

ABBREVIATED CURRICULUM VITAE, 2020

COLLINS, Laurel Smith

Professor

Department of Earth and Environment, and Department of Biological Sciences
Florida International University
Miami, Florida 33199, USA

CONTACT INFORMATION

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EDUCATION

Ph.D. Geology and Geophysics, Yale University

M. Phil. Geology and Geophysics, Yale University

M.S. Geology, George Washington University

B.S. Geology, University of Maryland

CURRENT APPOINTMENTS

2011-2020 Professor, joint appointment in Department of Earth and Environment and Department of Biological Sciences, Florida International University (FIU)

2017-2020 Chair, Human Resources Committee, Dept. of Earth and Environment

1993-2020 Research Associate, Smithsonian Tropical Research Institute, Panama

RECENT PROFESSIONAL ACTIVITIES

2020 President, Cushman Foundation for Foraminiferal Research

2018-2020 Associate Editor for peer-reviewed journal *Paleobiology*

2005-2020 Director, Board of Directors, Cushman Foundation for Foraminiferal Research

1999-2020 Associate Faculty Member, Latin American and Caribbean Center, FIU

1990-2020 Database Director and Web Site Manager, Panama Paleontology Project

2019 Co-Organizer, Geological Society of America Annual Meeting, oral session

2019 President-Elect, Cushman Foundation for Foraminiferal Research

2018-2020 Member, Nominations Committee for Fellows of the Paleontological Society

2016-2019 Member, Strimple Award Committee, Paleontological Society

2014-2019 Chairperson, Student Awards Committee, Cushman Foundation

2014-2016 Councilor at Large, Elected, Paleontological Society Council

2013-2014 Member, Organizing Committee for 10th North American Paleontological Convention, and NAPC Symposium *The Microfossil Record*

2011-2013 Member, Schuchert Award Committee, Paleontological Society

2010-2014 Member, W. Storrs Cole Memorial Research Award Committee, Geological Society of America

2011-2012 President, FIU Chapter of Sigma Xi, The Scientific Research Society

RECENT FELLOWSHIPS, SCHOLARSHIPS, AWARDS

2019 University Graduate School – Provost Award for Mentoring Graduate Students

2019 Top Scholar for Research and Creative Activities, Office of the Provost, FIU

2019 Research Associate, renewed academic appointment, Smithsonian Institution

- 2016 Smithsonian Senior Postdoctoral Fellowship, National Museum of Natural History, Smithsonian Institution, Washington, D.C.
- 2015 Top Scholars 2015 Award, Office of the Provost, FIU
- 2014 Fellow, Elected, Paleontological Society
- 2010 Top Scholars 2010 Award, Office of the Provost, FIU

PROFESSIONAL AFFILIATIONS

Cushman Foundation for Foraminiferal Research, Patron
 North American Micropaleontological Society, member
 Paleontological Society, elected Fellow
 Sigma Xi, The Scientific Research Society, founding member of FIU Chapter

STUDENTS' DEGREE COMMITTEES

Current Graduate Students

- 2016-2020 Major Professor for Vanessa Londoño, Ph.D. student, Geosciences
- 2012-2020 Major Professor for Maria Sider, Ph.D. candidate, Geosciences
- 2018-2020 Committee Member for Robert Thomasetti, Ph.D. student, Biological Sciences
- 2017-2020 Committee Member for Carlos Herédia, Ph.D. student, Geosciences
- 2016-2020 Committee Member for Kimberly Beck, Ph.D. student, Geosciences

