

Curriculum Vitae

CHRISTOPHER THOMAS GRIFFIN
DEPARTMENT OF EARTH AND PLANETARY SCIENCES

Yale University
210 Whitney Ave.
New Haven CT 06511
Phone: +1 (530) 217-9516
E-mail: chris.griffin@yale.edu
www.ctgriffin.wixsite.com/site

Current Position

Postdoctoral Associate (July 2020–present)
Yale University, Department of Earth and Planetary Sciences

Education

Virginia Tech, Blacksburg, VA, USA
Ph.D. in Geosciences (2020)
M.S. in Geosciences (2016)

Cedarville University, Cedarville, OH, USA
B.S. in Biology, Geology, and Molecular & Cellular Biology, with highest honor (2014)

External Grants and Fellowships

Total amount of competitive funding offered: \$618,382.74 (USD)

Total amount of competitive funding received: \$364,442 (USD)

- 2020** **COVID-19 Grant Support**
National Geographic Society, \$3,350 (co-principal investigator)
- Postdoctoral Research Fellowship in Biology (NSF PRFB)**
National Science Foundation, \$138,000.
- Marie Skłodowska-Curie Actions Individual Fellowship**
European Commission Research Executive Agency, 212,933.76 €. Review score 98.20/100. *Declined.*
- 2019** **Arthur J. Boucot Student Research Award**
Paleontological Society, \$1,200
- Jackson School of Geosciences Student Travel Grant**
Society of Vertebrate Paleontology, \$600
- Young Researcher Travel Grant for Evolutionary Developmental Biology**
Developmental Dynamics, \$500
- 2018** **Exploration Grant**
National Geographic Society, \$27,390 (co-principal investigator)
- 2017** **Graduate Student Research Grant**
Geological Society of America, \$1,755
- Early Career Grant**
National Geographic Society, \$4,980
- 2015** **Graduate Research Fellowship Program (NSF GRFP)**
National Science Foundation, \$132,000
- Graduate Student Research Grant**
Geological Society of America, \$1,607

- 2014 Research Grant**
Jurassic Foundation, \$2,356

Internal Competitive Research Grants

- 2018 Graduate Research Development Program Grant**
Virginia Tech Graduate Student Assembly, \$1,000
- 2017 Graduate Research Development Program Grant**
Virginia Tech Graduate Student Assembly, \$1,000
- 2015 Graduate Research Development Program Grant**
Virginia Tech Graduate Student Assembly, \$500

Awards, Scholarships, and Honors

- 2020 College of Science Outstanding Doctoral Student**
Virginia Tech
- Best Talk in Session—Graduate Student Research Symposium**
Virginia Tech Department of Geosciences
- Graduate School Doctoral Assistantship**
VT Department of Geosciences, VT Graduate School (declined)
- 2019 Charles J. Gose Jr. Summer Scholarship**
VT Department of Geosciences
- Petroleum Industry Research Scholarship**
VT Department of Geosciences
- Best Up-Goer Five Talk— Graduate Student Research Symposium**
Virginia Tech Department of Geosciences
- Best Talk in Session—Graduate Student Research Symposium**
Virginia Tech Department of Geosciences
- Charlotte Mangum Student Support Program**
Society for Integrative and Comparative Biology
- Graduate Student Assembly Travel Fund**
VT Graduate Student Assembly
- 2018 Charlotte Mangum Student Support Program**
Society for Integrative and Comparative Biology
- 2017 Colbert Prize for Outstanding Student Poster Presentation**
Society of Vertebrate Paleontology Annual Meeting
- Taylor & Francis Award for Best Student Article in the *Journal of Vertebrate Paleontology*, 2nd Place**
Society of Vertebrate Paleontology
- Travel Grant**
International Symposium on Paleohistology
- Travel Grant**
Last Days of Pangea Symposium
- 2016 Department Outstanding Master's Student**
VT Department of Geosciences
- College of Science Outstanding Master's Student**
Virginia Tech
- Graduate Student Assembly Travel Fund**
Virginia Tech
- 2015 Graduate Student Assembly Travel Fund**

