

CARRIE L. TYLER

EDUCATION

PhD Virginia Tech, Geosciences; Advisor: M. Kowalewski (2012)
MS San Diego State University, Geosciences; Advisor: L.R. Leighton (2007)

POSITIONS

2015-*present* Assistant Professor of Geology Miami University of Ohio
2014-2015 Visiting Assistant Professor of Geology, Colorado College
2012-2014 Post-Doctoral Associate, Florida Museum of Natural History

CONCURRENT APPOINTMENT

2017-*present* Assistant Professor of Ecology, Evolution, and Environmental Biology,
Miami University of Ohio

HONORS

2011 Graduate Fall Fellowship, Virginia Tech
2011 Gose Summer Fellowship, Virginia Tech
2010 Charles Edward Sears Fellowship, Virginia Tech
2010 Paleontological Society Field Course Scholarship (Gerace Research Centre, San Salvador, Bahamas)
2010 Nomination for the Philanthropic Educational Organization Scholar Award
2009 ConocoPhillips Graduate Scholarship, Virginia Tech
2009 C.G. Tillman Summer Fellowship, Virginia Tech
2008 Friday Harbor Laboratories Research Assistantship
2006 San Diego State University Equity Fellowship
2006 Friday Harbor Laboratories Fellowship
2006 Women's Association Scholarship, San Diego State University

GRANTS

National Science Foundation: Total \$841,160 [\$402,275 to PI's Institutions]

2018 *Submitted* NSF CAREER “*Identifying Ecosystem Properties Promoting Stability and Resistance: Modeling Late Ordovician Paleocommunity Dynamics and Functioning across the Richmondian Invasion*” – PI: **C.L. Tyler** (SGP-041065129) \$678,827
2016-2019 “*The Evolutionary Significance of Biotic Interactions: A Comparative Study utilizing Echinoid Associated Traces*” – PI's: **C.L. Tyler** and M. Kowalewski (SGP-1630475) \$342,595 [Collaborative proposal, \$112,573 to MU]
2016-2019 “*Mesozoic Tethyan Paleocommunity Dynamics: Modelling Complexity and Stability During Times of Biotic Escalation and Community Restructuring*” – PI's: P.D. Roopnarine and **C.L. Tyler** (SGP-1629786) \$279,103 [Collaborative proposal, \$70,240 to MU]
2011-2014 “*Higher-Taxon Fidelity: Comparative Taphonomy of Marine Benthic Associations in Holocene Depositional Systems of Coastal North Carolina*” – PI's: M. Kowalewski and **C.L. Tyler** (SGP-1053433) \$219,462

Other: \$49,172*

2018 PREP Award, Miami University – \$500
2017 PREP Award, Miami University – \$500

*Travel Grants not listed

C.L. TYLER

- 2017 Graduate School Scholar Assistantship – 1 semester of RGA
2016 Tech Fee Fund, Miami University – \$10,257
2016 Undergraduate Summer Scholar Grant – \$3,200
2016 Graduate School Scholar Assistantship – 1 semester of RGA
2015 Committee on Faculty Research Grant, Miami University – \$9,200 and RGA
2015 Collage of Arts and Sciences New Faculty Summer Research Grant, Miami University – \$5,000
2010 Lewis and Clark Field Scholar Grant – \$3,000
2010 Sigma XI Research Grant – \$800
2010 Paleontological Society Ellis L. Yochelson Award – \$750
2010 Graduate Research and Development Program Award, Virginia Tech – \$500
2010 Charles J. Gose Research Award, Virginia Tech – \$1,000
2009 Tillman Geoscience Graduate Research Award, Virginia Tech – \$500
2009 Geological Society of America Research Grant – \$2,190
2009 Institute for Applied Science and Technology Nano-scale Characterization and Fabrication Laboratory Research Grant, Virginia Tech – \$1,575
2007 Geological Society of America Research Grant – \$1,700
2007 Dry Dredgers Paul Sanders Award – \$500
2006 Lerner-Gray Fund for Marine Research, American Museum of Natural History – \$2,000
1999 Undergraduate Research Opportunities Program Grant, University of Colorado at Boulder – \$6,000

