

Maggie M. Hantak, Ph.D.

Assistant Professor, Biology
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Academic Appointments

2023 – present	Assistant Professor , Department of Biology, University of Dayton
2021 – 2022	NSF Postdoctoral Fellow , Florida Museum of Natural History, University of Florida
2020 – 2021	UF Informatics Institute Postdoctoral Fellow , Florida Museum of Natural History, University of Florida
2019 – 2020	Postdoctoral Researcher , Florida Museum of Natural History, University of Florida

Education

2019	Ph.D. , Biological Sciences, Ohio University, Athens, Ohio.
2013	M.S. , Biology, John Carroll University, University Heights, Ohio.
2011	B.S. , Biology, John Carroll University, University Heights, Ohio.

Fellowships (Total = \$258,558)

2020	NSF Postdoctoral Research Fellowship in Biology (PRFB): \$207,000
2020	University of Florida Informatics Institute Postdoctoral Fellowship: \$44,037
2016	Ohio University OCEES Graduate Research Fellowship: \$7,521

Grants & Awards (Total = \$38,104)

2022	Society for the Study of Evolution: Travel Award – \$500
2019	Outstanding Graduate Student: Ohio University
2018	Ohio University: Graduate Student Research Fund – \$1,000
2017-2019	Ohio University (GSS): Travel Grant – \$1,500 total
2017	NSF Doctoral Dissertation Improvement Grant (DEB-1701680) – \$19,630
2016	SSAR Grants in Herpetology – \$500
2015-2016	Ohio Biological Survey: Small Grant Award – \$1,000 total
2015	Outstanding Teaching Assistant: Ohio University
2015	Society for the Study of Evolution: Rosemary Grant Award – \$2,200
2015	Ohio University: Student Enhancement Award – \$5,904
2014-2015	Old Woman Creek NERR: Travel Grant – \$1,000 total
2013-2016	Ohio University (GSS): Original Work Grant – \$3,000 total
2013	Excellence in Graduate Studies Award: John Carroll University
2013	Society for the Study of Amphibians and Reptiles: Travel Award – \$400
2013	American Society of Ichthyologists and Herpetologists: Travel Award – \$300
2012	American Society of Ichthyologists and Herpetologists: Gaige Fund – \$500
2011-2013	John Carroll University (Biology Department) – \$670 total

Publications (*co-first authors, ^mentored undergraduate)

- Hantak, M. M.**, R. P. Guralnick, A. C. Cameron, A. H. Griffing, S. M. Harrington, J. L. Weinell and D. J. Paluh. 2022. Color scales with climate in North American ratsnakes: a test of the thermal melanism hypothesis using community science images. *Biology Letters* 18:20220403.
- Balk, M. A., J. Deck, K. F. Emery, R. L. Walls, D. Reuter, R. La France, J. Arroyo-Cabrales, P. Barrett, J. Blois, A. Boileau, L. Brenskelle, N. R. Cannarozzi, A. Cruz, L. M. Davalos, N. U.

