

ALEXA R. WARWICK

Department of Fisheries and Wildlife • Michigan State University (MSU) • 480 Wilson Rd, NR 11D
East Lansing, MI 48824 • awarwick@msu.edu • (517) 353-4872 • arwarwick.org

EDUCATION

2009–2016	Florida State University (FSU)	Ph.D. in Biological Sciences
2005–2009	University of Northern Iowa (UNI)	B.S. in Biology, Honors Research B.A. in Dual Lang.: Portuguese/Spanish
2015	Universidad de los Andes, Bogotá, Colombia:	Fellowship Semester Abroad
2008	Universidade de Brasília, Brasília, DF, Brazil:	Semester Abroad
2007	Universidad de Oviedo, Oviedo, Asturias, Spain:	Semester Abroad

PROFESSIONAL EXPERIENCE

Wildlife Engagement Specialist. Department of Fisheries and Wildlife, MSU. (March 2019 – present).

Postdoctoral Scholar in Evolution Education and Outreach, BEACON Center, MSU. (January 2016 – March 2019). Supervisors: Dr. Louise Mead and Dr. Peter White.

Graduate Student Fellow. Department of Biological Science, FSU. (August 2009–August 2016)
Advisors: Dr. Emily Moriarty Lemmon and Dr. Joseph Travis.

- Dissertation title: Ecology, Evolution, and Conservation of the Pine Barrens Treefrog

Senior Thesis Research Assistant. Biology Dept., UNI. (October 2005–May 2009)
Advisors: Dr. Peter B.-Z. Berendzen and Dr. Carl L. Thurman

- Senior thesis title: What's up with fiddler crabs: does larval dispersal render genetic similarity in the disjunct distribution of *Uca minax* (*Uca*: Ocypodidae)?

GRANTS AND FELLOWSHIPS

2019	The Society of Systematic Biologists Ad Hoc funding for Ecology/Evolution events at the annual SACNAS conference (\$10,000)
2019	NSF IUSE: Applying the CURE model to facilitate multi-institutional investigations across levels of biological inquiry using Eastern Red-Backed Salamanders (\$221,869)
2019	MSU IPPSR MAPPR: Evaluating CWD risk communication in Michigan meat processors and hunters using processors (\$20,000)
2019	BEACON Budget Request: Engaging Ecuadorian Educators in Evolutionary Emblematic Ecosystems (\$28,500)
2018	Society for the Study of Evolution Travel Stipend (\$500)
2018	European Cooperation in Science and Technology (COST) Action Grant: Building on scientific literacy in evolution towards scientifically responsible Europeans
2018	BEACON Budget Request: YEvo: teaching eukaryotic genetics and evolution using yeast (\$49,600)
2018	BEACON Budget Request: Evaluating curriculum goals in undergraduate evolution education (\$16,548)

2018	BEACON Budget Request: A MOOC for the adaptive learning of evolutionary data analysis to grow our nationwide talent pool in computation for STEM disciplines (\$32,758)
2017	BEACON Budget Request: BEACON and beyond: broadening participation and the scope of public engagement (\$56,730)
2016	COACH Workshop Travel Assistance to SACNAS 2016 (\$800)
2016	BEACON Budget Request: Evaluating career choices and the efficacy of a conference travel award program to increase diversity (\$18,874)
2016	BEACON Budget Request: Writing through STE(A)M: engaging evolution in creative spaces (\$26,191)
2016	BEACON Budget Request: An evidence-based framework for transforming scientific communication and engagement with the public (\$60,709)
2015	Leon County Tourist Development Council Special Event Grant (\$1,808)
2015	FSU Dissertation Research Grant (\$750)
2010–2015	FSU Congress of Graduate Students Travel Grants (\$1,700)
2012–2015	FSU Dept. of Biological Science Travel Grant (\$3,015)
2014	NSF GROW with USAID International Fellowship (\$15,000)
2014	University of Texas Travel Stipend to Phylogenomics Software School (\$250)
2013	New Jersey Dept. of Environ. Protection Conserve Wildlife Grant (\$3,500)
2011	Southeastern Ecology and Evolution Conference Travel Award (\$100)
2011	Society for the Study of Evolution Rosemary Grant Award (\$2,500)
2011	Am. Museum of Nat. History Theodore Roosevelt Memorial Grant (\$2,000)
2011	Sigma Xi Grant-in-Aid of Research (\$1,000)
2010–2013	NSF Graduate Research Three-Year Fellowship (\$122,500)
2008–2009	Barry M. Goldwater Scholar (\$7,500)
2008	UNI Intercollegiate Academics Travel Fund (\$1,825)
2007	UNI Dr. Alan Orr Research Grant (\$500)
2007	UNI Intercollegiate Academics Research Grant (\$500)
2007	UNI CNS Student Opportunities for Academic Research Grant (\$500)
2006, 2007	UNI Dr. Swanson Research Grant (\$750)

