

BIOGRAPHICAL SKETCH:

Julia Smith Wellner
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Professional Preparation

<i>Institution</i>	<i>Major</i>	<i>Degree</i>	<i>Year</i>
Bryn Mawr College, Bryn Mawr, PA	Geology	A.B.	1993
University of Alabama, Tuscaloosa, AL	Geology	M.S.	1995
Rice University, Houston, TX	Geology and Geophysics	Ph.D.	2001

Appointments

<i>Years(s)</i>	<i>Title</i>
2024-present	Professor, Department of Earth and Atmospheric Sciences, University of Houston
2019-2024	Associate Professor, Department of Earth and Atmospheric Sciences, University of Houston
2018-2023	Adjunct Faculty of the Graduate School, University of Alabama
2013-2019	Assistant Professor, Department of Earth and Atmospheric Sciences, University of Houston
2007-2015	Adjunct Assistant Professor, Department of Earth Science, Rice University
2006-2013	Co-Director Geoscience Learning Center & Research Assistant Professor, Department of Earth and Atmospheric Sciences, University of Houston
2001-2006	Post-doc and lecturer, Rice University

Products

Five Recent Products

- Wellner, J. S., T. Scambos, E. Domack, M. Vernet, A. Leventer, G. Balco, S. Brachfeld, M. Cape, B. Huber, S. Ishman, M. McCormick, E. Mosely-Thompson, E. Pettit, C. Smith, M. Truffer, C. Van Dover, K.-C. Yoo, 2019, The Larsen Ice Shelf System, Antarctica (LARISSA): Polar Systems Bound Together, Changing Fast, GSA Today, v. 29, n. 8, p. 4-10, doi.org/[10.1130/GSATG382A.1](https://doi.org/10.1130/GSATG382A.1).
- Troch, M., S. Bertrand, J. S. Wellner, C. B. Lange, and K. A. Hughen, 2023, Postglacial fluctuations of western outlet glaciers of the Southern Patagonian Icefield reconstructed from fjord sediments (Chile, 50°S), Quaternary Science Reviews, 107934, doi.org/[10.1016/j.quascirev.2022.107934](https://doi.org/10.1016/j.quascirev.2022.107934).
- *Munoz, Y. P., and J. S. Wellner, 2018, Seafloor geomorphology of western Antarctic Peninsula bays: a signature of ice flow behavior, The Cryosphere, 12, 205-225, doi.org/[10.5194/tc-12-205-2018](https://doi.org/10.5194/tc-12-205-2018).
- *Robinson, D., J. Menzies, J. Wellner, and *R. Clark, 2021, Subglacial sediment deformation in the Ross Sea, Antarctica, Quaternary Science Advances, doi.org/[10.1016/j.qsa.2021.100029](https://doi.org/10.1016/j.qsa.2021.100029).

Wåhlin, A. K., A. Graham, K. A. Hogan, B. Y. Queste, L. Boehme, R. Larter, E. Pettit, J. Wellner, and K. J. Heywood, 2021, Pathways and modification of warm water flowing beneath Thwaites Ice Shelf, West Antarctica, *Science Advances*, doi.org/10.1126/sciadv.abd7254.

Five Other Significant Products

*Davis, E., K. Rudolph, J. Saylor, T. Lapen, and J. Wellner, 2022, Effects of contemporaneous orogenesis on sedimentation in the Late Cretaceous Western Interior Basin, northern Utah and southwestern Wyoming, *Basin Research*, doi.org/10.1111/bre.12623.

*Ramon, C., K. Rudolph, P. Emmet, and J. Wellner, 2018, Quantitative Analysis of Siliciclastic Clinoforms: An Example From the North Slope, Alaska, *Marine and Petroleum Geology*, v. 97, p. 127-134, doi.org/10.1016/j.marpetgeo.2018.02.013.

Koppes, M., B. Hallet, E. Rignot, J. Mouginot, J. S. Wellner, and K. Boldt, 2015, Observed variations in glacial erosion as a function of glacier characteristics, from Patagonia to the Antarctic Peninsula, *Nature*, v. 526, p. 100-103, [doi:10.1038/nature15385](https://doi.org/10.1038/nature15385).

*Clark, R. W., J. S. Wellner, C.-D. Hillenbrand, R. L. Totten, J. A. Smith, L. M. Simkins, R. D. Larter, K. A. Hogan, A. G. C. Graham, F. O. Nitsche, *A. A. Lehrmann, A. P. Lepp, J. D. Kirkham, V. T. Fitzgerald, *G. Garcia-Barrera, W. Ehrmann, and L. Wacker, 2024, Synchronous retreat of Thwaites and Pine Island glaciers in response to external forcings in the pre-satellite era, *Proceedings of the National Academy of Sciences*, 121 (11) e2211711120, <https://doi.org/10.1073/pnas.2211711120>.

*Stearns, A. I., J. S. Wellner, J. J. Kendall, and S. D. Khan, 2023, Sediment routing in an incised valley during Hurricane Harvey (2017) in Houston, TX: implications for modern sedimentation, *Geology*, 51(11), p. 995–1000, <https://doi.org/10.1130/G51312.1>.

*student advisee

Selected Recent Synergistic Activities

2022-2028	Scientific Committee on Antarctic Research, <i>U.S. Representative (Geology)</i>
2020-2025	International Thwaites Glacier Collaboration Inclusion, Diversity, Equity, and Accessibility (ITGC-IDEA) <i>Committee Member</i>
2021-2022	U.S.S.S.P. Developing Science Mission Requirements for a New, Globally-Ranging U.S. Drilling Vessel, <i>Steering Committee Member</i>
2020-2021	International Ocean Discovery Program <i>Distinguished Lecturer</i>