Page*. Biodiversity of Great Hill Forest: A Baseline Inventory. Student Arts and Research Symposium (StARS), Bridgewater State University. *Online poster presentation*.
2023. *Grace Leopold*. Creating Accurate Clay Salamander Molds for In-Class Learning Modules on Polymorphism and Predation. Student Arts and Research Symposium (StARS), Bridgewater State University. *Online poster presentation*.
2023. *Caroline McDonough, Emmalee Bent*. Eastern Red-backed Salamander Research. Student Arts and Research Symposium (StARS), Bridgewater State University. *Online poster presentation*.
2022. *Alexander Gonatas, Blake Page*. Biodiversity inventory of Great Hill Forest: A baseline inventory. Friday Informal Seminar Hour, Bridgewater State University. *Oral presentation*.
2022. *Alexander Gonatas, Blake Page*. Biodiversity inventory of Great Hill Forest: A baseline inventory. ATP Summer Symposium, Bridgewater State University. *Poster presentation*.
2022. *Darren LePage, Drew Rezendes, Mohamed Diagne*. Microsatellite PCR testing for *Plethodon cinereus*. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2022. *Grace Leopold*. Optimizing casting molds for clay salamanders. Student Arts and Research Symposium (StARS), Bridgewater State University. *Oral presentation*. ***Received award for 3rd Most Engaging Presentation***
2021. *Darlene Andrade Fonseca, Katie Sylvia, William Riendeau*. Identifying factors that sustain common milkweed growth in urban environments. ATP Summer Symposium, Bridgewater State University. *Poster presentation*.
2021. *Katie Sylvia, Darlene Andrade Fonseca, William Riendeau*. Identifying factors that sustain common milkweed growth in urban environments. Friday Informal Seminar Hour, Bridgewater State University. *Oral presentation*.
2021. *Drew Rezendes*. A comparison of mammal diversity and abundance in two forests in Massachusetts. Friday Informal Seminar Hour, Bridgewater State University. *Oral presentation*.
2021. *Alyssa St. John, Alexander O'Roak*. SPARCnet Year 4: Seasonal differences in abundance of *Plethodon cinereus* in SE Massachusetts. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2021. *William Riendeau, Katie Sylvia, Darlene Andrade Fonseca*. Testing for local adaptation in a common garden experiment with *Asclepias syriaca* (common milkweed) and arbuscular mycorrhizal fungi. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2021. *Sean King, Drew Rezendes*. A comparison of mammal diversity and abundance in two forests in Massachusetts. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2019. *Alexander O'Roak*. Effects of increased canopy cover on the abundance of eastern red-backed salamanders (*Plethodon cinereus*). Friday Informal Seminar Hour, Bridgewater State University. *Oral presentation*.
2019. *Alexander O'Roak*. Effects of increased canopy cover on the abundance of eastern red-backed salamanders (*Plethodon cinereus*). ATP Summer Symposium, Bridgewater State University. *Poster presentation*.
2019. *Elena Babicz*. Effects of shade and soil composition on salamander abundance. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.

2019. *Alexandra Bebko*. A review of *Plethodon cinereus* travel and movement in varying conditions. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2019. *Sean King*. Territoriality of the red-backed salamander. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2019. *Alexander O'Roak*. Abundance of the red-backed salamander. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2019. *Julia Whalen*. Preliminary results of a common garden experiment with *Asclepias syriaca* (common milkweed). Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2018. *Elena Babicz*. A preliminary analysis of environmental correlates of *Plethodon cinereus* abundance. Friday Informal Seminar Hour, Bridgewater State University. *Oral presentation*.
2018. *Elena Babicz*. SPARCnet Year 1.5: Preliminary results of a long-term mark-recapture study on *Plethodon cinereus* in Bridgewater, MA. ATP Summer Symposium, Bridgewater State University. *Poster presentation*.
2018. *Elena Babicz*. SPARCnet Year 1: Preliminary results of a long-term mark-recapture study on *Plethodon cinereus* in Bridgewater, MA. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2018. *Sarah Couto*. Initial Findings in a Long-Term Mark-Recapture Survey on the Eastern Red Backed Salamander, *Plethodon cinereus*. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2018. *Mariah Fossella*. Where Do BSU Students and Faculty Come From? A Phylogenetic Study. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2018. *Emma Perry*. Fall vs. Spring Predation on Eastern Red-Backed Salamander. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2018. *Julia Whalen*. Introduction to Field and Greenhouse Techniques for Evolution Education. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2017. *Emma Perry*. Dawn of The Claymanders: Revealing the predators of eastern red-backed salamanders (*Plethodon cinereus*). Mid-Year Symposium, Bridgewater State University. *Poster presentation*.
2017. *Elena Babicz, Sarah Couto, Emma Perry*. BSU Joins SPARCnet: The Salamander Population and Adaptation Research Collaboration Network. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2017. *Mariah Fossella*. Distribution of *Plethodon cinereus* color morphs in New England: 40 years later. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2017. *Matthew Tucker*. Effects of habitat fragmentation on the population genetics of *Plethodon cinereus*. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2016. *Anna Back and Mariah Fossella*. Distribution of *Plethodon cinereus* color morphs in Massachusetts: 40 years later. Friday Informal Seminar Hour, Bridgewater State University. *Oral presentation*.

