

In January 2023 I will be starting a faculty position at Florida State University in the Department of Earth, Ocean, and Atmospheric Science. Please get in touch if you are interested in working with me as a postdoc or student.

EDUCATION

- September 2021 **Doctor of Philosophy**
Earth, Atmospheric & Planetary Sciences – MIT
Dissertation: *Dynamic rivers drive landscape change and biological evolution*. Advisor: J. Taylor Perron.
- 2011 – 2015 **Bachelor of Science**
Earth Science – Rice University
Magna cum laude; Distinction in Research and Creative Work

PUBLICATIONS

- Stokes, MF**, Kim, Daemin, Gallen, S., Benavides, E., Keck, B.P., Wood, J., Goldberg, S.L., Larsen, I.J., Mollish, J.M., Simmons, J.W., Near, TJ, Perron, JT, Erosion of heterogeneous rock drives diversification of Appalachian fishes, *submitted*.
- Stokes, MF**, Larsen, IJ, Goldberg, SL, McCoy, SW, Prince, PP, & Perron, JT, The erosional signature of drainage divide motion along the Blue Ridge escarpment, *in review*.
- Dolby, GA, Bennett, SEK., Dorsey, RJ, **Stokes, MF**, Riddle, BR., Lira-Noriega, A, Munguia-Vega, A, Wilder, BT, 2022, Integrating Earth-Life systems: A geogenomics approach. *Trends in Ecology & Evolution*. <https://doi.org/10.1016/j.tree.2021.12.004>.
- Stokes, MF** and Perron, JT, 2020, Modeling the evolution of aquatic organisms in dynamic river basins, *JGR: Earth Surface*, 125, e2020JF005652. <https://doi.org/10.1029/2020JF005652>
- Stokes, MF**, Goldberg, SL, Perron, JT, 2018, Ongoing river capture in the Amazon, *Geophysical Research Letters*, 45(11), 5545-5552. <https://doi.org/10.1029/2018GL078129>

HONORS AND AWARDS

- 2019 Excellence in Teaching Award (MIT/EAPS)
- 2019 MIT Graduate Woman of Excellence Award
- 2015 Exxon Mobil Outstanding Undergraduate Award, Rice University
- 2014 Society for Sedimentary Geology, Best Student Poster, Geological Society of the Americas, Annual Meeting
- 2013 Eugen Merton Memorial Prize, Rice University

INVITED LECTURES

- 2022 Florida State University EOAS Seminar
- 2022 Princeton Department of Geoscience Seminar
- 2022 UT Austin Soft Rock Seminar

2021	New Developments and Integrated Approaches in the Earth-Life Sciences (AGU)
2021	Yale Institute for Biospheric Studies Seminar
2021	ETH Zurich: Earth Surface Dynamics
2021	Caltech Geoclub

FELLOWSHIPS AND GRANTS

2021	Donnelly Postdoctoral Fellowship (Yale Institute for Biospheric Studies)
2018 – 2019	Hugh Hampton Young Fellowship (MIT)
2018 – 2019	Martin Fellow for Sustainability (MIT)
2017	EarthScope AGeS Geochronology Grant
2016 – 2021	National Science Foundation Graduate Research Fellowship
2015 – 2016	MIT Ida Green Fellowship
2015, 2017, 2018	Student Research Fund, MIT EAPS
2014 - 2015	Houston Geological Society Maby Scholarship
2014	Devin-Schnable Field Camp Award, Rice University

TEACHING EXPERIENCE

April 2022	Guest Lecturer, Western Connecticut State University
Fall 2020	Living on Mars, a month-long weekend enrichment course for Boston-area high school students
Fall 2018	12.001, Introduction to Geology (MIT), Teaching Assistant, Average Evaluation 7.0/7.0
Fall 2017	12.163/12.463, Geomorphology (MIT), Teaching Assistant Average Evaluation 6.8/7.0
2015 – 2018	Discover Earth Atmospheric and Planetary Sciences at MIT, Yellowstone: weeklong pre-orientation trip to Yellowstone National Park for incoming undergraduates.

LEADERSHIP AND OUTREACH

2020 – 2021	K-12 Outreach MIT; led and participated remotely
2017 – 2018	Departmental Graduate Student Advisory Committee; President
2017 – 2019	Chemical Oceanography, Geology, Geochemistry, and Geobiology department seminar; Student organizer
2016	Departmental graduate student retreat coordinator
2016 – 2019	Hands-on, interactive erosion demonstrations for elementary and middle-school aged students in the Boston area
2016 – 2021	MIT women's club ultimate frisbee; Coach
2014 and 2015	National Champion, DIII Women's ultimate frisbee; Captain
2013 – 2014	Rice Undergraduate Geoscience Society; Founder and president

PRESS

<https://eos.org/research-spotlights/how-river-capture-affects-the-evolution-of-aquatic-organisms>
<http://news.mit.edu/2019/from-streams-to-teams-maya-stokes-mit-0818>
<https://blogs.agu.org/geospace/2018/08/15/amazon-pirating-water-from-neighboring-river-orinoco/>
<https://eapsweb.mit.edu/news/2018/amazon-pirating-water-neighboring-river-orinoco>

SELECT CONFERENCE PRESENTATIONS

- Stokes, MF**, Near, TJ, Kim, D, Gallen, SF, Perron, JT, 2021, Erosion of heterogeneous rock drives fish diversification in a tectonically quiescent mountain range. *American Geophysical Union, Fall Meeting, Oral Presentation (invited)*.
- Stokes M.F.**, Larsen IJ, McCoy SW, Goldberg SL, Perron J., 2020, A Tale of Three Divides: Investigating the erosional signature of divide motion along the Blue Ridge Escarpment. *American Geophysical Union, Fall Meeting, Oral Presentation*.
- Goldberg S.L., **Stokes M.F.**, Perron J., 2020, Climate modulates lithologic control of river incision. *American Geophysical Union, Fall Meeting*.
- Dolby GA, Dorsey RJ, Bennett S, Hausback B, Noriega AL, Darin M, Araya-Donoso R, Orton J, **Stokes MF**, Vega AM, Kusumi K, Wilder B., 2020, Can we use causal theory to understand how Earth processes shape Life? *American Geophysical Meeting, Fall Meeting*.
- Stokes, M.F.**, Gallen, S.F., Perron, J.T. and Near, T., 2019, Knickpoints drive allopatric speciation in the Blue Ridge relict landscape, *American Geophysical Union, Fall Meeting, Oral Presentation*.
- Stokes M.F.** and Perron, J.T., 2019, Modeling the evolution of aquatic organisms in dynamic river basins, *Geological Society of America Annual Meeting, Oral Presentation*.
- Stokes, M.**, Christine, C.Y.C., and McGee, D., 2018. A Landsat-derived Record of Lake Area Fluctuations on the Altiplano-Puna Plateau. *American Geophysical Union, Fall Meeting, Poster*.
- Stokes, M.** and Perron, J.T., 2017. Biologic signatures of dynamic rivers from a coupled landscape evolution and neutral community model, *American Geophysical Union, Fall Meeting, Poster*.
- Stokes, Maya**, Dwyer, S.N., Nitttrouer, J., 2014. Growth faults and dewatering structures in prodelta sedimentary deposits: using sedimentary structures to constrain post-failure sediment transport in the Western Irish Namurian Basin: *Geological Society of America Annual Meeting, Poster*.