Brendan Matthew Anderson, Ph.D.

Postdoctoral Researcher NSF 2225014 Paleontological Research Institution Ithaca, NY

Previous Affiliations:

Baylor University Department of Geosciences 07/2020-12/2022

Postdoctoral Researcher

University of Mary Hardin-Baylor Department of Chemistry, 08/2021-12/2021

Environmental Science, and Geology

Adjunct Professor of Geology

West Virginia University Department of Geology and Geography 01/2019-06/2020

Postdoctoral Researcher Adjunct Professor

Education:

Cornell University, Ithaca, NY 08/2013-08/2018

Ph.D. degree in Geology, concentrating in paleontology

Advisor: Warren D. Allmon

Thesis: The evolution of unusual shell morphologies in fossil and living Turritellidae (Gastropoda)

University of Kansas, Lawrence, KS

M.S. degree in Geology, concentrating in paleontology

Advisor: Alison Olcott Marshall

Thesis: Viewing paleontology through a geochemical lens: 2 case studies

Dartmouth College, Hanover, NH

09/2005-06/2009

08/2011-08/2013

B.A. Biological Sciences, concentrating in paleobiology, and Religion, concentrating in Philosophy of Religion (Double). Earth Sciences minor.

Graduated with High Honors in Biology

Advisor: Kevin J. Peterson

Thesis: Affinity for open-ocean facing habitats: A potential bias against the preservation of Modern Faunal

elements in the Paleozoic

Research Interests:

My general interests are in macroevolution and diversity and the influence of geologic processes on both. I am a Paleobiologist whose work has always been cross-disciplinary, at the intersection of evolution and isotopic paleoclimate data. I work with a wide range of techniques including genetic sequencing, geochemical techniques (e.g., stable isotope sclerochronology, Raman spectroscopy, XRD), SEM and nano-CT imaging, and traditional paleoecological techniques to answer a variety of paleobiological questions, especially within phylogenetic paleoecology.

My doctoral research focused on Neogene gastropods, specifically the evolution of the uncoiled *Vermicularia* within the Turritellidae. I am interested in the patterns of evolution and diversity dynamics exhibited by this group as the closure of the Central American Seaway impacted the environment in the Caribbean and isolated Pacific and Atlantic populations. This research included constructing a molecular phylogeny of Turritellidae, a combined morphological and molecular phylogeny of fossil and extant *Vermicularia* and evaluating the ontogeny of these species using oxygen isotopic sclerochronology to study their evolution. I continue to explore how changes in the abiotic environment influence molluscan evolution, especially using stable isotope data to characterize both environmental conditions and species' lifespans and growth rates.

Macroevolutionary trends towards repeated evolution of features through convergence, parallelism, or as spandrels of selected features are an additional theme of my research. The present focus of my research is on the influence of climate on gastropod growth rates and lifespan both globally and in specific phylogenetic contexts.

Publications:

U designates undergraduate co-author. *Indicates corresponding author, if not first author.