Previous Graduate Students Advised, Last 10 Years

- 2020 Major Professor for Philip Lamela, Ph.D. candidate, Geosciences, FIU: *Foraminifera of the Paleocene Cannonball Formation, South Dakota*.
- 2019 Major Professor for Zoe R. F. Verlaak, Ph.D. 2019, Geosciences, FIU: *Benthic Foraminiferal Assemblages from Marshes and Mangroves in the Everglades (South Florida, USA) and their Application as Proxies for Habitat Shifts due to Sea Level Rise*, 153 p.
- 2016 Major Professor for Crystal Pletka, Ph.D. 2016, Geosciences, FIU: *Neogene Changes in Caribbean Paleoproductivity and the Diversity and Paleobiogeography of Deep-sea Benthic Foraminifera*, 227 p.
- 2012 Major Professor for Maria Sider, non-thesis M.S., Geosciences, project *Modern benthic foraminifera of Bocas del Toro, Panama*; transferred to Ph.D. program
- 2010 Major Professor for Jacqueline Powell, Ph.D. 2010, Geosciences, FIU: *Larger Foraminiferal Biostratigraphy, Systematics and Paleoenvironments of the Avon Park Formation and Ocala Limestone, Highlands County, Florida*, 239 p.
- 2010 Major Professor for Jie Cheng, Ph.D. 2010, Geosciences, FIU: *Paleoenvironmental Reconstruction of Florida Bay, South Florida, Using Benthic Foraminifera*, 202 p.
- 2009 Major Professor for Anna Wachnicka, Ph.D. 2009, Geosciences, FIU: *Quantitative Diatom-based Reconstruction of Paleoenvironmental Conditions in Florida Bay and Biscayne Bay, U.S.A.*, 226 p.

RECENT TEACHING (multiple titles for cross-listing between departments or undergraduate/graduate)

- 2021 Instructor, Appalachian Geology field excursion, undergraduate course, 3 credits, Department of Earth and Environment, to be taught in summer term
- 2000-2021 Instructor, *The History of Life*, undergraduate non-majors course, Department of Earth and Environment, 3 credits
- 2001-2021 Instructor of Record, *The History of Life Laboratory*, undergraduate laboratory course taught by Teaching Assistants, Department of Earth and Environment, 1 credit
- 2014-2020 Co-instructor, *Geoscience Systems*, required doctoral course, Department of Earth and

- Environment, 3 credits, every fall semester.
- 2014-2020 Co-instructor, *Field Excursion/Advanced Field Excursion* to Death Valley, combined undergraduate/graduate course, Department of Earth and Environment, 3 credits, every other spring semester.
- 2011-2020 Organizer, weekly Geology Reading Group, graduate students and faculty, Department of Earth and Environment, no credits, fall and spring semesters.
- 2006-2020 Instructor, *The Earth Through Time*, upper-level geoscience majors course, Department of Earth and Environment, 3 credits, every spring semester.
- 1999-2020 Instructor, *Paleoecology/Paleoenvironments/Environments of the Past/ Ecosystems of the Past*, upper-level combined undergraduate-graduate course, Department of Biological Sciences and Department of Earth and Environment, 3 credits, every other year.
- 2017, 2019 Co-instructor, *Senior Seminar*, required undergraduate course, 1 credit, Department of Earth and Environment, spring semester.
- 2007-2017 Instructor, *Principles of Paleobiology/Paleobiology/Advanced Paleontology*, upper-level combined undergraduate/graduate course, Department of Earth and Environment and Department of Biological Sciences, 3 credits, every other year.

RECENT PEER-REVIEWED ARTICLES (* = Collins' student)