2016. *Nathan Pierce and Matthew Tucker*. Effects of habitat fragmentation on the population genetics of *Plethodon cinereus*. Friday Informal Seminar Hour, Bridgewater State University. *Oral presentation*.
2016. *Anna Back and Mariah Fossella*. Distribution of *Plethodon cinereus* color morphs in Massachusetts: 40 years later. ATP Summer Symposium, Bridgewater State University. *Poster presentation*.
2016. *Nathan Pierce and Matthew Tucker*. Effects of habitat fragmentation on the population genetics of *Plethodon cinereus*. ATP Summer Symposium, Bridgewater State University. *Poster presentation*.
2016. *Anna Back*. Does Soil Moisture Influence Morph Frequency in *Plethodon cinereus*? Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2016. *Mariah Fossella*. Adult *P. cinereus* Territoriality of Artificial Cover Objects. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2016. *Rayssa Ribeiro*. Are Terrestrial Salamanders Impacted by Soil Salinity? A Pilot Study. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2016. *Nathan Pierce*. Cover Object Preference and its Effect on Color Morph Frequencies in *Plethodon cinereus*. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2016. *Matthew Tucker*. Responses of *Plethodon cinereus* to Differences in pH and Temperature of Soil. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2015. *Alexandrea Carreiro*. A review of ecological differences between two morphs of the eastern red-backed salamander, *Plethodon cinereus*. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2015. *Mariah Fossella*. A review of *Plethodon cinereus* distribution based on forest characteristics. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.
2015. *Nathan Pierce*. How will *Plethodon cinereus* be affected by habitat change? A review of the literature. Student Arts and Research Symposium (StARS), Bridgewater State University. *Poster presentation*.

GRANTS, FELLOWSHIPS, AWARDS – FUNDED

- RaMP: Training the next generation of interdisciplinary scientists to collaboratively address species responses to climate change with SPARCnet*. **Lead Principal Investigator** (PI), with co-PIs at Michigan State University, Pennsylvania State University, Monmouth University, and Susquehanna University. National Science Foundation – Division of Biological Infrastructure. 2023–2027. Total Award: \$3,000,000.
- Presidential Award for Excellence in Collaboration to Improve Teaching* with Dr. Heather Marella for development and implementation of BIOL 123: Becoming a Biologist. Academic Affairs, Bridgewater State University. 2023. \$5000.
- Travel Grant* for attending and presenting at the 2023 NENHC in Burlington, VT. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2022. \$811.

