

Michael P. Lamb

Geological and Planetary Sciences
California Institute of Technology
MC 170-25, 1200 E. California Blvd.
Pasadena, CA 91125

mpl@gps.caltech.edu
esp.gps.caltech.edu

Appointments

Professor of Geology, Geological and Planetary Science, California Institute of Technology, 2014 – present.
Geology Option Representative, Geological and Planetary Science, California Institute of Technology, 2014-2021.
Assistant Professor, Geological and Planetary Sciences, California Institute of Technology, 2009 – 2014.
Postdoctoral Fellow, Geological Sciences, University of Texas, Austin, Advisor: David Mohrig, 2008 – 2009.
Scientist, St. Anthony Falls Laboratory, Minneapolis, Minnesota, Advisors: Gary Parker & Chris Paola, 2000 – 2001.

Education

Ph.D. Earth and Planetary Science, University of California, Berkeley, Advisor: William Dietrich, 2008. Dissertation: *Formation of Amphitheater-headed Canyons*.
M.S. Oceanography, University of Washington, Seattle, Advisor: Jeffrey Parsons, 2003. Thesis: *High-density suspensions formed under waves*.
B.S. Geophysics *high distinction* & B.S. Geology *magna cum laude*, University of Minnesota, Minneapolis, 2001.

Major Research Interests

Landscape dynamics and physical sedimentology on Earth and other planets through the mechanics of erosion, transport and deposition of sediment. Active research questions include: Will river deltas and coastal landscapes drown due to sea level rise? How will Arctic rivers respond to permafrost thawing? When and where did water flow across the surface of Mars?

Consulting Services

Consulting services including expert witness and peer review for land-use and hazards: fluvial geomorphology; sediment transport; landslide and river-flooding hazards; river, hillslope and coastal erosion; riparian vegetation; stream and alluvial habitat restoration; river and reservoir sedimentation; dam removal; post-wildfire sedimentation and debris flows; hydrology.

Honors and Awards

Keynote Lecturer, Gilbert Club Meeting, Berkeley, 2019
NASA Group Achievement Award, MSL Curiosity Mission Science, 2017
James B. Macelwane Medal, American Geophysical Union, 2017
Fellow, American Geophysical Union, 2017
Keynote Lecturer, Steepest Descent Meeting, Vienna, 2017
Royal Academy of Engineering Distinguished Visitor, Imperial College - London, 2015
NASA Group Achievement Award, MSL Curiosity Mission Science, 2015
Editor's Citation for Refereeing for *Reviews of Geophysics*, 2014
Editor's Citation for Refereeing for *Geophysical Research Letters*, 2013
Luna B. Leopold Young Scientist Award, American Geophysical Union, 2012
Robert P. Sharp Capstone Lecture, American Geophysical Union, 2012
Editor's Citation for Excellence in Refereeing for *JGR-Earth Surface*, 2009

Louderback Award for Outstanding Scholarship, University of California, 2007
National Defense Science and Engineering Graduate Fellowship, 2001-2004
Academic Rewards for College Scientists (ARCS) National Scholarship, 2001-2004
Aldrich Award for Academic Excellence, University of Minnesota, 2001
Field Mentor Grant, Association of American State Geologists, 2000
Dennis Scholarship for Academic Excellence, University of Minnesota, 2000
W.A. Hoyer National Scholarship, Society of Professional Well Log Analysts, 2000

Selected Professional Service and Experience

Team Member, Mars Science Laboratory rover *Curiosity*, 2014 – present.
Team Member, Mars Exploration Rover *Opportunity*, 2016 – 2019.
Designed infographic on fires and debris flows, LA Times (front page), 2014, 2015.
Outreach with Pasadena Unified School District including laboratory demonstrations and tours, 2009 - present.
Interviewee for local and national news on natural hazards and related public concerns (16 events, 2009-2015).
Caltech's Watson public lecture: "When Rocks Roll: How Sediment Transport Shapes Planetary Surfaces," March, 2014.
Developed and led workshop on sediment transport in steep rivers for the annual meeting of the National Association of Geoscience Teachers, 2011.
Designed an informational geologic sign at Box Canyon State Park, Idaho, 2010.
Founder and moderator of "GeomorphLectures" Wiki that facilitates transfer of educational materials in geomorphology, 2010 – present.
Co-convenor: *Earth and Planetary Surfaces General Poster Session*, AGU 2009 – 2016
Reviewer for international scholarly journal and funding agencies.
Member: American Geophysical Union, European Geophysical Union, Geological Society of America, Society for Sedimentary Geology (SEPM).

Courses Taught

Ge13: Mentor for *Scientific Writing Tutorial*, Spring 2010, Spring 2011, Winter 2016.
Ge40: *Special Problems for Undergraduates*, Spring 2010, Fall 2010, Spring 2011, Winter 2014, Spring 2014.
Ge125: *Geomorphology*, Fall 2010, Fall 2012, Fall 2014, Fall 2016, Fall 2018, Fall 2020.
Ge126: *Topics in Geomorphology*:
 Winter 2010: *Geomorphology and Wildfire*
 Winter 2011: *Sediment Transport Physics*
 Winter 2012: *Alluvial Fans and Pediments*
 Winter 2014: *Organic Carbon and Landscapes* (with J. West and W. Fischer)
 Winter 2015: *Erosion of Rock by Wind*
 Winter 2016: *Soil Production in Steep Landscapes*
 Winter 2017: *Morphodynamics with Gary Parker*
 Winter 2018: *Rivers in Permafrost*
 Winter 2020: *Sediment Transport Mechanics*
 Winter 2021: *Floodplains and mud transport and deposition*
Ce/Ge/Ge222 (also Ge192): *Earthquake Source Processes, Debris Flows, and Soil Liquefaction* (with Ampuero, Andrade and Lapusta), Spring 2012, Spring 2013.
Ge193: *Subglacial hydrology and erosion* (with V. Tsai), Winter 2013
Ge121: *Advanced Field Mapping*:
 Spring 2012: *Death Valley and Carrizo Plain*
 Fall 2013: *The Channeled Scablands of eastern Washington*
 Fall 2015: *Inverted Channels of Southern Utah*
 Fall 2017: *Rivers without vegetation in Death Valley*
 Fall 2019: *Island accretion on Wax Lake Delta, Louisiana*

Student and Postdoctoral Research Advised

High school students: Conor O'Toole (2010), Khadijah Omerdin (2012-2013), Gheorghe Schreiber (2013), Jay Yalamanchili (2015).