- 2020 *Gudnitz, M.N., **Collins, L.S.**, and O'Dea, A. Foraminiferal communities of a mid-Holocene reef: Isla Colón, Caribbean Panama. *Palaeogeography, Palaeoclimatology, Palaeoecology*, in revision March 2020.
- 2020 *Verlaak, Z. R. M., and **Collins, L. S.** Environmental controls on the distribution of modern benthic foraminifera in the Florida Everglades and their use as paleoenvironmental indicators. *Journal of Foraminiferal Research*, in review Feb. 2020.
- 2020 **Collins, L.S.**, Aubry, M.-P., Berggren, W.A., and Coates, A.G. Regional correlation and paleoenvironments of tropical Neogene sequences of coastal Ecuador. *Stratigraphy*, in preparation.
- 2019 **Collins, L.S.**, *Cheng, J., Hayek, L., Fourqurean, J., and Buzas, M.B., Historical seagrass abundance of Florida Bay, USA, based on a foraminiferal proxy. *Journal of Paleolimnology*, v. 62, p. 15-29. <https://doi.org/10.1007/s10933-019-00072-6>
- 2019 *Verlaak, Z., **Collins, L.S.**, and Hayek, L.S. Effects of infaunal foraminifera on surface and subsurface assemblages in the southwestern Everglades, USA: baseline data for paleoenvironmental analyses: *SEPM Special Publication*, no. 111, p. 3-14. DOI: 10.2110/sepmsp.111.03.
- 2017 *Gurocak-Orhun, O., and **Collins, L.S.** Paleoenvironments of the Upper Miocene Tuira Formation, Darien, Panama, *Journal of Foraminiferal Research*, v. 47, no.1, p. 10-20.
- 2016 **Collins, L.S.**, Geary, D.H., and Grossman, E.L., Variability of modern foraminiferal stable isotope ratios in Caribbean shallow waters: a framework for Neogene studies, *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 463, p. 1-10, <http://dx.doi.org/10.1016/j.palaeo.2016.09.004>.
- 2016 O'Dea, A., Lessios, H. A., Coates, A. G., Eytan, R. I., Restrepo-Moreno, S. A., Cione, A. L., **Collins, L. S.**, and 27 other coauthors, 2016, Formation of the Isthmus of Panama: *Science Advances*, 2:e1600883, 17 August 2016, doi: 10.1126/sciadv.1600883, 11p.
- 2013 O'dea, A., and **Collins, L.S.** (Editors). Environmental, Ecological and Evolutionary Change in Seas Across the Isthmus of Panama. *Bulletin of Marine Science*, v. 89, no. 4, p. 769-1035.
- 2013 O'dea, A., and **Collins, L.S.** Introduction, in O'dea, A., and Collins, L.S. (Eds.), Environmental, Ecological and Evolutionary Change in Seas Across the Isthmus of Panama. *Bulletin of Marine Science, Special Issue*, v. 89, no. 4, p. 769-777.
- 2013 *Smith, C.J., **Collins, L.S.**, and Hayek, Lee-Ann. Biogeographic effects of the closing Central American Seaway on benthic foraminifera of Venezuela. *Bulletin of Marine Science, Special*

- Issue “Environmental, Ecological and Evolutionary Change in Seas Across the Isthmus of Panama,” O’Dea, A., & Collins, L.S. (Eds.), v. 89, no. 4, 921-936.
- 2012 Fourqrean, J.W., Kendrick, G.A., **Collins, L.S.**, Chambers, R.F., and Vanderkluft, M.A. Carbon, nitrogen and phosphorus storage in subtropical seagrass meadows: examples from Florida Bay and Shark Bay. *Marine and Freshwater Research*, 63: 967-983.
- 2012 *Cheng, J., **Collins, L.S.**, and Holmes, C. Four thousand years of habitat change in Florida Bay, as indicated by benthic foraminifera. *Journal of Foraminiferal Research*, v. 42, no. 1, pp. 3 -17.
- 2011 *Wachnicka, A., **Collins, L.S.**, and Gaiser, E. Response of diatom assemblages to 130 2 years of environmental change in Florida Bay (USA). *Journal of Paleolimnology*, v. 49, no. 1, pp. 83-101, DOI 10.1007/s10933-011-9556-3. [Published in print 2013]
- 2011 *Wachnicka, A., Gaiser, E., and **Collins, L.S.** Correspondence of historic salinity fluctuations in Florida Bay, USA, to atmospheric variability and anthropogenic activities. *Journal of Paleolimnology*, v. 49, no. 1, pp. 103-115, DOI 10.1007/s10933-011-9534-9. [Published in print 2013]
- 2010 *Smith, Carly J., **Collins, L.S.**, Jaramillo, C., and Quiroz, L.I. Marine paleoenvironments of Neogene formations of north-central Falcón State, Venezuela. *Journal of Foraminiferal Research*, v. 40, no. 3, p. 566-582.
- 2010 *Wachnicka, A., Gaiser, E., **Collins, L.S.**, Frankovitch, T., and Boyer, J. Distribution of diatoms and development of diatom-based models for inferring salinity and nutrient concentrations in Florida Bay (U.S.A.) and adjacent coastal wetlands. *Estuaries and Coasts*, v. 33, p. 1080-1098, DOI 10.1007/s12237-010-9283-4.