OTHER HONORS & AWARDS

2015	FSU Margaret Y. Menzel Award, Dept. Biological Science (\$1,000)
2015	Henri Seibert Award Best Oral Presentation (Honorable Mention)
2014	FSU Outstanding Teaching Assistant Award (\$650)
2013	Herpetology Conference Best Poster Award (\$100)
2011	FSU Robert B. Short Scholarship in Zoology, Dept. Biological Science (\$200)
2009–2013	FSU Presidential University Four-Year Fellowship (\$118,713)
2009	FSU Graduate Tuition Scholarship (\$1,000)
2009	UNI Merchant Scholarship for Graduate Education (\$3,585)
2009	UNI Purple and Old Gold Award for Meritorious Scholarship in Biology
2009	UNI Purple and Old Gold Award for Meritorious Scholarship in Dual Lang.
2009	UNI Chapter of Sigma Xi Best Undergraduate Poster Award (\$25)
2008	UNI Modern Languages George and Jane Zucker Study Abroad Award (\$700)
2008	UNI College of Natural Sciences (CNS) McKay Study Abroad Award (\$1,000)
2008	UNI CNS Summer Undergraduate Research Program (\$3,000)
2007	UNI LaDuke Family Scholarship (\$500)
2007–2009	UNI CNS C.W. Lantz Scholar Fund (\$4,000)

2007, 2008	UNI Nadyne Harris Study Abroad Scholarship (\$1,000)
2006	UNI Irene Thompson Natural Sciences Scholar (\$1,352)
2006	Biolife Plasma Services Scholarship (\$75)
2006–2009	UNI CNS Career Employment Scholar (\$6,500)
2006–2008	UNI Modern Languages Jane Sherwin Schwartz Scholar (\$2,378)
2005	Daniel B. Zaffarano Memorial Scholarship (\$250)
2005	State of Iowa Scholar (\$400)
2005, 2006	UNI Modern Languages Scholarship (\$470)
2005–2007	UNI Academic 2-Year Fees Scholarship (\$3,200)
2005–2009	UNI Science Symposium Four-Year Tuition Scholarship in Biology (\$20,672)

PUBLICATIONS (* = peer reviewed)

