

HEATHER L. FORD

DEPARTMENT OF EARTH SCIENCES
DOWNING STREET
CAMBRIDGE, CB2 3EQ, UNITED KINGDOM

PHONE: +44 (0) 1223 333427
E-MAIL: hlf40@cam.ac.uk
WEBSITE: www.heatherlford.com

PROFESSIONAL EXPERIENCE **University of Cambridge** **2016 – present**
NERC Independent Research Fellow

Columbia University **2013 – 2016**
Lamont-Doherty Earth Observatory
Postdoctoral Research Scientist

EDUCATION **University of California, Santa Cruz** **2007 – 2013**
Doctor of Philosophy, Ocean Sciences
Evolution of Tropical Pacific Ocean Dynamics: Surface to
Subsurface Temperature Variability from the Pliocene to
Present

San Diego State University **2004 – 2007**
Master of Science, Geological Sciences
Evaluating the Skeletal Chemistry of *Mytilus californianus* as a
Temperature Proxy

University of California, Davis **2000 – 2004**
Bachelor of Science, Geology, High Honors

University of Leeds **2002 – 2003**
University of California Education Abroad Program

PUBLICATIONS **Ford, H.L., Ravelo, A.C., *Ramirez, B., *Akers, T., *Krzeminski, O., IODP**
*student Expedition 320/321 Data Report: Mg/Ca values of *Globorotalia tumida* from the
early Pliocene to present at IODP U1338, accepted

 Raymo, M.E., Kozdon, R., Evans, D., Lisiecki, L., and **Ford, H.L.**, 2017, The
accuracy of mid-Pliocene $\delta^{18}\text{O}$ -based ice volume and sea level reconstructions,
Earth Science Reviews, accepted

Ford, H.L., Sosdian, S.M., Rosenthal, Y., and Raymo, M.E., 2016, Gradual and
abrupt changes during the Mid-Pleistocene Transition, *Quaternary Science*
Reviews, 148, 222-233, doi: 10.1016/j.quascirev.2016.07.005

 Lyle, M., Pockalny, R., Polissar, P., Lynch-Stieglitz, J., Bova, S., Dunlear, A.G.,
Ford, H.L., Hertzberg, J., Hovan, S., Jacobel, A., Wertman, C., Maloney, A.,
Murray, R.W., Wilson, J., Wejnert, K., Xie, R.C., 2016, Dynamic carbonate
sedimentation on the Northern Line Islands Ridge, Palmyra Basin, *Marine*
Geology, 379, doi:10.1016/j.margeo.2016.06.005

Ford, H.L., Ravelo, A.C., and Polissar, P., 2015, Reduced El Niño-Southern
Oscillation during the Last Glacial Maximum, *Science*, 347, 255-258,
doi:10.1126/science.1258437

Ford, H.L., Ravelo, A.C., Dekens, P. LaRiviere, J.P., Wara, M., 2015, The
evolution of the equatorial thermocline and the early Pliocene El Padre mean
state, *Geophysical Research Letters*, 42, doi:10.1002/2015GL064215

- Lynch-Stieglitz, J., Polissar, P., Jacobel, A., Hovan, S., Pockalny, R., Lyle, M., Murray, R., Ravelo, A.C., Bova, S., Castro, V., Dunlea, A., **Ford, H.L.**, Herzberg, J., King, C., Maloney, A., Shackford, J., Wejnert, K., and Xie, R. 2015, Glacial-Interglacial Changes in Central Tropical Pacific Surface Seawater Property Gradients, *Paleoceanography*, 30, doi:10.1002/2014PA002746
- Ravelo, A.C., Lawrence, K.T., Fedorov, A., and **Ford, H.L.**, 2014, Comment on “A 12-Million-Year Temperature History of the Tropical Pacific Ocean.”, *Science*, 346 1467, doi:10.1126/science.1257618
- Ford, H.L.**, Ravelo, A.C., and Hovan, S., 2012, A deep Eastern Equatorial Pacific thermocline during the early Pliocene warm period, *Earth and Planetary Sciences Letters* 355–356, 152–161, doi:10.1016/j.epsl.2012.08.027
- LaRiviere, J.P., Ravelo, A.C., Crimmins, A., Dekens, P.S., **Ford, H.L.**, Lyle, M., and Wara, M.W., 2012, Late Miocene decoupling of oceanic warmth and atmospheric carbon dioxide forcing: *Nature*, 486, doi:10.1038/nature11200
- Ford, H.L.**, Schellenberg, S., Becker, B., Deutschman, D., Dyck, K. and Koch, P., 2010, Evaluating the skeletal chemistry of *Mytilus californianus* as a temperature proxy: effects of microenvironment and ontogeny, *Paleoceanography*, 25, PA1203, doi:10.1029/2008PA001677

