

James M. Russell, Curriculum Vitae

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1. Educational Background

- 1999-2004 **Ph.D. Ecology.** University of Minnesota (Minneapolis, MN).
Thomas C. Johnson, advisor. Minor in Quaternary Paleoecology.
- 1994-1998 **Bachelor of Arts, Earth and Environmental Science** Wesleyan University
(Middletown, CT). Junior Phi Beta Kappa.

2. Professional Experience

- 2020 - **Chair of the Department of Earth, Environmental, and Planetary Sciences**
2018 - 2021 **Royce Family Professor of Teaching Excellence**
Dept. of Earth, Environmental, and Planetary Sciences, Brown University
- 2011- 2018 **Associate Professor.** Dept. of Geological Sciences, Brown University.
- 2008-2011 **Joukowsky Family Assistant Professor of Geological Sciences,** Brown University.
- 2006-2008 **Assistant Professor.** Dept. of Geological Sciences, Brown University.
- 2004-2005 **Postdoctoral Research Associate.** Large Lakes Observatory, U. Minnesota Duluth.
- 2004 & 2005 **Paleoclimatology Instructor.** Nyanza Project, University of Arizona (NSF-REU field
course on Lake Tanganyika, Africa)
- 1999-2004 **Ph.D. candidate.** University of Minnesota.
- 1998-1999 **Junior Scientist.** Limnological Research Center, University of Minnesota.

3. Publications (* denotes student or post-doctoral advisee)

A. Book Chapters

5. Mohtadi, M, Abram, NJ, Clemens, SC, Pfeiffer, M, **Russell, J.M.**, Steinke, S, Zinke, J
(2023). Paleoclimate evidence of Indian Ocean variability across a range of timescales. In:
Ummenhofer, C, Hood, R (Eds.), *The Indian Ocean and its role in the global climate system.*
Elsevier, Amsterdam, ISBN: 978-0-12-822698-8
4. Doughty, A.M., Kelly, M.A., **Russell, J.M.**, Jackson, M.S., Anderson, B.A., Chipman, J.,
Nakileza, B., and Dee, S.G., 2020, Modeling glacier extents and equilibrium line altitudes in the
Rwenzori Mountains, Uganda, over the last 31,000 yr, *in* Waitt, R.B., Thackray, G.D., and
Gillespie, A.R., eds., *Untangling the Quaternary Period: A Legacy of Stephen C. Porter:*
Geological Society of America Special Paper 548.
3. Eggermont, H., Russell, J. M., van Damme, Kay, 2009. Rwenzori: Headwaters of the Nile. In:
(Dumont, H., ed.), *The River Nile.* Monographiae Biologicae. Spriner-Verlag, Berlin, pp. 243-
262.

2. Brigham-Grette, J., et al., 2007. Chapter 1. Climate dynamics and global environments. In: Harms, U., Koeberl, C., Zoback, M. (eds.): *Continental Scientific Drilling: A Decade of Progress and Challenges for the Future*. Springer-Verlag, Berlin.
1. Laerdal, T, Talbot, MR, Russell, JM, 2002. Late Quaternary sedimentation and climate in the Lake Edward and George area, Uganda-Congo. In: Olago, D, Odada, EO (eds): *The East African Great Lakes: Limnology, Palaeolimnology, and Biodiversity*. Kluwer Academic Publishers, Dordrecht, The Netherlands, pp. 429-470.

B. Refereed Journal Articles (* denotes student or post-doctoral advisee)

154. *Liang, Jie, *Richter, N., Xie, H. Si, G., Wang, J., **Russell, J.M.**, Zhang, G., 2023. Branched glycerol dialkyl glycerol tetraether (brGDGT) distributions influenced by bacterial community composition in various vegetational soils on the Tibetan Plateau. *Palaeogeography, Palaeoclimatology, Palaeoecology* 611: 11358.
153. Doughty, A., Kelly, M.A., **Russell, J.M.**, Jackson, M., Anderson, B., Chipman, J.W., Nakileza, B., 2023. Last Glacial Maximum reconstructions of Rwenzori Mountain glaciers. *Paleoceanography and Paleoclimatology*.
152. *Du, X., **Russell, J.M.**, Liu, Z., Otto-Bliesner, B.L., Oppo, D.W., Mohtadi, M., Zhu, C., Galy, V.V., Schefuß, E., Yan, Y., Rosenthal, Y., Dubois, N., Arbuszewski, J., Gao, Y., in review. North Atlantic cooling triggered a zonal mode over the Indian Ocean during Heinrich Stadial 1. *Science Advances*.
151. Fastovich, D., **Russell, J.M.**, Marcott, S., Williams, J.W., 2022. Spatial fingerprints and mechanisms of precipitation and temperature changes during the Younger Dryas in eastern North America. *Quaternary Science Reviews* 294: 107724.
150. Bitner, L., de Jonge, C., Gil-Romera, G. Lamb, H.F., **Russell, J. M.**, Zech, M., 2022. A Holocene temperature (brGDGT) record from Garba Guracha, a high-altitude lake in Ethiopia. *Biogeosciences* 10.5194/bg-2022-95.
149. *Lupien, R.L., **Russell, J.M.**, Pearson, E.J., Castañeda, I.S., Asrat, A., Foerster, V., Lamb, H.F., Roberts, H.M., Schäbitz, F., Trauth, M.H., Beck, C.C., Feibel, C.S., Cohen, A.S., 2022. Orbital controls on eastern African hydroclimate in the Pleistocene. *Scientific Reports* doi.org/10.1038/s41598-022-06826-z
148. *Perrotti, A.G., Kiahtipes, C., **Russell, J.M.**, Jackson, S.T., Gill, J.L., Robinson, G., Krause, T., Williams, J.W., 2022. Diverse responses of vegetation and fire after Pleistocene megaherbivore extinction across the Eastern US. *Quaternary Science Reviews* 294: 107696.
147. *Garelick, S., **Russell, J.M.**, *Richards, A., *Smith, J.J., Kelly, M.A., Anderson, N., Jackson, M., Doughty, A., Nakileza, B., 2022. The timing and magnitude of last deglacial warming in high-elevation regions of eastern equatorial Africa. *Quaternary Science Reviews* 10.1016/j.quascirev.2022.107416
146. Ageli, M., Hamilton, P.B., Weidman, P, **Russell, J.M.**, Vogel, H., Bijaksana, S., Haffner, G.D, 2022. Benthic-pelagic state changes in the primary trophic level of an ancient tropical lake. *Journal of Paleolimnology* 594: 110937.
145. Cohen, A.S., Du, A., Rowan, J., Yost, C.L., Billingsley, A.L., Campisano, C.J., Brown, E., Deino, A.L., Feibel, C.S., Grant, K., Kingston, J.D., *Lupien, R.L., Muiruri, V., Owen, R.B., Reed, K.E., **Russell, J.M.**, Stockhecke, M., 2022. Plio-Pleistocene African environmental variability and mammalian evolution. *PNAS* 10.1073/pnas.2107393119
144. Cohen, A.S., Campisano, C., Arrowsmith, R., Asrat, A., Beck, C., Behrensmeier, A.K., Deino, A., Deocampo, D., Feibel, C., Foerster, V., Kingston, J., Lamb, H., Lowenstein, T., Lupien, R., Muiruri, V., Olago, D., Owen, R.B., Potts, R., **Russell, J.M.**, Schaebitz, F., Stone, J., Trauth, C., HSPDP Science team, 2022. Reconstructing the environmental context of human origins in East Africa through scientific drilling. *Annual Reviews in Earth and Planetary Sciences* 10.1146/annurev-earth-031920-081947