- **17.** Friend, D.S., **Anderson, B.M.,** Altier, E., Sang, S., Petsios, E., Portell, R.W., and Allmon, W.D. *in press.* Systematics and phylogeny of Plio-Pleistocene species of Turritellidae (Gastropoda) from Florida and the Atlantic coastal plain. *Bulletin of American Paleontology*.
- **16. Anderson, B.M.** and Allmon, W.D. *in revision*. Phylogeny and systematics of fossil and Recent *Vermicularia* (Caenogastropoda: Turritellidae). *Zootaxa*
- **15.** Pietsch, C., Gigliotti, M.^U, **Anderson, B.M.**, and Allmon, W.D. *in press*. Patterns and processes in the history of body size in turritelline gastropods, Jurassic-to-Recent. *Paleobiology*.
- **14.** Friend, D.S., **Anderson, B.M.**, and Allmon, W.D. *accepted*. The hollow newel state in gastropods: When snails are open-axis. *Journal of Molluscan Studies*.
- **13.** Anderson, B.M., Herleman, K.C., Ebey, C., and Haas, D. 2022. Consider the following: A pilot study of the effects of an educational television program on viewer perceptions of anthropogenic climate change and ocean acidification. *Journal of Geoscience Education*. 70: 437-459. DOI: 10.1080/10899995.2021.1949693
- **12.** Friend, D.S., **Anderson, B.M.**, and Allmon, W.D. 2021. Geographic contingency, not species sorting, dominates macroevolutionary dynamics in an extinct clade of neogastropods (*Volutispina*; Volutidae). *Paleobiology. Phylogenetic Paleoecology special issue*. 47: 236-250. DOI: 10.1017/pab.2020.60.
- **11.** Pietsch, C., **Anderson, B.M.**, Maistros, L.M., Paladino, E.^U, and Allmon, W.D. 2021. Convergent and parallel evolution of extreme parietal callusing in diverse Cenozoic gastropod clades. *Paleobiology. Phylogenetic Paleoecology special issue*. 47: 337-362. DOI: 10.1017/pab.2020.33

- **10.** Shin, C.P., Allmon, W.D., **Anderson, B.M.**, Kelly, B.T., Hiscock, K., and Shin, P.K.S. 2020. Distribution and abundance of turritelline gastropods (Cerithioida: Turritellidae) in Hong Kong: Implications for a characteristic fossil assemblage. *Journal of the marine biological association of the United Kingdom*. DOI: 10.1017/S0025315420001204.
- 9. Scholz, S.R., Petersen, S.V., Escobar, J., Jaramillo, C., Hendy, A.J.W., Allmon, W.D., Curtis, J.H., **Anderson, B.M.**, Hoyos, N., Restrepo, J.C., and Perez, N. 2020. Isotope sclerochronology indicates enhanced precipitation seasonality in northern Colombia during the mid-Miocene climatic optimum. *Geology*. 48: 668-672 DOI: 10.1130/G47235.1
- **8.** Anderson, B.M. and Allmon, W.D. 2020. High calcification rates and inferred metabolic trade-offs in the largest turritellid gastropod, *Turritella abrupta* (Neogene). *Palaeogeography Palaeoclimatology Palaeoecology*. 544: 109623 DOI: 10.1016/j.palaeo.2020.109623.
- 7. Sang, S.^U, Friend, D.S., Allmon, W.D., and **Anderson, B.M.*** 2019. Protoconch enlargement in western Atlantic turritelline gastropod species following the closure of the Central American Seaway. *Ecology and Evolution*. 9: 5309-5323. DOI: 10.1002/ece3.5120
- **6. Anderson, B.M.** and Allmon, W.D. 2018 When domes are spandrels: On septation in turritellids and other gastropods. *Paleobiology*. 44 (3): 444-459.
- **5.** Johnson, E.H.^U, **Anderson, B.M.**, and Allmon, W.D. 2017. What can we learn from all those pieces? Obtaining data on drilling predation from fragmented high-spired gastropod shells. *Palaios*. 32 (5): 271-277.
- **4.** Anderson, B.M., Hendy, A., Johnson, E.H.^U, and Allmon, W.D. 2017. Paleoecology and paleoenvironmental implications of turritelline gastropod dominated assemblages from the Gatun Formation (Upper Miocene) of Panama. *Palaeogeography Palaeoclimatology Palaeoecology*. 470: 132-146.
- **3.** Anderson, B. M., A. Moore, G. Lewis, and W. D. Allmon. 2014. Fossils of the Western US. Pages 81-124, in: *The Teacher-Friendly Guide to the Earth Science of the Western US*, M. D. Lucas, R. M. Ross, & A. N. Swaby (eds). Paleontological Research Institution (Special Publication 47), Ithaca, NY.
- **2.** Rothschild, B.M., Martin, L.D., **Anderson, B.,** Olcott Marshall, A., and Marshall, C.P. 2013. Raman spectroscopic documentation of Oligocene bladder stone. *Naturwissenschaften* 100: 8 789-794.
- **1. Anderson, B.M.,** Pisani, D., Miller, A.I., and Peterson, K.J. 2011. The environmental affinities of marine higher taxa and possible biases in their first appearances in the fossil record. *Geology* 39: 971-974.