- de la Sancha, P. Gyawali, **M. M. Hantak**, S. Hopkins, B. Kholi, J. King, M. Koo, M. Lawing, H. Machado, S. S. McCrane, B. McLean, K. Meshida, M. E. Morgan, S. Pilaar Birch, D. Reed, E. J. Reitz, N. Sewnath, N. S. Upham, A. Villaseñor, L. Yohe, E. B. Davis and R. P. Guralnick. 2022. A solution to the challenges of interdisciplinary aggregation and use of specimen-level trait data. *iScience* 25:105101.
- Hantak, M. M.**, R. P. Guralnick, A. Zare and B. J. Stucky. 2022. Computer vision for assessing species color pattern variation from web-based community science images. *iScience* 25:104784.
- Kuchta, S. R., **M. M. Hantak**, B. P. Waldron, C. M. Hickerson, R. M. Lehtinen and C. D. Anthony. 2022. Hybridization between the woodland salamanders *Plethodon cinereus* and *P. electromorphus* is not widespread. *Ichthyology & Herpetology* 110:430–438.
- Hantak, M. M.**, N. A. Federico[^], D. C. Blackburn and R. P. Guralnick. 2021. Rapid phenotypic change in a polymorphic salamander over 43 years. *Scientific Reports* 11:22681.
- Belitz, M. W., V. Barve, J. Doby, **M. M. Hantak**, E. A. Larson, D. Li, J. A. Oswald, N. Sewnath, M. Walters, N. Barve, K. Earl, N. Gardner, R. P. Guralnick and B. J. Stucky. 2021. Climate drivers of adult insect activity are conditioned by life history traits. *Ecology Letters* 24:2687–2699.
- Hantak, M. M.**, B. S. McLean, D. Li and R. P. Guralnick. 2021. Mammalian body size is determined by interactions between climate, urbanization, and ecological traits. *Communications Biology* 4:972.
- Paluh, D. J., K. Riddell, C. M. Early, **M. M. Hantak**, G. F. M. Jongsma, R. M. Keeffe, F. Magalhães Silva, S. V. Nielson, M. C. Vallejo-Pareja, E. L. Stanley and D. C. Blackburn. 2021. Rampant tooth loss across 200 million years of frog evolution. *eLife* 10:e66926.
- Li, D., N. Barve, L. Brenskelle, K. Earl, V. Barve, M. W. Belitz, J. Doby, **M. M. Hantak**, J. A. Oswald, B. J. Stucky, M. Walters and R. Guralnick. 2021. Climate, urbanization, and species traits interactively drive flowering duration. *Global Change Biology* 27:892–903.
- Hantak, M. M.**^{*}, K. M. Brooks[^], C. M. Hickerson, C. D. Anthony and S. R. Kuchta. 2020. A spatiotemporal assessment of dietary partitioning between color morphs of a terrestrial salamander. *Copeia* 108:727–736.
- Guralnick, R.^{*}, **M. M. Hantak**^{*}, D. Li and B. S. McLean. 2020. Body size trends in response to climate and urbanization in a widespread rodent, *Peromyscus maniculatus*. *Scientific Reports* 10:8882.
- Radomski, T., **M. M. Hantak**, A. D. Brown and S. R. Kuchta 2020. Multilocus phylogeography of the Eastern Red-backed Salamander (*Plethodon cinereus*): cryptic Appalachian diversity and post-glacial range expansion. *Herpetologica* 76:61–73.
- Barve, V. V., L. Brenskelle, D. Li, B. J. Stucky, N. V. Barve, **M. M. Hantak**, B. S. McLean, D. J. Paluh, J. A. Oswald, M. Belitz, R. Folk and R. Guralnick. 2020. Methods for broad-scale plant phenology assessments using citizen scientists' photographs. *Applications in Plant Sciences* 8:e11315.
- Hantak, M. M.**, R. B. Page, P. E. Converse, C. D. Anthony, C. M. Hickerson and S. R. Kuchta. 2019. Do genetic structure and landscape heterogeneity impact color morph frequency in a polymorphic salamander? *Ecography* 42:1383–1394.
- Waldron, B. P., S. R. Kuchta, **M. M. Hantak**, C. M. Hickerson and C. D. Anthony. 2019. Genetic analysis of a cryptic contact zone between mitochondrial clades of the Eastern Red-backed Salamander, *Plethodon cinereus*. *Journal of Herpetology* 53:144–153.
- Hantak, M. M.** and S. R. Kuchta. 2018. Predator perception across space and time: relative camouflage in a color polymorphic salamander. *Biological Journal of the Linnean Society* 123:21–33.
- Hantak, M. M.**, D. J. Paluh and C. M. Hickerson. 2016. Comparison of the diets of sympatric erythristic and striped morphs of *Plethodon cinereus* (Eastern Red-backed Salamander). *Northeastern Naturalist* 23:219–228.

- Hantak, M. M.**, D. J. Paluh and R. A. Saporito. 2016. Bufadienolide and alkaloid-based chemical defenses in two different species of Neotropical anurans are equally effective against the same arthropod predators. *Journal of Tropical Ecology* 32:165–169.
- Paluh, D. J., **M. M. Hantak** and R. A. Saporito. 2014. A test of aposematism in the dendrobatid poison frog *Oophaga pumilio*: The importance of movement in clay model experiments. *Journal of Herpetology* 48:249–254.
- Hantak, M. M.**, T. Grant, S. Reinsch, D. McGinnity, M. Loring, N. Toyooka and R. A. Saporito. 2013. Dietary alkaloid sequestration in a poison frog: An experimental test of alkaloid uptake in *Melanophryniscus stelzneri* (Bufonidae). *Journal of Chemical Ecology* 39:1400–1406.

