**Dr. Tripti Bhattacharya**

Department of Earth and Environmental Science 333F Heroy Geology Laboratory, Syracuse University Syracuse, NY 13210 U.S.A.

email: trbhatta@syr.edu

*url*: [https://trbhatta.expressions.syr.edu](https://trbhatta.expressions.syr.edu/) BlueSky: [@Triptychphrases](https://bsky.app/profile/triptychphrases.bsky.social)

**Appointments**

*2024 - present:*Thonis Family Associate Professor, Syracuse University

 2018-2024: Thonis Family Assistant Professor,

 Syracuse University

 2016-2018, Postdoctoral Associate

 University of ARizona

# Education

*2010- 2016:***PhD** Geography, University of California, Berkeley

**Specialization:** Climate

*2006 - 2010:***BSc** Environmental Science, Georgetown University

**summa cum laude**

# Submitted, In Review, or in Revision Publications (asterisk indicates student author, superscript 1 indicates postdoctoral author)

2. Ford, H.L. , Wrye N., Wofford, A., Burls, N., **Bhattacharya, T.**, Chandan, D., Federov, A., Lakhani, K., Lyle, M., Lynch-Stieglitz, J., Ravelo, A.C. in review. Equatorial Upper Ocean Thermal Structure during the Warm Pliocene: a Data-Model Comparison. Geophysical Research Letters

1. Johnson, KR, Griffiths, ML, **Bhattacharya, T.**, Borsato, A, Frisia, S, Hender- son 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.

# Peer-Reviewed Publications ( \* indicates student author)

40. Rubbelke, C.R\*., **Bhattacharya, T.**, Farnsworth, A., Valdes, P., McClymont, E., Ford, H.L. accepted Southern Hemisphere Subtropical Front impacts on Southern African Hydroclimate and early Hominins Across the Mid-Pleistocene Transition. Nature Communications.

39. Prow, A., Lu, Z., Blattler C., He, T., Yang, Z, Singh, P, Kemeny, P., Todes,J., Pohl, A., **Bhattacharya, T.**, van de Schootbrugge, B., Wignall, P.B., Payne,

J. 2025. Temporal and spatial dynamics of paleo-redox conditions across the Triassic-Jurassic boundary. Chemical Geology 673

38. Johnson, A.L.A, Schone, B.R., Leng, M.J., **Bhattacharya, T.**, Moss, D.K., Ivany, L.C.I, Duff, R.P. 2024. Sclerochronological evidence of Quaternary change in life history and environment from the marine bivalve *Glycymeris americana* of the US eastern seaboard. Palaios. 39(6): 175-193.

37. Lowenstein, Tim K., Olson, K.J., Stewart B.W., McGee, D., Stroup, J.S., Hud- son, A.M., Wendt, K.A., Peaple, M.D., Feakins, S.J, **Bhattacharya, T.**, Lund,

S. 2024. Unified 200 kyr paleohydrologic history of the southern Great Basin: Death Valley, Searles Lake, Owens Lake and the Devils Hole Cave. Quater- nary Science Reviews 336(1): 108751

36. Fastovich, D1 , **Bhattacharya, T.**, Pérez-Ángel, L., Burls, N.J., Feng, R., Knapp, S. 2024. Large-scale sea surface temperature gradients govern west- erly moisture transport in western Ecuador during the Plio-Pleistocene. Earth and Planetary Science Letters 640: 118781

35. **Bhattacharya, T**, Brennan, PR\*, Ibarra, DE, Gagnon, CA, Butler, KL, Ter- razas, A, Munk, LA, Boutt, DF, Feng, R, Bullinger, SN, Weisbeck, L.\* 2024. Pleistocene shifts in Great Basin hydroclimate seasonality govern the forma- tion of lithium-rich paleolake deposits. Quaternary Science Reviews 335(1): 108747

34. Peaple, M **Bhattacharya, T.**, Tierney, J.E., Knott, J.R, Lowenstein, T.K., Feakins, S. 2024. Biomarker evidence for an M2 glacial-pluvial in the Mojave Desert before warming and drying in the late Pliocene. Paleoclimatology and Paleoceanography

33. **Bhattacharya, T.**, Ibarra, D.E, Feng, R., Burls, N.J. 2024 Geochemical Ap- proaches to Reconstructing Earth’s Hydroclimates. Treatise in Geochem- istry, 3rd Edition, Elsevier.