PUBLICATIONS
IN
PREPARATION
*student

- Ford, H.L.**, Brick, C., Blaufass, K., Dekens, P.S., Gender Representation of Speaking Opportunities at the American Geophysical Union Fall Meeting, resubmitted, under consideration *Nature Comm.* <https://eartharxiv.org/6qhvvd/>
- Ford, H.L.**, and Ravelo, A.C. Long-term Stability and Sensitivity of the Western Equatorial Pacific to Radiative Forcing, submitted, *Paleoceanography*
- Ford, H.L.**, *McChesney, C.L., Hertzberg, J., McManus, J., Changes in thermocline structure in the Eastern Equatorial Pacific since the Last Glacial Maximum, submitted, *Geophysical Research Letters*
- Ford, H.L.**, and Raymo, M.E. Detangling regional and global signals in seawater $\delta^{18}\text{O}$ records across the Mid-Pleistocene Transition, in revision
- Dyez, K.A., Paul L. Koch, P.L., **Ford, H.L.**, Schellenberg, S.A., Newsome, S.D., Hylkema, M.G, Mollusk geochemical records show stable Holocene climate on the central California coast, in preparation, *The Holocene*
- Farmer, J.R., Hönisch, B., Haynes, L.L., Kroon, D., Jung⁴, S., **Ford, H.L.**, Raymo, M.E., Bell, D.B., Jaume-Seguí, M., Goldstein, S., Pena, L.D., Yehudai, M. Kim, J., Deep Atlantic Ocean carbon storage and the rise of 100,000-year glacial cycles, in preparation, *Nature*
- Ford, H.L.**, Haynes, L., Hönisch, B. Raymo, M.E. et al. Changes in Deep North Pacific Carbon Storage during the Mid-Pleistocene Transition. in preparation

SELECTED
ABSTRACTS
*student

- Ford, H.L.**, Burls, N., Hodell, D. 2018. Stable Isotope Evidence for North Pacific Deep Water Formation during the mid-Pliocene Warm Period *AGU Fall Meeting* PP41C-1323
- Ford, H.L.**, Raymo, M. 2017. Detangling regional and global signals in seawater $\delta^{18}\text{O}$ records across the Mid-Pleistocene Transition. PAGES-OSM
- Ford, H.L.**, Ravelo, A.C. 2017. Pliocene estimates of tropical Pacific temperature sensitivity to radiative greenhouse gas forcing. PAGES-OSM

- Ford, H.L.**, Haynes, L., Hönisch, B., Raymo, M. 2016. Records of bottom water temperature, ice volume and deep ocean carbon storage from the N. Pacific, *AGU Fall Meeting* PP31B-2280
- *McChesney, C.L., **Ford, H.L.**, McManus, J. 2016. Changes in thermocline structure in the Eastern Equatorial Pacific since the Last Glacial Maximum, *AGU Fall Meeting*, PP51D-2353
- *Ramirez, B. **Ford, H.L.**, *Ross, C. 2015. Investigating changes in North Pacific intermediate water during the last 4 million years. *AGU Fall Meeting*, PP21B-2234
- Lyle, M., Moore, T., Ravleio, A., Baldauf, J. **Ford, H.L.**, Stepanova, A., Hertzberg, J. 2015. Paradoxical High Productivity in the Eastern Equatorial Pacific Ocean During the Miocene “El Padre”, ODP Site 849, and IODP Sites U1337 and U1338. *AGU Fall Meeting*, PP24A-02
- Ford, H.L.**, Ravelo, A.C., Dekens, P. LaRiviere, J.P., Wara, M. 2013. Long-term Stability of the Western Equatorial Pacific Warm Pool, *AGU Fall Meeting*, PP53C-2019