PUBLISHED ABSTRACTS OF PRESENTATIONS AT MEETINGS, LAST 10 YEARS (* = Collins’ student)

- 2019 *Londoño, V., and **Collins, L.S.** Microfossil response to mid-Cretaceous Oceanic Anoxic Event 2 at North Atlantic IODP Site U1407: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 51, no. 5, doi: 10.1130/abs/2019AM-332683, <https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Paper/332683>
- 2019 *Sider, M.N. Gudnitz, and **Collins, L.S.** Pristine to modern: A comparison of shallow-water modern and mid-Holocene benthic foraminiferal assemblages from coastal Bocas del Toro, Panama: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 51, no. 5, doi: 10.1130/abs/2019AM-339802, <https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Paper/339802>
- 2019 *Verlaak, Z.R.F., and **Collins, L.S.** The history and prospects of habitat change due to sea level rise for Florida’s coastal Everglades, using benthic foraminiferal assemblages: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 51, no. 5, doi: 10.1130/abs/2019AM-335746, <https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Paper/335746>
- 2018 *Sider, M.N., and **Collins, L.S.** Benthic foraminiferal response to anthropogenic coastal change: Almirante Bay, Bocas del Toro, Panama: *FORAMS 2018 conference*, June 17-23, Edinburgh, Scotland, ponse to anthropogenic coastal change: Almirante Bay, Bocas del Toro, Panama: *FORAMS 2018 Abstracts*, p. 582, https://www.dropbox.com/sh/u74wwjjsdtr8s4h/AACNvSoppFqGT98MIKilc_TCa?dl=0.
- 2018 *Verlaak, Z.R.F., and **Collins, L.S.** History of paleoenvironmental changes in the southwestern Everglades (Florida, USA) using foraminiferal assemblages: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 50, no. 6, doi: 10.1130/abs/2018AM-324197, <https://gsa.confex.com/gsa/2018AM/meetingapp.cgi/Paper/324197>.
- 2017 **Collins, L.S.**, *Cheng, J., Hayek, L.C., Fourqrean, J., and Buzas, M. A ~3,800-year record of seagrass coverage in South Florida, based on foraminifera: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 49, no. 6, doi: 10.1130/abs/2017AM-303817, <https://gsa.confex.com/gsa/2017AM/meetingapp.cgi/Paper/303817>