- Travel Grant* for attending and presenting at the 2022 NENHC in Albany, NY. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2022. \$971.
- Course Development Grant* to revise BIOL 225L: General Ecology Lab to be more quantitative in nature. Quantity Across the Curriculum, Bridgewater State University. 2021. \$1000.
- Faculty and Librarian Research Grant* to explore the skin microbial communities of the eastern red-backed salamander. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2021–2022. \$8000.
- Virtual Conference Grant* for attending and chairing a session at the 2021 NENHC online (virtual conference). Center for the Advancement of Research and Scholarship, Bridgewater State University. 2021. \$155.
- Travel Grant* for attending the 2020 NENHC in Stamford, CT. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2020. \$500. ****Conference canceled due to COVID-19, grant not used****
- Collaborative Research: Applying the CURE model to build connected classrooms for investigations across biological inquiry levels using the Eastern Red-backed Salamander. Principal Investigator* along with colleagues at Michigan State University, Pennsylvania State University, University of Massachusetts Amherst, and University of Richmond. National Science Foundation Division of Undergraduate Education, Improving Undergraduate STEM Education Program. 2019–2022 (no-cost extensions 2022-2023; 2023-2024). Total Award: \$597,724.00; BSU Portion of Award: \$95,878.00.
- Travel Grant* for attending the 2019 NENHC in Springfield MA and chair a session. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2019. \$1350.
- Academic Innovation Fund* to develop a new course: Becoming a Biologist: A New Model for a Student-Centered Curricular Experience. Project Leaders: Heather Marella and **M. Caitlin Fisher-Reid**, Division of Academic Affairs, Bridgewater State University. 2018–2019. \$27,628.87
- Summer Teacher Scholar Institute: Technology in Pedagogy Track* to restructure a course using educational technology. Office of Teaching and Learning, Bridgewater State University. 2018. \$1200.
- Faculty and Librarian Research Grant* to develop range-wide molecular markers for *Plethodon cinereus*. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2018–2019. \$8000.
- Massachusetts Mathematics and Science Partnership (MMSP)* grant to develop an evolution course for K-12 teachers. Center for the Advancement of STEM Education, Bridgewater State University. 2018. \$3200.
- Travel Grant* for attending the 2018 NENHC in Burlington VT. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2018. \$500.
- First Year Seminar Course Enhancement Grant* for BIOL 199 during the Fall 2017 semester. Academic Affairs, Bridgewater State University. 2017. \$300
- Course-Embedded Research Grant* for BIOL 199 during the Fall 2017 semester. Office of Undergraduate Research, Bridgewater State University. 2017. \$500.
- Travel Grant* for attending the 2017 NENHC in Cromwell CT. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2017. \$500.
- Avida-ED Active LENS Workshop for Faculty* awarded to M. Caitlin Fisher-Reid and Maria Armour to attend workshop at Michigan State University's BEACON Center to learn how to use education software, Avida-ED. 2016. All travel, lodging, and meals covered by NSF

- funds to BEACON Center from June 9–11, 2016. ***MCFR invited to return for full July 2017 workshop as 2016 alumna. All travel, lodging, and meals covered by NSF funds to BEACON Center from July 26–30, 2017***
- Travel Grant* for attending the 2016 NENHC in Springfield MA. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2016. \$500.
- Faculty and Librarian Research Grant* to purchase start up equipment needed to join SPARCnet: The Salamander Population and Adaptation Research Collaborative Network. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2016–2017. \$8000.
- Darwin Day @ BSU CASE Grant* for New Initiatives awarded to M. Caitlin Fisher-Reid, Maria Armour, and Thilina Surasinghe to establish annual Darwin Day celebration. Center for the Advancement of STEM Education, Bridgewater State University. 2015. \$5000
- Teacher Creativity Fellowship* awarded to Carrie A. Bilodeau; M. Caitlin Fisher-Reid served as expert evolutionary biologist on two-week trip to the Galápagos Islands. Lilly Endowment, Inc. 2015. \$10,000.
- Travel Grant* for attending the 2015 NENHC in Springfield MA. Center for the Advancement of Research and Scholarship, Bridgewater State University. 2015. \$750.
- Mountain Lake Biological Station Early Career Fellowship*, for summer research station and laboratory fees, Mountain Lake Biological Station, University of Virginia. 2013. \$1650.
- Outstanding Teaching Assistant Award*, Department of Ecology and Evolution, Stony Brook University. 2012.
- President's Award for Excellence in Teaching by a Graduate Student*, Graduate School, Stony Brook University. Annual award to six graduate students across campus to recognize excellence in teaching. 2011. \$500.
- Alumni Association Dean's Choice Award*, Graduate School, Stony Brook University, First recipient of a new annual award to one graduate student across campus to promote alumni relations and to assist in completion of the graduate degree. 2011. \$1000.
- American Society of Ichthyologists and Herpetologists Travel Award* to attend 2010 Joint Meetings of Ichthyologists and Herpetologists, American Society of Ichthyologists and Herpetologists. 2010. \$300.
- Gaige Award* for proposed research expenses, American Society of Ichthyologists and Herpetologists. 2010. \$500.
- Conservation Leadership Award* for activism regarding hotel construction on Stony Brook University campus, First recipient, Department of Ecology and Evolution, Stony Brook University. 2010.
- George C. Williams Award* for proposed research expenses, Department of Ecology and Evolution, Stony Brook University. 2010. \$500.