GRANTS, FELLOWSHIPS and HONORS	Jesus College, Cambridge – College Post-Doctoral Associate	2017-present
	NERC Independent Research Fellowship: Reconstructing intermediate and deep ocean circulation during the Pliocene warm period (£507,225, ~\$730,270)	2016
	NSF-OCE: North Atlantic Bottom Water Temperature and Ice Volume Records from the Mid-Pleistocene Transition (PI, \$221,274)	2014
	Columbia University Climate Center Grant (\$10,000)	2014
	University of California President’s Dissertation-Year Fellowship (\$21,000)	2012 – 2013
	ARCS Foundation Fellowship (\$10,000)	2012 – 2013
	Ocean Sciences Department, Graduate Student of the Year	2011
	IODP Schlanger Fellowship, Ocean Leadership (\$28,000)	2009 – 2010
	CDELSI Research/IGPP Mini-Grant Award, <i>UC Santa Cruz</i> (\$3,000)	2009
	Regent’s Fellow, <i>UC Santa Cruz</i>	2007 – 2008
	Outstanding Master’s Thesis Presentation, <i>San Diego State University</i>	2007
	Geological Society of America Student Research Grant (\$1,500)	2005
	Geological Sciences Department, Exxon Mobil Fellowship, <i>San Diego State University</i>	2004
FIELD WORK	Research Assistant, R/V Langseth – <i>Line Islands</i>	2012
	Research Assistant, R/V Melville – <i>Costa Rica to Northern Chile</i>	2010
	Research Assistant, R/V Sproul – <i>Santa Barbara</i>	2008
	Research Assistant, R/V Revelle – <i>Hawaii to San Diego</i>	2005
PROFESSIONAL SERVICE	Reviewer for <i>Proceedings of the National Academy of Sciences</i> ; <i>Nature Geoscience</i> ; <i>Nature Scientific Reports</i> ; <i>Paleoceanography</i> ;	2013 – present

	<i>Earth and Planetary Science Letters; Geochemistry, Geophysics, Geosystems; Climate of the Past; Marine Micropaleontology</i>	
	Co-Convener, Reconstructing and modeling late Pliocene climate variability, AGU	2016
	AGU 2015 Fall Meeting Program Committee – <i>Assistant Secretary Paleoceanography and Paleoclimatology</i>	2015
	Co-Convener, Workshop on Plio-Pleistocene Climate – <i>LDEO</i>	2015
	Primary Convener, Reconstructing and Modeling the Pliocene Warm Period: A Potential Analog for Future Warmth, AGU	2014
	Co-Leader Postdoctoral Professional Development Group – <i>LDEO</i>	2013 – 2014
	Title IX Advisory Committee, <i>UC Santa Cruz</i>	2008 – 2012
	EVC Search Advisory Committee, Graduate Student Representative – <i>UC Santa Cruz</i>	2010
	Graduate Student Representative for Ocean Sciences – <i>UC Santa Cruz</i>	2008 – 2010
PROFESSIONAL DEVELOPMENT	IODP Early Career Workshop	2017
	Marine Geoscience Leadership Symposium	2015
	Professional Skills Development Workshop for Women and Minorities	2014
	The Cutting Edge, Preparing for an Academic Career in the Geosciences	2013
	ISEE Professional Development Program, Inquiry and Design Institute	2010
	Integrated Ocean Drilling Program, INVEST Workshop	2009
	Communicating Your Science to the Public	2009
	Summer School in Paleoceanography	2005
INVITED TALKS	<i>Open University, UK</i>	February 2018
	<i>QUIGS3 Workshop, Lesbos, Greece</i>	August 2017
	<i>University College London, UK</i>	January 2017
	<i>Cardiff University, UK</i>	January 2017
	<i>Workshop on Individual Foraminifera Datasets, Utrecht, NL</i>	August 2016
	<i>George Mason University, USA</i>	April 2016
	<i>University of Connecticut, USA</i>	January 2016
	<i>Rice University, USA</i>	January 2016
	<i>Woods Hole Oceanographic Institute, USA</i>	May 2015
	<i>Lamont-Doherty Earth Observatory, USA</i>	April 2015
	<i>University of Cambridge (Quaternary Group Discussions), UK</i>	January 2015
	<i>University of Cambridge (Isotope Coffee), UK</i>	January 2015
	<i>Yale, USA</i>	Sept 2014
	<i>Princeton University, USA</i>	May 2014
	<i>Lamont-Doherty Earth Observatory, USA</i>	May 2014
	<i>Williams College, USA</i>	March 2014
TEACHING	Urbino Summer School in Paleoclimatology	2016