143. Vuillemin, A., Mayr, C., Schuessler, J., Friese, A., Bauer, K., Lücke, A., Heuer, V., Glombitza, C., Henny, C., von Blackenberg, F., **Russell, J.M.**, Bijaksana, S., Vogel, H., Crowe, S., Kallmeyer, J., 2022. A one-million year record from siderites formed in modern ferruginous sediment. *Geological Society of America Bulletin* 10.1130/B36211.1
142. *Richter, N, **Russell, J.M.**, Amaral-Zettler, L., *DeGroff, W., Raposeiro, P.M., Gonçalves, V., de Boer, E.J., Pla-Rabes, S., Hernández, A., Sáez, A., Bao, R., Trigo, R., Giral, S., 2022. Long-term hydroclimate variability in the sub-tropical North Atlantic and anthropogenic impacts on lake ecosystems: A case study from Flores Island, the Azores. *Quaternary Science Reviews* 285: 107525.
141. *Liang, J., Guo, Y., *Richter, N., Xie, H., *Vachula, R., *Lupien, R., Zhao, B., Wang, M., Yao, Y., Hou, J., Liu, J., **Russell, J.M.**, 2022. Calibration and application of branched GDGTs to Tibetan lake sediments: the influence of temperature on the fall of the Guge Kingdom in Western Tibet, China. *Paleoceanography and Paleoclimatology* 10.1029/2021PA004393.
140. *Richter, N., **Russell, J.M.**, Garfinkel, J., Huang, Y., 2021. Impacts of Norse settlement on terrestrial and aquatic ecosystems in southwest Iceland. *Journal of Paleolimnology* 10.1007/s10933-020-00169-3
139. Shah, P., **Russell, J.M.**, Waldmann, N., 2021. Reconstructing 1200 years of hydroclimate variability in the southern margins of the Arabian Desert: insights from a paleo-lake in southern Yemen. *Frontiers in Earth Science* doi: 10.3389/feart.2021.712443.
138. *Du, X., **Russell, J.M.**, Liu, Z., Otto-Bliesner, B.L., Gao, Y., Zhu, C., Oppo, D.W., Mohtadi, M., Yan, Y., Galy, V.V., He, C., 2021. Deglacial trends in Indo-Pacific warm pool hydroclimate in an isotope-enabled Earth system model and implications for isotope-based paleoclimate reconstructions. *Quaternary Science Reviews* 270: 107188.
137. *Daniels, W.C., **Russell, J.M.**, Morrill, C., Longo, W.M., Giblin, A.E., *Holland-Stergar, P., Welker, J.M., Wen, X., Huang, Y., 2021. Lacustrine leaf wax hydrogen isotopes indicate strong regional climate feedbacks in Beringia since the last ice age. *Quaternary Science Reviews* 269: 107130.
136. *Liang, J., *Lupien, R.L., Xie, H., *Vachula, R.S., Stevenson, M.A., Han, B.-P., Lin, Q., He, Y., Wang, M., Liang, P., Huang, Y., McGowan, S., Hou, J., **Russell, J.M.**, 2021. Lake ecosystem on the Qinghai-Tibetan Plateau severely altered by climatic warming and human activity. *Palaeogeography, Palaeoclimatology, Palaeoecology* doi.org/10.1016/j.palaeo.2021.110509.
135. Ulfers., A., Hesse, K., **Russell, J.M.**, Vogel, H., Wonik, T., 2021. Paleoenvironmental and cyclostratigraphic results from downhole logging of sediments from tropical Lake Towuti, Indonesia. *Journal of Paleolimnology*. 10.1007/s10933-020-00171-9.
134. *Xie, H., *Liang, J., *Vachula, R.S., **Russell, J.M.**, Chen, S., Guo, M., Wang, X., Huang, X., Chen, F., 2021. Changes in the hydrodynamic *intensity* of Bosten Lake and its impact on early human settlement in the northeastern Tarim Basin, Arid Central Asia. *Palaeogeography, Palaeoclimatology, Palaeoecology* Doi: 10.1016/j.palaeo.2021.110499
133. *Lupien, R.L., **Russell, J.M.**, *Subramanian, A., Kinyanjui, R. Beverly, E.J., Uno, K.T., de Menocal, P.B., Potts, R., 2021. The history of eastern African environmental variation and its role in the evolution and technological advancement of *Homo* since 1 Ma. *Journal of Human Evolution*, doi: 10.1016/j.jhevol.2021.103028
132. *Garelick, S.G., **Russell, J.M.**, Dee, S, Verschuren, D., Olago, D., 2021. Assessing the controls on hydroclimate and hydrogen isotopes of precipitation in high-elevation regions in Eastern Africa since the LGM. *Earth and Planetary Science Letters* 567: 116984.
131. Morlock, M., Vogel, H., **Russell, J.M.**, Anselmetti, F., Bijaksana, S., 2021. Quaternary environmental changes in tropical Lake Towuti, Indonesia, inferred from end-member modelling of X-ray fluorescence core-scanning data. *Journal of Quaternary Science* 10.1002/jqs.3338

