



BRENDAN REILLY

Oregon State University, College of Earth, Ocean, and Atmospheric Sciences

Degrees:

B.S. in Management, Boston College

M.S. in Geosciences, Montclair State University, NJ

Advisor:

Joseph Stoner, PhD

Scholar Award Donors:

Mark and Leslie Workman

About the Scholar:

Brendan uses ocean and lake sediments to study Earth history and its paleoenvironments, glacial systems, and magnetic field. He works with sediments from near the Antarctic Peninsula, the Canadian Arctic Ocean, Greenland, North American lakes, and the Bay of Bengal. His work characterizes glacial advance/retreat, sediment chronology, and correlation of regional climate signals/events. Most recently, Brendan participated in the recovery of 0.3-1.2 km drill cores from the Indian Ocean to investigate climate-tectonic connections related to Himalayan uplift and the evolution of the monsoon.

Benefits to Society:

Atmospheric and oceanographic changes over time within Earth's systems impact environments, ecology, natural resources, and people.

Awards and Honors:

College of Science and Mathematics Award of Excellence, The Graduating Masters Research Award, Montclair State University

The Outstanding M.S. Student in Geosciences Award, Montclair State University

Antarctic and Arctic Service Medals

Presidential Call to Service Award

Publications and Posters:

Stoner, J., **Reilly, B.**, Ziegler, L., Cook, T., Francus, P., Lapointe, F., Abbott, M., Balascio, N., Bradley, R., (2015) Holocene paleomagnetic secular variation: What relationships between mid and polar latitudes tell us about geomagnetic dynamics, Joint Assembly, May 3-7, 2015, Montreal, Canada.

Reilly, B., Stoner, J., Hatfield, R., Ziegler, L., Abbott, M., Larsen, D., Hillman, A., (2014) A 33 kyr paleomagnetic secular variation record from Fish Lake, Utah, American

- Geophysical Union Fall Meeting, December 15-19, 2014, San Francisco, CA, USA.
- Stoner, J., Ziegler, L., **Reilly, B.**, Francus, P., Abbott, M., Cook, T., Bradley, R., (2014) Holocene paleomagnetic secular variation and paleointensity: Influence of high latitude flux lobes on the tangent cylinder, American Geophysical Union Fall Meeting, December 15-19, 2014, San Francisco, CA, USA.
- Ziegler, L., Stoner, J., Abbott, M., Finkenbinder, M., Hatfield, R., Konyndyk, D., **Reilly, B.**, Hillman, A., (2014) A Holocene paleomagnetic record from Fish Lake, Oregon, American Geophysical Union Fall Meeting, December 15-19, 2014, San Francisco, CA, USA.
- Windsor, K., Carlson, A., Welke, B., **Reilly, B.**, (2014) Southwestern Greenland ice-sheet retreat from the outer continental shelf by 18 ka, American Geophysical Union Fall Meeting, December 15-19, 2014, San Francisco, CA, USA.
- Reilly, B.**, Natter, C., Brachfeld, S., (2013) Magnetic Signatures of sea ice, ice shelf, and grounding-line facies in Antarctic fjords: Examples from Barilari Bay, Western Antarctic Peninsula, American Geophysical Union Fall Meeting, December 9-13, 2013, San Francisco, CA, USA.
- Brachfeld, S., Leventer, A., Wellner, J., McCormick, M., Domack, E., Ishman, S., Vernet, M., Darley, R., **Reilly, B.**, Vadman, K., Staszyc, A., Kyrmanidou, A., Shimizu, M., Cape, M., Lavoie, C., (2013) The "Perseverance Drift," a unique paleoenvironmental archive in the northwest Weddell Sea, Antarctic Drilling Workshop, November 7-8, 2013, Houston, TX, USA.
- Reilly, B.**, Elking, N., Yoo, K., Brachfeld, S., Domack, E., Leventer, A., Lavoie, C., and Ishman, S., (2012) Magnetic and sedimentologic analysis of late Holocene sediment core, Barilari Bay, Antarctica, XXXII Scientific Committee on Antarctic Research (SCAR) Open Science Conference, July 13-25, 2012, Portland, OR, USA.
- Reilly, B.**, Brachfeld S., Elking N., Yoo, K., Domack, E., Leventer, A., Lavoie, C., and Ishman, S., (2012) Magnetic and sedimentologic analysis of late Holocene sediment core, Barilari Bay, Antarctica, Montclair State University Sixth Annual Student Research Symposium, April 22, 2012, Montclair, NJ, USA.