

In Review or Revision, * indicates student author

9. Gagnon, C., Butler, K., Gaviria, E., Terrazas, A., Gao, A., **Bhattacharya, T.**, Boutt D., Munk, L., Ibarra, D. submitted. Paleoclimate controls on lithium enrichment in Great Basin Pliocene-Pleistocene lacustrine clays. GSA Bulletin
8. Peuple, M., **Bhattacharya, T.**, Lowenstein, T., McGee, D., Olson, K., Stroup, J., Tierney, J.E., Feakins S.J. in review. Biomarker and pollen evidence for late Pleistocene pluvials in the Mojave Desert. Paleooceanography and Paleoclimatology.
7. Knapp, S., Burls, N.J., Dee, S.G., Feng, R., Feakins, S.J., **Bhattacharya, T.**, in revision. Isotopic Fingerprints of Early Pliocene-like Sea Surface Temperature Gradients. Paleooceanography and Paleoclimatology.
6. Tierney, J.E., Torfstein, A., **Bhattacharya, T.**, Goldstein, S. in revision. Late Quaternary hydroclimate of the Levant: the leaf wax record from the Dead Sea. Earth and Planetary Science Letters .
5. Johnson, KR, Griffiths, ML, **Bhattacharya, T.**, Borsato, A, Frisia, S, Henderson GM, Legrande A, Lewis, M, Mason, A, Saniya, S, Tierney, J, Wang, JK, Yang, H. in revision. Orbital and millennial variability of Southeast Asian hydroclimate over the past 38,000 years. Nature Geoscience.
4. **Bhattacharya, T.**, Krause, S., Penny, D., Wahl, D. in revision. Progress Report: Drought and Water Management in Maya Society. Progress in Physical Geography.
3. **Bhattacharya, T.**, Feng, R., Tierney, J.E., Knapp, S., Burls, N.J., Fu, M. in revision. Expansion and Intensification of North American Monsoon during the Pliocene. Science Advances
2. Wright, K, Johnson, KR, Serrato Marks, G, McGee, D, **Bhattacharya, T.**, Goldsmith, G, Tabor, CR, Lacaille-Muzquiz, J-L, Lum, G, Beramendi-Orosco, L. in revision. Thermodynamics control precipitation in NE Mexico on orbital to millennial timescale. Nature Communications.
1. *Brennan, P., **Bhattacharya, T.**, Feng, R., Tierney, J.E., *Jorgensen, E.M. in revision. Low cloud changes govern northeast Pacific response to Pliocene boundary conditions. Paleooceanography and Paleoclimatology.

Peer-Reviewed Publications(* indicates student author)

21. Wright, K, Johnson, KR, **Bhattacharya, T.**, Serrato Marks, G., McGee, D., Ellsbury, D., Peings, Y., Lacaille-Muzquiz, J., Lum, G., Beramendi-Orosco, L., MagnUSDottir, G. accepted. Precipitation in northeast Mexico primarily controlled by the relative warming of Atlantic SSTs. Geophysical Research Letters.

20. Kumar, D.M., Tierney, J.E., **Bhattacharya, T.**, Zhu, J., and Murray, J. accepted. Glacial Warming in the Eastern Pacific Warm Pool. *Geophysical Research Letters*.
19. Feng, R., **Bhattacharya, T.**, Otto-Bleisner, B., Brady, E., Haywood, A., Tindall, J., Hunter, S., Abe-Ouchi, A., Chan, C., Contoux, C., Guo, C. Li, X., Lohmann, G., Stepanek, C., Tan, N., Zhang, Q., Zhang, Z. 2022. Past terrestrial hydroclimate driven by Earth system feedbacks. *Nature Communications* 13(1), doi: 10.1038/s41467-022-28814-7
18. Inglis, G.N., **Bhattacharya, T.**, Hemingway, J.D., Tierney, J.E., Feakins, S. 2022. Novel molecular approaches for reconstructing terrestrial environmental change. *Annual Reviews of Earth and Planetary Sciences* 50 doi: 10.1146/annurev-earth-032320-095943
17. Kumar, Dervla M., Tierney, J.E., **Bhattacharya, T.**, Jiang, Z., McCarty, L, Murray, J. 2021. Climatic drivers of deglacial SST variability in the eastern Pacific. *Paleoceanography and Paleoclimatology* 36 (10) doi: 10.1029/2021PA004264
16. Peuple, M., Tierney, J.E. McGee, D., Lowenstein, T.K., **Bhattacharya, T.**, Feakins, S.J. 2021. Identifying plant wax inputs in lake sediments using machine learning. *Organic Geochemistry* 156, doi: 10.1016/j.orggeochem.2021.104222
15. Tierney, J.E., Poulsen, C.J., Montañez I.P., **Bhattacharya, T.**, Feng, R., Ford, H.L., Honisch, B., Inglis, G.N., Petersen, S.V., Sagoo, N., Tabor, C.R., Thirumalai, K., Zhu, J., Burls, N.J., Godd eris, Y., Foster, G.L., Huber, B.T., Ivany, L.C., Turner, S.K., Lunt, D.J., McElwain, J.C., Mills, B.J.W., Otto-Bliesner, B.L., Ridgwell, A., Zhang, Y. 2020. Past climates inform our future. *Science* 370 (6517). doi: 10.1126/science.aay3701
14. *Judd, E, **Bhattacharya, T.**, Ivany, L.C. 2020. A dynamical framework for interpreting ancient sea surface temperatures. *Geophysical Research Letters* 47, e2020GL089044. doi: 10.1029/2020GL089044
13. **Bhattacharya, T.**, Coats, S. 2020. Atlantic-Pacific gradients drive Last Millennium hydroclimate variability in Mesoamerica. *Geophysical Research Letters* 47, e2020GL088061. doi: 10.1029/2020GL088061
12. Anderson, L., Wahl, D., **Bhattacharya, T.** 2020. Understanding Rates of Change: A case study using fossil pollen records from California to assess the potential for and challenges to a regional data synthesis. *Quaternary International*. doi: 10.1016/j.quaint.2020.04.044

