

Katherine C. Glover

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Education

2016 Ph.D., Geography

University of California – Los Angeles, Los Angeles, CA, USA

2004 M.S., Geology

University of Cincinnati, Cincinnati, OH, USA

2001 B.A. *cum laude*, Geology

DePauw University, Greencastle, IN, USA

Professional Positions

- 2020 – present **Adjunct Instructor**, Earth and Environmental Sciences, Lehigh University
- 2019 – present **Research Associate, Instructor, and Outreach Coordinator**
Climate Change Institute; Women, Gender and Sexuality Studies; School of Ecology and Biology, Univ of Maine
- 2019 – 2020 **Term Instructor of Quantitative Ecology**, School of Biodiversity Conservation, Unity College
- 2017 – 2019 **Postdoctoral Research Associate**, Climate Change Institute, Univ Maine
- 2017 **Naturalist**, Sequoia Field Institute, Sequoia-Kings Canyon National Parks
- 2007, 2008, 2010 **Senior Park Aide (seasonal)**, California Department of Parks and Recreation
- 2005 – 2011 **Science Teacher**, Earth and Environmental Science, Charlotte Catholic High School

Peer-Reviewed Publications

*student mentee †Principal Investigator

- [14] **Glover, K.C.**, Birkel, S., Wang, Y., Forrest, M., Hickler, T., and Gill, J.† (*in prep*). Dynamic climate-vegetation-wildfire interactions drove Los Angeles Basin plant community structure during Marine Isotope Stage 3. *Journal of Geophysical Research: Biogeosciences*.
- [13] **Glover, K.C.**, George, J., Heusser, L., and MacDonald, G.M. (2021). Vegetation change from West Coast pollen records over the past 130,000 years. *Physical Geography*. DOI: 10.1080/02723646.2021.1990506
- [12] Starratt, S., Kirby, M.K., **Glover, K.C.**, 2021. Diatom Record of Holocene Moisture Variability in the San Bernardino Mountains, California, USA. *in* Rosen, M. R. et

Updated Sept 2021

- al., eds., *Limnogeology: Progress, Challenges, and Opportunities*. Syntheses in Limnogeology, Springer Nature Switzerland. DOI: 10.1007/978-3-030-66576-0_11
- [11] Ferrara, J.* , Puhlick, J., Patterson, T., **Glover, K.C.**†, 2020. Dredging Impacts on Soil Properties of the Kankakee River System 150 Years after Perturbation. *Wetlands*. DOI: 10.1007/s13157-020-01347-9
- [10] **Glover, K. C.**, Chaney, A.* , Kirby, M. E., Patterson, W., MacDonald, G. M., 2020. Southern California vegetation, wildfire and erosion had nonlinear responses to climatic forcing during Marine Isotope Stages 5 - 2 (120 – 15 ka). *Paleoceanography and Paleoclimatology*. DOI: 10.1029/2019PA003628
This work was selected for a Research Spotlight in EOS, the news publication for the American Geophysical Union.
- [9] Kirby, M. K., Patterson, W. P., Ivanovici, L., Sandquist, D., **Glover, K. C.**, 2018. Evidence for a large middle Holocene flood event in the Pacific southwestern United States. in Starratt, S.W., and Rosen, M.R., eds., *From Saline to Freshwater: The Diversity of Western Lakes in Space and Time*. Geological Society of America Special Publication, 536. DOI: 10.1130/2018.2536(09).
- [8] Koch, A., **Glover, K.C.**, Zambri, B., Thomas, E.K., Benito, X., Yang, J.Z., 2018. Open data practices and challenges among early career paleo-researchers. *Past Global Changes Magazine* 26:2, 54-55. DOI: 10.22498/pages.26.2.54
- [7] Field, R.D., Fernandes, K., **Glover, K.C.**, Hansen, W.D., Rabinowicz, J., Williams, A.P., 2018. Understanding the roles of fuels, climate and people in predicting fire: taking the long view. *Past Global Changes Magazine* 26:1, 41. DOI: 10.22498/pages.26.1.41
- [6] Kirby, M.†, Heusser, L., Scholz, C., Ramezan, R., Anderson, M., Markle, B., Rhodes, E., Fantozzi, J., **Glover, K.C.**, Hiner, C., Price, B., Rangel, H., 2018. A late Wisconsin (32-10k cal a BP) history of pluvials, droughts, and vegetation in the Pacific southwest United States (Lake Elsinore, CA). *Journal of Quaternary Science*. DOI: 10.1002/jqs.3018
- [5] **Glover, K. C.**, 2017. Teaching California climate and vegetation change over long timescales: an NGSS unit using CalFlora and the Neotoma Paleocology Database. *The California Geographer* 56, 97 – 103.
Teaching module available at:
<http://serc.carleton.edu/neotoma/activities/174249.html>
- [4] **Glover, K. C.**, MacDonald, G. M., Kirby, M. E., Rhodes, E., Stevens, L., Silveira, E., Whittaker, A.* , and Lydon, S.* , 2017. Evidence for orbital and North Atlantic climate forcing in alpine Southern California between 125 – 10 ka from multi-proxy analyses of Baldwin Lake. *Quaternary Science Reviews* 167, 47-62. DOI: 10.1016/j.quascirev.2017.04.028
- [3] **Glover, K. C.**, Lowell, T. V., Wiles, G., Pair, D., Applegate, P., Hajdas, I., 2011. Deglaciation, basin formation, and post-glacial climate change from a regional network of sediment core sites in Ohio and Eastern Indiana. *Quaternary Research* 76, 401-410. DOI: 10.1016/j.yqres.2011.06.004
- [2] Lowell, T. V.†, Fisher, T. G.†, Hajdas, I., **Glover, K.**, Loope H., Henry, T., 2009. Radiocarbon deglaciation chronology of the Thunder Bay, Ontario area and implications for ice sheet retreat patterns. *Quaternary Science Reviews* 28, 1597-1607. DOI: 10.1016/j.quascirev.2009.02.025
- [1] Lowell, T. V†., Fisher, T. G.†, Comer, G., Hajdas, I., Waterson, N., **Glover, K.**, Loope, H. M., Shaefer, J., Rinterknecht, V., Broecker, W., Denton, G., and Teller,