Undergraduate and visiting graduate students: Peter Buhler (2009 - 2010), Eric Kleinsasser (2010), Mariya Levina (2010), Cindy Tran (2010 –2011), Will Steinhardt (2011), Odin Marc (2010 - 2011), Mathieu Lapôtre (2010-2011), Connor O'Toole (2011), Cailan Halliday (2011), Aaron Tran (2012), Daniel Lo (2012), Fanny Brun (2013), Michael Jensen (2013), Hima Hassenruck-Gudipati (2013-2014), Julianne Preimesberger (2014), Elliot Simon (2014), Sam Holo (2015), Kirby Sikes (2015-2016), Brian Zdeb (2016), Jose Silvestre (2017), Sarah Steele (2017-2019), Lydia Kivrak (2017), Erich Herzig (2016-2018), Omar Wani (2018), Zewei Ma (2018), Janette Levin (2019-2020), Jade Fischer (2019-2020), Victor Heme (2019), Denice Garcia (2019), Zhongheng Sun (2019-2020), Sarah Feil (2020), Patrick Donohoe (2021), Maria Schmeer (2021), Kenny Thai (2021).

PhD students as secondary advisor: Brent Minchew (2011), Luca Malatesta (2011-2016), Kirsten Siebach (2011-2012), Robert Wills (2013 – 2016), Abbey Nاستان (2013-2014), Yanzhe Zhu (2016-2017), Melanie Kanine (2020-).

PhD students as primary advisor:

Ajay Limaye (2009–2014; now Assistant Professor U. Virginia)
Joel Scheingross (2009–2015; now Assistant Professor U. Nevada-Reno)
Jeff Prancevic (2010–2016; now postdoctoral scholar U. California –Santa Barbara)
Mathieu Lapôtre (2012–2017; Ehlmann co-advised; now Assistant Professor Stanford)
Austin Chadwick (2014–2019; now postdoctoral scholar U. Minnesota)
Alistair Hayden (2014–2020; now Fellow, California Council of Science and Technology)
Madison Douglas (2017–present)
Justin Nghiem (2019–present)

Postdoctoral scholars:

Ryan Ewing (2010–2011; now Assistant Professor, Texas AM)
Ben Mackey (2010–2011; now Natural Hazards Analyst, Otago Regional Council, NZ)
Phairot Chatanantavet (2010–2013; now Engineer, TEAM Group Consultants, Thailand)
Adam Booth (2012-2013; now Assistant Professor, Portland State)
Roman DiBiase (2011–2014; now Assistant Professor Penn State)
Dirk Scherler (2013–2014; J.-P. Avouac main advisor; now Assistant Prof. at GFZ-Potsdam)
Vamsi Ganti (2012–2014; now Assistant Professor U.C. Santa Barbara)
Isaac Larsen (2013–2015; now Assistant Professor, U. Massachusetts-Amherst)
Florent Gimbert (2013–2015; V. Tsai main advisor; now Scientist, CNRS, France)
Marisa Palucis (2014–2017; now Assistant Professor, Dartmouth)
Mark Torres (2015–2017; W. Fischer co-advisor; now Assistant Professor, Rice U.)
Lizzy Trower (2015–2017; W. Fischer co-advisor; now Assistant Professor, U.C. Boulder)
Ke Liu (2017–2018; Marc Simard (JPL) main advisor; now on Wall Street)
Jan de Leeuw (2017–2019; Now Engineering Consultant in Bavaria)
Tien-Hao Liao (2017–present; Marc Simard (JPL) main advisor)
Alex Beer (2017–2019; Now postdoctoral scholar at Tuebingen University)
Flavien Beaud (2017–2019; Now postdoctoral scholar at U. British Columbia)
Gen Li (2018–2021; Fischer & Avouac co-advised; now Assist. Prof., U.C. Santa Barbara)
Tamara Pico (2019–2021; now Assistant Professor, U.C. Santa Cruz)
Lisanne Braat (2020–2021; now Scientist, European Space Agency)
Gerard Salter (2019–present)
Ben Cardenas (2019–present)
Kieran Dunne (2021–present)

Invited Seminars

2020: Duke University

- 2019: Institut de Physique du Globe de Paris (IPGP), France; Universidad Complutense, Madrid, Spain, University of Minnesota; Gilbert Club, Berkeley, CA.
- 2018: GeoMod Conference, Barcelona, Spain; UNED Madrid, Spain; GeoForschungsZentrum (GFZ), Potsdam, Germany.
- 2017: American Geophysical Union Fall Meeting, New Generation of Scientists session; European Geophysical Union, Planetary Geomorphology; Keynote Lecturer Steepest Descent Symposium, Vienna, Austria; University of Basel, Switzerland.
- 2016: University of California - Santa Barbara; University of Oregon; Jet Propulsion Laboratory, Director's conference; University of California – Santa Cruz.
- 2015: Brown University; Binghamton Symposium on experimental geomorphology; Imperial College, London.
- 2014: Rice University, University of California-Los Angeles, Caltech-GPS Division Seminar, Brown University, Earnest C. Watson public lecture at Caltech, Texas A&M; Stanford University.
- 2013: University of British Columbia, Geography; Simon Fraser University, Geography; Harvard University, EPS; Caltech, Board of Trustees; University of California – Los Angeles; ETH, Zurich, Switzerland; WSL, Zurich, Switzerland; IRSTEA, Grenoble, France; NASA Jet Propulsion Laboratory; Geological Society of America Annual Meeting; American Geophysical Union Annual Meeting; Stratodynamics Workshop, Nagasaki, Japan.
- 2012: Caltech, The Associates; University of Colorado, Boulder; University of Southern California, Earth Science; University of California, Santa Cruz, Earth Science; American Geophysical Union; Robert P. Sharp Capstone Lecture, AGU.
- 2011: University of California, Riverside, Earth Sciences; University of Illinois, Champaign, Geology; University of Wyoming, Geology and Geophysics; Titan Surface Processes Workshop, Pasadena.
- 2010: American Geophysical Union; California Institute of Technology, Board of Trustees, Keck Institute for Space Sciences & GPS Geoclub seminar; University of Washington, Seattle, School of Oceanography; Chevron Corporation; University of Pittsburg, Civil and Environmental Engineering.
- 2009: University of California, Santa Barbara, Earth Science; California Institute of Technology, Environmental Science and Engineering & GPS Division seminar; University of Arizona, Tucson, Geosciences; University of California, Berkeley, Civil and Environmental Engineering; University of Texas, Austin, School of Geosciences.
- 2008: University of Texas, Austin, RioMar Workshop & School of Geosciences; U.S. Geological Survey, Menlo Park; University of California, Berkeley, Earth and Planetary Science.
- 2007: Rice University, Earth Science; California Institute of Technology, Geological and Planetary Sciences; Massachusetts Institute of Technology, Earth and Planetary Sciences; University of Wisconsin, Madison, Geology and Geophysics.