MEDIA COVERAGE

- 2018 Article featured on the cover of *PALAIOS* (October, vol. 33)
2017 Miami University ‘Top Media Stories’ “*Shellfish Graveyards offer Glimpse of Ocean’s Pristine Past*” (March 16th)
2017 Florida Museum “*Mollusk Graveyards are Time Machines to Oceans’ Pristine Past*” (March 1st)
2016 Miami University Office of the Advancement of Research and Scholarship “*Paleontologist Explores the Ecology and Evolution of Echinoids*” (November 3rd)
2016 Journal of the Geological Society Lyell pages banner feature (May 14th)
2015 Deep Sea News “*Celebrity Wax Sculptures for Snails*” (April 13th)

EDITED BOOKS [1]

1. **Tyler, C.L.**, Schneider, C.L. (Eds.), 2018. Marine Conservation Paleobiology (Topics in Geobiology). *Springer Verlag, Cham*.

PUBLICATIONS [16]

1. **Tyler, C.L.**, Molinaro, D.J., Mendonca, S., Schneider, C.L., Leighton, L.R., *In Review*. Repair Scars Preserve Decadal Patterns of Predation Intensity Despite Short-term Ecological Disturbances. *Conservation Biology*.
2. **Tyler, C.L.**, Dexter, T.A., Portell, R.W., Kowalewski, M., 2018. Predation-Facilitated Preservation of Echinoids in a Tropical Marine Environment. *PALAIOS* 33(10):478-486.

3. **Tyler, C.L.**, Kowalewski, M., 2018. Regional Surveys of Macrobenthic Shelf Invertebrate Communities in Onslow Bay, North Carolina, USA. *Scientific Data* 5:180054.
4. **Tyler, C.L.**, 2018. A Conceptual Map of Conservation Paleobiology: Visualizing a Discipline. *Marine Conservation Paleobiology*, Eds. C.L. Tyler and C.L. Schneider (Eds.), Springer Verlag, Cham, p227-254.
5. **Tyler, C.L.**, Schneider, C.L., 2018. Conservation Paleobiology: The Need for a Paleontological Perspective. *Marine Conservation Paleobiology*, C.L. Tyler and C.L. Schneider (Eds.), Springer Verlag, Cham, p1-10.
6. **Tyler, C.L.**, Kowalewski, M., 2017. Surrogate Taxa and Fossils as Reliable Proxies of Spatial Biodiversity Patterns in Marine Benthic Communities. *Proceedings of the Royal Society B: Biology*, 284:20162839.
7. Leighton, L.R., Chojnacki, C.N., Stafford, E.S., **Tyler, C.L.**, Schneider, C.L., 2016. Categorization of Shell Fragments Provides a Proxy for Environmental Energy and Predation Intensity. *Journal of the Geological Society* 173:711-715.
8. **Tyler, C.L.**, Leighton, L.R., Stafford, E.S., 2015. The Utility of Wax Replicas as a Measure of Crab Attack Frequency in the Rocky Intertidal. *Journal of the Marine Biological Association of the United Kingdom* 95(2):361-369.
9. Stafford, E.S., **Tyler, C.L.**, Leighton, L.R., 2015. Gastropod Shell Repair Tracks Predator Abundance. *Marine Ecology* 36(4): 1176-1184.
10. **Tyler, C.L.**, Kowalewski, M., 2014. The Utility of Marine Benthic Associations as a Multivariate Proxy for Paleo-Bathymetry. *PLoS One* 9(4).
11. **Tyler, C.L.**, Leighton, L.R., Kowalewski, M., 2014. The effects of Limpet Morphology on Predation by Adult Cancrid Crabs. *Journal of Experimental Marine Biology and Ecology* 451:9-15.
12. Molinaro, D.J., Stafford, E.S., Collins, B.M.J., Barclay, K.M., **Tyler, C.L.**, Leighton, L.R., 2014. Peeling out Predation: A Test of Repair Scar Frequency as a Suitable Proxy for Predation Pressure along a Modern Predation Gradient. *Palaeogeography, Palaeoclimatology, Palaeoecology* 412:141-147.
13. **Tyler, C.L.**, Leighton L.R., Carlson, S.J., Huntley, J.W., Kowalewski, M., 2013. Predation on Modern and Fossil Brachiopods: Assessing Chemical Defenses and Palatability. *PALAIOS* 28:724-735.
14. **Tyler, C.L.**, Schiffbauer, J.D., 2012. The Fidelity of Microstructural Drilling Predation Traces and Gastropod Radula Morphology: Paleoecological Applications. *PALAIOS* 27:658-666.
15. **Tyler, C.L.**, Leighton, L.R., 2011. Detecting Competition in the Fossil Record: Support for Character Displacement among Ordovician Brachiopods. *Palaeogeography, Palaeoclimatology, Palaeoecology* 307:205-217.
16. Yanes, Y., **Tyler, C.L.**, 2009. Drilling Predation Intensity and Feeding Preferences by *Nucella* (Muricidae), on Limpets Inferred from a Dead-Shell Assemblage. *PALAIOS* 24:273-279.
17. Schiffbauer, J.D., Yanes, Y., **Tyler, C.L.**, Kowalewski, M., Leighton, L.R., 2008. The Microstructural Record of Predation: A New Approach for Identifying Predatory Drill Holes. *PALAIOS* 23:810-820.