	Teaching Assistant, <i>UC Santa Cruz Ocean Sciences Department</i>	2007-2012
	Life in the Sea, Marine Geology, Our Changing Planet	
	EarthWEST Transfer Student Workshop, <i>UC Santa Cruz</i>	2011
	Teaching Assistant, <i>San Diego State University Geological Sciences Department</i>	2004 – 2007
	Dynamics of the Earth, The Ocean Planet	
MENTORING	Part III Research Student, University of Cambridge	2017
	LDEO Research Experience for Undergraduates (REU) Summer Programs	2016, 2015
	LDEO Summer High School Intern Mentor	2015, 2014
	UCSC Summer High School Internship Program in the Geo-Sciences Mentor	2012, 2011
COMMUNITY SERVICE AND SCIENCE OUTREACH	She Persisted: A Discussion Forum with Women in Science, 500 Women Scientists, London Pod	2017
	AGU Congressional Visits Day	2016
	LDEO Day at the Explorer' Club NYC	2015
	Science Speed Dating, The Science and Entertainment Exchange a program of the National Academy of Sciences	2014
	Lamont-Doherty Earth Observatory Open House	2014
	Girls on the Run 5K Running Buddy	2013 – 2015
	Young Women in Science Mentor, Monterey Bay Aquarium	2009, 2008
MEMBERSHIPS	American Geophysical Union, American Association for the Advancement of Science, Earth Science Women's Network	
MEDIA	<ul style="list-style-type: none"> • https://www.sciencenews.org/article/what-pleistocene-epoch-can-teach-us-about-future-warming-earth • https://eos.org/features/data-illuminate-mountain-molehills-facing-women-scientists • http://www.theverge.com/2017/1/18/14308396/ryan-zinke-interior-secretary-policy-positions-climate-federal-lands • http://blogs.ei.columbia.edu/2015/06/02/tapping-into-earths-secret-history/ • http://yaledailynews.com/blog/2015/12/01/historic-ocean-temperatures-predict-climate-change/ 	<p>Nov 2017, Quote</p> <p>Jan 2017, Quote</p> <p>Jan 2017, Quote</p> <p>June 2015, Research Focus</p> <p>Dec 2015, Quote</p>
REFERENCES	<p>Prof. Christina Ravelo (PhD supervisor) Ocean Sciences, University of California Santa Cruz 1156 High Street, Santa Cruz, CA 95064 USA acr@ucsc.edu / +1 831 459 3722</p> <p>Prof. Maureen Raymo (LDEO postdoc supervisor) Lamont-Doherty Earth Observatory, Columbia University 61 Route 9W, Palisades, NY 10964 USA raymo@ldeo.columbia.edu / +1 845 365 8801</p>	

Prof. David Hodell (Collaborator)
Earth Sciences, University of Cambridge
Downing Street, Cambridge, CB2 3EQ, United Kingdom
dah73@cam.ac.uk / +44 (0) 1223 330270