Refereed Publications

Please see <https://esp.gps.caltech.edu/publications> for an up-to-date publication list and PDF downloads for in-review and published articles.

Google Scholar citation h-index = 46; i10-index = 109; Citations = 6301.

* denotes a graduate student, post-doctoral scholar or Lamb group staff author

**denotes a Caltech undergraduate student or high school student intern author

139. Li, G., Fischer, W.W., Lamb, M.P., West, Zhang, T., Galy, V., Wang, X., Li, S., Li, G., Zhao, L., Ji, J., 2021, Coal fly ash is a major carbon flux in the Changjiang (Yangtze) River basin, PNAS.
138. Scheingross, J.S. and Lamb, M.P., 2021, Thresholds of sediment scour and bedrock erosion in waterfall plunge pools.
137. Larsen, I.J., Karley, K.A., Lamb, M.P., Pritchard, C.J., 2021, Empirical evidence for cosmogenic ^3He production by muons, *Earth and Planetary Science Letters*, 562, 10.1016/j.epsl.2021.116825.
136. *Kemeny, P., Torres, M.A., Lamb, M.P., Webb, S.M., Dalleska, N., Cole, T., Hou, Y., Marske, J.P., Adkins, J.F., Fischer, W.W., 2021, Organic sulfur fluxes and geomorphic control of sulfur isotope ratios in rivers, *Earth and Planetary Science Letters*.
135. Lapotre, M.G.A., Ewing, R.C., Lamb, M.P., 2021, An evolving understanding of enigmatic large ripples on Mars, *Journal of Geophysical Research: Planets*, 126, e2020JE006729, doi: 10.1029/2020JE006729.
134. *Hayden, A.T., Lamb, M.P., Carney, A.J., 2021, Similar curvature-to-width ratios for channels and channel belts: Implications for paleo-hydraulics of fluvial ridges on Mars, *Geology*.
133. *Zeichner, S., *Nghiem, J., Lamb, M.P., *Takashima, N., *de Leeuw, J., Ganti, V., Fischer, W.W., 2021, Early plant organics increased global terrestrial mud deposition through enhanced flocculation, *Science*, v. 371 (6528), p. 526-539, doi: 10.1126/science.abd0379.
132. *Palucis, M.C., *Ulizio, T.P., Lamb, M.P., 2021, Debris flow initiation from ravel-filled channel-bed failure following wildfire in a bedrock landscape with limited sediment supply, *GSA Bulletin*, doi: 10.1130/B35822.1.
131. *Beer, A.R. and Lamb, M.P., 2021, Abrasion regimes in fluvial bedrock incision, *Geology*.
130. Moodie, A., Nittrouer, J.A., Ma, H., Carlson, B., Wang, Y., Lamb, M.P., Parker, G., 2020, Suspended-sediment induced stratification inferred from concentration and velocity profile measurements in the lower Yellow River, China. *Water Resources Research*, 56, e2020WR027192. doi: 10.1029/2020WR027192.
129. Brooke, S.A.S., Ganti, V., Chadwick, A.J., Lamb, M.P., 2020, Flood variability determines the location of lobe-scale avulsions on deltas: Madagascar. *Geophysical Research Letters*, 47, e2020GL088797. doi: 10.1029/2020GL088797.
128. *Dickson, J.L., Lamb, M.P., Williams, R.M.E., Hayden, A.T., Fischer, W.W., 2020, The global distribution of depositional rivers on early Mars. *Geology* 2020; doi: 10.1130/G48457.1.
127. *Hayden, A.T. and Lamb, M.P., 2020, Fluvial Sinuous Ridges of the Morrison Formation, USA: Meandering, Scarp Retreat, and Implications for Mars. *Journal of Geophysical Research: Planets*, 125, e2020JE006470. doi: 10.1029/2020JE006470.
126. Liao, Tien-Hao, Simard, M., Denbina, M., Lamb, M.P., 2020, Monitoring water level change and seasonal vegetation change in the coastal wetlands of Louisiana using L-band time series, *Remote Sensing*, 12, 2351, doi:10.3390/rs12152351.
125. *Chadwick, A.J., Lamb, M.P., Ganti, V., 2020, Accelerated river avulsion frequency on lowland deltas due to sea level rise, *Proceedings of the National Academy of Science*.
124. Trower, E.J., Bridgers, S.L., Lamb, M.P., Fischer, W.W., 2020, Ooid cortical stratigraphy reveals common histories of individual co-occurring sedimentary grains, *JGR-Earth Surface*.
123. An, C., Parker, G., Fu, X., Lamb, M.P., Venditti, J.G., 2020, Morphodynamics of downstream fining in rivers with unimodal sand-gravel feed, *River Flow 2020, Proceedings of the 10th Conference on Fluvial Hydraulics*, Eds. Uittewaal, W., Franca, M., Valero, D., Chavarrias, V., Ylla Arbos, C., Schielen, R., Crosato, A., Delft, Netherlands.
122. Lamb, M.P., de Leeuw, J., Fischer, W., Moodie, A.J., Venditti, J.G., Nittrouer, J.A., Haught, D., Parker, G., 2020, Mud in rivers transported as flocculated, suspended bed-material, *Nature Geoscience*.
121. *de Leeuw, J., Lamb, M. P., Parker, G., Moodie, A. J., Haught, D., Venditti, J. G., and Nittrouer, J. A., 2020, Entrainment and suspension of sand and gravel, *Earth Surf. Dynam. Discuss.*, doi.org/10.5194/esurf-2019-67.