130. *Richter, N., **Russell, J.M.**, Garfinkel, J., Huang, Y., 2021. Winter-spring warming in the North Atlantic during the last 2,000 years: Evidence for southwest Iceland. *Climates of the Past* 17: 1363-1383.
129. Liu, Z., Otto-Bliesner, B.L., Clark, P.U., Lynch-Stieglitz, J., **Russell, J.M.**, 2021. SynTRACE-21: Synthesis of Transient Climate Evolution of the last 21,000 years. *Past Global Changes* 29: doi.org/10.22498/pages.29.1.13
128. *Sheppard, R.Y., Milliken, R., **Russell, J.M.**, Sklute, E.C., Dyar, M.D., Vogel, H., Melles, M., Bijaksana, S., Hasberg, A., Morlock, M., 2021. Iron mineralogy and sediment color in a 100 m drill core from Lake Towuti, Indonesia reflect catchment and diagenetic conditions. *Geochemistry, Geophysics, Geosystems* doi:10.1029/2020GC009852.
127. Bauersachs, T., Schwarck, L., **Russell, J.M.**, 2021. A heterocyte glycolipid-based calibration to reconstruct past continental climate change. *Nature Communications* 10.1038/s41467-021-22739-3.
126. Friese, A. Bauer, K., Glombitza, C., Ordoñez, L., Crowe, S.A., Ariztegui, D., Heuer, V.B., Vuillemin, A., Henny, C., Nomosatryo, S. Simister, R., Wagner, D., Bijaksana, S., Vogel, H., Melles, M., Kallmeyer, J., **Russell, J.M.**, 2021. Methanogenesis dominates organic matter mineralization in modern ferruginous sediments. *Nature Communications* 12: 10.1038/s41467-021-22543-0.
125. *Dee, S.G., Morrill, C., **Russell, J.M.**, Kim, S.-H., 2021. Hot air, hot lakes, or both? Exploring mid-Holocene African temperatures using proxy system modeling. *Journal of Geophysical Research-Atmospheres* 10.1029/2020JD033269
124. Ivory, S. J., McGlue, M.M., Peterman, C., Baldwin, P., Lucas, J., Cohen, A.S., Russell, J.M., Saroni, J., Msaky, E., Kimirei, I., Soreghan, M., 2021. Climate, vegetation, and weathering across space and time in Lake Tanganyika, tropical eastern Africa. *Quaternary Science Advances* doi.org/10.1016/j.qsa.2021.100023
123. *Cheung, A., Vachula, R.S.*, Sandwick, S., Clifton, E.*, **Russell, J.M.**, 2021. Humans dominated biomass burning variations in Equatorial Asia over the past 200 years: evidence from a lake sediment charcoal record. *Quaternary Science Reviews* doi: 10.1016/j.quatscirev.2020.106778.
122. Cooper, A., Turney, C.S.M., Palmer, J., Hogg, A., McGlone, M., Wilmshurst, J., Lorrey, A.M., Heaton, T.J., **Russell, J.M.**, McCracken, K., Anet, J.G., Rozanov, E., Friedel, M., Suter, I., Peter, T., Muscheler, R., Adolphi, F., Dosseto, A., Faith, J.T., Fenwick, P., Fogwill, C.J., Hughen, K., Lipson, M., Liu, J., Nowaczyk, N., Rainsley, E., Ramsey, C.B., Sebastianelli, P., Souilmi, Y., Stevenson, J., Thomas, Z., Tobler, R., Zech, R., 2021. A global environmental crisis 42,000 years ago. *Science* 371:811-818.
121. Jensen, A.M., Fastovich, D., Watson, B.I., Gills, J.L., Jackson, S.T., **Russell, J.M.**, Bevington, J., Hayes, K., Lininger, K.B., Rubbelke, C., Schellinger, G.C., Williams, J.W., 2021. More than one way to kill a spruce forest: the role of fire and climate in the late-glacial termination of spruce woodlands across the southern Great Lakes region. *Journal of Ecology* DOI: 10.1111/1365-2745.13517.
120. *Zhang, X., Zhou, A., Huang, Z., An, C., Zhao, Y., Yin, L., **Russell, J.M.**, 2020. Moisture evolution in North Xinjiang (northwest China) during the last 8000-yr linked to westerlies and winter half-year precipitation. *Quaternary Research*, doi: 10.1017/qua.2020.94
119. Mackay, A., Lee, B., **Russell, J.M.**, 2020. Lake ecosystem change in response to climate warming in Rwenzori Mountain National Park, Central Africa. *Journal of Paleolimnology*. doi.org/10.1007/s10933-020-00161-x
118. *Zhang, R., Li, T., **Russell, J.M.**, Zhang, F., Xiao, X., Cheng, Y., Liu, Z., Guan, M., Han, Q., 2020. Source apportionment of polycyclic aromatic hydrocarbons in continental shelf of the East China Sea with dual compound-specific isotopes (d13C and d2h). *Science of the Total Environment* 704: 135459.

117. Vickers, A.C., Shakun, J.D., Goehring, B.M., Kelly, M.A., Jackson, M.S., Gorin, A., Doughty, A., **Russell, J.M.**, 2020. Similar Holocene glaciation histories in tropical South America and Africa. *Geology*, DOI: 10.1130/G48059.1
116. Potts, R., Dommoin, R., Moerman, J.E., Behrensmeier, A.K., Deino, A.L., Beverly, E.J., Brown, E.T., Deocampo, D., Kinyanjui, R., Lupien, R.L., Owen, R.B., Rabideaux, N., Riedl, S., **Russell, J.M.**, Stockhecke, M., deMenocal, P., Faith, J.T., Garcin, Y., Noren, A., Scott, J.J., Western, D., Bright, J., Clark, J.B., Cohen, A.S., Keller, C.B., King, J., Levin, N.E., Shannon, K.B., Muiruri, V., Renaut, R.W., Rucina, S.M., Uno, K.T., 2020. Increased ecological resource variability during a critical transition in hominin evolution. *Science Advances* 6: eabc8975.
115. Fastovich, D., **Russell, J.M.**, Jackson, S.T., Krause, T.R., Marcott, S.A., Williams, J.W., 2020. Spatial fingerprint of Younger Dryas cooling and warming in Eastern North America. *Geophysical Research Letters* doi: 10.1029/2020GL090031.
114. *Pereboom, E.M.B. , *Vachula, R.S., Huang, Y., **Russell, J.M.**, 2020. The morphology of experimentally produced charcoal distinguishes fuel types in the Arctic tundra. *The Holocene* 30: 1091-1096.
113. Jackson, M.S., Kelly, M.A., **Russell, J.M.**, Doughty, A.M., Howley, J.A., Chipman, D.A., Cavagnaro, D.A., Baber, M.A., Zimmerman, S.H., Nakileza, B., 2020. Abrupt, millennial-scale glacial events during the last deglaciation in tropical Africa. *Quaternary Science Reviews* 243: 106455.
112. *Longo, W.M., Huang, Y., **Russell, J.M.**, Morrill, C., *Daniels, W.C., Giblin, A.E., *Crowther, J., 2020. Insolation and greenhouse gases drove Holocene cold season warming in Eastern Beringia. *Quaternary Science Reviews* 242: 106438.
111. *Lupien, R.L., **Russell, J.M.**, Beck, C.C., Feibel, C.S., Cohen, A.S., 2020. Impacts of abrupt and high-frequency climate change on hominin evolution during the early Pleistocene in the Turkana Basin, East Africa. *Quaternary Science Reviews* 245: 106531.
110. **Russell, J.M.**, et. al., 2020. The Tanganyika Scientific Drilling Project: A late Miocene-present record of climate, rifting, and ecosystem evolution from the world's oldest tropical lake. *Scientific Drilling* 27: 53-60.
109. Pico, T., McGee, D., Mitrovica, J., **Russell, J.M.**, 2020. Recent constraints on MIS 3 sea level support role of continental shelf exposure as a control on Indo-Pacific hydroclimate. *Paleoceanography and Paleoclimatology* 35: e2020PA003998.
108. **Russell, J.M.**, Vogel, H., Bijaksana, S., Melles, M., 2020. The late Quaternary tectonic, biogeochemical, and limnological evolution of ferruginous Lake Towuti, Indonesia. *Palaeogeography, Palaeoclimatology, Palaeoecology* 556: 109905.
107. Vuillemin, A., Friese, A., Wirth, R., Schuessler, J.A., Schleicher, A.M., Kemnitz, H., Lucke, A., Bauer, K.W., Nomosatryo, S., Simister, R., Ordoñez, L., Ariztegui, D., Henny, C., Bijaksana, S., Vogel, H., Crowe, S.A., Kallmeyer, J., **Russell, J.M.**, 2020. Vivianite formation in ferruginous sediments from Lake Towuti, Indonesia. *Biogeosciences* 17: 1955-1973.
106. *Vachula, R.S., Huang, Y., **Russell, J.M.**, Abbott, M., Finkenbinder, M., O'Donnel, J., 2020. Sedimentary biomarkers reaffirm human impacts on northern Beringian ecosystems during the last glacial period. *Boreas* DOI 10.1111/bor.12449.
105. Fastovich, D., **Russell, J.M.**, Jackson, S., Williams, J., 2020. Deglacial temperature controls on no-analog community establishment in the Great Lakes Region. *Quaternary Science Reviews* 234: 106245.
104. Anderson, N.J., Heathcote, A.J., Engstrom, D.R., Ryves, D.B., Mills, K., Prairie, Y.T., Bennion, H., Shinneman, A.C., Umbanhowar, C.E., Fritz, S.C., Vershuren, D., Saros, J.E., **Russell, J.M.**, Bindler, R., Valero-Garces, B., Edlund, M.B., Myrbo, A.E., 2020. Anthropogenic alteration of nutrient supply increases the global freshwater carbon sink. *Science Advances* v. 6, eaw2145.