32. **Bhattacharya, T.**, Feng, R., Coats, S., Maupin C.R., Brennan, P\*, Carter, E.. 2023. California Margin SSTs modulate regional circulation and extreme summer precipitation in the desert southwest. Environmental Research Let- ters 18 04048

31. Rubbelke, C.\*, **Bhattacharya, T.**, Feng, R., Burls, N.J., Knapp, S., McClymont,

E. 2023. Plio-Pleistocene Southwest African Hydroclimate modulated by Benguela and Indian Ocean temperatures. Geophysical Research Letters 50(19): doi: 10.1029/2023GL103003

30. Wright, K, Johnson, KR, Serrato Marks, G, McGee, D, **Bhattacharya, T.**, Goldsmith, G, Tabor, CR, Lacaille-Muzquiz, J-L, Lum, G, Beramendi-Orosco,

L. 2023. Thermodynamics control precipitation in NE Mexico on orbital to millennial timescale. Nature Communications 14:2279.

29. Gagnon, C., Butler, K., Gaviria, E., Terrazas, A., Gao, A., **Bhattacharya, T.**, Boutt D., Munk, L., Ibarra, D. 2023. Paleoclimate controls on lithium enrich- ment in Great Basin Pliocene-Pleistocene lacustrine clays. GSA Bulletin, doi: 10.1130/B36572.1

28. **Bhattacharya, T.**, Krause, S., Penny, D., Wahl, D. 2023. Progress Report: Drought and Water Management in Ancient Maya Society. Progress in Physical Geography. doi:10.1177/03091333221129784

27. Knapp, S., Burls, N.J., Dee, S.G., Feng, R., Feakins, S.J., **Bhattacharya, T.**. 2022. A Pliocene Precipitation Isotope Proxy-Model Comparison Assessing the Hydrological Fingerprints of Sea Surface Temperature Gradients. Pale- oceanography and Paleoclimatology 37(12) : e2021PA004401

26. **Bhattacharya, T.**, Feng, R., Tierney, J.E., \*Rubbelke, C., Knapp, S., Burls, N.J., Fu, M. 2022. Expansion and Intensification of North American Mon- soon during the Pliocene. AGU Advances 3(6). doi: 10.1029/2022AV000757 *chosen as Editor’s Highlight*

25. **Bhattacharya, T.**, 2022. An energetic perspective on the Holocene North American Monsoon. Geophysical Research Letters 49 (19). *Invited Commen- tary*. doi: 10.1029/2022GL100782

24. Peaple, M., **Bhattacharya, T.**, Lowenstein, T., McGee, D., Olson, K., Stroup, J., Tierney, J.E., Feakins S.J. 2022. Biomarker and pollen evidence for late Pleistocene pluvials in the Mojave Desert. Paleoceanography and Paleocli- matology 37 (10), e2022PA004471

23. Tierney, J.E., Torfstein, A., **Bhattacharya, T.**, Goldstein, S. 2022. Late Qua- ternary hydroclimate of the Levant: the leaf wax record from the Dead Sea. Quaternary Science Reviews 289 (107613).

22. \*Brennan, P., **Bhattacharya, T.**, Feng, R., Tierney, J.E., \*Jorgensen, E.M. 2022. Patterns and Mechanisms of Northeast Pacific Temperature Response to Pliocene Boundary Conditions. Paleoceanography and Paleoclimatology 37(7): e2021PA004370.

