

ALEXA R. WARWICK

BEACON Center for the Study of Evolution in Action • Michigan State University (MSU) • 567 Wilson Rd
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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

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

- Serve as the primary postdoc for the grant Connected Biology: Three-Dimensional Learning from Molecules to Populations (NSF funded: DRK-12 1620746, White PI) to develop high school biology curriculum and test student learning outcomes.
- Coordinate with the ConnectedBio project team at MSU, the Concord Consortium, the project external evaluator, and our high school teacher collaborators and students.
- Organize a series of diversity and education-focused events.
- Lead data collection for salamander population monitoring research (>23 undergrads) and co-PI on a resubmission of an NSF Improving STEM Undergraduate Education grant.
- Lead for two working group deliverables as part of a European COST Action grant.
- Collaborate on six internal BEACON grants on education, outreach and/or diversity.
- Trained and calibrated reviewer of classroom teaching using the RTOP instrument (Reformed Teaching Observation Protocol).
- Member of the RTOP review team for the grant Investigating Contextual Factors that Impact Early-Career Faculty Teaching Practice (NSF funded: DUE 1623834, Ebert-May PI)
- Supervised three undergraduate research assistants over multiple semesters.

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
- Compared genomic data with current and historical climate models and contemporary ecological (morphological, behavioral, habitat) data of a rare treefrog in the eastern U.S.
- Evaluated FSU experimental biology courses using a survey instrument I developed.
- Collaborated with Dr. Andrew Crawford (Universidad de los Andes) to collect gladiator treefrog genetic and behavioral data in Colombia.
- Mentored 15 different undergraduates in science research.

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)?
- Collaborated with my advisors and other faculty in the U.S., Spain, and Brazil to study the ecology and evolution of fiddler crabs, lizards, toads, and turtles.

NATIONAL AWARDS

- 2014 NSF GROW with USAID International Fellowship (\$15,000)
 2010–2013 NSF Graduate Research Three-Year Fellowship (\$122,500)
 2008–2009 Barry M. Goldwater Scholar (\$7,500)

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)

GRANTS

- 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 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)
- 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)

PUBLICATIONS (* = peer reviewed)

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- *Mead, L. S., C. Kohn, **A. R. Warwick**, K. L. Schwartz. 2019. Applying measurement standards to evolution education assessment instruments. *Evolution Education and Outreach*. <https://doi.org/10.1186/s12052-019-0097-y>
- *Mead, L. S., M. Kjølvik, E. H. Schultheis, M. Stuhlsatz, **A. R. Warwick**, A. Mohan, J. Morris, P. Strode, R. Mayes. *Under Review*. Improving Scientific Literacy: Quantitative Reasoning in the Context of Science Education. Submitted to *BioScience*.
- *Bonner, K., D. Piechnik, J. Kovacs, **A. R. Warwick**, and P. White. *Accepted*. Clam Spawning and Red Tide: Helping Students Learn the Hardy-Weinberg Equilibrium. *American Biology Teacher*.
- *Heidemann, M., M. Taylor, A. Power, **A. R. Warwick**, C. Dresser-Briggs, P. J. T. White. *Accepted*. A Confluence of Immunology and Phylogeny: Oral Allergy Syndrome (aka Pollen-Food Allergy Syndrome). National Center for Case Study Teaching in Science, University of Buffalo, NY.
- *Relyea, R., P. Stephens, J. Hammond, J. Collins, O. Hyman, S. Price, E. M. Lemmon, L. Barrow, **A. R. Warwick**, *et al.* 2018. Phylogenetic patterns of trait and trait plasticity evolution: Insights from amphibian embryos. *Evolution*. 72(3): 663-678.
- Warwick, A. R.**, Mead, L., Fisher-Reid, M. C., Grant, E., Sutherland, C., Wills, A., Perry, E. 2018. Claymander field experiment. SPARCnet: Educational Resources. QUBES. doi:10.25334/Q46Q4Z.
- Mead, L., Grayson, K., **Warwick, A. R.**, Miller, D., Sutherland, C., Grant, E. 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, and 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.