Published

- *Ålund, M., N. Emery, B. J. M. Jarrett, K. J. MacLeod, H. F. McCreery, N. Mamoozadeh, J. G. Phillips, J. Schossau, A. W. Thompson, **A. R. Warwick**, K. M. Yule, E. R. Zylstra, E. Gering. To support a sustainable postdoc workforce, academic ecosystems must evolve. *Nature Ecology & Evolution*.
- *Heidemann, M. K., M. S. Taylor, A. Storm, C. Dresser-Briggs, **A. Warwick**, P. J. T. White. 2019. Oral Allergy Syndrome: A Confluence of Immunology and Phylogeny. National Center for Case Study Teaching in Science, University of Buffalo, NY.
- *Bonner, K., D. Piechnik, J. Kovacs, **A. Warwick**, and P. White. 2019. Clam Spawning and Red Tide: Helping Students Learn the Hardy-Weinberg Equilibrium. *American Biology Teacher*. 81(5): 366–371.
- *Mead, L. S., C. Kohn, **A. Warwick**, K. Schwartz. 2019. Applying measurement standards to evolution education assessment instruments. *Evolution Education and Outreach*. <https://doi.org/10.1186/s12052-019-0097-y>
- *Relyea, R. A., P. R. Stephens, L. N. Barrow, A. R. Blaustein, P. W. Bradley, J. C. Buck, A. Chang, J. P. Collins, B. Crother, J. Earl, S. S. Gervasi, J. T. Hoverman, O. Hyman, E. M. Lemmon, T. M. Luhring, M. Michelson, C. Murray, S. Price, R. D. Semlitsch, A. Sih, A. B. Stoler, N. VandenBroek, **A. Warwick**, G. Wengert, J. I. Hammond. 2018. Phylogenetic patterns of trait and trait plasticity evolution: Insights from amphibian embryos. *Evolution*. 72(3): 663-678.
- Warwick, A.**, L. Mead, M. C. Fisher-Reid, E. Grant, E., C. Sutherland, A. Wills, E. Perry. 2018. Claymander field experiment. SPARCnet: Educational Resources. QUBES. doi:10.25334/Q46Q4Z.
- Mead, L., K. Grayson, **A. Warwick**, D. Miller, C. Sutherland, E. Grant. 2017. How many salamanders are in the forest? Testing capture-recapture. QUBES. doi:10.25334/Q4637W.
- *Barrow, L. N., J. A. Soto-Centeno, **A. R. Warwick**, A. R. Lemmon, E.M. Lemmon. 2017. Evaluating hypotheses of expansion from refugia through comparative phylogeography of south-eastern Coastal Plain amphibians. *Journal of Biogeography*. 44(12): 2692-2705.
- ***Warwick, A. R.**, J. Travis, and E. M. Lemmon. 2015. Geographic variation of the Pine Barrens treefrog (*Hyla andersonii*): concordance of morphometric, acoustic signal, and genetic data. *Molecular Ecology*. 24: 3281–3298.
- ***Warwick, A. R.** and E. M. Lemmon. 2014. Development and characterization of 21 microsatellite loci for the Pine Barrens treefrog (*Hyla andersonii*). *Conservation Genetics Resources*. 6: 719–721.

Accepted

***Warwick, A. R.**, A. Kolonich, K. M. Bass, L.S. Mead, F. Reichsman. Ten Simple Rules for Partnering with K-12 Teachers to Support Your Broader Impact Goals. *PLOS Computational Biology*.

Submitted

***Warwick, A. R.**, J. G. Phillips, J. K. Scoggin, C. E. Parent, B. G. Miller. Fostering understanding of evolution in Galápagos elementary students using endemic land snails. *American Biology Teacher*.

***Warwick, A. R.**, L. N. Barrow, M. L. Smith, D. B. Means, A. R. Lemmon, E. M. Lemmon. Signatures of northeastern expansion and multiple refugia: Genomic phylogeography of the Pine Barrens Treefrog (*Hyla andersonii*). *Journal of Biogeography*.

INVITED TALKS

Warwick, A. R. 2019. Salamanders and Science Education. Invited brown bag talk, Michigan Natural Features Inventory, Lansing, MI.

Warwick, A. R. 2019. Evolution education and outreach: transforming student thinking and increasing diversity in evolutionary science. Invited talk, Graduate Colloquium, Dept. of Biology, University of Northern Iowa, Cedar Falls, IA.

Warwick, A. R., L. S. Mead. 2018. ConnectedBio: Three-Dimensional Learning from Molecules to Populations. CREATE for STEM Work-in-Progress Seminar. MSU, East Lansing, MI.

Warwick, A. R., L. Mead. 2018. Teaching Evolution Seminar. Johannes Gutenberg University, Mainz, Germany.

Warwick, A. R. 2018. Revealing student ideas and explanations of evolutionary phenomena. Invited talk, Department of Biology Special Seminar, Utah State University, Logan, UT.

Warwick, A. R., M. Kjolvik. 2016. Data Nuggets: increase your broader impacts while improving science education. Invited talk, Physics Education Research Seminar, Michigan State University, East Lansing, MI.

Warwick, A. R. 2016. Jumping frog, hidden history: understanding species distributions using the Pine Barrens Treefrog. BEACON Seminar, Michigan State University, East Lansing, MI.

Warwick, A. R. 2015. Understanding species distributions using the Pine Barrens Treefrog. Invited talk, Colloquium, Dept. of Biological Science, FSU, Tallahassee, FL.

Warwick, A. R. 2015. A tale of two frogs: concordance of morphometric, acoustic signal, and genetic data in *Hyla andersonii* and comparative phylogeography in *Hypsiboas*. Invited talk, Grupo Herpetológico, Universidad de Antioquia, Medellín, Colombia.