120. Prancevic, J.P., Lamb, M.P., McARDell, B.W., Rickli, C., Kirchner, J.W., 2020, Decreasing landslide sediment yield on steeper slopes in soil-mantled landscapes, *Geophysical Research Letters*, 47, e2020GL087505.doi.org/10.1029/2020GL087505.
119. *Torres, M.A., *Kemeny, P.C., Lamb, M.P., Cole, T.L., Fischer, W.W., 2020, Long-term storage and age-biased export of fluvial organic carbon: field evidence from West Iceland. *Geochemistry, Geophysics, Geosystems*, 21, e2019GC008632. doi.org/10.1029/2019GC008632.
118. Ma, H., Nittrouer, J., Wu, B., Zhang, Y., Mohrig, D., Lamb, M., Wang, Y., Fu, X., Moodie, A., Naito, K., Wang, G., Hu, C., Parker, G., 2020, Universal relation with regime transition for sediment transport in fine-grained rivers, *Proceedings of the National Academy of Science*.
117. DiBiase, R.A. and Lamb, M.P., 2020, Dry sediment loading of headwater channels fuels post-wildfire debris flows in bedrock landscapes, *Geology*, v. 48, doi.org/10.1130/G46847.1.
116. Moodie, A.J., Nittrouer, J.A., Ma, H., Carlson, B.N., Chadwick, A.J., Lamb, M.P., Parker, G., 2019, Modeling deltaic lobe-building cycles and channel avulsions for the Yellow River delta, China. *Journal of Geophysical Research - Earth Surface*.
115. Lapotre, M.G.A., Ielpi, A., Lamb, M.P., Williams, R.M.E., Knoll, A.H., 2019, Single-thread rivers without plants: A simple mechanistic model to interpret pre-Silurian and martian fluvial deposits. *Geological Society of America Bulletin*.
114. Larsen, I.J., Farley, K.A., Lamb, M.P., 2019, Cosmogenic ³He production rate in ilmenite and the redistribution of spallation ³He in fine-grained minerals, *Geochimica et Cosmochimica Acta* 113. *Farin, M., Tsai, V.C., Lamb, M.P., Allstadt, K., 2019, A physical model of the high-frequency seismic signal generated by debris flows, *Earth Surface Processes and Landforms*, doi.org/10.1002/esp.4677.
112. Ganti, V., Whittaker, A.C., Lamb, M.P., Fischer, W.W., 2019, Evidence for low gradient, single-threaded rivers prior to greening of the continents, *Proceedings of the National Academy of Science*, 116 (24), p. 11652-11657. doi.org/10.1073/pnas.1901642116.
111. Ganti, V., Lamb, M.P., *Chadwick, A.J., 2019, Autogenic erosional surfaces in fluvio-deltaic stratigraphy from floods, avulsions and backwater hydrodynamics, *Journal of Sedimentary Research*.
110. *Haden, A.T., Lamb, M.P., Fischer, W.W., Ewing, R.C., McElroy, B.J., Williams, R.M.E., 2019, Formation of sinuous ridges by inversion of river channel belts on Earth and Mars, *Icarus*.
109. *Chadwick, A.J., Lamb, M.P., Moodie, A.J., Parker, G., Nittrouer, J.A., 2019, Origin of a preferential avulsion node on lowland river deltas, *Geophysical Research Letters*, doi.org/10.1029/2019GL082491.
108. *Scheingross, J.S., Lamb, M.P., *Fuller, B.M., 2019, Self-formed bedrock waterfalls, *Nature*, V. 567, doi: 10.1038/s41586-019-0991-z.
107. *Trower, E. J., Lamb, M. P., and Fischer, W. W., 2019, The origin of carbonate mud. *Geophysical Research Letters*, 46, 10.1029/2018GL081620.
106. *Gimbert, *Fuller, Lamb, Tsai, Johnson, 2019, Investigating river sediment transport mechanics and its control on induced seismic noise using flume experiments and accelerometer-embedded tracers, *Earth Surface Process and Landforms*, 44 (1), doi.org/10.1002/esp.4495.
105. Stack, K.M., Grotzinger, J.P., Lamb, M.P., Gupta, S., Rubin, D.M., Kah, L.C., Edgar, L.A., Fey, D.M., Hurowitz, J.A., McBride, M., Rivera-Hernández, F, Sumner, D.Y., Van Beek, J.K., Williams, R.M.R., Yingst, R.A. 2018, Evidence for plunging river plume deposits in the Pahrump Hills member of the Murray formation, Gale crater, Mars, *Sedimentology*.
104. Sweeney, J., N. H. Warner, V. Ganti, M. P. Golombek, M. P. Lamb, R. Ferguson, and R. Kirk, 2018, Degradation of One-Hundred-Meter-Scale Impact Craters on Mars and Implications for Surface Process Rates in the Hesperian and Amazonian, *Journal of Geophysical Research – Planets*.
103. Fan, N., Chu, Z., Jiang, L., Hassan, M., Lamb, M.P., Liu, X., 2018, Abrupt drainage basin reorganization following a Pleistocene river capture, *Nature Communications*.