In preparation

- Warwick, A. R.**, D. B. Means, L. N. Barrow, A. R. Lemmon, and E. M. Lemmon. *In prep.* A phylogeographic analysis across the disjunct distribution of the Pine Barrens Treefrog. To be submitted to *Molecular Phylogenetics and Evolution*.
- Warwick, A. R.**, H. Heape, J. Brown Clarke, S. Edwards, J. Graves, Jr., R. Kliman, L. Mead, J. Weintraub. *In prep.* Evaluating career choices and the efficacy of a conference travel award program to increase diversity in evolutionary science. To be submitted to *BioScience*.
- Hagey, T. J., **A. R. Warwick**, , L. S. Mead. *In prep.* Classroom activity modeling the evolution of a trait in a population. To be submitted to *Evolution Education and Outreach*.
- Solomon-Lane, T., **A. R. Warwick**, T. J. Hagey, H. A. Hofmann. *In prep.* Professional development through public engagement: integrating skills and experience in to the STEM curriculum. To be submitted to *Science Communication*.
- Warwick, A. R.**, L. S. Mead, P. J. T. White, F. Reischman, K. McElroy-Brown, P. Horowitz, J. Smith. *In prep.* Using high school students' initial perceptions of evolution across biological levels to inform NGSS curriculum development. To be submitted to *Evolution Education and Outreach*.

INVITED TALKS AND WORKSHOPS

- Warwick, A. R.**, X. Sá Pinto, H. Dufour. 2018. Undergraduate Evolution Education Workshop: Improving Your Fitness in the Classroom. II Joint Congress on Evolutionary Biology, Montpellier, France.
- 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. Kjelvik. 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)

- 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.
- 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

2017	Co-instructor. "Evolution." Drs. Louise Mead and Travis Hagey. Department of Integrative Biology, MSU.
2017	Guest lecturer. "Integrating Biology: From DNA to Populations." Dr. Louise Mead. Department of Integrative Biology, MSU.
2013, 2015	Teaching Assistant (TA). "Evolution." Drs. Joseph Travis and Scott Stepan.

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.

TEACHING AND EDUCATION RESEARCH TRAINING

- 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.

PUBLIC ENGAGEMENT EXPERIENCE

- 2018 Presenter, Data Nuggets Workshop, Johannes Gutenberg University, Germany
 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
 2016–2018 Co-organizer, Public Engagement Workshop Series at MSU and University of Texas
 2017 Presenter, Great Lakes Science Boot Camp, East Lansing, MI
 2017 Presenter, Data Nuggets Workshop, Van Andel Institute, Grand Rapids, 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, Florida
- 2010 Presenter, Career Day, Rickards High School, Tallahassee, FL

PUBLIC ENGAGEMENT TRAINING

- 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”

PROFESSIONAL SOCIETY MEMBERSHIPS

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| 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 Association for Research in Science Teaching | |
| Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) | |

OTHER PROFESSIONAL SERVICE

- 2018–*present* Postdoc co-representative, MSU Department of Integrative Biology
- 2017–*present* Member, Education and Outreach Committee, Society for the Study of Evolution
- 2016– *present* Co-organizer, Ecology/Evolution events at SACNAS National Conference
- 2016– *present* Contributor, BEACON Center Blog
- 2016–2018 Reviewer, BEACON Center internal grant proposals
- 2016– *present* 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* and *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

OTHER SKILLS

Languages: English (native); Spanish (near fluent); Portuguese (intermediate); French (beginner)

Software: Qualtrics; JMP Pro, R, SPSS; ArcGIS; Raven Pro; Geneious; Wordpress, Weebly; Skype, Zoom, Slack; MS Word, Excel, Powerpoint; Adobe Acrobat Pro, Photoshop, Lightroom, Illustrator; Google Drive, Dropbox; Blackboard, D2L, Moodle, Canvas

Evaluation techniques: Surveys and interviews (mailed, online, in-person and phone), focus groups, participant/classroom observation (RTOP)

Molecular lab techniques: DNA extraction, sequencing, genotyping and marker development

Field techniques: Elastomer tagging for mark-recapture of amphibians and fish; cover boards, drift fences, and pitfall traps to collect amphibians; collecting tissue and blood samples from animals and preparing voucher specimens of amphibians