103. *Vachula, R., *Sae-Lim, J., **Russell, J.M.**, 2020. Sedimentary charcoal proxy records of fire in Alaskan Arctic tundra ecosystems. *Palaeogeography, Palaeoclimatology, Palaeoecology* 541: 109564.
102. *O'Mara, N.O., *Cheung, A.H., *Kelly, C.S., *Sandwick, S., Herbert, T.D., **Russell, J.M.**, Abella-Gutierrez, Dee, S.G., Swarzenski, P.W., Herguera, J.C., 2020. Subtropical Pacific Ocean temperature fluctuations in the common era: the Pacific Decadal Oscillation and its connection to western North American megadroughts. *Geophysical Research Letters* 46: 14662-14673.
101. *Lupien, R.L., **Russell, J.M.**, Kingston, J.D., Yost, C., Schuh, A., Logan, J., Cohen, A.S., 2020. Vegetation change in the Baringo Basin, East Africa across the Plio-Pleistocene Boundary. *Palaeogeography, Palaeoecology, Palaeoclimatology*, 10.1016/j.palaeo.2019.109426.
100. *Rodysill, J. R., **Russell, J. M.**, Vuille, M., Lughino, B., Dee, S., Bijaksana, S., 2019. La Niña-driven flooding in the Indo-Pacific warm pool during the past millennium. *Quaternary Science Reviews* 225: 106020.
99. *Vachula, R., **Russell, J.M.**, Huang, Y., 2019. Climate exceeded human management as the dominant control of fire at the regional scale in California's Sierra Nevada. *Environmental Research Letters* 14: 104011.
98. *Sae-Lim, J., **Russell, J. M.**, *Vachula, R., Holmes, R. M., Mann, P., Schade, J., Natali, S., 2019. Tundra fires and climate changes over the last millennium: a multi-proxy record from the Yukon-Kuskokwim Delta, Alaska, *The Holocene* 29: 1223-1233.
97. Jackson, M.S., Kelly, M.A., **Russell, J.M.**, Doughty, A.M., Howley, J.A., Zimmerman, S.H., 2019. Tropical glacier recession led atmospheric greenhouse gas rise at the onset of the last deglaciation. *Science Advances* 5: eaaw2610.
96. Ordoñez, L., Vogel, H., Sebag, D., Ariztegui, D., Adatte, T., **Russell, J.M.**, Kallmeyer, J., Vuillemin, A., Friese, A., Crowe, S., Bauer, K., Simister, R., Henny, C., Nomosatryo, S., Bijaksana, S., The Towuti Drilling Project Science Team, 2019. Empowering conventional rock-eval pyrolysis for organic matter characterization of the siderite-rich sediments of Lake Towuti, Indonesia, using end-member analysis. *Organic Geochemistry* 134: 32-44.
95. Vuillemin, A., Wirth, R., Kemnitz, H., Schleicher, A.M., Friese, A., Bauer, K.W., Simister, R., Nomosatryo, S., Ordoñez, L., Ariztegui, D., Henny, C., Crowe, S.A., Benning, L.G., Kallmeyer, J., **Russell, J.M.**, Bijaksana, S., Vogel, H., and the Towuti Drilling Project Science team, 2019. Formation of authigenic siderite in modern ferruginous sediments. *Geology* 10.1130/G46100.1
94. Baxter, A., Hopmans, E. C., **Russell, J. M.**, Sinninghe Damsté, J. S., 2019. Bacterial GMGTs in East African lake sediments: their potential as paleotemperature indicators. *Geochimica et Cosmochimica Acta* 259: 155-169.
93. *Ivory, S. J., **Russell, J. M.**, Early, R., Sax, D., 2019. Broader niches revealed by fossil data don't reduce estimates of range loss and fragmentation of African montane trees. *Global Ecology and Biogeography*, doi 10.1111/geb.12909
92. Sheppard, R. Y., Milliken, R. E., **Russell, J. M.**, Vogel, H., Melles, M., Bijaksana, S., Morlock, M., Hasberg, A., and the TDP Science Team, 2019. Spectroscopic Analysis of Iron Cycling in a Terrestrial Ultramafic Lake and its Implications for Martian Sedimentary Systems. *Chemical Geology* 512: 11-30.
91. Krause, T., **Russell, J. M.**, Williams, J. W., Jackson, S. T., 2019. Late-Quaternary vegetation, climate, and fire history of the Southeast Atlantic Coastal Plain based on a 30,000-year multiproxy record from White Pond, South Carolina, USA. *Quaternary Research* 91: 861-880.
90. *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.
89. *Lupien, R.L., **Russell, J.M.**, Feibel, C., Beck, C., Castañeda, I., Deino, A., Cohen, A.S., 2018. Reply to comment by Nutz and Schuster on "A leaf wax biomarker record of early Pleistocene rainfall from West Turkana, Kenya." *Quaternary Science Reviews* 201: 508-510.

88. *Liang, J., **Russell, J. M.**, Xie, H., Zhang, G., *Lupien, R.L., Si, G., Wang, J., Hou, J., Zhang, G., 2018. Vegetation effects on temperature calibrations of branched glycerol dialkyl glycerol tetraethers (GDGTs) in soils. *Organic Geochemistry* 127: 1-11.
87. *Zhang, R., Li, T., **Russell, J.M.**, Zhou, Y., Zhang, F. Liu, Z., Guan, M., Han, Q., 2018. High-resolution reconstruction of historical flood events in the Changjiang River catchment based on geochemical and biomarker records. *Chemical Geology* 499: 58-70.
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4. **Russell, J. M.**, Cohen, A. S., Johnson, T. C., Scholz, C. A., 2012. A strategic plan for continental drilling in the East African lakes. *PAGES News*.
3. Eggermont, H.R., **Russell, J.M.** 2010. Paleoclimate, paleolimnology, and glacier history of the East African Mountains. *Mountain Research Initiative News* 4.
2. **Russell, J. M.**, 2007. Rainfall and drought in lowland Indonesia: opportunities for paleoclimate research in the Malili Lakes. In: Hehanussa, P., Haryani, G. S, Ridwansyah, I., eds., *The Ecology and Limnology of the Malili Lakes*. LIPI (Indonesian Institute of Science) Press, pp. 9-17.