Warwick, A. R. 2015. Geographic variation in Pine Barrens treefrog (*Hyla andersonii*): concordance of morphometric, acoustic signal, and genetic data. Invited talk, Seminar, Dept. of Biological Science, Universidad de los Andes, Bogotá, Colombia.

Warwick, A. R. 2014. Down by the pond. Invited talk, FSU Fellows Society, January Research Sharing, FSU, Tallahassee, FL.

Warwick, A. R. 2013 Geographic variation in Pine Barrens treefrog (*Hyla andersonii*): concordance of genetic, morphometric, and acoustic signal data. Invited talk, Pinelands Research Series, New Jersey Pinelands Commission, New Lisbon, NJ.

Warwick, A. R. 2013 Geographic variation in Pine Barrens treefrog (*Hyla andersonii*): evidence from morphometric, acoustic signal, and genetic data. Invited talk, Graduate Colloquium, Dept. of Biology, University of Northern Iowa, Cedar Falls, IA.

Warwick, A. R. 2008. Comparison of larval distribution patterns, geographic range, and genetic variability in North American fiddler crabs (*Uca*: Ocypodidae). Invited talk, College of Natural Sciences, University of Northern Iowa, Cedar Falls, IA.

CONFERENCE PRESENTATIONS (* = presenter)

A. R. Warwick*. SPARCnet in Extension Programming.

Pomeranz, E.* , **A. R. Warwick**, B. Avers. Fostering a Culture of Engagement: Progress, Opportunities, and Challenges in Michigan. Oral presentation, North American Wildlife and Natural Resources Conference, Omaha, NE.

Warwick, A. R.*, B. Avers*, E. Pomeranz, D. Doberneck. Building Capacity: Development of Community Engagement Certificate Programs for State Wildlife Agency Professionals. Oral presentation, Midwest Fish and Wildlife Conference, Springfield, IL.

Moore, J.* , C. DeShambo, H. Campa III, J. P. Burroughs, **A. R. Warwick**. Human Dimensions of Deer Management in East Lansing. Oral presentation, Midwest Fish and Wildlife Conference, Springfield, IL.

Moore, J.* , C. DeShambo, H. Campa III, J. P. Burroughs, **A. R. Warwick**. Human Dimensions of Deer Management in East Lansing. Poster presentation, Mid-SURE, East Lansing, MI.

Taylor, B.* , M. J. Dunham, **A. Warwick**, R. Skophammer. 2019. yEvo: teaching eukaryotic genetics and evolution with yeast. Oral presentation, Evolution Meetings, Providence, RI.

Warwick, A. R.*, A. Kolonich, P. White, F. Reichsman, L. Mead, P. Horowitz, J. Smith, J. Krajcik, K. McElroy-Brown. 2019. Using high school students' initial perceptions of evolution across biological levels to inform curriculum development. Oral presentation, National Association for Research in Science Teaching, Baltimore, MD.

Warwick, A. R.*, P. White, F. Reichsman, L. Mead, P. Horowitz, J. Smith, J. Krajcik, K. McElroy-Brown. 2018. ConnectedBio: revealing student ideas and explanations of evolutionary phenomena. Poster presentation, National Association of Biology Teachers, San Diego, CA.

Warwick, A. R.* 2018. Evaluating student prior knowledge of Evo-Ed Cases to connect biology across the curriculum. II Joint Congress on Evolutionary Biology, Montpellier, France.

Warwick, A. R.*, P. White, F. Reichsman, L. Mead, P. Horowitz, J. Smith, J. Krajcik, K. McElroy-Brown. 2018. ConnectedBio: revealing student ideas and explanations of evolutionary phenomena. Poster presentation, BEACON Congress, East Lansing, MI.

Taylor, B.* , R. Skophammer, **A. Warwick**, M. J. Dunham. 2018. yEvo: Hands-On Yeast Evolution Research for the High School Classroom. Poster presentation, BEACON Congress, East Lansing, MI.

Solomon-Lane, T. K., **A. R. Warwick**, T. J. Hagey, H. A. Hofmann*. Professional development through evidence-based public engagement. 2018. Poster presentation, BEACON Congress, East Lansing, MI.

White P. * , F. Reichsman, L. Mead, P. Horowitz, J. Smith, J. Krajcik, **A. Warwick**, K. McElroy-Brown. 2018. Connected biology: three-dimensional learning from molecules to populations. Poster presentation, NSF DRK-12 PI Meeting. Washington, DC.