Presentations:

U designates undergraduate co-author.

Invited talks:

9. Anderson, B.M. 2022. Environmental and ontogenetic causes of Cenozoic gastropod macroevolution. University of Southern California Department of Earth Sciences, Los Angeles, CA.

- **8.** Anderson, B.M. 2022 Assessing mechanisms of morphological change in marine gastropods through an eco-evo-devo framework. Geological Society of America Annual Meeting, Boulder, CO. (**Keynote**-Exploring the Mechanisms of Morphological Change)
- **7. Anderson, B.M.** 2022. Snail Stories: Studying macroevolutionary processes in marine gastropods. SUNY Oswego Department of Biological Sciences, Oswego, NY.
- **6. Anderson, B.M.** 2022. Phylogenetic Paleoecology in Snails. EvoDay- Evolution in Deep Time. Cornell University Department of Ecology and Evolutionary Biology, Ithaca, NY.
- **5. Anderson, B.M.** 2022. Snail Stories: The influence of geologic change on gastropod macroevolution. Kimbell School of Geosciences, Midwestern State University, Wichita Falls, TX.
- **4. Anderson, B.M.** 2019. Paleobiological, paleoecological, and evolutionary applications of isotopic sclerochronology. Department of Geology, Colgate University, Hamilton, NY.
- **3. Anderson, B.M.** 2019. Paleoecological and evolutionary applications of isotopic sclerochronology. Department of Biology, Franciscan University of Steubenville, Steubenville, OH.
- **2.** Anderson, B.M. 2019. Stable Isotope data from an organismal perspective: Paleobiological, paleoecological, and evolutionary applications of isotopic sclerochronology. West Virginia University Department of Geology and Geography, Morgantown, WV.
- **1.** Anderson, B.M. Miller, J.W. U, Allmon, W.D. 2018. When theoretical morphology gets real: 3-D printing of idealized turritellid gastropod shells to better understand the function of sculpture and whorl shape. Geological Society of America Annual Meeting, Indianapolis, IN. (**Keynote**-Applications of 3D Printing and other 3D methods to experimental paleontology)

Conference Presentations:

- **37. Anderson, B.M.,** Petsios, E., Nesmith, S., and Friend, S. 2022. A pilot study of how evolution understanding, evolution acceptance, and perceptions of conflict between religion and evolution are affected by biology, geoscience, and science education courses at a religiously affiliated institution. Earth Educators Rendezvous, Twin Cities, MN.
- **36. Anderson, B.M.,** Petsios, E., Nesmith, S., and Friend, S. 2022. A pilot study of how evolution understanding, evolution acceptance, and perceptions of conflict between religion and evolution are affected by science classes at a religiously affiliated institution. Geological Society of America, South-Central Section Meeting, McAllen, TX (Virtual).
- **35. Anderson, B.M.**, Friend, D., Petsios, E., and Allmon, W. 2021. A comparison of sclerochronologically determined growth and lifespan data among 3 clades of co-occurring turritellid gastropods in phylogenetic context. Geological Society of America Annual Meeting, Portland, OR. doi: 10.1130/abs/2021AM-368781
- **34.** Friend, D., **Anderson, B.M.**, Allmon, W., Portell, R.W., and Altier, E. 2021. The hollow newel state in gastropods: When snails are open-axis. Geological Society of America Annual Meeting, Portland, OR. doi: 10.1130/abs/2021AM-371008