J. T., 2005. Testing the Lake Agassiz Meltwater Trigger for the Younger Dryas. *Eos* 86 (40), 365-373. DOI: 10.1029/2005EO400001

Teaching Experience

Instructor of Record

2020 & 2022 **Paleoecology and Landscape History**, Lehigh University
2021 **Fire in the Earth System**, Lehigh University
2021 **Humans, Climate and the Biosphere**, University of Maine
2021 **Conservation and Biodiversity**, Lehigh University
2020 & 2021 **Women and Climate Change**, University of Maine
2020 & 2021 **Professionalization in Biology**, University of Maine
2019 – 2020 **Biometry**, Unity College
2019 **Population and Community Ecology**, Unity College
2019 **Fueling the Future** graduate seminar, University of Maine
2014 & 2015 **Environmental Impact of Energy Resources** seminar, UCLA
2014 **Biogeography**, UCLA
2005-2011 **Earth Science 9** and **Environmental Science**, Charlotte Catholic High School
2005 **Introduction to Geology Lab**, University of North Carolina – Charlotte
2003 **Introduction to Geology Lab**, University of Cincinnati

Teaching Assistant

2015 **Biodiversity in a Changing World**, UCLA (Instructor: Dr. Glen MacDonald)
2013-2015 **The Global Environment**, UCLA (Lead Instructor: Dr. Keith Stolzenbach)

Student Mentorship

2012-2020 20 undergraduate students for research credits, capstone projects, K-12 curriculum design, and grant-supported projects

Teacher Training

2021 “Community of Remote Educational Practice” workshop, Center for Teaching and Learning, University of Maine
2015 ENG COMP 495 Supervised Teaching Practicum, UCLA
2012 GEOG 495 Teaching College Geography, UCLA
2009 “Project Coal-to-Electricity: Teaching Environmental Issues,” Eastern Coal Council
2008 “Earth and Environmental Science for Teachers,” Pisgah Forest Institute
2007 Diocese of Charlotte Teaching License
2006 “Using Authentic Scientific Ocean Drilling Data for Earth Systems Science Inquiry,” K-12 Short Course at Geological Society Annual Meeting
2005-2007 15 Continuing Education Credits at Central Piedmont Community College, including “Differentiating Instruction,” “Introduction to ADHD,” and “Socratic Seminar”

Scientific Talks

Invited

2022 Palmer Colloquium Series, Dept of Geology, Kent State University, Kent, OH

2021 Dept of Earth and Environmental Sciences, Lehigh University, Bethlehem, PA
2020 American Geophysical Union Fall Meeting (virtual)
2019 Society of Women Geographers Conference, Library of Congress, Washington, D.C.
2019 Dept of Biology, Kenyon College, Gambier, OH
2018 School of Biology and Ecology, University of Maine, Orono, ME
2017 Dept of Environmental and Ocean Sciences, University of San Diego, San Diego, CA
2017 United States Geological Survey, Menlo Park, CA
2017 Dept of Earth Sciences, Indiana University Purdue University-Indianapolis
2016 American Geophysical Union Fall Meeting, San Francisco, CA
2016 Dept of Geological Sciences, California State University – Fullerton
2015 Society of Woman Geographers, Southern California Chapter, Santa Monica, CA
2015 Dept of Earth Sciences, University of Southern California, Los Angeles, CA
2014 Dept of Earth Sciences, University of Minnesota, Minneapolis, MN