In Review

- Waldron, B. P., E. F. Watts, D. Morgan, **M. M. Hantak**, A. R. Lemmon, E. M. Lemmon, S. R. Kuchta. The limits of the metapopulation: Lineage formation in a widespread terrestrial salamander (*Plethodon cinereus*).
- Watts, E. F., B. P. Waldron, **M. M. Hantak**, E. M. Lemmon, A. R. Lemmon, S. R. Kuchta. Cryptic species within a cryptic species? Species delimitation in the Cumberland Plateau salamander, *Plethodon kentucki*.

Natural History Notes

- Waldron, B., and **M. M. Hantak**. 2020. *Plethodon cinereus* (Eastern Red-backed Salamander) and *Plethodon electromorphus* (Northern Ravine Salamander). Hybridization. *Herpetological Review* 51:809-810.
- Hantak, M. M.**, S. R. Kuchta, C. M. Hickerson and C. D. Anthony. 2015. *Plethodon cinereus*: Morphology. *Herpetological Review* 46:409-410.
- Martin, A. M., and **M. M. Hantak**. 2011. *Plethodon cinereus* (Eastern Red-backed Salamander). Tenacity and Homing. *Herpetological Review* 42:581-582.

Teaching Experience

Instructor of Record

- 2023 Ecology (BIO 310), University of Dayton
- 2017 Principles of Evolution (BIOS 3300), Ohio University

Guest Lecturer

- 2020 Curatorial Methods – Introduction to Natural History Museums (BOT 4935 / BSC 2930 / ZOO 4926 / ANT 4930), University of Florida
- 2017 Herpetology (BIOS 4720), Ohio University

Graduate Teaching Assistant, Ohio University

- 2018-2019 Animal Diversity (BIOS 1000)
- 2014-2016 Comparative Vertebrate Anatomy Lab (BIOS 3030)
- 2015-2018 Evolution (non-majors; BIOS 2500)
- 2015-2019 Principles of Evolution (BIOS 3300)
- 2015 Herpetology Lab (BIOS 4720)
- 2013-2014 Human Anatomy Lab (BIOS 3015)

Graduate Teaching Assistant, John Carroll University

- 2013 Environmental Biology Lab (BL 109)
- 2011-2012 Human Biology Lab (BL 112)
- 2011 Principles of Biology I Lab (BL 155)

Invited Seminars

- 2022 Environmental drivers of phenotypic variation in vertebrates. University of Arkansas Little Rock, Little Rock, Arkansas.
- 2022 Environmental drivers of phenotypic variation in vertebrates. University of Dayton, Dayton, Ohio.
- 2022 Using natural history collections and community science data to assess spatiotemporal patterns of phenotypic variation. Ohio University, Athens, Ohio.
- 2021 A computer vision model for assessing species color pattern from community science images. Florida Museum of Natural History, Gainesville, Florida.
- 2021 Using natural history collections to assess spatiotemporal drivers of phenotypic change in vertebrates. Texas A&M University San Antonio.
- 2021 Computer vision for assessing salamander color pattern variation from web-based community science images. East Carolina University.
- 2021 Computer vision for assessing species color pattern variation from web-based community science images. University of Florida Informatics Institute, Gainesville, Florida.
- 2020 Color polymorphism in the Eastern Red-backed Salamander (*Plethodon cinereus*). Herpetology Course, Millersville University, Millersville, Pennsylvania.
- 2019 Color polymorphism in *Plethodon* salamanders. Florida Museum of Natural History, Gainesville, Florida.
- 2018 Landscape genetics in a color polymorphic salamander, *Plethodon cinereus*. John Carroll University, University Heights, Ohio.
- 2017 The evolution and maintenance of the color polymorphism in *Plethodon cinereus*. John Carroll University, University Heights, Ohio.
- 2015 The ecology and evolution of *Plethodon* salamanders in Ohio. Old Woman Creek National Estuarine Research Reserve, Huron, Ohio.

Invited Conference Presentations

- 2022 BioDigiCon (iDigBio Summit) Capturing trait data: broad, across different taxonomic groups: Quantifying color polymorphisms and size in salamanders – oral presentation and panel discussion.