1. **Russell, J.M.**, Kelts, K.R., 2000. The sedimentologic history of Lake Edward, Uganda. *IDEAL Bulletin* (summer): 1-3.

D. Work in Review

6. *Karp, A., Uno, K.T., Berke, M.A., **Russell, J.M.**, Scholz, C.A., Marlona, J.R., Faith, J.T., Staver, C.A., submitted. Nonlinear effects on savannah fire activity across the African Humid Period. *Quaternary Science Reviews*.
5. Damanik, A., Wille, M., Ahmad, Q., Crowe, S.A., Bauer, K.W., Grosjean, M., Cahyarini, S.Y., Bijaksana, S., **Russell, J.M.**, Vogel, H., submitted. Sedimentary Mo isotope variability records climate-driven redox changes in ferruginous Lake Towuti, Indonesia, over the last 30 kyrs. *Chemical Geology*.
4. Tournier, N., Fabbri, S.C., Anselmetti, F.S., Cahyarini, S.Y., Bijaksana, S., Wattrus, N., **Russell, J.M.**, Vogel, H., submitted. Climate controls sensitivity of lake sediments to record earthquake-related mass wasting in tropical Lake Towuti during the past 40 kyr BP. *Quaternary Science Reviews*.
3. *Parish, M., **Russell, J.M.**, *Du, X., Bijaksana, S., submitted. A brGDGT-based reconstruction of terrestrial temperature from the Maritime Continent spanning the Last Glacial Maximum. *Paleoceanography and Paleoclimatology*.
2. Mohtadi, M., Zinke, J., Steinke, S., Clemens, S., **Russell, J.M.**, Wang, X., Pfeiffer, M., Abram, N., in press. Paleoclimate evidence of Indian Ocean variability across a range of timescales.
1. Arnold, A., Mering, J., Santi, L., Román-Palacios, C., Li, H., Petryshun, V., Mitsunaga, B., Elliott, B., Wilson, J., Lucarelli, J., Boch, R., Ibarra, D., Li, L., Fan, M., Kaufman, D., Cohen, A., Dunbar, R., **Russell, J.M.**, Lalonde, S., Roy, P.D., Dietzel, M., Lium, X., Chang, F., Eagle, R.A., Tripathi, A., submitted. Comparative clumped isotope temperature relationships in freshwater carbonates. *Paleoceanography and Paleoclimatology*.

E. Recent Invited Talks

28. October 2022. “The thermal evolution of tropical lands”. U. Mass Amherst.
27. June, 2022. “Tropical Africa’s Thermal Past”. Woods Hole Oceanographic Institution.
26. June, 2020, “Plio-Pleistocene environments of tropical Africa: climate change and human evolution”. University of Haifa, Israel.
25. August 2019. “Environmental change in the heart of the Indo-Pacific through the mid- to late Pleistocene.” University of Bern, Switzerland.
24. July, 2019. Asia-Oceania Geosciences Society 16th Annual Meeting, Singapore. “Climate and Vegetation Change in central Indonesia during the Pleistocene”.
23. March, 2018. Princeton University. “Just how sensitive are tropical mountain climates?”
22. September, 2017. University at Albany, Dept. of Atmospheric Sciences. “How sensitive is tropical mountain climate?”
21. August, 2017. 3rd Southeast Asian Gateway Evolution Meeting, Bogor Indonesia. Plenary, “The Towuti Drilling Project: understanding geological and biological evolution of ancient lakes in Central Indonesia.”
20. June, 2017. Wesleyan University. Climate change and tropical mountain glaciers: a view from the geological past.
19. December, 2016. American Geophysical Union Fall Meeting. “Late Pleistocene temperature, hydrology, and glaciation in equatorial East Africa. “
18. November, 2016. Continental Scientific Drilling Coordination Meeting, National Science Foundation, Washington D.C. “The Towuti Drilling Project: Scientific Advances and Lessons Learned.”

17. November, 2016. University of Pennsylvania. “Tropical African temperatures, glaciation, and lapse rates during the last ice age.”
16. September, 2016. Earth Observatory of Singapore. “Tropical African temperatures, glaciation, and lapse rates during the last ice age.”
15. August, 2016. The Southeast Asian Conference on Geophysics, Bali, Indonesia. “A New, Long, Geophysical and Geochemical Record of Indo-Pacific Climate from Lake Towuti, Indonesia.”
14. June, 2016. University of Basel, Switzerland. “A Neogene Tropical Paleoclimate Record from Lake Tanganyika, Africa: Progress and Challenges”.
13. April, 2016. European Geophysical Union General Assembly. “A new Pleistocene record of Indo-Pacific paleoclimate: The Lake Towuti Drilling Project”.
12. January, 2016. University of Minnesota. “Tropical lapse rates since the Last Glacial Maximum: insight into our future?”
11. December, 2015. STEPPE/GeoPrisms workshop. “Continental Scientific Drilling for Paleoclimate in Lake Tanganyika, Africa.”
10. December, 2015. University of Rhode Island. “Tropical lapse rates since the Last Glacial Maximum: insight into our future?”
9. November, 2015. University of Windsor, Ontario. “The Lake Towuti Drilling Project: Indo-Pacific hydrology since 1 Myr BP”.
8. August, 2015. International Paleolimnology Symposium, Lanzhou, China. Plenary Address: Continental Scientific Drilling for Paleoclimate: Progress and Future Challenges.
7. January, 2015. Universitas Hasanuddin, Indonesia. The Lake Towuti Drilling Project.
6. December, 2014. American Geophysical Union. Multiproxy records of Indo-Pacific climate from Lake Towuti, Indonesia, since 60 kyr BP.
5. November, 2014. Massachusetts Institute of Technology. The deglacial evolution of tropical African climate.
4. August, 2014. The Lake Towuti Drilling Project. Sam Ratulangi University, Indonesia.
3. April, 2014. Plenary speaker. brGDGTs in lakes: Progress and Challenges. GDGTs 2014 Workshop, Royal Netherlands Institute for Sea Research.
2. April, 2014. Dartmouth College. Tropical African glaciation: temperature vs. hydrology.
1. February 2014. University of Connecticut. Late Pleistocene climates of Tropical Africa: A molecular perspective.