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. 2022. Precipitation in northeast Mexico primarily con- trolled by the relative warming of Atlantic SSTs. Geophysical Research Let- ters 49(11) e2022GL098186.

20. Kumar, D.M., Tierney, J.E., **Bhattacharya, T.**, Zhu, J., and Murray, J. 2022. Glacial Warming in the Eastern Pacific Warm Pool. Geophysical Research Letters 49(10): e2022GL098830

19. Feng, R., **Bhattacharya, T.**, Otto-Bleisner, B., Brady, E., Haywood, A., Tin- dall, 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 terres- trial hydroclimate driven by Earth system feedbacks. Nature Communica- tions 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 environ- mental change. Annual Reviews of Earth and Planetary Sciences 50 doi: 10.1146/annurev-earth-032320-095943

17. Anderson, L., Wahl, D., **Bhattacharya, T.**. 2022. 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 621 26-36.

doi: 10.1016/j.quaint.2020.04.044

16. 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

15. Peaple, M., Tierney, J.E. McGee, D., Lowenstein, T.K., **Bhattacharya, T.**, Feakins, S.J. 2021. Identifying plant wax inputs in lake sediments using ma- chine learning. Organic Geochemistry 156, doi: 10.1016/j.orggeochem.2021.104222

14. 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., Thiru-

malai, K., Zhu, J., Burls, N.J., Goddéris, 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

13. \*Judd, E, **Bhattacharya, T.**, Ivany, L.C. 2020. A dynamical framework for interpreting ancient sea surface temperatures. Geophysical Research Let- ters 47, e2020GL089044. doi: 10.1029/2020GL089044

12. **Bhattacharya, T.**, Coats, S. 2020. Atlantic-Pacific gradients drive Last Mil- lennium hydroclimate variability in Mesoamerica. Geophysical Research Letters 47, e2020GL088061. doi: 10.1029/2020GL088061

11. Tierney, J.E., Haywood, A.M. Feng, R. **Bhattacharya, T.**, Otto-Bleisner, B. 2019. Pliocene warmth consistent with greenhouse gas forcing. Geophysi- cal 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 dy- namics linked to 800-1050 CE dry interval in Mesoamerica. Quaternary Sci- ence 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 cli- matic influences on fire and regional vegetation in Mexico’s Cuenca Orien- tal. 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 tran- sitions 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. Qua- ternary Science Reviews 28:1710 – 1724

# Research Funding

*Summary Total funding awarded as PI and co-PI* ***$2,960,898***

*Pending*

“Collaborative Research: A Synthesis of Hydroclimate Records from Lake Bo- sumtwi and other African Scientific Drill Cores: New Proxies, Geochronologies and Proxy-Model Integration” PI: Chris Scholz; co-PI: Tripti Bhattacharya (Syra- cuse University) $392,014 U.S. National Science Foundation

*Awarded*

*2024-2027*“Disentangling dynamical controls on deglacial hydroclimate in eastern North America PI: Tripti Bhattacharya (Syracuse University); co-PI David Fas- tovich (Syracuse University) $547,085 U.S. National Science Foundation

*2023-2026*“Collaborative Research: Calibration of a global climate model and its future projection using reconstructions of the meridional gradient in temperature and isotope during the past warm climates” PI: Ran Feng (University of Connecti- cut), co-PI: Tripti Bhattacharya (Syracuse University), Jiang Zhu (NCAR) $300,858

U.S. National Science Foundation

*2023-2025*“Sloan Foundation Fellowship in Earth System Science” PI: Tripti Bhat- tacharya (Syracuse University). $75,000 Sloan Foundation

*2023-2028*“CAREER: Biomarker Perspectives on the Response of Western North American Rainfall to Climate Change” PI: Tripti Bhattacharya (Syracuse Univer- sity). $793,000 U.S. National Science Foundation