Oral Presentations (*undergraduate co-author)

- Hantak, M. M.** 2023. Body size shifts in color polymorphic salamanders in response to climate change. International Congress of Vertebrate Morphology (ICVM), Cairns, Queensland, Australia.
- Hantak, M. M.** 2022. Color scales with climate in North American ratsnakes: a test of the thermal melanism hypothesis using community science images. Evolution Meeting, Cleveland, Ohio
- Hantak, M. M.** 2021. Rapid phenotypic change in a polymorphic salamander over 43 years. Evolution Meeting (virtual).
- Hantak, M. M.** 2021. Assessing organismal color pattern variation using museum collections, computer vision modeling, and web-based community science images. 5th Annual Digital Data Conference, Florida Museum of Natural History.
- Hantak, M. M.,** Kuchta, S. R. 2019. Spatial variation of correlated trait complexes in the polymorphic Eastern Red-backed Salamander, *Plethodon cinereus*. Joint Meeting of Ichthyologists and Herpetologists (JMIH), Snowbird, Utah.
- Hantak, M. M.,** Kuchta, S. R. 2019. Spatial variation in ecological divergence in a widespread polymorphic salamander. The Society for Integrative and Comparative Biology (SICB) Annual Meeting, Tampa, Florida.

- Brooks, K. M.*, **Hantak, M. M.**, Anthony, C. D., Hickerson, C. M. and Kuchta, S. R. 2018. Diet of a polymorphic salamander: an examination across space and time. Ohio Herpetology Symposium, John Carroll University, University Heights, Ohio.
- Hantak, M. M.**, Page, R. B., Anthony, C. D., Hickerson, C. M., Kuchta, S. R. 2018. The Relationship Between the Genetic Structure, Landscape Ecology, and Color Polymorphism in the Eastern Red-backed Salamander (*Plethodon cinereus*). Joint Meeting of Ichthyologists and Herpetologists (JMIH), Rochester, New York.
- Hantak, M. M.**, Page, R. B., Anthony, C. D., Kuchta, S. R. 2018. Evaluation of the genetic structure of a color polymorphic salamander, *Plethodon cinereus*. The Society for Integrative and Comparative Biology (SICB) Annual Meeting, San Francisco, California.
- Hantak, M. M.**, Kuchta, S. R. 2016. Color polymorphism in the Eastern Red-backed Salamander (*Plethodon cinereus*): how morphs are seen through the eyes of visual predators. Joint Meeting of Ichthyologists and Herpetologists (JMIH), New Orleans, Louisiana.
- Hantak, M. M.**, Kuchta, S. R. 2016. Color polymorphism in the Eastern Red-backed Salamander (*Plethodon cinereus*): how morphs are seen through the eyes of visual predators. The Society for Integrative and Comparative Biology (SICB) Annual Meeting, Portland, Oregon.
- Hantak, M. M.**, Saporito, R. A. 2013. The role of chemical compounds in the defense against predation of two Neotropical anurans, *Dendrobates auratus* and *Rhaebo haematiticus*. Joint Meeting of Ichthyologists and Herpetologists (JMIH), Albuquerque, New Mexico.
- Hantak, M. M.**, Saporito, R. A. 2012. Chemical defense in the green and black poison frog *Dendrobates auratus*: Do alkaloid provide sufficient protection against color-blind predators? Ohio Herpetology Symposium, John Carroll University, University Heights, Ohio.
- Hantak, M. M.**, Saporito, R. A. 2011. Geographic differences in diet of the poison frog *Oophaga pumilio* from Panama and Costa Rica. Ohio Herpetology Symposium, Ohio University, Athens, Ohio.

Poster Presentations (*undergraduate co-author)

