

KATHERINE C. GLOVER

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EDUCATION

2016 Ph.D. in Geography

University of California – Los Angeles, Los Angeles, CA, USA
Dissertation: *Southern California climate and vegetation over the past 125,000 years from lake sequences in the San Bernardino Mountains*
Advanced to Candidacy: May 2014
Advisor: Dr. Glen M. MacDonald

2004 M.S. in Geology

University of Cincinnati, Cincinnati, OH, USA
Thesis: *Paleoenvironmental evidence for the Last Termination in two bog sequences and a regional network of sites from Ohio and eastern Indiana*
Advisor: Dr. Thomas V. Lowell

2001 B.A. *cum laude* in Geology

DePauw University, Greencastle, IN, USA
Senior Honors Thesis: *Geologic provenance of artifacts and raw materials in stone from the Elmalı Basin, southwest Turkey*
Advisor: Dr. Pedar W. Foss
Honor Scholar Program, Science Research Fellow, Phi Beta Kappa

PROFESSIONAL POSITIONS

2017 – present **Postdoctoral Research Associate**, Climate Change Institute, Univ Maine
2017 **Naturalist**, Sequoia Field Institute, Sequoia-Kings Canyon National Parks
2005-2011 **Science Teacher**, Earth and Environmental Science, Charlotte Catholic High School
2007-2010 **Senior Park Aide**, Henry W. Coe State Park, CA Dept. of Parks and Recreation
2003-2004 **Laboratory Supervisor**, Quaternary/Surface Processes Research Group, University of Cincinnati

PEER-REVIEWED PUBLICATIONS

in progress [10] **Glover, K. C.**, Chaney, A., Kirby, M. E., Patterson, W., MacDonald, G. M., (*in revision*) Southern California vegetation, wildfire and erosion had nonlinear responses to climatic forcing during Marine Isotope Stages 5 - 2 (120 – 15 ka). *Paleoceanography and Paleoclimatology*.
2018 [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

Updated May 2019

- 2018 [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
- 2017 [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
- 2011 [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
- 2009 [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
- 2005 [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

INVITED TALKS

- 2019 [10] Inclusion in Climate Change and Paleoenvironmental Research. Society of Woman Geographers Conference, Library of Congress, Washington D.C.
- [9] What do paleorecords tell us about ice age environments in North America, and how can they inform future policy? Department of Biology, Kenyon College.
- 2018 [8] Summit-to-Sea Clues for Southern California's Ice Age Climate and Vegetation. School of Biology and Ecology, University of Maine.
- 2017 [7] Glacial-Interglacial Cycles in California. Department of Environmental and Ocean

Sciences, University of San Diego.

- [6] Southern California Climate and Vegetation over the past 125,000 years from lake sequences in the San Bernardino Mountains. Geology, Minerals, Energy, and Geophysics Science Center Seminar, Menlo Park U.S. Geological Survey.
- [5] Glacial paleoclimate change from North American Midwest and alpine Southern California lake sequences, Department of Earth Sciences, Indiana University Purdue University – Indianapolis.
- 2016 [4] Insights into hydroclimatic variability of Southern California since 125 ka, from multi-proxy analyses of alpine lake records. Department of Geological Sciences Colloquium Series, California State University – Fullerton.
- 2015 [3] Lake sequences from Big Bear Valley in the San Bernardino Mountains provide insight into S. California paleoclimate over the past 100,000 years. Society of Woman Geographers, Southern California chapter.
- [2] Insight into Southern California paleohydrology since Marine Isotope Stage 5c (c. 96 ka) from lakes in the Big Bear Valley, San Bernardino Mountains, California. Department of Earth Sciences, University of Southern California.
- 2014 [1] Lake sequences from Big Bear Valley in the San Bernardino Mountains provide insight into S. California paleoclimate over the past 100,000 years. Department of Earth Sciences Colloquium Series, University of Minnesota.

CONTRIBUTED SCIENTIFIC PRESENTATIONS

First-author presentations, with invited papers and awards noted in bold.

- 2019 [29] Glover, K.C. Vegetation Change at the La Brea Tar Pits from 50,000 to 30,000 years BP. Borns Symposium, Climate Change Institute, University of Maine, Orono, ME (talk)
- [28] Glover, K.C., Gill, J.L., Blois, J., Lindsey, E., Farrell, A., Yeakel, J., Mason, M., Carroll, C. Models and macrofossils: integrating Rancho La Brea's plant collection with dynamic vegetation modeling during Marine Isotope Stage 3. Pacific Climate Workshop, Pacific Grove, CA. (poster)
- 2018 [27] Glover, K.C., Gill, J.L., Blois, J., Lindsey, E., Farrell, A., Yeakel, J., Mason, M., Carroll, C. Models and macrofossils: integrating Rancho La Brea's plant collection with dynamic vegetation modeling during Marine Isotope Stage 3. American Geophysical Union Fall Meeting, Washington, D.C. (poster)
- [26] Glover, K.C. Vegetation Cover and climate at the Rancho La Brea Tar Pits, Southern California, during Marine Isotope Stage 3. Borns Symposium, Climate Change Institute, University of Maine, Orono, ME (talk)
- [25] Glover, K.C. Clues for Southern California's past hydroclimate: from summit to sea level. Paleochronology Building Workshop II, Campeche City, Campeche, Mexico (talk)
- 2017 [24] Glover, K.C. Vegetation and fire in the San Bernardino Mountains, Southern California, since 120,000 years BP: Insights and challenges for 21st century predictions. Conference on Fire Prediction Across Scales, The Columbia Initiative on Extreme Weather and Climate, New York, NY (talk)
- [23] Glover, K.C. Patterns, challenges, and future research potential from the West Coast paleovegetation record over the last 130 ka. Pacific Climate Workshop, Pacific Grove, CA (talk)
- [22] Glover, K.C., MacDonald, G.M., Chaney, A. A 120,000-year vegetation and wildfire history from the San Bernardino Mountains, Southern California. International Biogeography Society Biennial Conference, Tucson, AZ (talk)