- **33.** Anderson, B.M. and Allmon, W.D. 2021. Fossil Eco-evo-devo: Identifying heterochronic mechanisms employed in the evolution of vermiform morphology in turritellid gastropods using isotopic sclerochronology. Evolution 2021 (Virtual).
- **32.** Anderson, B.M., Pietsch, C., Petsios, E., and Allmon, W.D. 2020. Leveraging paleoclimate data to evaluate the evolutionary history of growth and lifespan in the Turritellidae (Caenogastropoda): Challenges and opportunities. Geological Society of America Annual Meeting (held via GSA connects).
- **31.** Pietsch, C., **Anderson, B.M.**, Maistros, L.M., Padalino, E.C., and Allmon, W.D. 2020. Convergence, parallelism, and function of extreme parietal callus in marine gastropods. Geological Society of America Annual Meeting (held via GSA connects).
- **30.** Anderson, B.M., Lamsdell, J.C., Falk, A.R., and Congreve, C.R. 2020. Quantifying neglect of research for non-commercial marine species and the potential dangers of generalizing from limited ecological data. American Malacological Society Annual Meeting (held via zoom).
- **29.** Pietsch, C. **Anderson**, **B.M.**, Maistros, L.M., Agelvis, M. ^U, and Allmon, W.D. 2020. Convergence, parallelism, and function of extreme parietal callus in marine gastropods. Geological Society of America Cordilleran Section Meeting. (Conference cancelled due to Covid-19). Abstract available at: doi: 10.1130/abs/2020CD-347575
- **28.** Anderson, B.M., Herleman, K.C., Ebey, C. and Duggan-Haas, D. 2019. Consider the following: evaluating the effectiveness of a climate science educational television program. Geological Society of America Annual Meeting, Phoenix, AZ.
- **27.** Johnson, E.H., **Anderson, B.M.** and Allmon, W.D. 2019. An empirical test of 3D printed turritelline shells: Does differential distribution of ornamentation increase shell strength? Geological Society of America Annual Meeting, Phoenix, AZ.
- **26.** Anderson, B.M., Waldman, E.K. U, Miller, J. U, and Allmon, W.D. 2019. Applications of 3-D printing to testing functional hypotheses of turritellid gastropod shell morphologies and sculpture. North American Paleontological Convention, Riverside, CA.
- **25.** Pietsch, C. **Anderson**, **B.M.**, Maistros, L.M., Agelvis, M. ^U, and Allmon, W.D. 2019. Testing convergence and function of extreme parietal callus in marine gastropods. North American Paleontological Convention, Riverside, CA.
- **24.** Anderson, B.M., Sang, S., Friend, D.S., and Allmon, W.D. 2018. Protoconch enlargement in Western Atlantic turritelline gastropod species following the closure of the Central American Seaway. Geological Society of America Annual Meeting, Indianapolis, IN.
- **23.** Anderson, B.M. and Allmon. W.D. 2018 All power to shields: The growth and ecology of *Turritella abrupta* (Miocene), the largest, heaviest-shelled turritellid gastropod. Geological Society of America Annual Meeting, Indianapolis, IN. (Poster)
- **22.** Pietsch, C., Gigliotti, M. ^U, **Anderson**, **B.M.**, and Allmon, W.D. 2018 Patterns and processes in the history of body size in turritelline gastropods, Jurassic-to-Recent. Geological Society of America Annual Meeting, Indianapolis, IN.