CONFERENCE ABSTRACTS [66]

1. †Farrar, L., *Graves, E., **Petsios, E., Portell, R.W., Kowalewski, M., **Tyler, C.L.**, 2018. Tracking Traces of Predation and Parasitism on Fossil Echinoids Through Geologic Time. *Miami University Graduate Research Forum*.
2. †Sorman, M., **Dineen, A.A., Roopnarine, P.D., **Tyler, C.L.**, 2018. Paleocommunity Dynamics in the Western Tethys. *Miami University Graduate Research Forum*.
3. **Tyler, C.L.**, 2018. A Conceptual Map of Conservation Paleobiology: Visualizing a Discipline. *GSA Abstracts with Programs 50(6)*.
4. **Tyler, C.L.**, Kowalewski, M., 2018. Quantifying the Fidelity of the Macro-Invertebrate Fossil Record Across Multiple Higher Taxa in Nearshore Marine Assemblages. *GSA Abstracts with Programs 50(6)*.
5. †Farrar, L., *Graves, E., **Petsios, E., Portell, R.W., Kowalewski, M., **Tyler, C.L.**, 2018. Characterizing Traces of Predation and Parasitism on Fossil Echinoids. *GSA Abstracts with Programs 50(6)*.
6. *†Kempf, H.L., †Castro, I.O., **Tyler, C.L.**, **Dineen, A.A., Roopnarine, P.D., 2018. Comparisons of Ecosystem Dynamics Before and After Invasion Reveal Consequences of Invasive Species in Benthic Marine Paleocommunities. *GSA Abstracts with Programs 50(6)*.
7. **Petsios, E., **Tyler, C.L.**, Portell, R.W., Kowalewski, M., 2018. Trends in Drilling Predation and Parasitism on Echinoids During the Mesozoic Marine Revolution. *GSA Abstracts with Programs 50(6)*.
8. †Sorman, M., **Dineen, A.A., Roopnarine, P.D., **Tyler, C.L.**, 2018. Paleocommunity Dynamics in the Western Tethys. *GSA Abstracts with Programs 50(6)*.
9. Tennakoon, S., Portell, R.W., Kowalewski, M., **Petsios, E., **Tyler, C.L.**, 2018. Morphometric Analysis of Cenozoic Cassid Snails (Mollusca: Gastropoda). *GSA Abstracts with Programs 50(6)*.
10. **Dineen, A.A., Roopnarine, P.D., †Sorman, M., **Tyler, C.L.**, 2018. Marine Mesozoic Revolution (MMR): Community Structure During a Time of Biotic Escalation and Evolutionary Diversification. *GSA Abstracts with Programs 50(6)*.
11. **Tyler, C.L.**, *†Kempf, H.L., †Castro, I.O., **Dineen, A.A., Roopnarine, P.D., 2018. Ecosystem Dynamics and the Consequences of Invasive Species. *5th International Palaeontological Congress*.
12. †Farrar, L., *Graves, E., **Petsios, E., Portell, R.W., **Tyler, C.L.**, Kowalewski, M., 2018. Characterizing Traces of Predation and Parasitism on Fossil Echinoids. *5th International Palaeontological Congress*.
13. **Dineen, A.A., **Tyler, C.L.**, Roopnarine, P.D., 2018. Complexity and Stability of Marine Paleocommunities During Escalation and Restructuring. *5th International Palaeontological Congress*.
14. †Sorman, M., **Dineen, A.A., Roopnarine, P.D., **Tyler, C.L.**, 2018. Paleocommunity Dynamics in the Western Tethys Following the End-Triassic Extinction. *5th International Palaeontological Congress*.
15. **Petsios, E., **Tyler, C.L.**, Portell, R.W., Kowalewski, M., 2018. Trends in Drilling Predation and Parasitism on Echinoids During the Mesozoic Marine Revolution. *5th International Palaeontological Congress*.

