

Cassandra R. Stirpe  
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Department of Geosciences, Oberlin College  
52 W Lorain St, Oberlin, OH 44074

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**EDUCATION:**

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- 2018 - 2023      Ph.D.      University of Maine, Orono, ME**  
**Earth and Climate Sciences**  
Dissertation: "The Upper Ocean at the End of an Ice Age: Using Proxies in Benthic Foraminifera to Investigate Intermediate Water Changes During the Last Glacial Termination"
- 2016 - 2018      M.S.      University of Maine, Orono, ME**  
**Earth and Climate Sciences**  
Thesis: "Assessing the Reliability of the Benthic Mg/Ca-Temperature Proxy: A *Uvigerina* Core-top Study from New Zealand"
- 2011 - 2015      B.A.      Vassar College, Poughkeepsie, NY**  
**Earth Science**  
Senior thesis: "Pleistocene Foraminifera as a Proxy for Temperature in the Weddell Sea, ODP Site 693A"

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**EMPLOYMENT:**

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- 2025 - present      Visiting Assistant Professor**  
Department of Geosciences, Oberlin College, Oberlin, OH
- 2023 - 2025      Postdoctoral Research Associate**  
Department of Geological Sciences, University of Florida, Gainesville, FL
- 2017 - 2023      Graduate Research Assistant**  
School of Earth and Climate Sciences, University of Maine, Orono, ME
- 2016 - 2017      Graduate Teaching Assistant**  
School of Earth and Climate Sciences, University of Maine, Orono, ME
- 2015 - 2016      Collins Research Fellow**  
Environmental Research Institute, Vassar College, Poughkeepsie, NY

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**PUBLICATIONS:**

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- Stirpe, C.R., Williams, T.J., Martin, E.E., Sikes, E.L. (in prep)
- Stirpe C.R., Allen, K.A., Sikes, E.L., Russell, J., Putnam, A., Guilderson, T. (in revision) Synchronous subsurface ocean warming in both hemispheres during Heinrich Stadial 1. *Communications Earth and Environment*.
- Stirpe C. R., Allen K. A., Sikes E. L., Zhou X., Rosenthal Y., Cruz-Uribe A. M. and Brooks H. L. (2021) The Mg/Ca proxy for temperature: A *Uvigerina* Core-Top Study in the Southwest Pacific. *Geochim Cosmochim Ac.* 309, 299-312.
- Stirpe C. R., Cunningham M. and Menking K. M. (2017) How Will Climate Change Affect Road Salt Export from Watersheds? *Water, Air, & Soil Pollution* 228, 362.

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**POSTERS and PRESENTATIONS:**

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- 2024** Propagation of Deglacial Changes in Water Mass Sourcing and Deep Ocean Carbon Storage in the Southern Indian Ocean During the Last Glacial Termination. C.R. Stirpe, T. Williams, E.E. Martin, E.L. Sikes, N. Umling, R. Glaubke. Oral presentation, American Geophysical Union Fall meeting, Washington, D.C.
- 2023** The Ocean's Role in Ice Age Cycles: Evidence from Seafloor Sediment. C.R. Stirpe. Department seminar lecture. Department of Geological Sciences, University of Florida, Gainesville, FL.
- 2021** New Records of Glacial Antarctic Intermediate Water Temperature from Three Benthic Foraminifer Species in the Southwest Pacific Ocean. C.R. Stirpe, K.A. Allen, E.L. Sikes. Oral presentation, American Geophysical Union Fall meeting, Virtual/New Orleans, LA.
- 2019** The Benthic Mg/Ca-Temperature Proxy: A *Uvigerina* Core-top Study from New Zealand. C.R. Stirpe, K.A. Allen, E.L. Sikes, X. Zhou, Y. Rosenthal, A.M. Cruz-Urbe, H.L. Brooks. Poster, American Geophysical Union Fall meeting, San Francisco, CA.
- 2019** Proxy Development in Paleoceanography: Exploring Mg/Ca Anomalies in Core-top Sediments. C.R. Stirpe, K.A. Allen, A.M. Cruz-Urbe, E.L. Sikes, B. Hall. Oral presentation, Geological Society of Maine Spring meeting, Presque Isle, ME.
- 2017** The Benthic Mg/Ca Temperature Proxy: A *Uvigerina* Core-top Calibration and Deglacial Record from the Southwest Pacific. C.R. Stirpe, K.A. Allen, E.L. Sikes. Poster, Goldschmidt Conference, Paris, France.