11. Tierney, J.E., Haywood, A.M. Feng, R. **Bhattacharya, T.**, Otto-Bleisner, B. 2019. Pliocene warmth consistent with greenhouse gas forcing. *Geophysical Research Letters*.
doi: 10.1029/2019GL083802
10. DiNezio, P., Tierney, J.E. Otto-Bleisner, B.L., Timmerman, A., **Bhattacharya, T.**, Rosenbloom, N., Brady, E. 2018. Glacial changes in warm pool climate amplified by Indian Ocean. *Science Advances* 4:12
9. **Bhattacharya, T.**, Tierney, J.E., Addison, J.A., Murray, J.W. 2018. Ice sheet modulation of deglacial North American Monsoon intensification. *Nature Geoscience*.
doi: 10.1038/s41561-018-0220-7 *chosen for a News and Views feature*
8. **Bhattacharya, T.**, Chiang, J.C.H., Cheng, W. 2017. Ocean-atmosphere dynamics linked to 800-1050 CE dry interval in Mesoamerica. *Quaternary Science Reviews*.
doi: 10.1016/j.quascirev.2017.06.005
7. **Bhattacharya, T.**, Tierney, J.E., DiNezio, P. 2017. Glacial reduction of the North American Monsoon via surface cooling and atmospheric ventilation. *Geophysical Research Letters* doi: 10.1002/2017GL073632 *chosen as Journal Editor's Highlight*
6. **Bhattacharya, T.**, Byrne, R. 2016. Late Holocene anthropogenic and climatic influences on fire and regional vegetation in Mexico's Cuenca Oriental. *Global and Planetary Change* 138: 56 – 69.
5. **Bhattacharya, T.**, Byrne, R., Boehnel, H., Wogau, K., Kienel, U., Ingram, B.L. Zimmerman, S. 2015. Cultural implications of late Holocene climate change in the Cuenca Oriental, Mexico. *Proceedings of the National Academy of Sciences* 112(6): 1693-1698.
4. Chiang, J.C.H., Fung, I.Y., Wu, C.-H., Cai, Y., Edman, J.E., Liu, Y., Day, J.E., **Bhattacharya, T.**, Mondal, Y., Labrousse, C.A. 2015. Role of seasonal transitions and westerly jets in East Asian paleoclimate. *Quaternary Science Reviews* 108: 111-129.
3. **Bhattacharya, T.**, Chiang, J.C.H. 2014. Spatial variability and mechanisms underlying El Nino-induced drought in Mexico. *Climate Dynamics* doi: 10.1007/s00382-014-2106-8
2. **Bhattacharya, T.**, Beach T., Wahl, D. 2011. An analysis of modern pollen rain from the Maya Lowlands of northern Belize. *Review of Paleobotany and Palynology* 164:

109-120.

1. Beach, T., Luzzadder-Beach, S., Dunning, N., Jones, J., Lohse, J., Guderjan, T., Bozarth, S., Millspaugh, S., **Bhattacharya, T.** 2009. A review of human and natural changes in Maya Lowlands wetlands over the Holocene. *Quaternary Science Reviews* 28:1710 – 1724