* Undergraduate Advisees

† Graduate Advisees

*† Combined BS/MS Program Students

** Post-doctoral Researchers

16. Kowalewski, M., **Tyler, C.L.**, 2018. Comparative Fidelity of Higher Taxa in Benthic Marine Assemblages of Coastal North Carolina, USA: Implications for Conservation Paleobiology and Paleoecology. *5th International Palaeontological Congress*.
17. Tennakoon, S., Portell, R.W., Kowalewski, M., ****Petsios, E., Tyler, C.L.**, 2018. Morphometric Analysis of Cenozoic Cassid Snails (Mollusca: Gastropoda) from Florida. *5th International Palaeontological Congress*.
18. **Tyler, C.L.**, ****Petsios, E.**, Portell, R.W., Kowalewski, M., 2018. Applications of the Echinoids-Associated Traces Database: Cretaceous to Modern Drilling Predation and Parasitism. *16th International Echinoderm Conference pp. 127*.
19. †Farrar, L., *Graves, E., ****Petsios, E.**, Portell, R.W., **Tyler, C.L.**, Kowalewski, M., 2018. Characterizing Traces of Predation and Parasitism on Fossil Echinoids. *16th International Echinoderm Conference pp. 163*.
20. *Graves, E., †Farrar, L., ****Petsios, E.**, **Tyler, C.L.**, Portell, R.W., Kowalewski, M., 2018. Characterizing Traces of Biotic Interactions on Fossil Echinoids. *Undergraduate Research Forum, Miami University*.
21. **Tyler, C.L.**, *†Kempff, H.L., †Castro, I.O., ****Dineen, A.A.**, Roopnarine, P.D., 2018. Ecosystem Dynamics and the Consequences of Invasive Species. *International Geoscience Programme Project 653 (IGCP) Event Annual Meeting*.
22. Tennakoon, S., Portell, R.W., Kowalewski, M., ****Petsios, E.**, **Tyler, C.L.**, 2018. Carnivorous Cassids (Mollusca: Gastropoda) from the Upper Eocene Ocala Limestone of Florida. *GSA Abstracts with Programs 50(3)*.
23. ****Petsios, E.**, **Tyler, C.L.**, Portell, R.W., Kowalewski, M., 2018. Cretaceous to Modern Trends in Drilling Predation and Parasitism on Echinoids. *GSA Abstracts with Programs 50(3)*.
24. *†Kempff, H.L., †Castro, I., **Tyler, C.L.**, ****Dineen, A.A.**, Roopnarine, P.D., 2018. Using Food Webs to Understand the Effects of Biotic Invasion on Late Ordovician Marine Community Structure. *AGU Ocean Sciences Meeting*.
25. Mendonca, S., Barclay, K.M., **Tyler, C.L.**, Leighton, L.R. 2017. Differences Between Predator-Prey Encounters on Two Intertidal Gastropods. *Western Society of Naturalists 98th Annual Meeting*.
26. *†Kempff, H.L., †Castro, I., **Tyler, C.L.**, ****Dineen, A.A.**, Roopnarine, P.D., 2017. Using Food Webs to Understand the Effects of Biotic Invasion on Late Ordovician Marine Community Structure. *GSA Abstracts with Programs 49(6)*.
27. †Castro, I., *†Kempff, H.L., **Tyler, C.L.**, ****Dineen, A.A.**, Roopnarine, P.D., 2017. Assessment of Data Resources for the Construction of Late Ordovician Shallow Marine Food Webs: Data Compilations Versus Museum Collections. *GSA Abstracts with Programs 49(6)*.
28. ****Petsios, E.**, **Tyler, C.L.**, Portell, R.W., Kowalewski, M., 2017. Trends in Predation and Parasitic Drill-hole Traces on Paleogene Echinoids. *GSA Abstracts with Programs 49(6)*.
29. **Tyler, C.L.**, Dexter, T.A., Portell, R.W., Kowalewski, M., 2017. Predation on the Modern Echinoid *Meoma ventricosa* in a Tropical Marine Environment. *GSA Abstracts with Programs 49(6)*.
30. **Tyler, C.L.**, *†Kempff, H.L., ****Dineen, A.A.**, Roopnarine, P.D., 2017. Functional Homogenization and Destabilization During an Ancient Marine Invasion: Using Food