102. *Palucis, M., *Ulizio, T., *Fuller, B., Lamb, M.P., 2018, Flow resistance, sediment transport, and bedform development in a steep gravel-bedded river flume, *Geomorphology*.
101. Lapotre, M. G. A., R. C. Ewing, C. M. Weitz, K. W. Lewis, M. P. Lamb, B. L. Ehlmann, and D. M. Rubin, 2018, Morphologic Diversity of Martian Ripples: Implications for Large-Ripple Formation, *Geophysical Research Letters*.
100. *Trower, E.J., O'Reilly, S.S., Gomes, M., Cantine, M., Stein, N., Grotzinger, H., Strauss, J.V., Lamb, M.P., Grotzinger, J.P., Knoll, A.H., Fischer, W.W., in press, Active ooid growth driven by sediment transport in a high energy shoal, Little Ambergris Cay, Turks and Caicos, British Overseas Territories. *J. Sedimentary Research*.
99. *Trower, E.J., *Ganti, V., Fischer, W.W., Lamb, M.P., 2018, Erosional surfaces in the Upper Cretaceous Castlegate Sandstone (Utah, USA): Sequence boundaries or autogenic scour from backwater hydrodynamics?, *Geology*, doi: 10.1130/G40273.1.
98. *Lai, V.H., Tsai, V.C., Lamb, M.P., *Ulizio, T.P., *Beer, A.R., 2018, The Seismic Signature of Debris Flows: Flow Mechanics and Early Warning at Montecito, California, *Geophysical Research Letters*.
97. *Palucis, M., *Ulizio, T., *Fuller, B., Lamb, M.P., 2018, Intense granular sheelflow in steep streams, *Geophysical Research Letters*.
96. Booth, A.M., McCarley, J., Hinkle, J., Shaw, S., Ampuero, J-P, Lamb, M.P., 2018, Transient reactivation of a deep-seated landslide complex by undrained loading captured with repeat airborne and terrestrial lidar, *Geophysical Research Letters*.
95. *Ayoub, F., Jones, C.E., Lamb, M.P., Holt, B., Shaw, J.B., Mohrig, D., Wagner, W., 2018, Inferring surface currents within submerged, vegetated deltaic islands and wetlands from multi-pass airborne SAR. *Remote Sensing of Environment*.
94. Myrow, P.M., Lamb, M.P., Ewing, R.C., 2018, Rapid sea level rise in the aftermath of a Neoproterozoic snowball Earth, *Science*, doi.10.1126/science.aap8612.
93. *Lapotre, M.G.A., Lamb, M.P., 2018, Substrate controls on valley formation by groundwater on Earth and Mars, *Geology*, doi.org/10.1130/G40007.1.
92. Allen, G.H, Pavelsky, T.M., Barefoot, E.A., Lamb, M.P., Butman, D, Tashie, A., Gleason, C.J., 2018, Similarity of stream width distributions across headwater systems, *Nature Communications*, 610, doi:10.1038/s41467-018-02991-w.
91. *Prancevic, J.P., Lamb, M.P., *Palucis, M., Venditti, J., 2018, The role of three-dimensional boundary stresses in limiting the occurrence and size of experimental landslides, *J. Geophysical Research-Earth Surface*.
90. *Scheingross, J.S. and Lamb, M.P., 2017, A mechanistic model of waterfall plunge-pool erosion into bedrock, *J. Geophysical Research-Earth Surface*.
89. *Torres, M. A., Limaye, A. B., Ganti, V., Lamb, M. P., West, A. J., and Fischer, W. W., 2017, Model predictions of long-lived storage of organic carbon in river deposits, *Earth Surface Dynamics*, doi:10.5194/esurf-2017-29.
88. Lamb, M.P., **Brun, F., *Fuller, B.M., 2017, Direct measurements of lift and drag on shallowly submerged cobbles in steep streams: Implications for flow resistance and sediment transport. *Water Resources Research*.
87. *Malatesta, L.C. and Lamb, M.P., 2017, Formation of waterfalls by intermittent burial of active faults, *Geological Society of America Bulletin*.
86. *Palucis, M.C. and Lamb, M.P, 2017, What controls channel form in steep mountain streams? *Geophysical Research Letters*, 44, doi:10.1002/2017GL074198.
85. Ewing, R.C., *Lapotre, M.G.A., Lewis, K.W., Day, M., Stein, N., Rubin, D.M, Sullivan, R., Banham, S., Lamb, M.P., Bridges, N.T., Gupta, S., Fischer, W.W., 2017, Sedimentary processes of the Bagnold Dunes: Implications for the eolian rock record of Mars, *J. Geophysical Research – Planets*, 122, doi:10.1002/2017JE005324..
84. *Trower, E., Lamb, M.P., Fischer, W.W., 2017, Experimental evidence that ooid size reflects a dynamic equilibrium between rapid precipitation and abrasion rates, *Earth and Planetary Science Letters*.

83. *DiBiase, R.A., Lamb, M.P., *Ganti, V. and *Booth, A.M., 2017, Slope, grain size and roughness controls on hillslope sediment transport in steep landscapes, *J. Geophysical Research - Earth Surface*.
82. Lamb, M.P., **Brun, F., *Fuller, B.M., 2017, Hydrodynamics of steep streams with planar coarse-grained beds: Turbulence, flow resistance, and implications for sediment transport, *Water Resources Research*, v. 53, doi:10.1002/2016WR019579.
81. *Lapotre, M.G.A., Lamb, M.P. and B.J. McElroy, 2017, What sets the size of current ripples?, *Geology*, doi:10.1130/G38598.1.
80. *Scheingross, J.S., **Lo, D.Y., and Lamb, M.P., 2016, Self-formed waterfall plunge pools in homogeneous rock. *Geophysical Research Letters*, 43, doi:10.1002/2016GL071730.
79. *Larsen, I.J. and M.P. Lamb, 2016, Progressive incision of the Channeled Scablands by outburst floods, *Nature*, doi:10.1038/nature19817.
78. *Ganti, V., *von Hagke, C., *Scherler, D., Lamb, M.P., Avouac, J.P., Fischer, W.W., 2016, Time scale bias in erosion rates of glaciated landscapes, *Science Advances*, 2, e1600204, doi:10.1126/sciadv.1600204.
77. *Ganti, V., *Chadwick, A., *Hassenruck-Gudipati, H., Lamb, M.P., 2016, Avulsion cycles and their stratigraphic signature on an experimental backwater-controlled delta, *Journal of Geophysical Research - Earth Surface*, 121, doi:10.1002/2016JF003915.
76. *Lapotre, M. G. A., R. C. Ewing, M. P. Lamb, W. W. Fischer, J. P. Grotzinger, D. M. Rubin, K. W. Lewis, M. J. Ballard, M. Day, S. Gupta, S. G. Banham, N. T. Bridges, D. J. Des Marais, A. A. Fraeman, J. A. Grant, K. E. Herkenhoff, D. W. Ming, M. A. Mischna, M. S. Rice, D. A. Sumner, A. R. Vasavada, R. A. Yingst, 2016, Large wind ripples on Mars: A record of atmospheric evolution, *Science*, v. 353 (6294), p. 55-58, doi: 10.1126/science.aaf3206.
75. *Lapotre, M.G.A., Lamb M.P. and R.M.E. Williams, 2016, Canyon formation constraints on the discharge of catastrophic outburst floods of Earth and Mars, *Journal of Geophysical Research - Planets*, 121, p. 1-32, doi: 10.1002/2016JE005061.
74. *Ganti, V., *Chadwick, A.J., *Hassenruck-Gudipati, H.J., *Fuller, B.M., Lamb, M.P., 2016, Experimental river delta size set by multiple floods and backwater hydrodynamics, *Science Advances*, 2, no. 5, e1501768, doi:10.1126/sciadv.1501768.
73. Shaw, J.B., *Ayoub, F., Jones, C.E., Lamb, M.P., Holt, B., Wagner, W., Coffey, T., Chadwick, J.A. and Mohrig, D., 2016, Airborne radar imaging of subaqueous channel evolution in Wax Lake Delta, Louisiana, USA., *Geophysical Research Letters*, doi: 10.1002/2016GL068770.
72. Lamb, M.P. and Venditti, J.V., 2016, The grain size gap and abrupt gravel-sand transitions in rivers due to suspension fallout. *Geophysical Research Letters*, 43, doi:10.1002/2016GL068713.
71. *Scheingross, J.S. and Lamb, M.P., 2016, Sediment transport through self-adjusting, bedrock-walled waterfall plunge pools. *Journal of Geophysical Research - Earth Surface, J. Geophys. Res. Earth Surf.*, 121, doi:10.1002/2015JF003620
70. *Limaye, ABS and Lamb, MP, 2016, Numerical model predictions of autogenic fluvial terraces and comparison to climate change expectations. *Journal of Geophysical Research - Earth Surface*, 121, doi:10.1002/2014JF003392.
69. *Scherler, D., Lamb, M.P., Rhodes, E.J., Avouac, J.P., 2016, Climate change versus landslide origin of fill terraces in an arid bedrock landscape: San Gabriel River, CA, *Geological Society of America Bulletin*, doi: doi:10.1130/B31356.1.
68. Grotzinger, J.P., S. Gupta, M. C. Malin, D. M. Rubin, J. Schieber, K. Siebach, D. Y. Sumner, K. M. Stack, A. R. Vasavada, R. E. Arvidson, F. Calef III, L. Edgar, W. F. Fischer, J. A. Grant, J. Griffes, L. C. Kah, M. P. Lamb, K. W. Lewis, N. Mangold, M. E. Minitti, M. Palucis, M. Rice, R. M. E. Williams, R. A. Yingst, D. Blake, D. Blaney, P. Conrad, J. Crisp, W. E. Dietrich, G. Dromart, K. S. Edgett, R. C. Ewing, R. Gellert, J. A. Hurowitz, G. Kocurek, P. Mahaffy, M. J. McBride, S. M. McLennan, M. Mischna, D. Ming, R. Milliken, H. Newsom, D. Oehler, T. J. Parker, D. Vaniman, R. C. Wiens, and S. A. Wilson, 2015,