- VT Graduate Student Assembly
Charles E. and Frances P. Sears Research Scholarship
 VT Department of Geosciences
Charles E. and Frances P. Sears Summer Scholarship
 VT Department of Geosciences
- 2014** **Graduate Student Assembly Travel Fund**
 Virginia Tech
CCCU Tuition Waiver
 2010-2014, Cedarville University
Transfer Academic Excellence Award
 2010-2014, Cedarville University
Transfer Academic Grant
 2010-2014, Cedarville University
Dean's List
 2010-2014, Cedarville University
- 2013** **BIO-OCE REU Travel Scholarship**
 National Science Foundation
Alumni Honor Scholarship for Science and Mathematics
 Cedarville University
- 2012** **L. Bert Frye Geology Award**
 Cedarville University
Academic Excellence Geology Award
 Cedarville University

Research Interests

- The relationship between evolution and development
- Intraspecific variation
- Evolutionary radiations and post-extinction ecological recovery
- Homology and mechanisms of convergent evolution

Peer-Reviewed Publications

Total citations: 133; **h-index:** 5 (Google Scholar); † = mentored undergraduate

- 11) **Griffin, C. T.** and S. J. Nesbitt. 2020. Does the maximum body size of theropods increase across the Triassic–Jurassic boundary? Integrating ontogeny, phylogeny, and body size. *The Anatomical Record* 303: 1158–1169.
- 10) **Griffin, C. T.** 2019. Large neotheropods from the Upper Triassic of North America and the early evolution of large theropod body sizes. *Journal of Paleontology* 93: 1010–1030. *Selected by Cambridge University Press for waived open access fee on account of scientific merit and high impact potential.*
- 9) **Griffin, C. T.** and K. D. Angielczyk. 2019. The evolution of the dicynodont sacrum: constraint and innovation in the synapsid axial column. *Paleobiology* 45: 201–220.
- 8) **Griffin, C. T.**, L. S. Bano†, A. H. Turner, N. D. Smith, R. B. Irmis, S. J. Nesbitt. 2019. Integrating gross morphology and bone histology to assess skeletal maturity in early dinosauromorphs: new insights from *Dromomeron* (Archosauria: Dinosauroomorpha). *PeerJ* 7: e6331.

- 7) **Griffin, C. T.** 2018. Pathological bone tissue in a Late Triassic neotheropod fibula, with implications for the interpretation of medullary bone. *New Jersey State Museum Investigations* 6: 2–10.
- 6) McLain, M., D. Nelsen, K. Snyder, **C. T. Griffin**, B. Siviero, L. Brand, A. Chadwick. 2018. Tyrannosaur cannibalism: A case of a tooth-traced tyrannosaurid bone in the Lance Formation (Maastrichtian), Wyoming. *PALAIOS* 33: 164–173.
- 5) **Griffin, C. T.** 2018. Developmental patterns and variation among early theropods. *Journal of Anatomy* 232: 604–640.
- 4) **Griffin, C. T.**, C. M. Stefanic, W. G. Parker, A. Hungerbuehler, M. Stocker. 2017. Sacral anatomy of the phytosaur *Smilosuchus adamanensis*, with implications for pelvic girdle evolution among Archosauriformes. *Journal of Anatomy* 231:886–905. doi:10.1111/joa.12681.
- 3) **Griffin, C. T.** and S. J. Nesbitt. 2016. Anomalously high variation in postnatal development is ancestral for dinosaurs but absent in birds. *Proceedings of the National Academy of Sciences, USA* 113: 14757-14762. doi:10.1073/pnas.1613813113.
- 2) Kuruwilla, H., B. Schmidt, S. Song, M. Bhajjan, M. Meral, C. Alley, **C. Griffin**, D. Yoder, J. Hein, D. Kohl, C. Puffenberger, D. Petroff, E. Newcomer, K. Good, G. Heston, A. Hurtubise. 2016. Netrin-1 peptide is a chemorepellent in *Tetrahymena thermophila*. *International Journal of Peptides* 2016: 7142868. doi: 10.1155/2016/7142868
- 1) **Griffin, C. T.** and S. J. Nesbitt. 2016. The histology and femoral ontogeny of the Middle Triassic (?late Anisian) dinosauriform *Asilisaurus kongwe* and implications for the growth of early dinosaurs. *Journal of Vertebrate Paleontology* 36: e1111224. **Winner of Taylor & Francis Award for Best Student Article in the Journal of Vertebrate Paleontology, 2nd Place**