* Undergraduate Advisees

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** Post-doctoral Researchers

Webs to Examine Invasion Dynamics. *Ecological Society of America Abstracts with Programs*.

31. **Dineen, A.A., **Tyler, C.L.**, Roopnarine, P.D., 2017. Modeling complexity and Stability of Marine Paleocommunities During Times of Evolutionary Expansion. *Ecological Society of America Abstracts with Programs*.
32. *Chatterjee, W., Kowalewski, M., **Tyler, C.L.**, 2017. Characterizing Biotic Interactions with Echinoids. *Undergraduate Research Forum, Miami University*.
33. *†Kempf, H.L., **Tyler, C.L.**, **Dineen, A., Roopnarine P.D., 2017. Using Food Webs to Examine Ecosystem Dynamics during Biotic Invasions in Late Ordovician Shallow Marine Communities. *Undergraduate Research Forum, Miami University*.
34. Kowalewski, M., **Tyler, C.L.**, 2017. Mollusks as Archives of Spatial Biodiversity Patterns in Marine Benthic Communities: An Example from Coastal North Carolina, USA. *SE GSA Abstracts with Programs 49(3)*.
35. Borszcz, T., **Tyler, C.L.**, Kowalewski, M., 2016. Predation on Echinoids: Current Knowledge and Future Research Agendas. *9th European Conference on Echinoderms*.
36. **Tyler, C.L.**, Kowalewski, M., 2016. Quantifying the Fidelity of the Fossil Record Across Multiple Higher Taxa in Nearshore Marine Macro-Invertebrate Assemblages (North Carolina, USA). *GSA Abstracts with Programs 48(7)*.
37. *†Kempf, H.L., **Tyler, C.L.**, **Dineen, A., Roopnarine P.D., 2016. Using Food Webs to Examine Ecosystem Dynamics during Biotic Invasions in Late Ordovician Shallow Marine Communities. *GSA Abstracts with Programs 48(7)*.
38. Kowalewski, M., **Tyler, C.L.**, 2016. Fossils Track Spatial Biodiversity Patterns in Marine Benthic Communities. *GSA Abstracts with Programs 48(3)*.
39. **Tyler, C.L.**, Roopnarine, P.D. 2015. Fossil Food Webs: Quantifying Changes in Marine Ecosystems during Times of Escalating Predator-prey Interactions. *GSA Abstracts with Programs 47(7):275*.
40. Molinaro, D.J., **Tyler, C.L.**, Mendonca, S., Leighton, L.R., 2015. Peeling out Predation Intensity: Does Repair Scar Frequency Shift during Modern Ecological Disturbance or Over Time? *GSA Abstracts with Programs 47(7):427*.
41. **Tyler, C.L.**, Kowalewski, M., 2014. Beyond Mollusks: A Multi-Taxic Evaluation of the Fidelity of Beta Diversity. *GSA Abstracts with Programs 46(6):211*.
42. **Tyler, C.L.**, Kowalewski, M., 2014. Assessing the Fidelity of Beta Diversity: Marine Benthic Assemblages on the Inner Shelf of North Carolina, USA. *10th North American Paleontological Convention 13:10*.
43. **Tyler, C.L.**, Kowalewski, M., 2013. Using Benthic Marine Community Assemblages as Paleo-Bathymetric Proxies: A Direct Test from Recent Coastal Ecosystems of North Carolina using Multivariate Ordinations. *GSA Abstracts with Programs 45(7):684*.
44. **Tyler, C.L.**, Leighton, L.R., Kowalewski, M., 2013. The effects of Limpet Morphology on Predation by Adult Cancrid Crabs. *GSA Abstracts with Programs 45(7):839*.
45. Molinaro, D.J., Stafford, E.S., Collins, B.M.J., Barclay, K.M., **Tyler, C.L.**, Leighton, L.R., 2013. Peeling out Predation Intensity: Can Repair Frequency be a Useful Proxy towards Understanding Predation? *GSA Abstracts with Programs 47(7):756*.
46. **Tyler, C.L.**, Kowalewski, M., 2013. The Utility of Benthic Mollusk Associations as a Proxy for Paleo-Bathymetry: A Direct Test from Recent Coastal Ecosystems of North Carolina. *Florida United Malacologists Abstracts with Programs (v. 4)*.