- 2016 [21] Glover, K.C., MacDonald, G.M., Kirby, M.E. Insights into hydroclimatic variability of Southern California since 125 ka, from multi-proxy analyses of alpine lake records. American Geophysical Union Fall Meeting, San Francisco, CA (**Invited talk**)
- [20] Glover, K.C. Vegetation Change in the San Bernardino Mountains from 60,000 – 15,000 years BP. California Geographical Society Annual Meeting, San Jose, CA (talk)
- Geosystems Paper Award**
- [19] Glover, K.C., MacDonald, G.M., Chaney, A., Saraf, S. A 90,000-year fire history from the San Bernardino Mountains, Southern California. American Association of Geographers Annual Meeting, San Francisco, CA (talk)
- Biogeography Student Paper Award**
- 2015 [18] Glover, K.C., MacDonald, G.M., Kirby, M.E., Rhodes, E., Stevens, L., Silveira, E., Whitaker, A., Lydon, S.E. Southern California climate, hydrology and vegetation over the past c. 96 ka from Baldwin Lake, San Bernardino Mountains, California. American Geophysical Union Fall Meeting, San Francisco, CA (poster)
- [17] Glover, K.C., MacDonald, G.M., Kirby, M.E., Rhodes, E., Stevens, L., Silveira, E., Whitaker, A., Lydon, S.E. Insight into Southern California's paleoclimate since Marine Isotope Stage 5c (c. 96 ka) from Baldwin Lake, San Bernardino Mountains, CA. Geological Society of America Annual Meeting, Baltimore, MD (talk)
- [16] Glover, K.C., MacDonald, G. M., Kirby, M.E., Rhodes, E. Paleohydrology, Native Vegetation, and Fire Regime during Marine Isotope Stages 2-3 in the San Bernardino Mountains, California, U.S. Quadrennial International Limnogeology Congress, Reno, NV (poster)
- [15] Glover, K.C., MacDonald, G.M., Kirby, M.E., Rhodes, E. Insight into Southern California paleohydrology since Marine Isotope Stage 5c (c. 96 ka) from Baldwin Lake, San Bernardino Mountains, CA. Pacific Climate Workshop, Pacific Grove, CA (talk)
- 2014 [14] Glover, K.C., MacDonald, G.M., Kirby, M.E. Lake Sequences from Big Bear Valley, San Bernardino Mountains, CA Provide Insight into Western Paleoclimate over the Past 100 kyr. California Geographical Society, Annual Meeting, Los Angeles, CA (talk)
- Tom McKnight 1st Place Graduate Student Paper Award**
- 2013 [13] Glover, K.C., MacDonald, G.M., Kirby, M.E., Rhodes, E. An emerging c. 100 ka record of climate change from Baldwin Lake, San Bernardino Mountains, CA, U.S. American Geophysical Union Fall Meeting, San Francisco, CA (poster)
- [12] Glover, K.C., MacDonald, G.M., Kirby, M.E., Paladino, L., Saraf, S., Tachiki, N. A 9.2 ka paleoecological history of Lower Big Bear Lake, San Bernardino Mountains, CA, and implications for Holocene climate change in the U.S. Coastal Southwest. Geological Society of America Annual Meeting, Denver, CO (talk)
- [11] Glover, K.C. Categorizing and visualizing 200,000 years of West Coast paleoclimate events. California Geographical Society Annual Meeting, San Luis Obispo, CA (digital map)
- [10] Glover, K.C., MacDonald, G.M., Kirby, M.E. Baldwin Lake, San Bernardino Co., CA, USA: a record of past glacial cycles. American Association of Geographers Annual Meeting, Los Angeles, CA (talk)