Invited Talks

- February 2020, DeFord Lecture Seminar Series, Jackson School of Geosciences, University of Texas at Austin.
- July 2019, International Congress on Vertebrate Morphology symposium: *The axial skeleton: diversity, patterning, and function*, Prague, Czech Republic—“The evolution of the avian sacrum, and the transition from tail- to hip-centered locomotion during the evolution of birds”.
- June 2019, St. John’s College, Harare, Zimbabwe, and the Natural History Museum of Zimbabwe, Bulawayo, Zimbabwe—“Zimbabwe’s Key Role in Understanding the Origin of Dinosaurs”.
- April 2019, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil—“Linking Brazil and Africa: an exceptional new Late Triassic (Carnian) fossil assemblage from Zimbabwe and Africa’s oldest definitive dinosaur”.
- August 2017, Natural History Museum of Zimbabwe, Bulawayo—“Museum Collections, Expeditions, and One of Africa’s Oldest Dinosaurs”.
- July 2017, American Emu Association Annual Meeting, Springfield, MO—“Using Emus to Understand the Dinosaur-to-Bird Transition”.
- May 2015, Natural History Museum of Zimbabwe, Bulawayo—“The Dinosaurs of Zimbabwe”.

Conference Presentations

* = podium presentation, ° = poster presentation, † = mentored undergraduate

- 27) ***Griffin, C. T.** 2020. ‘Recapitulation’ of ancestral states across the early ontogeny in the avian pelvis is driven by persistent modularity in the archosaurian hindlimb. Society of Vertebrate Paleontology Annual Meeting. *Selected for the Romer Prize Session for best student oral presentation.*
- 26) *Tsai, H. P., and **C. T. Griffin.** 2020. The cartilaginous hips of Diplodocoidea: functional implications for highly specialized locomotor behaviors among sauropods. Society of Vertebrate Paleontology Annual Meeting.
- 25) °**Griffin, C. T.**, and M. S. Stocker. 2020. “How do you know where to dig?”: Using a student-driven experiential learning activity to reach hypothesis-based fieldwork in a large general education university course. Society of Vertebrate Paleontology Annual Meeting.
- 24) *Tsai, H. P., and **C. T. Griffin.** 2019. The cartilaginous hips of Diplodocoidea: functional implications for highly specialized locomotor behaviors among sauropods. Society for Integrative and Comparative Biology Annual Meeting, Austin, TX.
- 23) ***Griffin, C. T.**, J. Botelho, M. Hanson, M. Fabbri, S. J. Nesbitt, B.-A. Bhullar. 2019. The avian pelvis possesses ancestral dinosaurian and archosaurian character states early in ontogeny. Society of Vertebrate Paleontology Annual Meeting, Brisbane, Australia.
- 22) *Colbert, M. W. and **C. T. Griffin.** Sample size artifacts in paleontological analyses of ontogenetic sequences. Society of Vertebrate Paleontology Annual Meeting, Brisbane, Australia.
- 21) ***Griffin, C. T.**, J. Botelho, M. Hanson, M. Fabbri, S. J. Nesbitt, B.-A. Bhullar. 2019. The evolution of the avian sacrum, and the transition from tail- to hip-centered locomotion during the evolution of birds. International Congress of Vertebrate Morphology, Prague, Czech Republic. *Invited as part of the symposium “The axial skeleton: diversity, patterning, and function”*
- 20) *Nesbitt S.J., **C. T. Griffin**, R. T. Muller, C. Pacheco, F. Preto, D. E. Barta, A. Marsh, B. M. Wynd, M. Langer, K. Chapelle. 2019. Dinosaurs inherited highly variable and extended ontogenetic pathways from their closest relatives and subsequently lost this pattern. International Congress of Vertebrate Morphology, Prague, Czech Republic.
- 19) °**Griffin, C.**, J. Botelho, M. Hanson, M. Fabbri, B.-A. Bhullar. 2019. The avian pelvis possesses ancestral dinosaurian character states early in development. Society of Integrative and Comparative Biology Annual Meeting, Tampa, FL.
- 18) °Taruvinga†, H., B. Wynd, S. Tolan, **C. T. Griffin.** 2018. A *Luangwa*-like cynodont from Northern Zimbabwe and endemism across the Carnian of Southern Africa. Society of Vertebrate Paleontology Annual Meeting, Albuquerque, NM. *Winner of the Scientists from Economically Developing Nations Award.*
- 17) ***Griffin, C. T.**, D. Munyikwa, T. J. Broderick, S. Tolan, M. Zondo, S. J. Nesbitt, H. Taruvinga. 2018. An exceptional new Late Triassic (Carnian) fossil assemblage from Zimbabwe and the biogeography of the earliest dinosaurs across Pangea. Society of Vertebrate Paleontology Annual Meeting, Albuquerque, NM.