Warwick, A. R.*, C. Bartholomew*. 2018. Evo-Ed Cases: Connecting Biology Across the Curriculum. Oral Presentation, Michigan Science Teachers Association, Lansing, MI.

Heape, H. * , J. B. Clarke, S. Edwards, J. Graves, R. Kliman, L. S. Mead, J. Weintraub, **A. Warwick**. 2018. Efficacy of a Travel Award Program to Increase Diversity in Evolutionary Science. Oral presentation, MSU UURAF , East Lansing, MI.

- Warwick, A. R.** * 2018. ConnectedBio: revealing student ideas and explanations of evolutionary phenomena. Oral presentation, BEACON Seminar, Michigan State University, East Lansing, MI.
- Heape, H. *, **A. R. Warwick** *. 2018. Efficacy of the UDE travel award program to increase diversity in evolutionary science. Oral presentation, BEACON Seminar, Michigan State University, East Lansing, MI.
- Hagey, T. *, A. Warwick, L. Mead. 2017. A classroom activity simulating population-level evolution by hand. Poster presentation, NABT 2017, St. Louis, MO.
- Warwick, A. R.** *, P. White, L. Mead., J. Smith. 2017. Evaluating the use of integrative Evo-Ed cases for evolution education. Poster presentation, Evolution Meetings, Portland, OR.
- Heape, H. *, J. B. Clarke, S. Edwards, J. Graves, R. Kliman, L. S. Mead, J. Weintraub, **A. R. Warwick**. 2017. Efficacy of a Travel Award Program to Increase Diversity in Evolutionary Science. Poster presentation, Evolution Meetings, Portland, OR.
- Solomon-Lane, T. K. *, T. J. Hagey, **A. R. Warwick**, H. A. Hofmann. Using evidence to broaden participation and the scope of public engagement. 2017. Poster presentation, Society for Behavioral Neuroendocrinology Meeting, Long Beach, CA.
- Hagey, T. *, **A. R. Warwick**, L. Mead, E. Goodman. 2017. Broader Impacts at BEACON. Poster presentation, National Alliance for Broader Impacts Summit 2017, Stevenson, WA.
- White, P., **A. R. Warwick***, L. Mead, J. Smith. 2017 Evo-Ed: an integrative case-based approach to evolution education. Poster presentation, EvoKE, Porto, Portugal.
- Warwick, A. R.** * 2016. Treefrog tales: incorporating evolutionary biology in research, conservation, and education. Oral presentation, AISES, Minneapolis, MN.
- Warwick, A. R.** *, and L. S. Mead. 2016. Outreach opportunities through BEACON. Poster presentation, BEACON Congress, East Lansing, MI.
- Mead, L.S. *, E. H. Schultheis, M. Kjolvik, **A. R. Warwick**. 2016. NSF DRK-12 PI Meeting, Scientific Data in Schools: Measuring the efficacy of an innovative approach to integrating quantitative reasoning in secondary science.
- Warwick, A. R.** *, and L. S. Mead. 2016. Tri-society outreach opportunities through BEACON. Oral presentation, Evolution Meetings, Austin, TX.
- Warwick, A. R.** *, D. B. Means, and E. M. Lemmon. 2015. Jumping frog, hidden history: a phylogeographic analysis across the disjunct distribution of the Pine Barrens Treefrog. Oral presentation, Evolution Meetings, Guarujá, SP, Brazil.
- Warwick, A. R.** * 2014. Natural replication for testing the influence of landscape processes on genetic structure across the disjunct range of the Pine Barrens treefrog. Poster presentation, Evolution Meetings, Raleigh, NC.
- Warwick, A. R.** * 2013. Geographic variation in Pine Barrens treefrog (*Hyla andersonii*): concordance of morphometric, acoustic signal, and genetic data. Ecology and Evolution Seminar, Dept. of Biological Science, FSU, Tallahassee, FL.
- Warwick, A. R.***, J. Travis, and E. M. Lemmon. 2013. Geographic variation in Pine Barrens treefrog (*Hyla andersonii*): concordance of genetic, morphometric, and acoustic signal data. Poster presentation, Herpetology Conference, Gainesville, FL.
- Warwick, A. R.** * 2012. Geographic variation among enclaves of the Pine Barrens treefrog (*Hyla andersonii*): evidence from morphometric, acoustic signal, and genetic data. Oral presentation, 1st Joint Congress on Evolutionary Biology, Ottawa, ON, Canada.
- Warwick, A. R.** * 2012. Differentiation among enclaves of the Pine Barrens treefrog (*Hyla andersonii*). Oral presentation, Herpetology Conference, Gainesville, FL.
- Warwick, A. R.** * 2012. Phylogeography of the Pine Barrens treefrog (*Hyla andersonii*). Oral presentation, Southeastern Ecology and Evolution Conference, Clemson, SC.