- Evers, T., Garner, K., Mayer, R., **Hantak, M. M.**, Hickerson, C. M., Anthony, C. D. 2021. Dispersal and morphology in the Eastern Red-backed Salamander, *Plethodon cinereus*: an evaluation of clade membership, sex, and age group. Joint Meeting of Ichthyologists and Herpetologists (JMIH), Phoenix, Arizona.
- Federico, N. A.*, **Hantak, M. M.**, Blackburn, D. C., Guralnick, R. 2020. Historical data reveals rapid phenotypic change in a polymorphic salamander. University Research Scholar Symposium, University of Florida, Gainesville, Florida.
- Brooks, O. L.*, **Hantak, M. M.** 2017. Spatial variation in assortative mating in a color polymorphic salamander. Ohio Herpetology Symposium, Ohio University, Athens, Ohio.
- Waldron, B., Kuchta, S. R., **Hantak, M. M.**, Hickerson, C. M., Anthony, C. D. 2017. Genetic analysis of distinct lineages of *Plethodon cinereus* at a secondary contact zone in northeast Ohio. Joint Meeting of Ichthyologists and Herpetologists (JMIH), Austin, Texas.
- Hantak, M. M.**, Kuchta, S. R. 2016. Color polymorphism in the Eastern Red-backed Salamander: is one morph better camouflaged than the other? Special Highlands Conference on Plethodontid Salamander Biology, Highlands, North Carolina.
- Brooks, K. M.*, **Hantak, M. M.**, Kuchta, S. R. 2015. Differences in the diet of the striped and lead color morphs of the Eastern Red-backed Salamander (*Plethodon cinereus*). Ohio Herpetology Symposium, Ohio University, Athens, Ohio.
- Hantak, M. M.**, Kuchta, S. R. 2014. Color polymorphism in the Eastern Red-backed Salamander (*Plethodon cinereus*): how morphs are seen through the eyes of visual predators. Joint Meeting of Ichthyologists and Herpetologists (JMIH), Chattanooga, Tennessee.

- Hantak, M. M.**, Paluh, D. P., Hickerson, C. M. 2014. A comparison of the diets of erythristic and striped phenotypes of Red-backed Salamanders, *Plethodon cinereus*. 6th Conference on the Biology of Plethodontid Salamanders, Tulsa, Oklahoma.
- Hantak, M. M.**, Saporito, R. A. 2013. Dietary alkaloid sequestration in a poison frog: An experimental test of alkaloid uptake in *Melanophryniscus stelzneri* (Bufonidae). Joint Meeting of Ichthyologists and Herpetologists (JMIH), Albuquerque, New Mexico.
- Hantak, M. M.**, Saporito, R. A. 2013. A comparison of the diets of erythristic and striped phenotypes of red- backed salamanders, *Plethodon cinereus*. Joint Meeting of Ichthyologists and Herpetologists (JMIH), Albuquerque, New Mexico.
- Hantak, M. M.**, Saporito, R. A. 2011. Geographic differences in diet of the poison frog *Oophaga pumilio* from Panama and Costa Rica. Joint Meeting of Ichthyologists and Herpetologists (JMIH), Minneapolis, Minnesota.

Mentorship

2023	Evelyn Thomson (undergraduate researcher, University of Dayton): field work surveying amphibians.
2019-2021	Nicholas Federico (undergraduate researcher, University of Florida): basics in ImageJ and R statistical software.
2014-2018	Olivia Brooks (undergraduate researcher, Ohio University): field work collecting ecological data, genetic lab work, mark-recapture software, basics in R statistical software.
2014-2017	Kyle Brooks (undergraduate researcher, Ohio University): field work collecting ecological data, lead role in salamander dietary prey identification, basics in R statistical software, scientific writing training.
2017	Jasmine Facun (undergraduate researcher, Ohio University): basics in Adobe Photoshop and ImageJ.
2015-2017	Christine Hanson (undergraduate researcher, Ohio University): field work collecting ecological data, genetic lab work, mark-recapture software.
2016	Patricia Richards (undergraduate researcher, Ohio University): field work collecting ecological data.
2016	Brian Waldron (M.Sc. student, John Carroll University): genetic lab work.
2015	Cassandra Thompson (undergraduate researcher, Ohio University): field work collecting ecological data.
2015	Thomas Radomski (M.Sc. student, Ohio University): genetic lab work.
2014	Eric Leach (undergraduate researcher, Ohio University): field work collecting ecological data, genetic lab work.

University Service

- University of Dayton: Keck Award committee (2023)
- University of Dayton: graduate committee member (Kata Gregory, MSc)

Professional Service

- Board of Governors: American Society of Ichthyologists and Herpetologists (2023-2027)
- Committee chair: American Society of Ichthyologists and Herpetologists Gaige Fund Award Committee (2023)
- Committee member: American Society of Ichthyologists and Herpetologists Gaige Fund Award Committee (2021-2022)
- Manuscript reviewer: African Journal of Herpetology, Animal Behaviour, Australian Journal of Zoology, Biological Journal of the Linnean Society, Ecology, Ecology and Evolution, Global Change Biology, Heredity, Herpetological Conservation and Biology, Herpetology