4. Research Grants and Support

A. Current

- | | |
|------------|--|
| 2023-2027 | NSF-DEB. Collaborative Research: DoCP-Implementation: The impact of climate change on functional biodiversity across spatiotemporal scales at Lake Tanganyika, Africa. \$247,080. |
| 2022-2024 | NSF-P2C2. Tropical hydroclimate change during the last deglaciation: a synthesis of transient isotope-enabled model simulations and proxy data. Co-PI. \$343,657. |
| 2021- 2023 | NSF-P2C2. A one-million record of orbital-scale changes in temperature and precipitation from the Indo-Pacific Warm Pool. \$399,747. |
| 2021-2024 | NSF-DEB. Collaborative Research: Are Amazonian and Andean ecosystems close to a tipping point? \$436,560 (PI). |
| 2021-2024 | NSF-DEB. Collaborative Research: Fire, ecosystem, and landscape dynamics in Afroalpine environments in a warmer world. \$511,577 (Lead PI) |
| 2020-2024 | ICDP. The Lake Tanganyika Scientific Drilling Project. \$1,500,000 (Lead PI). |
| 2018-2022 | NSF-REU. REU Site: Dynamic Earth in the 21 st century: undergraduate research on the |

- evolution of the Earth's interior, surface, and climate. Co-coordinator.
- 2019-2021 **NSF-P2C2.** Constraining African climate since the last glacial maximum via integrated climate and proxy system modeling. Co-PI, \$78,509.
- 2018-2021 **NSF-SGP.** A 750,000 year leaf wax biomarker record to assess environmental change across the Plio-Pleistocene Boundary in tropical East Africa. PI, \$302,491.
- 2018-2021 **NSF-P2C2.** Collaborative Research: New perspectives on the thermal history of tropical East Africa. PI, \$249,801 to Brown.
- 2020-2021 **Seismic Micro Technology,** The Kingdom Software Suite Brown Site License (software site license), **PI,** \$310,708.

B. Completed

- 2020-2021 **NSF-EAR.** Acquisition of a continuous flow isotope ratio mass spectrometer system for the Organic Geochemistry Core Facility at Brown University. Co-PI, \$387,476.
- 2019-2021 **NSF-EAR.** Developing the Lake Tanganyika Drilling Project. PI, \$36,537.
- 2018-2019 **ICDP.** The Lake Tanganyika Scientific Drilling Project: a planning workshop. PI, \$83,550
- 2017-2018 **NGS-CRE.** "Holocene environmental and human cultural dynamics in Sulawesi, Indonesia, inferred from lake sediment cores." \$20,000 to Brown.
- 2017-2018 **NSF-OISE.** International Conference: The Towuti Drilling Project: Paleoenvironments, Biological Evolution, and Geomicrobiology of a Tropical Western Pacific Lake. \$24,695.
- 2013-2018 **NSF-FESD.** Earth System Dynamics and its role in human evolution in Africa. **Co-PI,** \$139,234 to Brown.
- 2014-2018 **NSF-P2C2.** Collaborative Research: A 650,000 year record of hydroclimate in the Western Pacific Warm Pool: Scientific Drilling at Lake Towuti, Indonesia. **PI** \$488,911.
- 2014-2018 **NSF-DEB.** Collaborative Research: Megaherbivore and climatic controls on fire and vegetation dynamics during the last deglaciation. **Co-PI** \$81,955.
- 2014-2018 **ICDP.** The Lake Towuti Drilling Project: Paleoclimates, biological evolution, and paleobiogeochemistry of a tropical Pacific ultramafic lake. **Lead PI,** \$1,200,000
- 2015-2018 **NSF-OPP.** Collaborative research: Reconciling conflicting Arctic temperature and fire reconstructions using multi-proxy records from lake sediments north of the Brooks Range, Alaska. **Co-PI** with Yongsong Huang (Brown), Carrie Morrill (UC Boulder). \$556,190 to Brown.
- 2012-2015 **NSF-BCS.** Collaborative Research: A high-resolution analysis of unique paleoenvironmental data from key hominin sites in East Africa. **Co-PI,** \$71,391.
- 2012-2015 **NSF-EAR.** Collaborative Research: Climate controls on the formation of glacier moraines in the Rwenzori Mountains, Uganda-Congo. **Lead PI,** \$139,854 to Brown.
- 2013-2015 **NSF-IF. PI.** Logistical planning for scientific drilling in Lake Towuti, Indonesia. \$39980.
- 2012-2014 **NSF-OISE. EAGER:** Exploring scientific drilling in Lake Towuti, Indonesia: Paleoclimate, Biological Evolution, and Geomicrobiology in a tropical Pacific lake. \$91,586.
- 2012-2013 **Brown University Seed Fund.** Sedimentation and biogeochemical cycling in a ferruginous, ultramafic-hosted lake. \$85,000.
- 2012-2013 **NSF-AGS & PAGES.** Workshop Proposal: Synthesis of Transient Climate Evolution of the last 21 kyr (SynTraCE-21). \$45,000.

- 2011-2012 **National Geographic Society** Sr-isotopic evaluation of hydrological connectivity of an Ancient Lake Chain: Impacts on biological endemism in the Malili Lakes, Indonesia. \$20,000.
- 2009-2012 **NSF-P2C2**. Collaborative Research: Reconstructing millennial-scale trends and variability in western Pacific convection and hydrology from large lakes on Sulawesi, central Indonesia.” **Lead PI**, \$312,192 to Brown.
- 2011-2012 **NSF-OISE**. Lake Towuti: A Planning Workshop for Scientific Drilling. **PI** \$18,900.
- 2011-2012 **NSF-EAR & PAGES** Drilling Workshop: A community vision for scientific drilling in the East African Rift Lakes. **PI**, \$69,800.
- 2011-2012 **ICDP**: Lake Towuti: A Lake Drilling Planning Workshop. **PI** \$60,000.
- 2009-2011 **NOAA-CCDD**. High-frequency variations in the Indian Ocean Dipole during the past millennium reconstructed from East African and Indonesian lake sediment cores. **Lead PI**, \$215,570 to Brown (collaborative with Mathias Vuille, University at Albany).
- 2009-2011 **ACS-PRF**. The Methylation Index of Branched Tetraethers (MBT) as a paleotemperature proxy in lakes: investigation, calibration, and validation. **PI**, \$100,000.
- 2009-2011 **NSF-MRI**. Acquisition of a Multi-Collector Inductively-Coupled Mass Spectrometer. **Co-PI** with Alberto Saal (Brown), \$677,890.
- 2008-2010 **National Geographic Society**. Crater lakes in eastern Java, Indonesia: Archives of the History of the El Niño Southern Oscillation? **PI**. \$19,400.
- 2007-2011 **NSF-EAR**. Abrupt Climate Change during Marine Isotope Stage 3 in Southern Tropical Africa: Multiproxy reconstructions from Lake Tanganyika. **PI**, \$288,682.
- 2007-2008 **NSF-IF**. Acquisition of a high-performance liquid chromatograph-mass spectrometer (HPLC-MS). **Co-PI** with Yongsong Huang (Brown), \$162,522.
- 2007-2008, **Richard B. Salomon Research Award** (Brown University). Paleoclimate changes and tropical glacier dynamics in the Rwenzori Mountains, Uganda-Congo. **PI**. \$14,800.
- 2006-2008 **NSF-EAR**. SGER: Exploratory Seismic Reflection and Gravity Coring Survey of Lakes Matano and Towuti, South Sulawesi. \$80,000.
- 2005-2006 **National Geographic Society**. Aquatic biota from Ruwenzori mountain lakes as paleothermometers in African climate reconstruction. **Co-PI** with Hilde Eggermont (U. Ghent) \$19,840.
- 2003-2005 **NSF-ATM** A high-resolution record of Holocene climate variability from Lake Edward, central Africa. **Authored** with Thomas C. Johnson, P.I. \$190,856.

C. Pending Proposals

- 2023 **NSF-R1**. Mid-scale Research Infrastructure RI-1: Unlocking Earth Science Frontiers through Continental Scientific Drilling. **Co-PI**, \$19,998,000.