GRANTS, FELLOWSHIPS, AWARDS – NOT FUNDED

- RaMP: Understanding Patterns, Process, and Predictions of Plethodon Responses to Climate Change (RaMP UP x 4 with SPARCnet)* National Science Foundation – Division of Biological Infrastructure. Lead PI, with co-PIs at Michigan State University, Pennsylvania State University, Monmouth University, and Susquehanna University. First submitted 1/2022, not funded 6/2022. Reviewed by panel, reviewer scores: 2 Very Goods, 1 Good, and 1 Fair. Resubmitted in 2/2023, funded on second submission (see above).

Faculty and Librarian Research Grant to explore the skin microbial communities of the eastern red-backed salamander. Center for the Advancement of Research and Scholarship, Bridgewater State University. Spring 2020. Not selected, encouraged to resubmit in next funding cycle. Resubmitted in Spring 2021, funded (see above).

Collaborative Research: Applying the CURE model to build connected classrooms for investigations across biological inquiry levels using the Eastern Red-backed Salamander National Science Foundation – Division of Undergraduate Education, Improving Undergraduate STEM Education Program. PI along with colleagues at Michigan State University, Pennsylvania State University, University of Massachusetts Amherst, and University of Richmond. First submitted 1/2017, not funded 6/2017. Resubmitted 12/2017, not funded 6/2018. Resubmitted 12/2018, funded 7/2019 (see above).

Preliminary Proposal: RUI: Long-term impacts of an invasive intertidal predator: invasion history, genetic structure, and self-limitation, National Science Foundation – Division of Environmental Biology, Population and Community Ecology Program. Submitted 1/2016. Co-PI along with Drs. Christopher Bloch (PI) and Kevin Curry (Co-PI). Not invited for full proposal, 5/2016. Resubmitted in 1/2017 as *RUI: Invasion history and prey depletion by an invasive intertidal predator: effects on abundance, fecundity, and ecological impacts*. Not invited for full proposal, 5/2017.

Daniel J. Smith Award to support summer research, Bartlett College of Science and Mathematics, Bridgewater State University. Applied 5/2015 and 5/2017, not selected for award either year. Did not qualify for award in 5/2016 or 5/2018 due to funded CARS Faculty and Librarian Research Grants.

INVITED PEER REVIEW

Book chapters: Animal Behavior: Concepts, Methods, and Applications (2013; Oxford University Press, by Nordell and Valone). 2011.

Book chapters: Evolution: Making Sense of Life (2nd edition; Roberts and Company Publishers, by Zimmer and Emlen). 2014.

Book chapters: Ecology: A Unified Approach (forthcoming; Oxford University Press, by Stevens). 2015.

Marketing Review: Ecology: Evolution, Applications, Integration (1st edition; Oxford University Press, by Krohne). 2015.

Book chapters: Introductory Ecology (forthcoming; Oxford University Press, by Fox). 2016.

Book chapters: Constructing Ecology (forthcoming; W.W. Norton & Company, by Paradise). 2016.

Online supplements: Ecology: Evolution, Applications, Integration (1st edition; Oxford University Press, by Krohne). 2017.

Reviewer of graduate student research proposals submitted to the Herpetologist's League for the 2017 E.E. Williams Award. 2017.

Video Scripts: Evolution: Making Sense of Life (3rd edition; Oxford University Press, by Zimmer and Emlen). 2018.

Book chapters: Forthcoming Ecology Textbook (1st edition; W.W. Norton & Company, by Marchetti et al.). 2018.

Book chapters: Ecology: The Economy of Nature (9th edition; Bedford Freeman & Worth Publishing Group, by Relyea and Ricklefs). 2018.

Book chapters: Ecology in Action (2nd Edition; Cambridge University Press; by Singer). 2019.

External reviewer for research grant. Ohio University Research Council. 2020.
Accuracy reviewer: Online Materials for Forthcoming Ecology Textbook (1st edition; W.W. Norton & Company, by Marchetti et al.). 2022-2023.
Guest Editor for article submitted to PLOS One. July 2023.