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**AWARDS and HONORS:**

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- 2022 - 2023** **University of Maine Chase Distinguished Research Assistantship**  
School of Earth and Climate Sciences, University of Maine, Orono, ME
- 2022** **University of Maine Graduate Student Government grant**  
Grant for degree-related expenses, University of Maine, Orono, ME
- 2021** **University of Maine Graduate Student Government grant**  
Grant for degree-related expenses, University of Maine, Orono, ME
- 2019** **Award for Best Seminar Presentation by a Doctoral Student**  
School of Earth and Climate Sciences, University of Maine, Orono, ME
- 2017** **University of Maine Graduate Student Government grant**  
Grant for degree-related expenses, University of Maine, Orono, ME
- 2017** **Award for Best Seminar Presentation by a Masters Student**  
School of Earth and Climate Sciences, University of Maine, Orono, ME

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**TEACHING EXPERIENCE and TRAINING:**

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- 2025 Oberlin College, Department of Geosciences**  
**GEOS-110 “Understanding Earth’s Climate”**  
This entry-level undergraduate course focuses on providing an introduction to the geosciences through the lens of the global climate system.  
**GEOS-325 “Paleoclimate”**  
This upper-level undergraduate course offers an introduction to the field of paleoclimatology. Topics include common paleoclimate archives and proxies, as well as discussion of several climate events in Earth history.
- 2025 University of Florida, Department of Geological Sciences**  
**GLY-3074 “Oceans and Global Climate Change”**  
This upper-level undergraduate course focused on the role of oceans in Earth’s climate, including climate events from geologic history and future climate predictions under anthropogenic global warming
- 2024 CIRTL’s “The College Classroom” course**  
A 12-week online course through the Center for the Integration of Research, Teaching and Learning as part of University of Florida’s “Passport to Great Teaching” program, with a focus on inclusive, evidence-based teaching
- 2024 The Inclusive STEM Teaching Project**  
A 6-week asynchronous online course devoted to helping educators create more inclusive courses and maintain a positive classroom climate
- 2022 Guest teaching lecture and laboratory activity**  
Invited by Dr. Raquel Portes. Bates College, Lewiston, ME.  
The lesson included preparation of a 50-minute lecture about marine sediments and paleoceanographic proxies, followed by a 2-hour microscope-based activity identifying foraminifera and using species assemblages to determine where each sample was collected
- 2016 - 2017 Graduate Teaching Assistant**  
“ERS-101: Introduction to Earth Science”, University of Maine, Orono, ME  
Grading assignments, running three laboratory sections, and holding office hours

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**ADDITIONAL RESEARCH EXPERIENCE and TRAINING:**

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- 2022 Scientific Party Member**  
RV Atlantis, Expedition AT49
- 2021 Scientific Party Member and Watch Leader**  
RV Endeavor, Expedition EN669
- 2018 Scientific Party Member**  
RV Thomas G. Thompson, Expedition TN362
- 2017 International School of Foraminifera**  
Urbino, Italy

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**SERVICE and OUTREACH:**

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- 2024 – 2025      Geosciences Education & Mentorship Support (GEMS) program mentor**  
Mentoring and offering advice to a matched mentee considering graduate school
- 2023 – 2025      Peer Manuscript Review and NSF Grant Proposal Review**  
*Communications Earth and Environment; Nature Communications; Quaternary Science Reviews*
- 2024              “Can You Dig It?” Station Volunteer**  
Florida Museum of Natural History, Gainesville, FL
- 2023              A Scientist in Every Florida School Volunteer**  
Virtual visit: Ocean circulation lecture and discussion with 6th-grade students
- 2023 - 2024      Inter-Laboratory Discussion Group Coordinator**  
“Processes and Proxies of Change at Earth’s Surface”  
Department of Geological Sciences, University of Florida, Gainesville, FL
- 2023              Maine Science Festival Volunteer**  
Paleoceanography in the Gulf of Maine: videos and activities for families
- 2022              GeoLunch Fall Lecture Series Coordinator**  
School of Earth and Climate Sciences, University of Maine, Orono, ME
- 2022, 2023      Maine Science Olympiad Event Leader: Dynamic Planet**  
Freshwater Systems test for high school students
- 2021 - 2022      Graduate Earth Science Club Treasurer**  
School of Earth and Climate Sciences, University of Maine, Orono, ME

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**PROFESSIONAL MEMBERSHIPS:**

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- 2017 - present      The Geochemical Society**
- 2017 - present      American Geophysical Union**
- 2014 - present      Geological Society of America**