*2021-2024*“Collaborative Research: Sensitivity of Walker Circulation To CO2 forc- ing during the late Pliocene as an analogue for future Climate Change” PI: Ran Feng (University of Connecticut) co-PIs: Tripti Bhattacharya (Syracuse Univer- sity). U.S. National Science Foundation Paleo Perspectives on Climate Change Program (NSF P2C2). $200,942

*2021-2025*“PaleoCAMP (Paleoclimate training in Climate Archives, Models, and Proxies): A multidisciplinary summer school for graduate students in paleocli- matology” PI: Jessica Tierney (University of Arizona). Co-PI: Tripti Bhattacharya (Syracuse); Dan Ibarra (Brown University); Kevin Anchukaitis (University of Ari- zona). Heising Simons Foundation. $16,083 (total grant $500,000)

*2020-2023*“MRI: Acquisition of a gas-chromatograph isotope-ratio mass spectrom- eter for compound-specific isotope analysis” PI: Tripti Bhattacharya, co-PI: Chris Junium (Syracuse University). U.S. National Science Foundation Major Research Instrumentation.$302,110

*2019-2022*“Collaborative Research: A paleoclimatic perspective on Southwest US precipitation responses to elevated greenhouse gases” PI: Tripti Bhattacharya, co- PIs: Jessica E Tierney (University of Arizona), Ran Feng (University of Connecti- cut). U.S. National Science Foundation Paleo Perspectives on Climate Change Pro- gram (NSF P2C2).$322,395

*2019-2021* “Spatiotemporal Dynamics of long-term drought in Mesoamerica” PI: Tripti Bhattacharya CUSE Grant Program. $30,000

*2019-2022*“Acquisition of a Multi-Sensor Core Logger for Syracuse University ” PI: Melissa Chipman. co-PIs: Chris Scholz, Zunli Lu, Chris Junium, Tripti Bhat- tacharya. U.S. National Science Foundation Instrumentation and Facilities.$403,425

*2013-2015* “Reconstructing the Paleoenvironmental History of Mexico’s Cuenca Oriental” NSF Doctoral Dissertation Improvement Grant No. BCS-13333370, $15,811

# Honors and Awards

*2025* Kavli Foundation Fellow, National Academies of Science Engineering and Math

*2024* Nanne Webber Award from American Geophysical Union

*2023-2028* NSF CAREER Grant Recipient

*2023-2025* Sloan Foundation Fellowship in Earth System Science

*2021* Meredith Award for Excellence in Teaching, Spring 2021

*2014* Denise Gaudreau Award for Excellence in Quaternary Studies, American Quaternary Association

*2012-2015* NSF Graduate Research Fellowship Grant No. DGE 1106400

*2010-2012* University of California Berkeley Fellowship for Doctoral Study

# Teaching

Climate Dynamics (15-30 students, covers a mathematical introduction to atmosphere and ocean circulation)

Climate Change (250 student course, covering basics of earth system science and the science of past and future climate change)

Sustainability Capstone Seminar (25 student course, providing interdisciplinary perspective on earth system science and sustainability for senior undegraduates)

# Postdoctoral Scholars and Research Scientists Advised

*2022-2025* Dr. David FastovichCurrently Assistant Professor at University of Geor- gia

*2022-2024* Dr. Tiffany Napier *Currently Meetings Administrator at Geological Soci- ety of America*

# Student Advising and Committees, bold indicates primary adviser

*2023-* **Allie Thompson**, PhD Student (Earth and Environmental Science), Primary Adviser

*2022-* Ilexxis Morales, PhD Student (Earth and Environmental Science), Commit- tee Member

*2022-* Lee Depue, MS Candidate (Earth and Environmental Science), Committee Member

*2023* Bryce Mitsunuga PhD Candidate (Earth Science, Brown University), External Committee Member

*2023* Anson Cheung, PhD Candidate (Earth Science, Brown University), External Committee Member

*2021-* Tyler Logie, PhD Candidate (Earth and Environmental Science), Secondary Advisor

*2020-* **Claire Rubbelke**, PhD Candidate (Earth and Environmental Science), Pri- mary Advisor