- Warwick, A. R.**, M. J. Hopkins, P. B. Berendzen, C. L. Thurman*. 2009. Genetic, physiological, and morphological variation in the red-jointed fiddler crab, *Uca minax* (Le Conte). Integrative and Comparative Biology. Meeting Abstract 64.6 (Jan. 6). Boston, MA.
- Warwick, A. R.** *, P. B.-Z. Berendzen, and C. L. Thurman. 2009. Comparison of larval distribution, geographic range, and genetic variation of the fiddler crab *Uca minax* (*Uca*: Ocypodidae). Poster presentation, Research in the Capitol, Des Moines, IA.
- Warwick, A. R.***, P. B.-Z. Berendzen, and C. L. Thurman. 2008. Comparison of larval distribution, geographic range, and genetic variation of the fiddler crab *Uca minax* (*Uca*: Ocypodidae). Poster presentation, Evolution Meetings, Minneapolis, MN.

TEACHING EXPERIENCE

- 2020 Guest instructor. "The Practice of FW Outreach & Engagement." FW895. Dr. Erin Dreelin. Department of Fisheries and Wildlife (FW), MSU.
- 2019 Guest instructor. "Human Dimensions." FW434. Dr. Shawn Riley. FW, MSU.
- 2019 Guest presenter. "Undergraduate Seminar". FW293. Drs. Amber Peters, Jim Schneider, Meredith Gore. Department of FW, MSU.
- 2019 Guest presenter. "Fisheries and Wildlife 101" FW101. Dr. Mary Bremigan. Department of FW, MSU.
- 2018 Guest instructor. "Integrating Biology: From DNA to Populations." IBIO150. Dr. Louise Mead. Department of Integrative Biology, MSU.
- 2017 Co-instructor. "Evolution." IBIO445. Drs. Louise Mead and Travis Hagey. Department of Integrative Biology, MSU.
- 2017 Guest instructor. "Integrating Biology: From DNA to Populations." IBIO150. Dr. Louise Mead. Department of Integrative Biology, MSU.
- 2013, 2015 Teaching Assistant (TA). "Evolution." Drs. Joseph Travis and Scott Steppan. Department of Biological Science, FSU.
- 2014 TA. "Conservation Biology." Dr. Nora Underwood. Dept. of Biol. Science, FSU.
- 2014 TA. "Ecology." Dr. Brian Inouye. Department of Biological Science, FSU.
- 2013 TA. "Experimental Biology." Dr. Alice Winn. Dept. of Biol. Science, FSU.
- 2013 Guest lecturer. "Herpetology." Dr. Emily Lemmon. Dept. of Biol. Science, FSU.
- 2012 TA. "Animal Diversity." Dr. Kevin Dixon. Dept. of Biol. Science, FSU.
- 2006 TA. "General Chemistry I." Dr. Michaela Rich. Chemistry Department, UNI.

WORKSHOPS / TRAININGS ORGANIZED

- 2020 Co-organizer, Presenter, Michigan Department of Natural Resources (MDNR) /MSU Community Engagement Virtual Sessions.
- 2019 Co-organizer, Presenter & Participant, Michigan Department of Natural Resources (MDNR) /MSU Community Engagement Advanced Certificate Program.
- 2018 Co-organizer & Presenter, Data Nuggets Workshop, Johannes Gutenberg University, Germany.
- 2018 Co-organizer & Presenter, Undergraduate Evolution Education Workshop: Improving Your Fitness in the Classroom. II Joint Congress on Evolutionary Biology, Montpellier, France.
- 2017 Co-organizer & Presenter, Data Nuggets Workshop, Van Andel Institute, Grand Rapids, MI.
- 2016–2018 Co-organizer & Presenter, Public Engagement Workshop Series at MSU and the University of Texas, Austin.