* Undergraduate Advisees

† Graduate Advisees

*† Combined BS/MS Program Students

** Post-doctoral Researchers

47. **Tyler, C.L.**, Kowalewski, M., 2013. The Utility of Marine Benthic Associations as a Multivariate Proxy for Paleo-Bathymetry: A Direct Test from Recent Coastal Ecosystems of North Carolina. *GSA Abstracts with Programs* 45(2):55.
48. **Tyler, C.L.**, Kowalewski, M., 2012. Live-Dead Fidelity of Multi-Taxic Assemblages: Relative Taphonomic Biases across Major Benthic Marine Invertebrate Groups (NC, USA). *GSA Abstracts with Programs* 44(7).
49. Stafford, E.S., Nikqueta, C., **Tyler, C.L.**, Schneider, C.L., Leighton, L.R., 2012. Six Thousand Little Pieces: Shell Fragments as an Indicator of Crushing Predation Intensity. *GSA Abstracts with Programs* 44(7).
50. Kowalewski, M., **Tyler, C.L.**, 2012. A Multi-Taxic Evaluation of the Quality of the Fossil Record Based on Marine Benthic Associations of Coastal North Carolina. *GSA Abstracts with Programs* 44(7).
51. Stafford, E.S., Nikqueta, C., **Tyler, C.L.**, Schneider, C.L., Leighton, L.R., 2012. Crushing Predation and Shell Fragmentation on Marine Mollusks. *Ecological Society of America Annual Meeting, Portland*.
52. **Tyler, C.L.**, Kowalewski, M, Hendy, A.J.W., 2012. Onshore-Offshore Trends in Marine Macrobenthic Communities in the Presence of Anthropogenic Impacts. *GSA Abstracts with Programs* 44(4):76.
53. Kowalewski, M., **Tyler, C.L.**, *Mack, K, Hendy, A.J.W., 2012. Anthropogenic and Bathymetric Determinants of Marine Benthic Associations in Coastal North Carolina. *GSA Abstracts with Programs* 44(4):76.
54. *Mack, K., **Tyler, C.L.**, Kowalewski, M., 2012. Spatial Variation in Predation on *Spisula solidissima* across Recent Barrier Island Environments, Beaufort, North Carolina. *GSA Abstracts with Programs* 44(4)1:19.
55. **Tyler, C.L.**, Kowalewski, M., 2011. Live-Dead Fidelity of Multi-Taxic Assemblages: Relative Taphonomic Biases across Major Groups of Marine Benthos (North Carolina, USA). *GSA Abstracts with Programs* 43(5).
56. **Tyler, C.L.**, Leighton, L.R., Carlson, S.J., Huntley, J.W., Krause R.A. Jr., Kowalewski, M., 2010. Brachiopods as Acceptable Prey: Predation on Modern and Fossil Brachiopods. *GSA Abstracts with Programs* 42(5).
57. Stafford, E.S., **Tyler, C.L.**, Leighton, L.R., Forcino, F.L., 2010. Repair Frequency and Predation Risk in Intertidal Gastropod Populations. *GSA Abstracts with Programs* 42(5).
58. **Tyler, C.L.**, Leighton, L.R., Carlson, S.J., Huntley, J.W., Krause R.A. Jr., Kowalewski, M., 2009. The Well-Defended Brachiopod: You Don't Have to Taste Bad to Live Well. *GSA Abstracts with Programs* 41(7):389.
59. **Tyler, C.L.**, Leighton, L.R. 2009. Saturation, Diversity and Competition in the Ordovician Fossil Record. *NAPC Abstracts* 9:306.
60. Schiffbauer, J.D., **Tyler, C.L.**, Leighton, L.R., Kowalewski, M., 2009. Testing the Microstructural Record of Predation: An Experimental Approach to Examine the Reliability of Predatory Microtraces. *9th North American Paleontological Convention* 9:19.
61. **Tyler, C.L.**, Kowalewski, M., 2008. Comparative Taphonomy of Marine Benthos: Quantitative Estimates of Higher-Taxon Fidelity in Marine Nearshore Systems of the Outer Banks, North Carolina. *GSA Abstracts with Programs* 40(6):

