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KEYWORDS

Paleoclimate, paleolimnology, organic geochemistry, stable isotope geochemistry, water isotopes, Arctic

CURRENT POSITION

2020- **NSF Postdoctoral Fellow**, University of Massachusetts Amherst, Dept of Geological Sciences.
Dr. Isla S Castañeda, supervisor

Biomass burning in the terrestrial Arctic during past warm periods: New insights from organic biomarkers in Lake El'gygytgyn (Siberia)

EDUCATION

2017 **Ph.D., Brown University**, Department of Earth, Environmental and Planetary Sciences (Providence, RI) and **Marine Biological Laboratory**, Ecosystems Center (Woods Hole, MA).
Drs. James M. Russell and Anne E. Giblin, advisors.

Climatic and ecological change in Arctic Alaska over the last 32,000 years inferred from lacustrine records and experiments

2013 **M.Sc., Brown University**, Department of Earth, Environmental and Planetary Sciences (Providence, RI) and **Marine Biological Laboratory**, Ecosystems Center (Woods Hole, MA).
Drs. James M. Russell and Anne E. Giblin, advisors.

Benthic community metabolism in deep and shallow arctic lakes during 13 years of whole-lake fertilization

2007 **B.A., Lawrence University**, Appleton, WI. Magna cum laude in biology. Dr. Bart T. De Stasio, advisor.

Dreissena polymorpha and suspended sediment effects on the lower food web in Green Bay, Lake Michigan and Lake Winnebago, Wisconsin: A modeling approach

SELECT PUBLICATIONS

Daniels, W. C., Castañeda, I. S., Salacup, J., Habicht, M. H., Lindberg, K. R., Brigham-Grette, J. Archaeal lipids reveal climate-drive changes in microbial ecology at Lake El'gygytgyn (Far East Russia) during the Plio-Pleistocene. *Journal of Quaternary Science*. DOI 10.1002/jqs.3347.

Daniels, W. C., Russell, J. M., Morrill, C., Longo, W. M., Giblin, A. E., Holland-Stergar, P., Welker, J. M., Wen, X., Hu, A., Huang, Y. Regional feedbacks strongly modulated Arctic Alaskan climate since the last ice age. *Geophysical Research Letters*. *Quaternary Science Reviews*: 269: 107130 DOI 10.1016/j.quascirev.2021.107130

Zhao, B., Castañeda, I. S., Bradley, R. S., Salacup, J. M., de Wet, G. A., **Daniels, W. C.**, Schneider, T. Development of an in situ branched glycerol dialkyl glycerol tetraether (brGDGT) calibration in Lake 578, southern Greenland: applications to future Arctic paleoclimate studies. *Organic Geochemistry*. 152:104168. Doi.org/10.1016/j.orggeochem.2020.104168.

Vachula, R. S., Huang, Y., Longo, W. M., Dee, S. G., **Daniels, W. C.**, Russell, J. M. 2019. Evidence of

Ice Age humans in eastern Beringia suggests early migration to North America. *Quaternary Science Reviews*. 205: 35-44. DOI /10.1016/j.quascirev.2018.12.003.

Daniels, W. C., Huang, Y., Russell, J. M., Giblin, A. E. 2018. Effect of continuous light on leaf wax isotope ratios in *Betula nana* and *Eriophorum vaginatum*: Implication for Arctic paleoclimate reconstructions. *Organic Geochemistry*. 125: 70-81. DOI 10.1016/j.orggeochem.2018.08.008

Daniels, W. C., Russell, J. M., Giblin, A. E., Welker, J. M., Klein, E. S., Huang, Y. 2017. Hydrogen isotope fractionation in leaf waxes in the Alaskan Arctic tundra. *Geochimica et Cosmochimica Acta*. 213: 216-236. DOI 10.1016/j.gca.2017.06.028.

Daniels, W. C., Giblin, A. E., Kling, G. W. 2015. Benthic community metabolism in deep and shallow arctic lakes during 13 years of whole-lake fertilization. *Limnology and Oceanography*. 60(5): 1604-1618. DOI 10.1002/lno.10120

REFERENCES

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