OUTREACH / ENGAGEMENT EXPERIENCE

- 2019–*present* Consultant, MDNR – Wildlife Division, Lansing, MI/
 2020 Organizer, Bioblitz and Beyond!, Statewide Virtual Program, MI.
 2020 Organizer, Smart Gardening with Deer Webinar.
 2019 Organizer, Community Deer Meeting, East Lansing, MI.
 2019 Organizer & Presenter, MSU Extension Capital Area Conservation Stewards Program, East Lansing, MI.
 2019 Consultant, Troy High School teacher, Troy, MI.
 2019 Consultant, Mason Elementary LEGO Robotics team, Grand Blanc, MI.
 2019 Volunteer, 4-H Great Lakes & Natural Resources Camp, Presque Isle, MI.
 2019 Presenter, Tomas de Berlanga School, Galapagos Islands, Ecuador.
 2019 Volunteer, FW Outreach Event, Everett High School, Lansing, MI.
 2018 Presenter, Skype a Scientist, Hillside Elementary, West Des Moines, IA.
 2018 Presenter, Darwin Day Roadshow 2018, Howell High School, Howell, MI.
 2018 Volunteer, Michigan Frog and Toad Survey.
 2017–2018 Volunteer, Darwin Discovery Day, MSU Museum, East Lansing, MI.
 2017 Presenter, Great Lakes Science Boot Camp, East Lansing, MI.
 2017 Volunteer, Hiawatha Elementary School Science Night, Okemos, MI.
 2017 Volunteer, Lansing Charter Academy Science Night, Lansing, MI.
 2017 Organizer, Darwin Day Roadshow 2017.
 2016 Volunteer, Glencairn School Science Night, East Lansing, MI.
 2016 Volunteer, Beagle Elementary Science Fair Night, Grand Ledge, MI.
 2016 Volunteer, Murphy Elementary Science Fair Night, Haslett, MI.
 2015 Educator, Middle School Physical Science, Sacred Heart Home Educators, FL.
 2012–2014 Volunteer and Guest Presenter, E.O. Wilson Biophilia Center, Freeport, FL.
 2014 Volunteer, Party w/ Animals, Central Panhandle Fairground, Panama City, FL.
 2014 Volunteer, iDigBio: Digitization of Museum Collections, Tallahassee, FL.
 2014 Volunteer, Science Night at the School of Arts and Sciences, Tallahassee, FL.
 2010–2014 Judge, Capital Regional Science Fair, Tallahassee, FL.
 2011 Volunteer, Leon County 4-H Extension, Tallahassee, FL.
 2011 Volunteer, North American Amphibian Monitoring Program, FL.
 2010 Presenter, Career Day, Rickards High School, Tallahassee, FL.

OUTREACH / ENGAGEMENT PROFESSIONAL DEVELOPMENT

- 2019 Emerging Engagement Scholars Workshop, Engaged Scholarship Consortium.
 2019 Advanced Facilitative Leadership Workshop, MSU Extension.
 2019 “Strategies for Publishing Your Community-Engaged Scholarship.” With Dr. Diane Doberneck, MSU Office of Outreach and Engagement.
 2018 Science Policy Webinar Series with Dr. Sally Otto, University of British Columbia. Sponsored by the Society for the Study of Evolution.
 2017 Communicating Beyond Journals and Peers: A Communications Workshop for Academics, MSU.
 2016 Science Communication workshop at Evolution 2016 with Dr. Jory Weintraub.
 2016 Science Communication workshop at MSU with Dr. Randy Olson.
 2012 Science Communication workshop at FSU with Dr. Randy Olson.
 2010 COMPASS communication workshop at FSU: “Meet the press: opportunities and challenges for scientists in a changing world”