* Undergraduate Advisees

† Graduate Advisees

*† Combined BS/MS Program Students

** Post-doctoral Researchers

62. Schiffbauer, J.D., Yanes, Y., **Tyler, C.L.**, Kowalewski, M., Leighton, L.R., 2008. The Microstructural Record of Predation: A New Approach for Identifying Predatory Drill Holes. *GSA Abstracts with Programs* 40(6): 372.
63. Schiffbauer, J.D., Yanes, Y., **Tyler, C.L.**, Kowalewski, M., Leighton, L.R., 2008. Microstructural Criteria for Identifying Drill Holes of Predatory Origin. *GSA Abstracts with Programs* 40(4):23.
64. **Tyler, C.L.**, Leighton, L.R., 2007. A Morphometric Approach to Competition in Ordovician Brachiopods. *GSA Abstracts with Programs* 39(6):531.
65. **Tyler, C.L.**, Yanes, Y., 2007. Crushing Predation and Patelliform Shell Morphology: Are All Ribs Created Equal? *GSA Abstracts with Programs* 39(3):54.
66. **Tyler, C.L.**, Leighton, L.R., Redman, C.M., Landau, E., Sawyer, J.S., 2006. Community Paleocology of the Bird Spring Group, Arrow Canyon, NV. *GSA Abstracts with Programs*, 38(7):404.

PRESENTATIONS

Keynotes

- 2018 International Geoscience Programme Project 653 Third Annual Meeting

Invited Seminars

- 2019 The Ohio State University at Newark
2018 University of Alberta Grace Anne Stewart Speaker Series
Department of Biology, Miami University of Ohio
2017 UC Davis Bodega Marine Laboratory
Dallas Paleontological Society
University of Kentucky
2016 Kent State University
2014 Department of Geology, Miami University of Ohio
Lake Superior State University
Denison University
2013 Vanderbilt University
Colorado College
University of Alabama
2011 Colby College

Symposium Panelist

- 2018 The Bearded Lady Project: Issues and Experiences Unique to Women in Science (Miami University)
2016 Mineralogical Society of America Career Forum (Geological Society of America)

REVIEWER

Ecology Letters (1), *Journal of Morphology* (1), *Palaios* (5), *Paleobiology* (1), *PLoS One* (1), *Southeastern Geology* (1), *Springer Textbooks* (1), *Topics in Geobiology* (2), *Thalassas: An International Journal of Marine Sciences* (2), *Contemporary Trends in Geosciences* (1)

FUNDING AGENCY PANELIST

- 2017-*present* Advisory Panel Member – National Science Foundation, Biology (2 panels)
- 2012-*present* External Reviewer – National Science Foundation (reviewed 22 proposals)
- 2017-*present* External Reviewer – Paleontological Society Student Research Grants

