Ryan A. Venturelli [she/her]

CONTACT Information Department of Geology and Geological Engineering Colorado School of Mines

Colorado School of Mines E-mail: venturelli@mines.edu 1500 Illinois Street Phone: 219.808.0251 Golden, CO 80401 USA Website: rad-subglacial.github.io

RESEARCH INTERESTS

I am an isotope geochemist with expertise in Quaternary geochronology, paleoglaciology, and paleothermometry. My research is centered on the application of novel carbon extraction techniques to place chronological constraints on recent Antarctic ice sheet change.

ACADEMIC APPOINTMENTS **Assistant Professor**

Aug. 2022–present

Colorado School of Mines, Golden, CO

Department of Geology and Geological Engineering

Postdoctoral Fellow

Feb. 2021-Aug. 2022

Tulane University, New Orleans, LA

Department of Earth and Environmental Sciences

Mentor: Dr. Brent M. Goehring

EDUCATION

Ph.D. in Marine Geology

2021

University of South Florida, St. Petersburg, FL

Dissertation: Investigating the Recent History of a Changing Planet with Innovative Isotopic

Techniques and New Geologic Archives

Advisor: Dr. Brad E. Rosenheim

M.S. in Earth and Quaternary Systems

2015

Indiana State University, Terre Haute, IN

Thesis: The Ecology of Deep Sea Benthic Foraminifera on the California Margin: Epifaunal Taxa

in an Infaunal World

Advisor: Dr. Anthony E. Rathburn

B.S in Geology

2013

Indiana University Northwest, Gary, IN

SELECTED
JOURNAL
PUBLICATIONS

- [4] Gustafson, C.G., Key, K., Siegfried, M.R., Fricker, H.A., **Venturelli, R.A.**, Michaud, A.B. A dynamic saline groundwater system mapped beneath an Antarctic ice stream. *Science*, 376(6593), 640-644, doi: 10.1126/science.abm3301
- [3] Johnson, J.S., Venturelli, R.A., Balco, G., Allen, C.S., Braddock, S., Campbell, S., Goehring, B.M., Hall, B.L., Neff, P.D., Nichols, K.A., Rood, D.H., Thomas, L.R., Woodward, J. Existing and potential evidence for Holocene grounding line retreat and readvance in Antarctica. *The Cryosphere*, 16(5), 1543-1562. doi: 10.5194/tc-16-1543-2022.
- [2] Priscu, J.C., Kalin, J.Winans, J., Campbell, T., Siegfried, M.R., Skidmore, M., Dore, J., Leventer, A., Harwood, D., Duling, D., Zook, R., Burnett, J., Gibson, D., Krula, E., Mironov, A., Roberts, G., Rosenheim, B. E., Christner, B., Kasic, K., Fricker, H.A., Lyons, W.B., Barker, J., Bowling, M., Collins, B., Davis, C., Gagnon, A., Gardner, C., Gustafson, C., Li, W., Michaud, A.B., Patterson, M.O., Tranter, M., Venturelli, R.A., Vick-Majors, T., Elsworth, C., and The SALSA Science Team. (2020) Scientific Access into Mercer Subglacial Lake: Scientific Objectives, Drilling Operations and Initial Observations, Annals of Glaciology, doi: 10.1017/aog.2021.10
- [1] Venturelli, R.A., Siegfried, M.R., Roush, K.A., Li, W., Burnett, J. Zook, R., Fricker, H.A., Priscu, J.C. Leventer, A., and Rosenheim, B.E. (2020) Mid-Holocene grounding line retreat

and readvance at Whillans Ice Stream, West Antarctica. $Geophysical\ Research\ Letters,\ 47,$ doi: 10.1029/2020 GL088476.

Research Funding	National Science Foundation Title: Collaborative Research: Sensitivity of the West Antarctic Ice Sheet to 2° Cels Period: September, 2021–August, 2025 Award Number: OPP 2035035 PI: Molly Patterson (Binghamton) Co-Is: Justin Dodd (NIU), Amy Leventer (Colgate), Paul Winberry (CWU), I (UNL), Jeanine Ash (Rice), Jacqueline Austermann (Columbia), Jonathan Kingsla*Venturelli sub-contract from total \$3,240,796	David Harwood
Honors and Awards	University of South Florida	
	College of Marine Science Sackett Prize for Innovative Research Gulf Oceanographic Trust Fellowship Jack and Katharine Ann Lake Fellowship Paul Getting Endowed Memorial Fellowship Anne and Werner Von Rosenstiel Fellowship	2021 2018–2019 2017–2018 2016–2017 2015–2016
	OFFICE OF GRADUATE STUDIES International Travel Grant Graduate Student Research Symposium Presentation Winner	2017 2017
	Indiana State University College of Graduate and Professional Studies	2021
	Research and Creativity Award EARTH AND ENVIRONMENTAL SYSTEMS	2015
	Outstanding Graduate Assistant Award Indiana University Northwest GEOSCIENCES	2015
	Karen Brunson Memorial Award	2013
FIELD EXPERIENCE	Subglacial Antarctic Lakes Scientific Access (SALSA) Project Mercer Ice Stream, West Antarctica Subglacial water and sediment sampling	2018-2019
	McMurdo Station, West Antarctica	2017-2018

Contamination remediation and preparation of a deep field laboratory

American Geophysical Union (AGU), Geological Society of America (GSA)

PROFESSIONAL ORGANIZATIONS