Contributed

2019 Borns Symposium, Climate Change Institute, Orono, ME
2018 Borns Symposium, Climate Change Institute, Orono, ME
2018 Paleochronology Building Workshop, Campeche City, Campeche, Mexico
2017 Conference on Fire Prediction Across Scales, New York, NY
2017 Pacific Climate Workshop, Pacific Grove, CA
2017 International Biogeography Society Biennial Conference, Tucson, AZ
2016 California Geographical Society Annual Meeting, San Jose, CA
Geosystems Paper Award
2016 American Association of Geographers Annual Meeting, San Francisco, CA
Biogeography Paper Award
2015 Geological Society of America Annual Meeting, Baltimore, MD
2015 Pacific Climate Workshop, Pacific Grove, CA
2014 California Geographical Society Annual Meeting, Los Angeles, CA
2013 Geological Society of America Annual Meeting, Denver, CO
2013 American Association of Geographers Annual Meeting, Los Angeles, CA
2012 150,000 years of climate change from West Coast pollen records
2011 American Geophysical Union Fall Meeting, San Francisco, CA
2006 10th International Paleolimnology Symposium, Duluth, MN
2004 Geological Society of America Annual Meeting, Denver, CO

Posters

2020 American Geophysical Annual Meeting (virtual)
2019 Pacific Climate Workshop, Pacific Grove, CA
2018 American Geophysical Union Fall Meeting, Washington, D.C.
2015 American Geophysical Union Fall Meeting, San Francisco
2015 Quadrennial International Limnogeology Congress, Reno, NV
2013 American Geophysical Union Fall Meeting, San Francisco, CA
2013 Geographical Society of California Annual Meeting, San Luis Obispo, CA
2013 Pacific Climate Workshop, Pacific Grove, CA
2003 XVI International Union for Quaternary Research, Reno, NV
2003 Third International Limnogeology Congress, Tucson, AZ
2002 Geological Society of America Annual Meeting, Denver, CO
2001 Fifteenth National Conference on Undergraduate Research, Lexington, KY

Funding History

\$111,910 awarded in competitive fellowships, research grants, and travel funds.

\$931,880 currently under review

~\$690,000 submitted, not funded

[details available upon request]

Professional Service

- 2020 – 2023 Board member, Society of Woman Geographers
2019 Reviewer, IPCC: The Physical Science Basis draft report
2017- present Data Steward, North American Pollen Database and Neotoma Paleocology Database
2014- present **Peer Reviewer**, American Chemical Society Petroleum Research Fund, National Science Foundation Geomorphology and Land-Use Dynamics Program, EcoEd Digital Library, *Quaternary Research*, *International Journal of Limnology*, *Open Quaternary*, *Quaternary Science Reviews*, *Progress in Physical Geography*, *PLoS One*
2015-2016 Fossil Lab Volunteer, La Brea Tar Pits, Los Angeles County Museums
2013-2015 Organizing Committee, International Limnogeology Congress (ILIC6; June 2015)
2013-2014 Geography Graduate Curriculum Reform Committee, UCLA
2012-2013 Graduate-Faculty Representative, UCLA
2012-2013 Graduate Student Association Representative, Faculty Welfare Committee, UCLA Academic Senate
2006-2010 Faculty Sponsor, Outdoor Club, Cult Movie Club, Charlotte Catholic High School

Outreach

- 2017–present Blogging and social media outreach (Facebook, Twitter) for the La Brea Food Webs project (<http://labreawebs.wordpress.com> @labreawebs #labreawebs)
2019–2020 Blogging and webinars for Kankakee Paleo Project
2018 Virtual mentor via Skype, Girls Academic Leadership Academy, LAUSD
2018 presenter, “Skype a Scientist” for middle school classrooms
2018 presenter, “Summit-to-Sea Clues for Southern California’s Ice Age Climate and Vegetation” webinar, Society of Woman Geographers

Field Experience

- 2019 Sediment and soil coring, Grand Kankakee Marsh, Northern Indiana (PI)
2017 Lake coring in Acadia National Park
2017 Visitor Interpretation at several natural resource sites in Sequoia National Park
2015 Project 23 Excavation, La Brea Tar Pits, L.A. County Museums
2014, 2015 Vegetation survey in San Bernardino Mountains for Ph.D. research
2012 Site survey and coordinated lake drilling for Ph.D. research, San Bernardino Mountains
2012 Field mapping course of Quaternary sediments, Death Valley, CA
2007-2010 Mapped trail alignments, structures and terrain for California State Parks
2002-2004 Lake and bog coring trips in Canada, Midwest and Great Lakes region
2001 & 2002 Field mapping courses in glacial geology, Alaska and Canadian Rockies
2000 & 2001 Archaeological landscape survey in Turkey (2000) and Greece (2001)
~15 years and 1000+ miles of wilderness backpacking experience

Professional Memberships

2011 – present	American Geophysical Union
2012 – present	Society of Woman Geographers
2015 – present	Earth Science Womens' Network
2017 – present	Past Global Changes Working Group and Early Career Network
2001 – 2018	Geological Society of America
2016 – 2017	International Biogeography Society
2011 – 2016	California Geographical Society
2012 – 2016	American Association of Geographers
2014 – 2016	American Association of Stratigraphic Palynologists