SHORT COURSE AND SYMPOSIUM ORGANIZER

- 2014 Topical Session Organizer North American Paleontological Convention
- 2013 Topical Session Organizer GSA
- 2012 Topical Session Organizer GSA
- 2011 Symposium Organizer, Virginia Tech Geosciences Student Research Symposium
- 2009 Topical Session Organizer North American Paleontological Convention

SERVICE AND OUTREACH

- 2018 Faculty Advisor for the Miami University (MU) Geological Society; Graduate Acceptance Committee (MU); Graduate School Scholar Assistantship Committee (MU); Bearded Lady Project Exhibit Planning Committee (MU); Paleontological Society GSA Student Poster Judge
- 2017 Annual Departmental Field Trip Leader (Gerace Research Centre, Bahamas); Faculty Advisor for the MU Geological Society; Graduate Acceptance Committee (MU); Graduate School Scholar Assistantship Committee (MU); Bearded Lady Project MU Exhibit Planning Committee; Revision of Ohio Department of Higher Education Transfer Assurance Guides (MU)
- 2016 Faculty Advisor for the MU Geological Society; Graduate Acceptance Committee (MU); Graduate School Scholar Assistantship Committee (MU); Fossil Fest Presenter (Cincinnati Museum)
- 2015 Search Committee for Permanent Lecturer (MU); Faculty Advisor for the MU Geological Society
- 2014 Session Chair North American Paleontological Convention
- 2013 Invertebrate Paleontology Coordinator Museum Retreat (FLMNH); Collections Assistant (FLMNH); Session Chair GSA
- 2012 Session Chair GSA
- 2011 Session Chair Geosciences Student Research Symposium, Virginia Tech (VT)
- 2010 Refreshments Committee Head Geosciences Student Research Symposium, VT
- 2009 Session Chair North American Paleontological Convention

COURSES TAUGHT

- Paleontology in Conservation (BIO / GLG 437/537)
- Geobiology of Critical Coastal Environments (GEOL 400)
- Oceanography (OCE 100 and GLG 244)
- Life on an Evolving Planet (GLG 204)
- Historical Geology (GY 205)
- Ocean Systems: Past and Future (GY 250)
- Earth Resources and the Environment (GY 250)
- Physical Geology (GY 140)

MENTORING AND ADVISING

Post-Doctorates (2) – Co-advisor for Ashley Dineen (2016-*present*), Elizabeth Petsios (2017-2018)

Graduate Students (4) – Ian Castro, MS (2016-2018); Hannah Kempf, MS (2016-2018); Melanie Sorman, MS candidate (2017-*present*); Lyndsey Farrar, MS candidate (2017-*present*)

Committee Member (2) – Stephany Bosch, MS (2015-2017); Sutton Chiorini, MS candidate (2018-*present*)

Undergraduate Research Projects (7) – Kyle Mack, Wrik Chatterjee, Erin Graves, Hannah Kempf (combined BS/MS program), Joe Tawil, Hannah Goggin, Jenn Davis

Undergraduate Advisees (14) – Alyssa Tucker, Heather McGettigan, Kyle Mack, Wrik Chatterjee, Erin Graves, Hannah Kempf (combined BS/MS program), Jessica Goldstein, Tasha Anderson, Sarah Emrick, Katherine Bartels, Joe Tawil, Hannah Goggin, Jenn Davis, Gage Huey

WORKSHOPS AND SHORTCOURSES

2019 Interactive Data Analysis and Visualization with R Shiny

2016 On the Cutting Edge - Early Career Geoscience Faculty Workshop: Teaching, Research, and Managing Your Career

2012 Sequence Stratigraphy (GSA Short Course)

2011 On the Cutting Edge: Preparing for an Academic Career in the Geosciences

2011 Dreamweaver CS5

2010 Using R for Basic Statistical Needs

2010 Web Design: Building an Effective Web Site

2009 Building the NSF Grant

2009 Dreamweaver: Webpage Creation

2008 ConocoPhillips Carbonates Field Trip (San Antonio)

PROFESSIONAL AFFILIATIONS

Geological Society of America

Paleontological Society of America

Ecological Society of America

Graduate Women in Science

Sigma XI

Association for Women Geoscientists

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