*2021-* Daniel Philippi, PhD Candidate (Earth and Environmental Science), Com- mittee Member

*2019-* Laura Streib, PhD Candidate (Earth and Environmental Science), Committee Member

*2019-* Briana Edgerton, PhD Candidate (Earth and Environmental Science), Com- mittee Member

*2019-2023* **Peter Brennan**, PhD Candidate (Earth and Environmental Science), Pri- mary Advisor *Currently at US Geological Survey*

*2019-2023* Ellen Jorgensen, Undergraduate Student, Research Mentor (Will be Ph.D. student at Brown University in Fall 2023)

*2019-2020* Gabi Serrato-Marks, PhD Candidate (Earth and Planetary Science, MIT), External Committee Member

*2019-2022* Ruliang He, PhD Student (Earth and Environmental Science), Commit-

tee Member

*2019-2020* Jessie McCraw, MS Student Earth and Environmental Science), Com- mittee Member

*2018-2022* Nick Zaremba, PhD Student (Earth and Environmental Science), Com- mittee Member

*2018-2020* Emily Judd, Ph.D. Student (Earth and Environmental Science), Commit- tee Member

*2018-2020* Micah Wiesner, MS Student (Earth and Environmental Science), Com- mittee Member

# Selected Talks and Presentations, since 2020 (\* indicates invited, *x* indicates student presenter)

*2023* **\*Bhattacharya, T..** 2023. Paleoclimate insights on the water cycle in a warmer world. Brown University Department Colloquium, Providence, RI, Sept. 28, 2023.

**\*Bhattacharya, T..** 2023. Molecular perspectives on Pliocene southwestern hy- droclimate. Princeton University Environmental Geology and Geochemistry Sem- inar, Princeton, NJ, May 11, 2023.

**\*Bhattacharya, T..** 2023. Pliocene constraints on the behavior of the North American Monsoon in warm climate. Monsoon Seminar (Zoom),

more info: [https://www.monsoongeoseminars.com](https://www.monsoongeoseminars.com/)/.

**\*Bhattacharya, T..** 2023. Proxy and model perspectives on Pliocene hydrocli- mate. Lamont Doherty Earth Observatory, New York, NY, Feb. 2023.

**\*Bhattacharya, T..** 2023. Understanding future regional hydroclimate through the lens of paleoclimate. University of California, Berkeley. Berkeley, CA, Feb. 2023

*2022* **\*Bhattacharya, T..** 2022. Lessons from the Pliocene for understanding hy- droclimate in a warmer world. University of Southern California, November 2022.

**\*Bhattacharya, T..** 2022. Isotopic constraints on Pliocene Subtropical Hydrocli- mate, Cornell University, September 2022.

**\*Bhattacharya, T..** 2022. Novel perspectives on subtropical hydroclimate from organic biomarkers and models, Stanford University, Palo Alto, CA, May 2022.

**\*Bhattacharya, T..** 2022. From past to future: leveraging paleoclimate data to understand future aridity in Central America, UNC Greensboro, Greensboro, NC, March 2022.

**\*Bhattacharya, T..** 2022. Molecular perspectives on southwest North American hydroclimate, London Paleoclimate Network Seminar Series, January 2022.

*2021* **\*Bhattacharya, T..** 2021. Molecular perspectives on Pliocene Hydroclimate, Departmental Colloquium, Yale University, New Haven, CT, November 2021.

**\*Bhattacharya, T..** 2021. Proxy and model perspectives on Pliocene western US hydroclimate, PAOC Colloquium, MIT, Cambridge, MA, October 2021.

**\*Bhattacharya, T..** 2021. Perspectives on subtropical Pliocene Hydroclimate from proxies and models, Changelings Meeting, Comer Foundation, October 2021.

**\*Bhattacharya, T..** 2021. Glacial Changes in the North American Monsoon, Iowa State University, April 2021.

**\*Bhattacharya, T..** 2021. Paleoclimate perspectives on drought in Central Amer- ica, University of Buffalo, March 2021.