- 16) *Nesbitt, S. J., **C. T. Griffin**, E. Evans, R. T. Mueller, C. Pacheco, F. Preto, S. Cabreira, A. Marsh, B. M. Wynd, M. Langer. 2018. Prevalent ontogenetic changes characterize early dinosaurs and their closest relatives: implications for species identification, phylogeny, and the loss of these changes in later dinosaurs. Society of Vertebrate Paleontology Annual Meeting, Albuquerque, NM.
- 15) °Evans, E. L., **C. T. Griffin**, N. Smith, A. H. Turner, R. B. Irmis, S. J. Nesbitt. 2018. Ontogenetic changes in the femur of *Tawa hallae* and implications for species diversity of Late Triassic dinosaurs. Society of Vertebrate Paleontology Annual Meeting, Albuquerque, NM.
- 14) ***Griffin, C.** and K. Angielczyk. 2018. The evolution of the dicynodont sacrum, and constraint on the axial column in crown Mammalia. Society of Integrative and Comparative Biology Annual Meeting, San Francisco, CA.
- 13) °**Griffin, C. T.** and K. D. Angielczyk. 2017. The evolution of the dicynodont sacrum, with implications for evolutionary constraint in the vertebral column of Mammalia. Society of Vertebrate Paleontology Annual Meeting, Calgary, Alberta. ***Winner of the Colbert Prize for Outstanding Student Poster Presentation.***
- 12) °**Griffin, C. T.** 2017. Pathological bone tissue in a Late Triassic theropod fibula, with implications for the interpretation of medullary bone. 4th International Symposium on Paleohistology, Trenton, NJ.
- 11) ***Griffin, C. T.** and S. J. Nesbitt. 2017. Does the maximum body size of theropod dinosaurs increase across the Triassic-Jurassic boundary? Integrating ontogeny, phylogeny, and body size. Last Days of Pangea Triassic-Jurassic Research Symposium, Greenwich, CT.
- 10) ***Griffin, C. T.** and S. J. Nesbitt. 2016. Anomalously high intraspecific variation in ontogeny is the ancestral dinosaurian growth condition. Society of Vertebrate Paleontology Annual Meeting, Salt Lake City, UT.
- 9) ***Griffin, C. T.** and S. J. Nesbitt. 2016. Intraspecific variation and the evolution of the ancestral dinosaurian growth condition. 11th International Congress of Vertebrate Morphology, Washington, D.C.
- 8) °Bano†, L. and **C. T. Griffin**. 2016. Integration of histology and morphology to assess the skeletal maturity of early-diverging dinosauromorphs. 11th International Congress of Vertebrate Morphology, Washington, D.C.
- 7) ***Griffin, C. T.** and S. J. Nesbitt. 2016. The evolution of intraspecific variation in growth patterns among early dinosaurs and their relatives. Southeastern Association of Vertebrate Paleontology annual meeting, Martinsville, VA.
- 6) ***Griffin, C. T.** and S. J. Nesbitt. 2015. Does the maximum body size of theropod dinosaurs increase across the Triassic-Jurassic boundary? Integrating phylogeny, growth, and body size. Society of Vertebrate Paleontology Annual Meeting, Dallas, TX.
- 5) ***Griffin, C. T.** and S. J. Nesbitt. 2015. Does the maximum body size of theropod dinosaurs increase across the Triassic-Jurassic boundary? Using ontogeny and phylogeny to understand transitions in Earth history. Geological Society of America Annual Meeting, Baltimore, MD.

- 4) °Bano†, L. and **C. T. Griffin**. 2015. Integrating histology and morphology to assess the skeletal maturity of early-diverging dinosauromorphs. Geological Society of America Annual Meeting, Baltimore, MD.
- 3) °**Griffin, C. T.** and S. J. Nesbitt. 2014. The histology and femoral ontogeny of the Middle Triassic (?late Anisian) dinosauriform *Asilisaurus kongwe* and implications for the growth of early dinosaurs. Society of Vertebrate Paleontology Annual Meeting, Berlin, Germany.
- 2) ***Griffin, C. T.** and S. J. Nesbitt. 2013. How to grow a dinosaur: the histology and femoral ontogeny of the Middle Triassic (?late Anisian) dinosauriform *Asilisaurus kongwe* and implications for the growth of early dinosaurs. Geological Society of America Abstracts with Programs 45:474.
- 1) °McKevitt, D. J., **C.T. Griffin**, R. T. Gustafson, and J. H. Whitmore. 2013. Glacial outflow origin of Massie Creek Gorge, Greene County Ohio. Geological Society of America Abstracts with Programs 45:378.