- **21.** Khan, T.M. ^U, **Anderson, B.M.,** Allmon, W.D., and Stilwell, J.D. 2018. Paleoenvironmental interpretation of turritellid gastropod-dominated assemblages (TDAs) from the La Meseta Formation (Middle to Upper Eocene), Seymour Island, Antarctica. Geological Society of America Annual Meeting, Indianapolis, IN.
- **20.** Scholz, S.R., Petersen, S.V., Escobar, J., Jaramillo, C., Hendy, A., Allmon, W.D., Moreno, F., Curtis, J.H., **Anderson, B.M.**, Hoyos, N., Restrepo, J.C., and Perez, N. 2018. Isotope sclerochronology and tropical seasonality during the Mid Miocene Climatic Optimum. Goldschmidt Abstracts, Boston, MA.
- **19. Anderson, B.M.** and Allmon. W.D. 2017. Evolution and diversification of the "Vermiculariinae" (Gastropoda: Turritellidae). Geological Society of America Annual Meeting, Seattle, WA.
- **18.** Herleman, K.C., **Anderson, B.M.,** and Duggan-Haas, D. 2017. Teaching techniques in climate science television programming: Evaluating the quality of learning outcomes in "edutainment". Geological Society of America Annual Meeting, Seattle, WA.
- **17.** Pietsch, C. **Anderson**, **B.M.**, Maistros, L.M., Agelvis, M. ^U, and Allmon, W.D. 2017 Evaluating ecological function and convergent evolution of extreme parietal callus in marine gastropods. Geological Society of America Annual Meeting, Seattle, WA. (Poster)
- **16.** Khan, T.M. ^U, **Anderson, B.M.,** Allmon, W.D., and Stilwell, J.D. 2017. Paleoenvironmental interpretation of turritelline gastropod-dominated assemblages from the La Meseta Formation (Upper Eocene), Seymour Island, Antarctica. Geological Society of America Annual Meeting, Seattle, WA.
- **15.** Escobar, J.H., Hendy, A., Jaramillo, C., Petersen, S., Curtis, J., Moreno, F., **Anderson, B.**, Allmon, W., Scholz, S. 2017. Isotope sclerochronology and clumped isotopes of Miocene molluscs from the Guajira Peninsula, Colombia. XVI Congreso Colombiano de Geologia, 2017, Santa Marta, Colombia.
- **14. Anderson, B.M.** and Allmon. W.D. 2017. Turritella abrupta: The bizarre biology and ecology of the largest known turritellid gastropod. Western Society of Malacologists Annual Meeting. Los Angeles, CA.
- **13. Anderson, B.M.** and Allmon. W.D. 2016. When Domes are Spandrels: On Septation in Turritellids and Other Gastropods. Geological Society of America Annual Meeting, Denver, CO.
- **12.** Waldman, E.K. ^U, **Anderson**, **B.M**., Allmon, W.D. 2016. The Effect of Shell Morphology on Sediment Retention in Turritelline Gastropods. Geological Society of America Annual Meeting, Denver, CO. (Poster)
- **11.** Allmon, W., Khan, T.M. ^U, Escobar, J.H., Hendy, A.J.W., Stiles, E., **Anderson, B.M**. 2016. Biogeographic and Evolutionary Significance of Turritellid Gastropods from the Miocene of Northern Colombia. Geological Society of America Annual Meeting, Denver, CO. (Poster)
- **10.** Anderson, B.M. and Allmon. W.D. 2015. Multiple Forms of Heterochrony Result in Rapid Growth and Vermiform Morphology in *Vermicularia* (Turritellidae). Geological Society of America Annual Meeting, Baltimore, MD.
- **9. Anderson, B.M.** and Allmon. W.D. 2015. Septa Aren't Rare in Gastropods! Geological Society of America Annual Meeting, Baltimore, MD. (Poster)
- **8.** Johnson, E. ^U, **Anderson, B.M.** and Allmon. W.D. 2015. Applying the Theoretical Apex System and Calculating Minimum Numbers of Individuals within a Bulk Sample of Fragmented Turritelline Gastropod Shells. Geological Society of America Annual Meeting, Baltimore, MD. (Poster)