- Deposition, exhumation and paleoclimate of an ancient lake deposit, Mars, *Science*, 350 (6257), doi: 10.1126/science.aac7575.
67. *Lapotre, MGA and Lamb, MP, 2015, Hydraulics of floods upstream of horseshoe canyons and waterfalls. *Journal of Geophysical Research - Earth Surface*. doi: 10.1002/2014JF003412.
 66. Kite, E.S., Howard, A.D., Lucas, A.S., Armstrong, J.C., Aharonson, O., and Lamb, M.P., 2015, Stratigraphy of Aeolis Dorsa, Mars: Stratigraphic context of the great river deposits, *Icarus*, doi: 10.1016/j.icarus.2015.03.007.
 65. Hooshmand, A., Horner-Devine, A.R., Lamb, M.P., 2015, Structure of turbulence and sediment stratification in wave-supported mud layers, *Journal of Geophysical Research-Oceans*, doi: 10.1002/2014JC010231.
 64. Lamb, M.P., Finnegan, N.J., *Scheingross, J.S., Sklar, L.S., 2015, New insight into the mechanics of fluvial bedrock erosion through flume experiments and theory, *Geomorphology*, Special issue 46th Annual Binghamton Geomorphology Symposium: Laboratory Experiments in Geomorphology, doi: 10.1016/j.geomorph.2015.03.003.
 63. *Prancevic, J.P. and Lamb, M.P., 2015, Unraveling bed slope from relative roughness in initial sediment motion. *Journal of Geophysical Research - Earth Surface*. doi: 10.1002/2014JF003323.
 62. *Prancevic, J.P. and Lamb, M.P., 2015, Particle friction angles in steep mountain channels, *Journal of Geophysical Research - Earth Surface*. doi:10.1002/2014JF003286.
 61. *Booth, AM, *Hurley, R, Lamb, MP, Andrade, J, 2014, Force chains as the link between particle and bulk friction angles in granular material, *Geophysical Research Letters*, doi: 10.1002/2014GL061981.
 60. Golombek, M.P., Warner, N.H., *Ganti, V., Lamb, M.P., Parker, T.J., Ferguson, R.L., Sullivan, R., 2014, Small Crater Modification on Meridiani Planum and Implications for Erosion Rates and Climate Change on Mars. *JGR-Planets*, doi: 10.1002/2014JE004658.
 59. *Ganti, V., Chu, Z., Lamb, M.P., Nittrouer, J.A., Parker, G., 2014, Testing morphodynamic controls on the location and frequency of river avulsions on fans versus deltas: Huanghe (Yellow River), China, *Geophysical Research Letters*, doi: 10.1002/2014GL061918.
 58. *Gimbert, F., Tsai, V.C., Lamb, M.P., 2014, A physical model for seismic noise generation by turbulent flow in rivers, *JGR-Earth Surface*, doi: 10.1002/2014JF003201.
 57. *Ewing, R.C., *Eisenman, I., Lamb, M.P., Poppick, L., Maloof, A.C., Fischer, W.W., 2014, New constraints on equatorial temperatures during a Late Neoproterozoic snowball Earth glaciation. *Earth and Planetary Science Letters*.
 56. *DiBiase, R.A., Whipple, K.X., Lamb, M.P., Heimsath, A.M., 2014, The role of waterfalls and knickzones in controlling the style and pace of landscape adjustment in the western San Gabriel Mountains, CA. *GSA Bulletin*.
 55. **Buhler, P.B., Fassett, C., Head, J.W., Lamb, M.P., 2014, Timescales of fluvial activity and intermittency in Milna Crater, Mars, *Icarus*, doi:10.1016/j.icarus.2014.06.028.
 54. *Chatanantavet, P. and Lamb, M.P., 2014, Sediment transport and topographic evolution of a coupled river and river-plume system: An experimental and numerical study, *Journal of Geophysical Research - Earth Surface*, 119, doi:10.1002/2013JF002810.
 53. *Scheingross, J.S., **Brun, F., **Lo, D.Y., **Omerdin, K., and Lamb, M.P., 2014, Experimental evidence for bedrock erosion by suspended sediment. *Geology*, doi:10.1130/G35432.1.
 52. *Limaye, A.B.S. and Lamb, M.P., 2014, Numerical simulations of bedrock valley evolution by meandering rivers with variable bank material, *Journal of Geophysical Research – Earth Surface*, v. 119, doi:10.1002/2013JF002997.
 51. *Ganti, V., Lamb, M.P., McElroy, B.A., 2014, Quantitative Bounds on Environmental Signal Preservation in the Sedimentary Record. *Nature Communications*, doi:10.1038/ncomms4298.