Research Experience

Graduate

- Visiting Researcher, Department of Geology and Geophysics, Yale University. Faculty advisor: Bhart-Anjan Bhullar. Fall semester, 2017.
- Member of the Paleobiology and Geobiology Research Group, Department of Geosciences, Virginia Tech. 2014-2020 (anticipated).

Undergraduate

- NSF REU research intern, Geology Department, Field Museum of Natural History, Chicago, IL. 2013.
 - Project: The histology and ontogeny of the dinosauriform *Asilisaurus kongwe*. Advisor: Sterling Nesbitt
- Independent research, Department of Science and Mathematics, Cedarville University, Cedarville OH. Funded by the Department of Science and Mathematics, Cedarville University.
 - The molecular paleontology and immunoreactivity of dinosaur osteocytes. 2013. Advisors: John Whitmore and Alicia Schaffner
 - The origin and geomorphology of gorges in southwest Ohio. 2012. Advisor: John Whitmore
- Research assistant, Department of Science and Mathematics, Cedarville University, Cedarville, OH.
 - The effect of vertebrate neuronal chemorepellents Semaphorin 3C and Netrin-1 on *Tetrahymena thermophila*. 2013. Advisor: Heather Kuruvilla
 - Geochemistry of dolomite formation. 2011. Advisor: Aaron Hutchison

Field Experience

Principal investigator:

2019 Mashonaland Central, Zimbabwe

2017 Mashonaland West and Mashonaland Central, Zimbabwe

Participant:

- 2018** Apache County and Petrified Forest National Park, Arizona
- 2015** Fremont County, Wyoming
Ghost Ranch, New Mexico
Apache County, Arizona
Anton Chico, New Mexico
- 2014** Ghost Ranch, New Mexico
Geology Field Course, Southern Utah University

Teaching Experience

Virginia Tech

Graduate Teaching Assistant:

- GEOS-4244/5244 Morphology of the Vertebrates/Advanced Vertebrate Morphology (Spring 2020; Student Perception of Teaching score: 5.9/6)
- BIOL-1115 Principles of Biology (Fall 2019; Student Perception of Teaching score: 5.8/6)
- GEOS-1104 Physical Geology (Fall 2015; Student Perception of Teaching score: 5.8/6)
- GEOS-1014 The Earth and Life Through Time (Fall 2014; Student Perception of Teaching scores: 5.5/6; 5.6/6)

Presented guest lectures:

- GEOS-1054 Age of Dinosaurs (Fall 2019)

Graduate student mentor

- BIOL-5174 NSF GRFP Preparation (Fall 2018; Fall 2019)

Cedarville University

Presented guest lectures:

- GSCI 1010 Principles of Earth Science
- GEOL 1120 Historical Geology
- GEOL 3200 Invertebrate Paleontology
- GEOL 4200 Sedimentology and Stratigraphy

Teaching assistant/tutor:

- GSCI 1010 Principles of Earth Science
- GEOL 3300 Petrology
- CHEM 3510 Organic Chemistry

Undergraduate Mentoring

- Kayla Blatman—VT Class of 2020 (B.S. Animal and Poultry Science), continued to veterinary program at the Virginia-Maryland College of Veterinary Medicine, Virginia Tech.
- Hazel Taruvinga—continuing education at Great Zimbabwe University, Masvingo, Zimbabwe.
- Lauren Bano—VT Class of 2019 (B.S. Biology), continued to physician assistant program at Stony Brook University, Stony Brook, New York.