- **7.** Anderson, B.M. 2015. The interior castles of turritelline gastropods. 9th Annual Summer Symposium, Museum of the Earth, Ithaca, NY, 1 August 2015
- **6.** Anderson, B.M. and Allmon. W.D., and Hendy, A.J.W. 2014. Sclerochronological Comparison of *Turritella altilira* from Within and Without Turritelline-Dominated Assemblages in the Gatún Formation (Miocene), Panama. Geological Society of America Annual Meeting. Vancouver, Canada
- **5.** Allmon, W.D., **Anderson, B.M.**, Friend, D.S., Onofryton, K. ^U and Sang, S. ^U. 2014. Toward a phylogeny of Western Atlantic Neogene Turritelline gastropods. North American Paleontological Convention. Gainesville, FL.
- **4. Anderson, B.M.** and Olcott Marshall, A. 2013. Global geologic, biologic and geochemical influences on the formation of Phanerozoic marine *Konservat-Lagerstätten*. Paleontological Research Institution Summer Symposium. Ithaca, NY
- **3.** Anderson, B.M., and Olcott Marshall, A. 2012. A New Dataset of Phanerozoic Marine *Konservat-Lagerstätten*: Patterns in secular distribution. Geological Society of America Annual Meeting. Charlotte, NC.
- **2.** Anderson, B., Peterson, K.J., Miller, A.I. 2009. Estimating the divergence times of "missing" open-ocean taxa of the Paleozoic: A molecular clock approach. North American Paleontological Convention. Cincinnati, OH. (Poster)
- **1.** Anderson, B.M., Peterson, K.J., Miller, A.I. and Pisani, D. 2009. Estimating the divergence times of "missing" open-ocean taxa of the Paleozoic: a molecular clock approach. Sigma Xi Wetterhahn Undergraduate Science Symposium. (Poster)

Awards and Honors:

Norman Newell Early Career Grant, Paleontological Society, 2022

University Teaching Exploration Grant (education related research grant), Baylor University, 2021

Bryan Isacks Excellence in Teaching Award- Cornell Earth and Atmospheric Sciences, 2018

Cornell Sigma Xi Graduate Research Grant, 2017

GSA Student Research Grant, 2016

Cornell Graduate Research Travel Grant, 2016

GSA Student Research Grant, 2015

Paleontological Society Ellis L. Yochelson Award, 2012

1st Prize in Dartmouth's Sigma Xi/Christopher Reed competition for undergraduate science or engineering theses

Dartmouth Biology Department Christopher Reed award for Honors Thesis research

Dartmouth Religion Department Dickinson Writing Prize

James O. Freedman Presidential Scholar

Dartmouth Office of Residential Life/Class of 1989 Senior Scholar

University and Societal Service:

PhD Committee Member: Emily Hughes, West Virginia University presently serving

MS Committee Member: Sam Tybout, West Virginia University

Student degree conferred 2020

Reviewer for: Geology; Evolutionary Biology; Journal of Geoscience Education; Palaeogeography, Palaeoclimatology, Palaeoecology; Paleobiology; PLOS One; Journal of Natural History; Zootaxa

Service to Scientific Societies/Conferences

Societal Committee Service:

National Association of Geoscience Teachers, Advocacy Committee 2022-present

Paleontological Society Student Research Grants Committee 2020-present

Paleontological Society ad hoc committee on employment of Paleontologists 2021-present

Conference Session organizer:

North American Paleontological Convention:

2019

New insights into physiology and functional morphology: Microstructure, Modeling, and Experimental approaches: Brendan Anderson, Nicholas Hebdon, Carlie Pietsch, Kathleen Ritterbush

Organizational Committee Chair- PRI Summer Symposium

2014, 2016, 2017

Service to the field of Paleontology:

Paleosynthesis Project

working group on Adaptations, Innovations, and Origins (presently participating)

working group on Looking Inward and Outward (presently participating)

National Academy of Sciences, Engineering and Medicine workshop: 2021

"Identifying community-driven science themes for NSF's support of paleoclimate research"

Contributor to Spotlight on Diversity, Palaeontological Association Newsletter July, 2021

"Juggling palaeontology and caring responsibilities during Covid19"

Department Service:

Vice President- Sigma Gamma Epsilon, Alpha Chapter 2012-2013

Organizer- University of Kansas Geology Department G-Hawk Symposium 2012

Graduate Student Faculty Representative (university of Kansas Geology) 2011-2012

Professional Societies:

General Science: Sigma Xi, AAAS, Society for Advancement of Chicanos/Hispanics and Native Americans in Science