Ad-hoc reviewer for manuscripts submitted to: *Amphibia-Reptila*, *Copeia*, *Current Zoology*, *Ecography*, *Ecology and Evolution*, *Evolution*, *Heredity*, *Journal of Biogeography*, *Journal of Heredity*, *Journal of Insect Science*, *Journal of Zoological Systematics and Evolutionary Research*, *Molecular Ecology*, *Northeastern Naturalist*, *Oikos*, *PLoS One*, *Teaching Issues and Experiments in Ecology*, *The Open Ecology Journal*, *Virginia Journal of Science*.

SERVICE & OTHER PROFESSIONAL ACTIVITIES

Bridgewater State University

- Member. Academic Integrity Working Group, 2014 – 2015.
- Chair. Darwin Day @ BSU committee. 2015 – present.
- Member. Academic Policy Committee and Academic Review Board, 2016 – 2020.
- Round-Table Leader. Office of Teaching and Learning Part-Time Faculty Development Program, Spring 2017.
- Participant. Core Curriculum Steering Committee Information Literacy Workshop, 2020.
- Member. Student Success/Retention Working Group of the Strategic Enrollment Planning special committee, 2020 – 2021.
- Member. Learning Management System (LMS) Review Committee, 2022.
- Member. Staff Assistant Proposal Coordinator Search Committee, Office of Grants and Sponsored Projects 2023.
- Member. Office of Undergraduate Research Advisory Board. 2023 – present.
- Member. Institutional Animal Care and Use Committee (IACUC). 2023 – present.

Bartlett College of Science and Mathematics, Bridgewater State University

- Education Liaison. CAEP Assessments, 2015 – 2020.
- Faculty Mentor. Women in Science Residential Learning Community, 2016 – 2019.
- Member. Advisory Committee for the Center for the Advancement of STEM Education (CASE), 2018 – present.

Department of Biological Sciences, Bridgewater State University

- Member. Wildlife Ecologist Search Committee, 2014.
- Member. Departmental Curriculum Committee, 2014 – present.
- Academic advisor for 22 – 44 students (Average: 31) in each of 17 semesters, Fall 2014 – Spring 2023.
- Co-coordinator. Department of Biological Sciences' Friday Informal Seminar Hour (FISH), 2016 – 2023.
- Member. Technical Assistant III Greenhouse Search Committee, 2022.
- Member. Peer Evaluation Committee, 2022.

Other Academic and Professional Activities

2023 **Herpetology taxon leader.**

- CUNY Macaulay Honors College BioBlitz, Prospect Park, Brooklyn, NY.
- 2023 **Attendee**
Northeast Partners in Amphibian and Reptile Conservation (NEPARC), Middletown, CT.
- 2023 **Attendee**
Joint Meetings of Ichthyology and Herpetology, Norfolk, VA.
- 2023 **City Nature Challenge Nature Walk Leader**
Friends of Boyden Refuge, Taunton, MA.
- 2023 **Attendee**
Northeast Natural History Conference (NENHC), Burlington, VT.
- 2023 **Steering Committee Member**
City Nature Challenge Boston Area
- 2022 **Member**
Bristol County Agricultural High School Advisory Board, 2022 — present
- 2022 **Secretive Salamanders Nature Walk Leader**
Friends of Boyden Refuge, Taunton, MA.
- 2022 **Herpetology taxon leader.**
CUNY Macaulay Honors College BioBlitz, Randall's Island Park, New York, NY.
- 2022 **Attendee**
Northeast Natural History Conference (NENHC), Albany, NY.
- 2021 **Herpetology expert.**
CUNY Macaulay Honors College BioBlitz, Virtual Webinar.
- 2021 **Secretive Salamanders Nature Walk Leader**
Raynham Brownie Troop 70896, Bridgewater, MA.
- 2021 **Session Chair & Attendee**
Northeast Natural History Conference (NENHC), Virtual Conference.
- 2021 **Participant**
Undergraduate Field Experiences Research Network (UFERN) Faculty Mentoring Network, Virtual Workshop (6 months).
- 2021 **Attendee**
Project Kaleidoscope Regional Network Winter Meeting, Virtual Conference.
- 2021 **Attendee**
American Society of Naturalist's Virtual Asilomar, Virtual Conference.
- 2020 **Participant**
Decentering Whiteness, Virtual Workshop (4 weeks)
- 2020 **Herpetology expert.**
CUNY Macaulay Honors College BioBlitz, Virtual Webinar.
- 2020 **Participant**
4DEE Ecology Education Workshops, Virtual Workshop
- 2020 **Participant**
MicroBIOME Faculty Mentoring Network, Virtual Workshop (6 months).
- 2020 **Participant.**
BIOME Institute: Cultivating Scientific Curiosity, Virtual Workshop (2 weeks).
- 2020 **Attendee.**
Science Communication (SciComm) 2020, Virtual Conference.
- 2020 **Attendee.**