50. *Johnson, J.E., **Gerpeide, A., Lamb, M.P., Fischer, W.W., 2014, O₂ constraints from Paleoproterozoic detrital pyrite and uraninite, *Geological Society of America Bulletin*, doi:10.1130/B30949.1.
49. *Mackey, B.H., *Scheingross, J.S., Lamb, M.P., Farley, K.A., 2014, Knickpoint formation, rapid propagation and landscape response following coastal cliff retreat at last-interglacial sea-level highstand: Kauai, Hawaii, *GSA Bulletin*, doi: 10.1130/B30930.1.
48. *Prancevic, J., Lamb, M.P., and *Fuller, B., 2014, Initial sediment transport across the river-debris flow transition. *Geology*. doi: 10.1130/G34927.1
47. Lamb, M.P., *Mackey, B.H., Farley, K.A., 2014, Amphitheater-headed canyons formed by megaflooding at Malad Gorge, Idaho. *Proceedings of the National Academy of Science*, doi/10.1073/pnas.1312251111.
46. *Limaye, A.B.S. and Lamb, M.P., 2014, A vector-based method for bank material tracking in coupled models of meandering and landscape evolution, *Journal of Geophysical Research – Earth Surface*, VOL. 118, 1–17, doi:10.1002/2013JF002854.
45. *Booth, A.M., Lamb, M.P., Avouac, J.-P., Delacourt, C., 2013, Landslide velocity, thickness and rheology from remote sensing: La Clapiere landslide, France, *Geophysical Research Letters*, v. 40, p. 1-6, doi:10.1002/grl.50828.
44. *DiBiase, R.A., *Limaye, A.B., *Scheingross, J.S., Fischer, W.W. and Lamb, M.P., 2013, Deltaic deposits at Aeolis Dorsa: Sedimentary evidence for a large body of water in the northern plains of Mars, *Journal of Geophysical Research - Planets*, v. 118, p. 1-18, doi: 10.1002/jgre.20100.
43. *Hayes, A.G., R. D. Lorenz, M. A. Donelan, M. Manga, T. Schneider, J. I. Lunine, M. P. Lamb, J. M. Mitchell, W. W. Fischer, S. D. Graves, H. L. Tolman, O. Aharonson, P. Encrenaz, B. Ventura, D. Casarano, C. Notarnicola, and the Cassini RADAR Team, 2013, Wind driven capillary-gravity waves on Titan's Lakes: Hard to Detect or Non-Existent?, *Icarus*, doi: 10.1016/j.icarus.2013.04.004.
42. *Scheingross, J.S., **Winchell, E.W., Lamb, M.P., Dietrich, W.E., 2013, Influence of bed patchiness, slope, grain hiding, and form drag on gravel mobilization in very streams, *JGR-Earth Surface*, doi: 10.1002/jgrf.20067.
41. Grotzinger, J.P., *Hayes, A.G., Lamb, M.P., McLennan, S.M., 2013, Sedimentary processes on Earth, Mars, Titan and Venus, In *Comparative Climatology of Terrestrial Planets*, Mackwell, S., Bullock, M. and Harder, J., eds., University of Arizona Press.
40. Lamb, M.P., **Levina, M., *DiBiase, R.A., *Fuller, B.M., 2013, Slope, roughness and particle-size controls on sediment storage by vegetation in steep bedrock landscapes: Theory, experiments and implications for post-fire sediment yield, *JGR-Earth Surface*, v, 118, p. 1–14, doi:10.1002/jgrf.20041.
39. *Chatanantavet P., Whipple K. X., Adams M.A., and Lamb M.P., 2013, Experimental study on coarse grain saltation dynamics in bedrock channels, *J. of Geophysical Research – Earth Surface*, v. 118, p. 1–16, doi:10.1002/jgrf.20053.
38. *DiBiase, R.A. and Lamb, M.P., 2013, Vegetation and wildfire controls on sediment yield in bedrock landscapes, *Geophysical Research Letters*, v. 40, p. 1-5, doi: 10.1029/2013GL055108.
37. *Mackey, B.H., Lamb, M.P., 2013, Deciphering boulder mobility from cosmogenic exposure age dating, *JGR - Earth Surface*, v. 118, p. 184-197, doi: 10.1002/jgrf.20035.
36. *Kite, E.S., Lewis, K.W., Lamb, M.P., 2013, Growth and form of the mound in Gale Crater, Mars: Slope-wind enhanced erosion and transport, *Geology*, v. 41(5), p. 543-546, doi:10.1130/G33909.1.
35. *Scheingross, J.S.,*Minchew, B., *Mackey, B.H., Simons, M., Lamb, M.P., Hensley, S., 2013, Fault zone controls on the spatial distribution of slow moving landslides, *Geological Society of America Bulletin*, v. 125, p. 473-489, doi: 10.1130/B30719.1.
34. Burr, D.M., Perron, J.T., Lamb, M.P., Irwin, R.P., Collins, G., Howard, A.D., Sklar, L.S., Moore, J.M., Ádámkóvics, M., Baker, V., Drummond, S.A., Black, B.A., 2013, Fluvial Features on Titan, *Geological Society of America Bulletin*, v. 125, p. 299–321, doi:10.1130/B30612.1.