Notes, Ichthyology & Herpetology, Insectes Sociaux, Journal of Animal Ecology, Journal of Herpetology, Journal of Mammalogy, Plos ONE, Scientific Data, Scientific Reports, The Science of Nature, Wildlife Biology

- Grant reviewer: Herpetologists' League E. E. Williams Research Grant, ACA Grants in Biodiversity
- OU/JCU Herpetology Symposium (co-organizer; 2012, 2017)

Public Outreach & Service

- Instructor for "Museum in the Parks: Herpetology at Morningside Nature Center". Provided a short presentation on the importance of museum natural history collections with a focus on amphibians and reptiles. Guided a nature hike to look for local amphibians and reptiles with local elementary school students. October 13, 2022.
- Co-organizer and team leader for a "Frog Night Walk" outreach event at the Florida Museum of Natural History. Co-developed a program for families in the Gainesville area to experience Florida swamp life at night – with a focus on finding frogs and identifying species based on call. Guided families on a night nature hike at the University of Florida Natural Area Teaching Laboratory (NATL). July 14, 2022.
- Presented research on computer vision modeling for scoring salamander color pattern and participated in a panel discussion on using AI in the K-12 classroom for the University of Florida's Thompson Earth Systems Institute (TESI) – Scientist in Every Florida School AI teacher workshop. May 22, 2021.
- Instructor for "Museum in the Parks: Herpetology at Paynes Prairie". Provided a short presentation on the importance of museum natural history collections with a focus on amphibians and reptiles. Guided a nature hike to look for local amphibians and reptiles. Participated in a short video discussing amphibians and reptiles to aid in self-guided tours. May 17, 2021. <https://www.floridamuseum.ufl.edu/event/mitp-herpetology-paynes-prairie/>
- Created a Notes from Nature blog post and project on a salamander color polymorphism. November 7, 2019. <https://blog.notesfromnature.org/2019/11/07/calling-all-naturalists-were-surveying-salamander-stripes/>
- Herpetology tabling event at Florida Museum of Natural History "Viva Museum!" bilingual Latin American event. September 14, 2019.
- Communicated with members of the Lake Erie Islands Conservancy to help save a parcel of land (Cooper's Woods) on South Bass Island, Ohio from being developed. 2016-2020. <https://www.ohio-put-in-bay.com/coopers-woods-saved/>
- Provided a letter of support for the Lake Erie Islands Conservancy to obtain grant funding from the Land and Water Conservation Fund to save Cooper's Woods on South Bass Island. November 13, 2018.
- BioBlitz at The Ridges, Ohio University (team leader). April 20, 2018.
- Old Woman Creek National Estuarine Research Reserve: citizen science, salamander monitoring training. 2016-2017.
- BioBonanza at Athens County Public Libraries. 2017.
- Guest speaker: Wellston public high school. 2016, 2018.
- Science fair judge: Wellston public high school. March 15, 2016.

Press

- NSF Research News: "Cities are making mammals bigger" https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=303407&org=NSF&from=news
- Florida Museum of Natural History: "Cities are making mammals bigger" <https://www.floridamuseum.ufl.edu/science/cities-are-making-mammals-bigger/>

- Sustainability Times: “Mammals living in cities grow larger than their country cousins” <https://www.sustainability-times.com/environmental-protection/mammals-living-in-cities-grow-larger-than-their-country-cousins/>
- Miami Herald: “Watch where you throw your pizza. City life plumping up wild animals, Florida study says” <https://www.miamiherald.com/news/state/florida/article253518774.html>
- New York Post: “Mice are getting mysteriously smaller, study finds” <https://nypost.com/2020/06/02/mice-are-getting-mysteriously-smaller-chilling-study-finds/>
- Florida Museum of Natural History: Mice are shrinking, but are climate change and cities to blame?” <https://www.floridamuseum.ufl.edu/science/mice-are-shrinking/>
- Lake Erie Islands Conservancy Quarterly Newsletter: “Salamanders in Coopers Woods” <http://lakeerieislandsconservancy.org/wp-content/uploads/2017/04/2017-LEIC-Spring-Newsletter-Final-online-version.pdf>
- Sandusky Register: “Student studying salamander at Edison Woods MetroPark”

Professional Affiliations

Society for the Study of Evolution (SSE)

American Society of Ichthyologists and Herpetologists (ASIH)

Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

Society for the Study of Amphibians and Reptiles (SSAR)

Society for Integrative & Comparative Biology (SICB)