- [9] Glover, K.C., MacDonald, G.M., Kirby, M.E. West Coast environmental change over the last 150,000 years: a case study from Baldwin Lake, San Bernardino Mountains, California. Pacific Climate Workshop, Pacific Grove, CA (poster)
- 2012 [8] Glover, K.C. 150,000 years of climate change from West Coast pollen records.” California Geographical Society Annual Meeting, Davis, CA (talk)
- 2011 [7] Glover, K. C., Lowell, T. V., Wiles, G., Pair, D., Applegate, P., Hadjas, I. Deglaciation, basin formation, and post-glacial climate change from a regional network of sediment core sites in Ohio and Eastern Indiana. American Geophysical Union Fall Meeting, San Francisco, CA (talk)
- 2006 [6] Glover, K.C., Lowell, T.V., Fisher, T., Hadjas, I., Waterson, N., Larson, P., Hamilton, R. Additional Radiocarbon Control for the Deglaciation and Subsequent Landscape Development of Northeastern Minnesota. 10th International Paleolimnology Symposium, Duluth, MN (talk)
- 2004 [5] Glover, K. C., Lowell, T. V., Wiles, G., Pair, D., Hadjas, I. Deglaciation and Post-Glacial Climate Change in a Regional Network of Sites, Ohio and Eastern Indiana. Geological Society of America Annual Meeting, Denver, CO (talk)
- 2003 [4] Glover, K. C., Lowell, T. V., Wiles, G., Pair, D. Tracking Climate Change in Ohio Throughout the Last Termination: A Network of Paleobasins Dating to c. 16,000 ¹⁴C Years BP. XVI International Union for Quaternary Research, Reno, NV (poster)
- [3] Glover, K. C., Lowell, T. V. Paleoclimate Reconstruction of the Last Termination from a Bog Sequence, Champaign Co., Ohio. Third International Limnogeology Congress, Tucson, AZ (poster)
- 2002 [2] Glover, K. C., Lowell, T. V. Paleoclimate Reconstruction of the Last Termination, Champaign Co., Ohio. Geological Society of America Annual Meeting, Dever, CO (poster)
- 2001 [1] Glover, K. C. The Geologic Origin of Artifacts and Raw Materials in Stone from the Elmalı Basin, Turkey. Fifteenth National Conference on Undergraduate Research, Lexington, KY (poster)

FUNDING HISTORY

\$101,260 raised in competitive fellowships, grants, and travel funds.

Research Grants

2018	Principal Investigator: “Biogeography of Grand Kankakee Marsh, N. Indiana, U.S. over the past 5,000 years,” National Geographic Committee for Research & Exploration. EC-55150R-18	\$9,920
2014	Limnological Research Center Graduate Student Travel Award	\$1,000
2014	UCLA La Kretz Center for California Conservation Science student award	\$1,100
2013	Geological Society of America Graduate Student Grant	\$2,100
2003	Geological Society of America Graduate Student Grant	\$2,460
2003	Sigma Xi Society Grant-in-Aid of Research	\$300

Fellowships

2015-2016	Dissertation Year Fellowship, UCLA Graduate Division	\$20,500
2014-2015	Society of Woman Geographers National Fellow	\$12,000
2014	John Muir Memorial Chair Summer Fellowship	\$3,000

2012-2013	Graduate Research Mentor Fellowship, UCLA Graduate Division	\$20,500
2013 & 2012	Graduate Summer Research Mentorship, UCLA Graduate Division	\$13,000
2001-2002	Fenneman Fellowship, Dept of Geology, University of Cincinnati	\$13,000

Travel Awards

2017	Columbia Univ Initiative on Extreme Weather and Climate	\$1,100
2015	American Association of Stratigraphic Palynologists	\$500
2014	Dissertation Pilot Program, UCLA Graduate Division	\$280
2003	U.S. National Committee for the International Union of Quaternary Research, The National Academies	\$500

TEACHING EXPERIENCE

Instructor of Record

2020	Women and Climate Change , University of Maine
2019	Fueling the Future graduate seminar, University of Maine
2014 & 2015	Environmental Impact of Energy Resources seminar, UCLA
2014	Biodiversity in a Changing World , 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)
2002-2003	Introduction to Geology , University of Cincinnati (Instructor: Dr. John Grover)

Student Mentorship

2018	Mikayla Mason (undergraduate work study, paleoecological lab techniques)
2018	Cassandra Carroll (undergraduate work study, paleoecological lab techniques)
2017-2018	Trevor Lessard (undergraduate work study for paleoecological databases)
2015	Victor Huang, Alec Lautanen (undergraduates ENV 99 research credit)
2013-2014	April Chaney (undergraduate Geography Honors Thesis and co-author)
2013	Nicole Tachiki (undergraduate ENV 199 Research Project)
2012-2013	Sargam Saraf (undergraduate ENV 199 Research Project)
2012-2013	Alexis Whitaker (undergraduate research volunteer and co-author)

Teacher Training

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”

FIELD EXPERIENCE

- 2019 Sediment 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, Page Museum at the 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)

OUTREACH

- 2017–present Blogging and social media outreach (Facebook, Twitter) for the La Brea Food Webs project (<http://labreawebs.wordpress.com> @labreawebs #labreawebs)
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

PROFESSIONAL SERVICE

- 2019 Reviewer, IPCC 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*
2015-2016 Fossil Lab Volunteer, Page Museum at 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

PROFESSIONAL MEMBERSHIPS

- 2012 – present Society of Woman Geographers
2011 – present American Geophysical Union
2015 – present Earth Science Womens Network
2017 – present Past Global Changes Working Group and Early Career Network

Curriculum Vitae | Katherine C. Glover, Ph.D.

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