5. Service

Departmental and University

- 2021- Chairs Agenda Committee
- 2021- Graduate Education Advisory Committee member
- 2020-present Department Chair
- 2018-2021 University Resources Committee member, Vice Chair 2019-2020.
- 2019-2020 Director of Undergraduate Studies, Earth, Environmental, and Planetary Sciences
- 2016-2020 University Conflict of Interest Review Board member, Vice-Chair and Chair in 2019.
- 2009-2020 Undergraduate concentration advisor for the Geo-Biology degree.
- 2011-2020 Department Space and Facilities Committee, Environmental Chemistry Facilities Committee, XRF facility committee, Chair’s Advisory Committee.

2017-2019 University Human Resources Committee member
 2018 Department Undergraduate Spring Break Field Trip Leader, Big Bend and the Guadalupe Mountains.
 2017 Department Undergraduate Spring Break Field Trip Leader, Death Valley.
 2015 Search Committee Member, Atwater Chair in Physical Hydrology, IBES/DEEPS
 2013-2018 Brown Institute for the Study of Environment and Society (BISES) Steering Committee Member and “Food and Water” theme leader.
 2012 Search Committee Chair for Climate Modeling Position, Geological Sciences.
 2011 Faculty Advisor, Undergraduate Spring Field Trip to the Grand Canyon and northern Arizona.
 2007-2011 Dept. of Geological Sciences Curriculum Committee,
 2007-2011 X-ray Fluorescence Committee, Facilities Committee
 2009 Instructor, Watson International Scholars of the Environment Program, Brown University.
 2007-2008 Dept. of Geological Sciences Curriculum Committee, X-ray Fluorescence Committee, Facilities Committee
 2006, 2007 Geological Sciences Dept. fall field trip leader.
 2006-2009 Brown University Library Advisory Committee

Professional

2022 **Geological Society of America.** Member of the Working Group on Divisions.
 2021-present **American Geophysical Union** Dansgaard Award Committee member and chair, Paleooceanography and Paleoclimatology Executive Committee.
 2021 **Panelist.** National Academies Workshop on Identifying New Community-Driven Science Themes for NSF’s Support of Paleoclimate Research
 2020-2022 **Past Chair,** Geological Society of America Interdisciplinary Interest Group on Continental Scientific Drilling.
 2017-2020 **Chair (and founder).** Geological Society of America Interdisciplinary Interest Group on Continental Scientific Drilling.
 2017-2021 **Associate Editor.** Paleooceanography and Paleoclimatology.
 2016-2021 **Editorial board member.** *Quaternary International*.
 2002-present **Reviewer.** Agencies/journals include: the National Science Foundation, European Science Foundation, Swiss National Science Foundation, German Science Foundation, Science, Nature, Geology, Quaternary Research, The Holocene, Palaeogeography, Palaeoclimatology, Palaeoecology, Journal of Sedimentary Research, Chemical Geology, Organic Geochemistry, Geochimica et Cosmochimica Acta, Quaternary Science Reviews, Journal of Paleolimnology, Journal of Ecology.
 2013-2019 **Chairman of the Board of Directors,** Drilling, Observation, and Sampling of the Earth’s Continental Crust (DOSECC).
 2012-2017 **International Continental Drilling Program,** Science Advisory Group.
 2017 **Session Chair,** “Understanding African environmental history through continental scientific drilling.” Geological Society of America Annual Meeting, Seattle, WA
 2017 **Environmental Protection Agency Reviewer.** “Lakes and Climate Warming”.
 2015-2017 **Member,** American Association of the Advancement of Science Electorate Nominating Committee, Atmospheric and Hydrologic Science.
 2016 **Theme Leader.** “Hydroclimate”, Continental Scientific Drilling Coordination Meeting, National Science Foundation, Washington D.C.
 2016 **Session Chair,** European Geophysical Union General Assembly. “New Insights in past African and Middle Eastern climates: A tribute to Françoise Gasse”.

- 2014-2016 **Member-at-Large.** Geological Society of America External Awards Committee.
2012 **Workshop Organizer, SynTraCE-21.** Synthesis and modeling of the transient evolution of Earth Climate since 21 kyr BP. Providence, RI, 46 participants.
- 2012 **Session Chair,** American Geophysical Union Fall Meeting. Asian and Indo-Pacific Climate Variability: Archive and Modeling Explorations. 53 abstracts.
- 2011 & 2012 **Panelist,** National Science Foundation.
- 2011 **Session Chair,** American Geophysical Union Fall Meeting. Co-chaired two sessions: “Dynamics of Tropical Climate Change Across Glacial-Interglacial Cycles” (56 abstracts) and “Isotopes in Precipitation: Paleoclimate Archives, Modern Observations, and Modeling” (47 abstracts).
2011. **Brown International Advanced Research Institute for Climate Change,** Instructor. Led two-week institute on climate change for scientists from developing countries.
- 2010-2012 **Secretary, DOSECC Board of Directors.**
- 2009-2010 **Member Representative to DOSECC for Brown University.**
- 2009-2010 **SynTraCE-21 (Synthesis of Transient Evolution of the last 21-kyr).** Project comparing paleoclimate records to transient model simulations with CCSM3 of the last 21 kyr (lead by Bette Otto-Bliesner, NCAR, Zhengyu Liu (Wisconsin), Peter Clark (OSU). Section leader for African paleoclimate and Tropical lake records in workshops Aug. 2009 (Boulder, CO) and Oct. 2010 (Portland, OR).
- 12/2008 **Session Chair.** American Geophysical Union Fall Meetings, GC-21. Tropical . Mountain Glaciers: Past, Present, and Future, 17 abstracts.
- 2/2008 **Invited Participant.** National Research Council Workshop on “The Earth System Context for Hominin Evolution.” Irvine, CA, Feb. 21-22.
- 12/2006 **Session Chair,** American Geophysical Union Fall Meeting. PP41C, 42A, 43A: Climate Variability After Deglaciation: Regional Phasing and Mechanisms of Holocene Climate Events, 46 abstracts.
- 7/2006 **Organizing committee,** 10th International Paleolimnology Symposium, Duluth, MN.
- 11/2005 **Invited Participant:** Workshop on Lake Drilling and Human Evolution, Smithsonian Institution, Washington, D.C. Session leader: “Time-specific Environmental Reconstruction.”
- 3/ 2005 **Invited Participant:** “Continental Scientific Drilling in the Next Decade: A community vision for the next decade. International Continental Drilling Program Decadal Meeting. GFZ, Potsdam, Germany.

6. Honors and Awards

- 2022 Ganesa Widya Research Award, Institute of Technology Bandung, Indonesia
- 2020 American Geophysical Union Willi Dansgaard Award
- 2018 Royce Family Professor of Teaching Excellence, Brown University
- 2013 *Earth and Planetary Sciences* Award for Excellence in Reviewing
- 2008-2011 Joukowsky Family Assistant Professorship in Geological Sciences
- 2005 Best Dissertation in the Biological and Medical Sciences. University of Minnesota.
- 2000-2003 National Science Foundation Graduate Fellow. University of Minnesota.
- 1999-2000 Graduate School Fellow, University of Minnesota.