- 2017 *Pletka, C., and **Collins, L.S.** Neogene diversity of deep-sea Caribbean benthic foraminifera relative to the closure of the Central American Seaway: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 49, no. 6, doi: 10.1130/abs/2017AM-303527, <https://gsa.confex.com/gsa/2017AM/meetingapp.cgi/Paper/303527>
- 2017 *Sider, M.N., **Collins, L.S.**, and O’dea, A. A baseline study for assessing land-use changes along the Caribbean coast of Panama: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 49, no. 6, doi: 10.1130/abs/2017AM-308139, <https://gsa.confex.com/gsa/2017AM/meetingapp.cgi/Paper/308139>
- 2017 *Verlaak, Z.R.F., and **Collins, L.S.** Spatial distribution of modern foraminiferal assemblages in the southwestern Everglades, Florida, USA: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 49, no. 6, doi: 10.1130/abs/2017AM-307395, <https://gsa.confex.com/gsa/2017AM/meetingapp.cgi/Paper/307395>
- 2017 **Collins, L.S.**, *Cheng, J., and Fourqrean, J.W. Historical perspective on the ecosystem health of Florida Bay – A foraminiferal proxy for seagrass abundance: *Conference on Greater Everglades Ecosystem Restoration, April 17-20, Coral Springs, Florida, Conference Abstracts*, p. 123, published online at http://conference.ifas.ufl.edu/GEER2017/documents/GEER_2017_Abstract_Book_online.pdf
- 2017 *Verlaak, Z., and **Collins, L.S.** Influence of the benthic foraminiferal biocoenosis on fossil assemblages in the southwestern Everglades: *Conference on Greater Everglades Ecosystem Restoration, April 17-20, Coral Springs, Florida, Conference Abstracts*, p. 369, published online at http://conference.ifas.ufl.edu/GEER2017/documents/GEER_2017_Abstract_Book_online.pdf
- 2016 *Pletka, C., and **Collins, L.S.** Neogene Paleoproductivity of the Caribbean and Equatorial Eastern Pacific: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 48, no. 7, doi: 10.1130/abs/2016AM-285183, <https://gsa.confex.com/gsa/2016AM/webprogram/Paper285183.html>
- 2016 *Sider, M.N., **Collins, L.S.**, and O’Dea, A. Benthic foraminiferal facies of a Caribbean, mid-Holocene coral reef, Isla Colon, Bocas del Toro, Panama: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 48, no. 7, doi: 10.1130/abs/2016AM-286844, <https://gsa.confex.com/gsa/2016AM/webprogram/Paper286844.html>
- 2015 **Collins, L.S.** Emergence of the Isthmus of Panama: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 47, no. 7, p. 44. <https://gsa.confex.com/gsa/2015AM/webprogram/Paper269112.html>
- 2015 *Lamela, P., and **Collins, L.S.** Marine paleoenvironments of the Paleocene Cannonball Formation, North Dakota: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 47, no. 7, p. 135. <https://gsa.confex.com/gsa/2015AM/webprogram/Paper269248.html>
- 2015 *Sider, M., and **Collins, L.S.** Benthic foraminifera of a tropical mangrove-seagrass-coral-reef ecosystem, Caribbean Panama: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 47, no. 7, p. 133. <https://gsa.confex.com/gsa/2015AM/webprogram/Paper269485.html>
- 2015 *Verlaak, Z., **Collins, L.S.**, and Allen, J. Vertical distribution of living (stained) benthic foraminifera in the Everglades, South Florida, USA: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 47, no. 7, p. 132. <https://gsa.confex.com/gsa/2015AM/webprogram/Paper265926.html>
- 2015 **Collins, L.S.**, Hayek, L.-A., and *Wachnicka, A. Mathematical analysis of the influence of naturally occurring vs. anthropogenic events on water quality in Florida Bay: *Conference on Greater Everglades Ecosystem Restoration, April 21-23, Coral Springs, Florida, Conference Abstracts*, p. 63, http://conference.ifas.ufl.edu/geer2015/Documents/GEER_2015_Abstract_Book.pdf
- 2014 *Sider, Maria N., and **Collins, L. S.** 2014. Comparison of fossil and modern benthic foraminiferal assemblages to assess Recent environmental changes in coastal Bocas del Toro,

- Panama: *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 46, no. 6, p. 144.
- 2014 **Collins, L.S.**, Hallock, P., *Pletka, C.R., and Beck, K.D. Environmental Impact of the Deepwater Horizon Oil Spill on Deep-sea Benthic Foraminifera. 10thNorth American Paleontological Convention, Gainesville, Florida, *Paleontological Society Special Publication*, v. 13, p. 14.
- 2013 **Collins, L.S.**, Hayek, L.-A., and *Wachnicka, A. Integrated analysis of microfossil and physical indicators of anthropogenic and natural environmental changes in Florida Bay. *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 45, no. 7, p. 531.
- 2012 **Collins, L.S.**, Hallock, P., *Pletka, C.R., and Beck, K.D. Deep-water Foraminiferal Response to the Catastrophic Deepwater Horizon Well Oil Spill, Northeastern Gulf of Mexico. *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 44, no. 7, p. 219.
- 2011 **Collins, L.S.**, *Cheng, J., and Fourqurean, J. Seagrass foraminifera of Florida Bay: Proxy for water quality through time. Proceedings, 21st Biennial Conference of the Coastal and Estuarine Research Federation, Daytona Beach Florida, Nov. 6–10, p. 44.
- 2010 **Collins, L.S.**, Ogg, J., Aubry, M.-P., Berggren, W.A., Coates, A.G., and *Pletka, C.R. The Panama Paleontology Project Database: Using *TimeScale Creator* for Automatic Age Updates to Paleontological Collections. *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 42, no. 5, p. 461.