Outreach

- Virginia Science Festival–Department of Geosciences Paleontology Lab (September 2014–2016, 2019; 6,000 attendees from >6 school systems)
- Virginia Tech Paleo Public Unwrapping Party (August 2015; August 2017; September 2018; October 2019)
- Science outreach to kindergarten classes, St. Anne’s Day School, Salem VA (2019)
- This & That Educational Summer Camp outreach, Lyric Theatre, Blacksburg VA (2018)
- Jurassic World II opening night education display, Frank’s Cinebowl, Blacksburg VA (2018)
- Kindergarten 2 College (5th grade) paleontology lab tour (2017)
- Virginia Tech Museum of Geoscience GeoFair (2016)
- Living Library science outreach volunteer, Blacksburg Public Library (2016)
- Public Lecture, “When did the carnivorous dinosaurs first become giants?”, VT Museum of Geosciences (2015)
- Virginia Tech Museum of Geoscience display design (Fall 2015)
- Science outreach talks to middle school and junior high school students, Redding, CA (2012-2014)
- Volunteer tutor for high school and college students in Algebra, Biology, and Geology (2010-2012)
- Volunteer, 7th Grade Ecology Camp, Redding CA (May 2014)

Media Experience

- “The Rise of Meat-Eating Dinosaurs Is More Complicated Than We Thought.” Smithsonian Magazine, 5/11/2020. <https://www.smithsonianmag.com/science-nature/meat-eating-dinosaurs-carnivorous-180974525/>
- “Printing the Past.” Documentary short, A Million Bones of Stone, Horse Archer Productions, 2/26/2020. https://www.youtube.com/watch?v=AA_CZUI3vew&t=34s
- “Making prehistoric discoveries globally available one bone at a time.” VT News, 1/13/2020. <https://vtnews.vt.edu/articles/2020/01/univlib-3Dscans-dinosaurbones.html>
- “Bringing Fossils Back to Life.” 3D film, Moss Arts Center, Virginia Tech, 10/2018.
- “Virginia Tech geoscientists size-up early dinosaurs, find surprising variation.” VT News, 12/7/2016. <https://vtnews.vt.edu/articles/2016/12/120616-fralin-dinosaurusize.html>
- Featured in *NSF Science Now* episode 43, 5/13/2016. <https://science360.gov/obj/video/97a7696e-afd1-48c4-9254-32b79b3a85d4/nsf-science-now-episode-43>
- “Bone scars’ reveal varied growth in dinosaur cousins.” Fox News, 4/6/2016. <http://www.foxnews.com/science/2016/04/06/bone-scars-reveal-varied-growth-dinosaur-cousins.html>
- “240-million-year-old fossils provide new insight into how dinosaurs grew from hatchling to adult.” VT News, 4/4/2016. <https://vtnews.vt.edu/articles/2016/04/science-AsilisauruskongweGriffin.html>

Professional Service

- Journal Peer Reviewer
 - *Acta Palaeontologica Polonica* (2)
 - *Anais da Academia Brasileira de Ciências* (1)
 - *Journal of Vertebrate Paleontology* (2)
 - *Papers in Palaeontology* (1)

- *Scientific Reports* (1)
- *PeerJ* (1)
- *Geological Magazine* (1)
- *Palaeontology* (1)

- Grant Peer Reviewer
 - National Science Centre [Narodowe Centrum Nauki], Poland (3)
 - National Geographic Society, Early Career Grant (5, Fall 2019 cycle)

- Session Chair
 - “Technical Session I: Dinosaurs”, Society of Vertebrate Paleontology Annual Meeting, Albuquerque, New Mexico (2018)
 - “Technical Session XV: Sauropods, etc.”, Society of Vertebrate Paleontology Annual Meeting, Salt Lake City, Utah (2016)
 - “Paleontology 3”, 11th International Congress of Vertebrate Morphology, Washington, D.C. (2016)

- Departmental Service
 - Graduate student representative, VT Department of Geosciences faculty meetings (2019-2020)
 - Liaison Committee, VT Paleobiology Research Group representative (2018-2019)

- Professional Society Service
 - Award committee, Jon C. Graff International Paleontology Award, Society of Vertebrate Paleontology (2020-present)

Professional Training

- ComSciCom Virginia Tech: Inclusion, Diversity, and Accessibility in Science Communication: 2020, Virginia Tech Center for Communicating Science
- Pedagogy in the Sciences (FIW 6004): 2018, Virginia Tech Department of Fish and Wildlife Conservation
- Mentoring Undergraduates Workshop: 2016, Virginia Tech Office of Undergraduate Research
- REU Phylogenetics Workshop Series: 2013, The Field Museum of Natural History, Chicago