7. Teaching and Student Supervision

A. Regular Courses, rating of instructor effectiveness 1 (lowest) – 5 (highest)

Term	Course	Rating
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Fall, 2022	EEPS 1240: Stratigraphy and Sedimentation (12 students)	
Fall, 2021	EEPS 1240: Stratigraphy and Sedimentation (21 students)	4.69
Summer, 2021	EEPS 0240: Earth, Evolution of a Habitable Planet (45 students)	4.74
Fall 2020	EEPS 2350: Quaternary Paleoclimatology	5.00
Spring 2020	GEOL 0240: Earth, Evolution of a Habitable Planet (41 students)	4.84
Fall 2019	GEOL 1240, Stratigraphy and Sedimentation (20 students)	4.85

A. Regular Courses, rating of instructor effectiveness 1 (highest) – 5 (lowest)

Term	Course	Rating
Spring 2019	GEOL 1150: Limnology, the Study of Lakes (20 students)	1.20
Fall 2018	GEO 1240. Sedimentology and Stratigraphy (15 students)	1.36
Spring 2018	GE 2350. Quaternary Paleoclimatology seminar (8 students)	1.20
Fall 2017:	GEOL 1950M, Geoengineering Or, The Unnatural World (19 students)	1.33
Fall 2017:	GEO 1240. Sedimentology and Stratigraphy (18 students)	1.20
Spring 2017:	GEO 1150. Limnology (11 students)	1.25
Fall 2016.	GEO 1240. Sedimentology and Stratigraphy (25 students)	1.40
Spring 2016	GE 2350. Quaternary Paleoclimatology seminar (11 students)	1.20
Spring 2016	GE 1150. Limnology (11 students)	1.11
Fall 2015	GE 1240. Sedimentology and Stratigraphy (18 students)	1.31
Spring 2014	GE 2350. Quaternary Paleoclimatology seminar (5 students)	1.31
Spring 2014	GE 1150. Limnology (14 students)	1.25
Fall 2012.	GE 0030. Climate and Climate Change (22 students)	N/A
Fall 2012.	GE 1240. Sedimentology and Stratigraphy (9 students)	1.3
Spring 2012.	GE 2350. Quaternary Paleoclimatology seminar (7 students)	1.1
Spring 2012	GE 1150. Limnology (13 students)	1.2
Fall 2011	GE 1240. Sedimentology and Stratigraphy (23 students)	1.4
Spring 2011	GE 1150. Limnology (23 students)	1.0
Fall 2010	GE 1240 Sedimentology and Stratigraphy (17 students)	1.2
Fall 2009	GE 1240 Sedimentology and Stratigraphy. (8 students)	1.1
Spring 2009	GE 2350 Quaternary Paleoclimatology seminar (8 students)	1.8
Spring 2009	GE 1150 Limnology (12 students)	1.4
Fall 2008.	GE 1240 Sedimentology and Stratigraphy (15 students)	1.5
Spring 2008	GE 1150 Limnology (15 students)	1.5
Fall 2007	GE 1240 Sedimentology and Stratigraphy (10 students)	1.3
Fall 2007	GE 2910 Paleolimnology (11 students)	2.0
Spring 2007	GE 1150 Limnology: The study of lakes (10 students)	2.4
Fall 2006	GE 1240 Sedimentology and Stratigraphy (13 students)	2.4
Fall 2006	GE 2910 High Frequency Climate Variations and Coupled Modes (9 students)	1.6
Spring 2006	GE 0240 Introduction to Earth System History (16 students)	2.8

B. Mentoring and Advising

Past Students:

Jessica Tierney, Ph.D. 2010 (now associate professor, U. Arizona)
 Shannon Loomis, Ph.D. 2013 (Sr. Data Scientist, Nimble Storage)
 Bronwen Konecky, Ph.D., 2013 (Assistant Professor, Washington University)
 Jessica Rodysill, Ph.D. 2013 (Research Geologist, US Geological Survey)
 Satrio Wicaksono, Ph.D., 2016 (Forest Restoration Manager, World Resources Insitute)
 William C. Daniels, Ph.D., 2017 (postdoctoral researcher, U. Mass Amherst)

Christopher Kelly, M.A., 2017, Science Teacher, Dwight-Englewood School, NJ
Ashling Neary, MA., 2018, Research Associate, University of Michigan.
Rachel Lupien, Ph.D., 2019 (postdoctoral researcher, Lamont-Doherty Earth Observatory)
Nora Richter, Ph.D., 2020 (postdoctoral researcher, NIOZ, The Netherlands)
Richard Vachula, Ph.D., 2020 (postdoctoral researcher, (William and Mary)
Sloane Garelick Ph.D., 2022 (Visiting Assistant Professor, Brown University)

Former Postdocs:

Jaquelyn Gill, 2012-2013 (Associate Professor, University of Maine)
Sarah Ivory, 2014-2016 (Assistant Professor, Penn State University)
Sylvia Dee, 2015-2017 (Assistant Professor, Rice University)

Current Students:

Bryce Mitsunaga (2018-present), Meredith Parish (2019-present), Andrea Mason (2021-present)

Current Postdocs:

Angie Perrotti (2019-present), Xiaojing Du (2020-present), Boyang Zhang (2021-present), Allison Karp (2022-present)

Undergraduate Thesis Supervision (2006-present):

Sophie McCoy, Natacha Meyer, Marc Mayes (Honors), Ana Hereux (Honors), Bethany Ladd (Honors), Andrea Weber (Honors), Samuel Phelps (honors), Patrick Holland-Stergar (Honors), Rebecca Rose, Allison Cluett (Honors), Aaron Rachels (Honors), Dani Carrasco, James Napoli (Honors), Avinash Subramanian (Honors), Grace Molino (Honors), Nade Sae-Lim (Honors), Colette Bertschy, Tristan Reinecke, Rachel Gold (Honors), Ashley Bang (Honors), Hannah Yi, Eleanor Pereboom (Honors), Ella Wood (Honors).

Graduate Student Committees:

Past: Juzhi Hou, Jaime Toney, Bethany Ehlmann, Paige Newby, Caitlin Chazen, Jon Nichols, David Baker, Li Gao, Alex Kasprak, Susie Theroux, Aron Buffen, Timothy Goudge, Samantha Bova, Marc Mayes, Will Longo, Vivian Sun, James Cassanelli, Yinsui Zheng, Qing Li, Sarabeth George, Alyssa Pascuzzo.

Current: Chris Kremer, Benjamin Boatwright, Kristin Kimble, Carol Hundal, Ethan Kyzviat, Sarah McGrath, Ted Bobik, Catherine Gagnon, Ted Bobik, Desmond Yeo.

External: Ilse Bessems, Ph.D., Geology (2007), U. Ghent, Belgium (Geology); Matthew Steinkamp, M.A. Geology (2006), Oregon State University (Geology); Laura Wetter, M. A., 2006. U. C. Davis (Geology); Allison Burnett, M. A. Geology (Dec, 2008), Syracuse University, Amy Morissey (Syracuse), Cindy DeJonge (Utrecht University, 2015), Laura Buckles (Utrecht University, 2015), Parth Shah (University of Haifa)