

Katherine J. Keller

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EDUCATION

- Harvard University** 2018 - Present
Ph.D. student
Advisors: Ann Pearson and David Johnston
- Georgetown University** 2016
M.S. Physiology
- Columbia University** 2014
B.A. Environmental Chemistry

PREVIOUS RESEARCH EXPERIENCE

- United States Geological Survey** 2016 - 2018
Research Assistant Reston, Va
- Project: Quaternary Arctic Ocean paleoceanography using benthic foraminiferal oxygen isotopes and ostracode Mg/Ca ratios
PI: Thomas Cronin
 - Project: Reconstruction of Holocene hydroclimate patterns in the Bering Sea region using oxygen isotopes from peatland cellulose
PI: Miriam Jones
- Georgetown University** 2016
Research Assistant Washington, D.C.
- Project: Understanding the role of Neuropeptide Y (NPY) in Ewing sarcoma tumor growth and progression
PI: Jason Tilan
- Lamont-Doherty Earth Observatory** 2014
Research Assistant Palisades, NY
- Project: Molecular biomarker changes in high-latitude peatlands during the Younger Dryas
PI: Jonathon Nichols
- Lamont-Doherty Earth Observatory** 2012 - 2013
Research Assistant Palisades, NY
- Project: Analysis of seawater carbon chemistry in the Arctic Ocean during winter time
PI: Taro Takahashi

PUBLICATIONS

1. Jones, M.C., Berkelhammer, M., Keller, K.J., Yoshimura, K., Wooller, M.J., 2020. High sensitivity of Bering Sea winter sea ice to winter insolation and carbon dioxide over the last 5,500 years. *Science Advances*. Accepted.
2. Wingard, G.L., Bergstresser, S.E., Stackhouse, B.L., Jones, M.C., Marot, M.E., Hoefke, K., Daniels, A. and Keller, K., 2019. Impacts of Hurricane Irma on Florida Bay Islands, Everglades National Park, USA. *Estuaries and Coasts*, pp.1-20.

3. Jones, M.C., Wingard, G.L., Stackhouse, B., Keller, K., Willard, D., Marot, M., Landacre, B. and Bernhardt, C.E., 2019. Rapid inundation of southern Florida coastline despite low relative sea-level rise rates during the late-Holocene. *Nature communications*, 10(1), pp.1-13.
4. Jones, M.C., Anderson, L., Keller, K., Nash, B., Littell, V., Wooller, M. and Jolley, C.A., 2019. An assessment of plant species differences on cellulose oxygen isotopes from two Kenai Peninsula, Alaska peatlands: implications for hydroclimatic reconstructions. *Frontiers in Earth Science*, 7, p.25.
5. Cronin, T.M., Keller, K.J., Farmer, J.R., Schaller, M.F., O'Regan, M., Poirier, R., Coxall, H., Dwyer, G.S., Bauch, H., Kindstedt, I.G. and Jakobsson, M., 2019. Interglacial Paleoclimate in the Arctic. *Paleoceanography and Paleoclimatology*, 34(12), pp.1959-1979.
6. Cronin, T.M., Seidenstein, J., Keller, K., McDougall, K., Ruefer, A. and Gemery, L., 2019. The benthic foraminifera *Cassidulina* from the Arctic Ocean: application to paleoceanography and biostratigraphy. *Micropaleontology*, 65(2), pp.105-125.

CONFERENCE PRESENTATIONS

1. Dwyer, G.S., Cronin, T.M., Keller, K. and Gemery, L., 2019. Mg/Ca Ratios in Ostracode Genera *Sarsicytheridea* and *Paracyprideis*: A Potential Paleotemperature Proxy for Arctic and Sub-Arctic Continental Shelf and Slope Waters. AGUFM, 2019.
2. Jones, M., Keller, K., Wooller, M.J. and Berkelhammer, M.B., 2018. Bering Sea climate influenced by solar forcing during the late Holocene. AGUFM, 2018.
3. Wingard, G.L.L., Jones, M., Bergstresser, S., Stackhouse, B., Keller, K., Marot, M.E. and Daniels, A., 2018. Late Holocene Changes to the South Florida Mangrove Coastline and Projections for the 22nd Century: Interaction of Climate, Sea Level, and Local Factors. AGUFM, 2018.
4. Keller, K.J., Cronin, T.M., Dwyer, G.S., Farmer, J.R., Poirier, R.K., Schaller, M.F. 2017. Orbital-scale central Arctic ocean temperature records from benthic foraminiferal $\delta^{18}O$ and ostracode Mg/Ca ratios. AGUFM, 2017.
5. Jones, M., Bernhardt, C.E., Wingard, G.L.L., Keller, K., Stackhouse, B. and Landacre, B., 2017. Impact of sea-level rise on Everglades carbon storage capacity in the Holocene. AGUFM, 2017.
6. Jones, M.C., Anderson, L., Jolley, C., Keller, K.J., Littell, V. and Nash, B., 2017, October. Toward understanding drivers and controls of Holocene oxygen isotopes shifts of water and peat cellulose on the Kenai Peninsula, Alaska. In GSA Annual Meeting in Seattle, Washington, USA, 2017.
7. Keller, K.J., Jones, M.C. and Wooller, M., 2017, October. Holocene climate reconstruction for the Bering Sea region from peat oxygen isotopes, St. Matthew Island, Alaska. In GSA Annual Meeting in Seattle, Washington, USA, 2017.

TEACHING EXPERIENCE

Harvard University

Course: Climate-Energy Challenge

Fall 2019

GENED 1094

- Teaching fellow. Introduction to climate change, energy systems, and strategies for climate change mitigation. Course head: Dan Schrag. Awarded Harvard certificate of distinction and excellence in teaching