- Society for the Advancement of Biology Education Research (SABER), Virtual Conference.
- 2020 – present. **Steering Committee Member.** The Salamander Population and Adaptation Research Collaborative Network (SPARCnet).
- 2019 **Herpetology taxon leader.**
CUNY Macaulay Honors College BioBlitz, Green-Wood Cemetery, Brooklyn, NY.
- 2019 **Attendee.**
Northeast Partners in Amphibian and Reptile Conservation (NEPARC), Galloway, NJ.
- 2019 **Volunteer taxonomic specialist.**
Great Walden BioBlitz, Concord, MA.
- 2019 **Attendee.**
Association for Biological Laboratory Education (ABLE), Ottawa, Ontario, Canada.
- 2019 **Session chair & attendee.**
Northeast Natural History Conference (NENHC), Springfield, MA.
- 2019 **Attendee.**
Project Kaleidoscope Regional Network Winter Meeting, Norton, MA.
- 2018 **Herpetology taxon leader.**
CUNY Macaulay Honors College BioBlitz, Inwood Hill Park, New York, NY.
- 2018 **Attendee.**
Northeast Partners in Amphibian and Reptile Conservation (NEPARC), Amherst, MA.
- 2018 **Attendee.**
Salamander Population and Adaptation Research Collaboration Network Meeting, State College, PA.
- 2018 **Attendee.**
Project Kaleidoscope Regional Network Summer Meeting, Salem, MA.
- 2018 **Attendee.**
Northeast Natural History Conference (NENHC), Burlington, VT.
- 2017 – present. **Member.** Milkweed Adaptation Research and Education Network (MAREN).
- 2017 **Attendee.**
Salamander Population and Adaptation Research Collaboration Network Meeting, Petersham, MA.
- 2017 **Photography contributor.**
Book of Snakes, by Mark O’Shea, Ivy Press and University of Chicago Press.
- 2017 **Attendee.**
Northeast Natural History Conference (NENHC), Cromwell, CT.
- 2016 **Photography contributor.**
Hidden Talent: Photography, Center for the Advancement of Research and Scholarship May Celebration, Bridgewater State University, Bridgewater, MA.
- 2016 **Photography contributor.**
A case study approach to ecology field studies, by Jahoda et al. Kendall Hunt Publishing Company
- 2016 **Photography contributor.**
Wetland Plants of New England, by Donald J. Padgett, Spatterdock Press.
- 2016 **Attendee.**
Northeast Partners in Amphibian and Reptile Conservation (NEPARC), Poultney, VT.
- 2016 **Attendee.**

- Northeast Natural History Conference (NENHC), Springfield, MA.
- 2015 **Attendee.**
Northeast Partners in Amphibian and Reptile Conservation (NEPARC), Greenwich, RI.
- 2015 **Attendee.**
Northeast Natural History Conference (NENHC), Springfield, MA.
- 2015 – present. **Member.** The Salamander Population and Adaptation Research Collaborative Network (SPARCnet).
- 2014 **Photography contributor.**
American Spirit Magazine, "The Women of Laura Plantation," March/April 2014 Issue.
- 2013 **Attendee.**
Southeastern Population Ecology and Evolutionary Genetics (SEPEEG).
- 2011 **Tattoo photo and story contributor.**
Science Ink: Tattoos of the Science Obsessed, by Carl Zimmer.

PROFESSIONAL AFFILIATIONS

American Society of Ichthyologists and Herpetologists
American Society of Naturalists
International Society for Evolutionary Medicine and Public Health
National Center for Science Education (sustaining member)
Northeastern Naturalist
Society for the Study of Evolution