*2020* **\*Bhattacharya, T..** 2020. Perspectives on Atlantic-Pacific gradients from pa- leoclimatic proxies. Meeting of American Geophysical Union (virtual), Dec. 2020.

**\*Bhattacharya, T.** , Feng, R. 2020. Pliocene subtropical hydroclimate linked to monsoon dynamics. Meeting of American Geophysical Union (virtual), Dec. 2020.

**\*Bhattacharya, T.** 2020. Paleoclimate perspectives on long-term drought in Cen- tral America. University of California Irvine (virtual), October 19th 2020.

**\*Bhattacharya, T.** 2020. Atlantic-Pacific gradients modulate past and future hy- droclimate variability in Mesoamerica. SUNY Albany Department of Atmospheric Sciences (virtual), October 19th 2020.

**\*Bhattacharya, T..** 2020. The future of the North American Monsoon: lessons

from Quaternary Paleoclimates. Meeting of American Quaternary Association (virtual), June 15-19, 2020.

# Public Outreach and Service

*2023-present* Associate Editor, Geophysical Research Letters

*2022-present* Outstanding Student Presentation Award Coordinator for the Paleo- ceanography and Paleoclimatology specialty group at Fall Meeting of American Geophysical Union.

*2022-present* Executive Editorial Board, Environmental Research Letters: Climate

*2022- present* Volunteer and Faculty Mentor, SUSTAIN (Strategic Undergraduate STEM Talent Acceleration Initiative) at Syracuse University, a mentoring program that supports diverse and Pell-grant eligible students seeking degrees in a STEM field

*2022-2024* Syracuse University College of Arts and Sciences Strategic Planning Committee

*2022-2023* Syracuse University Department of Earth and Environmental Sciences Strategic Planning Committee

*2022- present* Organizing Committee Member, Paleoclimate Advances Webinar Se- ries (PAWS) for National Center for Atmospheric Research (NCAR). This webinar highlights the work of diverse early career researchers in paleoclimate science

*2021- 2024* Founding Board Member, PaleoCAMP (Paleoclimate Training in Cli- mate Archives, Models, and Proxies), a summer short course for graduate students in paleoclimate, highlighting EDI principles and recruiting students from a diverse background (funded by Heising-Simons Foundation)

*2021* Organizing Committee Member, National Academy of Sciences, Identifying New Community-Driven Science Themes for NSF’s Support of Paleo Perspectives on Climate Change (P2C2): A Workshop (July 2021). *Final report link:* [https:](https://www.nap.edu/read/26377/chapter/1)

[//www.nap.edu/read/26377/chapter/1](https://www.nap.edu/read/26377/chapter/1)*, report features EDI themes*

*2021* URGE (Unlearning Racism in the Geosciences) Pod Leader, Syracuse Univer- sity Faculty

*2020- present* Faculty Adviser and Founding Member, Justice Equity and Diversity Committee, Syracuse University

*2020* Panelist for Paleoperspectives on Climate Change (P2C2) program at National Science Foundation, January 2020

# Lab Facilities

*2018- present* Director of Paleoclimate Dynamics laboratory at Syracuse Univer- sity, which consists of two spaces (400 sq ft and 500 sq. ft), and contains a suite of instrumentation for the analysis of organic biomarkers. These include an ac- celerated solvent extractor (ASE 350, Dionex), Labconco freezedrier, several evap- orators, two 6-ft fume hoods, and Thermo Trace 1310 gas chromatograph with flame ionization detector (GC-FID). Our isotope facilities contain a gas chromato- graph -isotope ratio mass spectrometer (GC-IRMS) capable of compound specific measurements of hydrogen and carbon at precisions of 2 permil and 0.2 permil respectively (Thermo Trace 1310 GC coupled to a Delta V plus isotope ratio mass spectrometer.)