Paleobiology/Geology: Geological Society of America, Palaeontological Association, Paleontological Society, Association for Women Geoscientists, American Society of Adaptation Professionals

Evolutionary Biology: Society for the Study of Evolution, Pan-American Society for Evolutionary Developmental Biology

Malacology: American Malacological Society, Conchologists of America, Western Society of Malacologists

Science Education & Museum Professional Organizations: National Association of Geoscience Teachers, Society for the Preservation of Natural History Collections

Teaching Experience:

Adjunct professor of Geology- University of Mary Hardin-Baylor

08/2021-12/2021

Physical Geology, Instructor of Record for both lecture and lab components. I also developed the questions used to assess student learning outcomes in Geology as new assessments for Lab Science Courses were being developed during this semester.

Adjunct Professor of Geology- West Virginia University

01/2020-06/2020

Planet Earth (Introduction to physical geology), Instructor of Record. In person and adapted online delivery.

Graduate TA Development Consultant- Cornell College of Engineering

06/2016-05/2018

Graduate TA Development consultants are responsible for TA training for the College of Engineering. We develop and facilitate workshops to prepare new TAs, both undergraduate and graduate, for their roles.

TA- University of New Hampshire/Cornell: Shoals Marine Laboratory

06-07/2017

Evolution of Marine Diversity- As TA of this 4-credit course taught in 15 days I oversaw preparations and cleanup for daily laboratory and field work, graded student assignments and held office hours daily to assist students in keeping up with the fast pace of the material.

TA- Cornell University Department of Earth and Atmospheric Sciences

08/2013-05/2018

Introduction to Oceanography Lecture Coordinator 2013

Lab designer/Instructor 2014, 2015

Evolution of the Earth and Life 2014, 2017, 2018

The Earth System	Lab Instructor	2015, 2017
Earthquake!		2016
Evolution of the Earth System	Lab Instructor	2016, 2017
Paleobiology	Lab Instructor	2018

GTA- University of Kansas Geology Department

08/2011-5/2013

Geology Fundamentals Laboratory Instructor of Record 2011, 2012

Prehistoric Life: DNA to Dinos

Introduction to Geology

Earthquakes and Natural Disasters- Lead TA (of 5)

History of the Earth/ Historical Geology

McNair Scholars Program Tutor

Spring, 2012

TA- Dartmouth College Religion Department

Winter, 2009

Patterns of Religious Experience

Museum Experience:

Paleontological Research Institution and the Museum of the Earth

2013-2018

Collections: At PRI I have assisted with the curation of modern and fossil molluscan material and provided taxonomic opinions, especially for gastropods. In addition, I have experience with professional photographic equipment and software for collections digitization efforts.

Public Events: I have participated in fossil ID and outreach days and have given lectures on geologic history and evolution for the museum. I have also run an annual research symposium 3 times, assisting with the event 3 additional years.

Professional Development

Paleontological Society Workshop "How bystanders can change the conversation about social bias"	4/2022
Communicating Climate Risks in Rural Regions, Community Adaptation Learning Exchange	2/2022
CITI Program Certifications in Social & Behavioral Research	11/2021
American Society of Adaptation Professionals workshop/meeting	9/2021

Society for the preservation of natural history collections natural history education demo c	amp 6/2021	
Unlearning Racism in Geosciences (URGe) WVU Pod member	1/2021-12/2021	
State of New York Sustainability Conference (NYCSHE, Cornell, Ithaca College)	12/2020	
Increasing diversity and inclusion for underrepresented scholars in Earth Sciences:		
Addressing an urgent challenge, Board on Earth Sciences and Resources, NASEM	10/2020	
Diversity, equity, and inclusion in paleontology, PRI symposium 2020	8/2020	
Paleo Society Short Course: Teaching Paleo in the 21st Century, GSA national meeting	11/2018	
Teaching in Higher Education- Cornell University	01/2014- 05/2014	
Science Communication Workshop- Cornell University	2/28/2014-3/2/2014	