OTHER PROFESSIONAL DEVELOPMENT

2019	Diversity, Equity and Inclusion Summit, MSU College of Agriculture and Natural Resources (CANR).
2019	CANR New Faculty Orientation.
2019	MSU Extension New Staff Onboarding.
2019	Urban Deer Workshop, MDNR.
2019	DiSC Workshop, MDNR.
2019	“Research Mentoring Workshop” with Dr. Judi Brown Clarke, BEACON Center.
2019	Leadership Academy, MSU Graduate School.
2018	“Introduction to Qualitative Methods in Education Research” course at MSU.
2018	Interactive Workshop on Quantitative Ethnography: Open Source Tools for Analyzing Large Sets of Discourse Data with Dr. David Shaffer.
2018	Ambitious Science Teaching Conference at MSU.
2017	CIRTL Webinar Series – What to do on the First and Last Day of Classes.
2017	MSU STEM Teaching Essentials Workshop: Putting It All Together: Learning Outcomes and Assessments that Blend Core Ideas with Science and Engineering Practices.
2017	COACH Professional Skills Training for Minority Graduate Students and Postdocs, SACNAS National Conference 2017, Salt Lake City, Utah.
2017	Training Workshop for use of the Reformed Teaching Observation Protocol, MSU.
2017	Planning Workshop for INCLUDES Proposal: Understanding and Overcoming Challenges to Increasing Diversity in Ecology and Evolutionary Biology.
2016	“Pathways to Scientific Teaching” seminar course with Dr. Diane Ebert-May, MSU.
2016	MSU STEM Teaching Essentials Workshop: Strategies for Effective Creation, Implementation and Assessment of Student Teams.
2013–2014	“Teaching Science to Maximize Learning and Retention” and “Assessment in Math and Science Education” education courses at FSU.
2013	FSU Program for Instructional Excellence’s (PIE) Teaching Workshop.
2009	FSU Dept. of Biological Science “Teaching Workshop”. Five-day workshop on lecturing and conducting biology labs.

PROFESSIONAL SOCIETY MEMBERSHIPS

Society for the Study of Evolution	American Society of Naturalists
Society for the Study of Amphibians and Reptiles	Sigma Xi Scientific Research Society
American Indian Science and Engineering Society	FSU Graduate Fellows Society
National Science Teacher Association	National Association of Biology Teachers
Society for the Advancement of Bio. Ed. Research	National Alliance of Broader Impacts
National Assoc. for Research in Science Teaching	The Wildlife Society
Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)	

OTHER PROFESSIONAL SERVICE

2020	Judge, FW Graduate Student Organization 2020 Symposium
2020	Participant, MSU FW Club Professional Meet and Greet
2020	Reviewer, Theodore Roosevelt Conservation and Environmental Leadership Fellowship applications
2019–present	Member, MSU FW Conservation Social Science and Wildlife research groups
2019–present	Member, MSU FW Outreach, Engagement and Extension Committee
2019–present	Member, North American Bsal Task Force

2019–*present* Director, Harris Nature Center Foundation Board
2019–*present* Member, MSU FW Tribal Work group
2019–*present* Member, MSU Extension Natural Resources Workteam
2019–*present* Member, MDNR WLD DEI Workgroup
2019–*present* Member, MDNR WLD Stakeholder Engagement Workgroup
2019 Participant, Strategic Planning Retreat: Corey Marsh Ecological Research Center
2019 Reviewer, *Journal of Herpetology*
2019 Guest speaker, MSU Zoology Club
2018–2019 Postdoc co-representative, MSU Department of Integrative Biology
2017–*present* Member, Education and Outreach Committee, Society for the Study of Evolution
2016–2019 Co-organizer, Ecology/Evolution events at SACNAS National Conference
2016–2019 Contributor, BEACON Center Blog
2016–2019 Reviewer, BEACON Center internal grant proposals
2016–2017 Co-organizer, Undergraduate Diversity at Evolution Program
2017 Contributor, MSU Evolution Curriculum Committee
2017 Co-organizer, MSU STEM Postdocs Group
2017 Judge, MSU University Undergraduate Research and Arts Forum 2017, MSU
2016 Judge, Student oral presentations, AISES Conference 2016
2016 Judge, MSU Mid-Michigan Symposium for Undergraduate Research Experiences
2016 Judge, Southeastern Ecology and Evolution Conference 2016 at FSU
2016 Reviewer, FSU Research and Creativity Awards
2016 Co-organizer, Southeastern Ecology and Evolution Conference 2016 at FSU
2014–2015 Reviewer for *Hydrobiologia*, *Bioacoustics* journals
2011–2014 Panelist, NSF Graduate Research Fellowship Workshop at FSU
2012 Co-organizer, FSU Fellows Forum 2012
2011 Volunteer, Natural Areas Conference at FSU
2009 Co-president, UNI Student Nature Society