33. Lamb, M.P., Fischer, W.W., Raub, T.D., Perron, J.T., Myrow, P.M., 2012, Origin of giant wave ripples in Snowball Earth cap carbonates, *Geology*, v. 40(9), p. 827-830, doi:10.1130/G33093.1.
32. Tsai, V.C., *Minchew, B., Lamb, M.P., Ampuero, J.-P., 2012, A Physical Model for Seismic Noise Generation from Sediment Transport in Rivers, *Geophysical Research Letters*, v. 39, p. 1-6, doi:10.1029/2011GL050255.
31. *Chatanantavet, P., M. P. Lamb, and J. A. Nittrouer, 2012, Backwater controls on avulsion location on deltas, *Geophys. Res. Lett.*, v. 39, p. 1-6, doi:10.1029/2011GL050197.
30. Lamb, M.P., J. Nittrouer, D. Mohrig, J. Shaw, 2012, Backwater and river-plume controls on scour upstream of river mouths: Implications for fluvio-deltaic morphodynamics. *Journal of Geophysical Research Earth Surface*, v. 117, p. 1-15, F01002, doi:10.1029/2011JF002079
29. Nittrouer, J.A., Shaw, J., Lamb, M.P., Mohrig, D., 2012, Spatial and temporal trends for water-flow velocity and bed-material transport in the lower Mississippi River. *Geological Society of America Bulletin*, v. 124, p. 400-414, doi: 10.1130/B30497.1.
28. Lamb, M.P., Grotzinger, J., Southard, J.B., Tosca, N., 2012, Were ripples on Mars formed by flowing brines? in J. Grotzinger and R. Milliken (eds.), *Sedimentary Geology on Mars*, SEPM Special Publication No. 102, p. 139-150.
27. *Mackey, B.H., J.J. Roering, M.P. Lamb, 2011, Landslide-dammed paleolake perturbs anadromous fish evolution and marine sedimentation. *Proceedings of the National Academy of Science*, doi:10.1073/pnas.1110445108, p. 1-5.
26. Lamb, M.P., *Scheingross, J., *Swanson, E., *Amidon, W., *Limaye, A., 2011, A model for post-fire sediment flux by dry ravel in steep landscapes. *Journal of Geophysical Research – Earth Surface*, F03006, p. 1-13, doi:10.1029/2010JF001878.
25. **Buhler, P.B., Fassett, C., Head, J.W., Lamb, M.P., 2011, Paleolakes in Erythraea Fossa, Mars: Implications for an ancient active hydrological cycle. *Icarus*, v. 213, p. 104-115, doi:10.1016/j.icarus.2011.03.004.
24. Tosca, N.J., McLennan, S., Lamb, M.P., Grotzinger, J., 2011, Physico-chemical properties of concentrated Martian surface waters. *Journal of Geophysical Research – Planets*, v. 116, p. 1-16, doi:10.1029/2010JE003700.
23. Conway, S.J., Lamb, M.P., Balme, M.R., Towner, M.C., Murray, J.B., 2011, Enhanced runout and erosion by overland flow at low pressure and subfreezing conditions: experiments and application to Mars. *Icarus*, 211, p. 458-471, doi:10.1016/j.icarus.2010.08.026.
22. Yan, B., Zhang, Q., Lamb, M.P., 2010, Time-averaged turbulent mixing and vertical concentration distribution of high-density suspensions formed under waves, in *Coastal Engineering*, Eds. Smith, J.M. and Lynett, P., v. 32, p. 1-8.
21. Lamb, M.P. and Fongstad, M.A., 2010, Rapid formation of a modern bedrock canyon by a single flood event. *Nature Geoscience*, p. 1-5, DOI: 10.1038/NGEO894.
20. Lamb, M.P., *McElroy, B., **Kopriva, B., *Shaw, J. and Mohrig, D., 2010, Linking river-flood dynamics to hyperpycnal-plume deposits: Experiments, theory, and geological implications. *Geological Society of America Bulletin*, 122(9/10), p. 1389-1400, doi: 10.1130/B30125.1.
19. Lamb, M.P. and Mohrig, D., 2009, Do hyperpycnal plumes record river flood dynamics? *Geology* 7(12); p. 1067–1070; doi: 10.1130/G30286A. *Noted on Geology's Most Read List, January 2010.*
18. Lamb, M.P. and Dietrich, W.E., 2009, The persistence of waterfalls in fractured rock. *Geological Society of America Bulletin*, doi: 10.1130/B26842.1.
17. Lamb, M.P., Dietrich, W.E., Aciego, S.M., DePaolo, S.M., Manga, M., 2008, Formation of Box Canyon, Idaho, by megaflood: Implications for seepage erosion on Earth and Mars. *Science*, 320, 1067, doi: 10.1126/science.1156630.
16. Lamb, M.P., Dietrich, W.E. and Sklar, L.S., 2008, A model for fluvial bedrock incision by impacting suspended and bedload sediment. *Journal of Geophysical Research – Earth Surface* 113, F03025, doi:10.1029/2007JF000915.

15. Lamb, M.P., Dietrich, W.E., and Venditti, J.G., 2008, Is the critical Shields stress for incipient sediment motion dependent on channel-bed slope? *Journal of Geophysical Research – Earth Surface*, 113, F02008, doi:10.1029/2007JF000831.
14. Lamb, M.P., Myrow, P.M., Lukens, C., Houck, K., and Strauss, J., 2008, Deposits from wave-influenced turbidity currents: Pennsylvanian Minturn Formation, Colorado, USA. *Journal of Sedimentary Research*, 78, doi: 10.2110/jsr.2008.052.
13. Myrow, P.M., Lukens, C., Lamb, M.P., Houck, K. and Strauss, J., 2008, Dynamics of a transgressive prodeltaic system: Implications for geography and climate within a Pennsylvanian intracratonic basin, Colorado, USA. *Journal of Sedimentary Research*, 78, doi: 10.2110/jsr.2008.061.
12. Lamb, M.P., Parsons, J.D., Mullenbach, B.L., Finlayson, D.P., Orange, D. and Nittrouer, C., 2008, Evidence for superelevation, channel incision and formation of cyclic steps by turbidity currents in Eel Canyon, California. *Geological Society of America Bulletin*, 120, p. 463 – 475, doi: 10.1130/B26184.1.
11. Lamb, M.P., Howard, A.D., Dietrich, W.E. and Perron, J.T., 2007, Formation of amphitheatre-headed valleys by waterfall erosion after large-scale slumping on Hawai'i. *Geological Society of America Bulletin*, 119, p. 805-822, doi: 10.1130/B25986.1.
10. Liang, H., Lamb, M.P. and Parsons, J.D., 2007, Formation of a sandy near-bed transport layer from a fine-grained bed under oscillatory flow. *Journal of Geophysical Research – Oceans*, 112, C02008, doi: 10.1029/2006JC003635.
9. Aciego, S.M., DePaolo, D.J., Kennedy, B.M., Lamb, M.P., Sims, K. and Dietrich, W.E., 2007, Combining [³He] cosmogenic dating with U-Th/He eruption ages using olivine in basalt. *Earth and Planetary Science Letters*, doi: 10.1016/j.epsl.2006.11.039.
8. Toniolo, H., Lamb, M. and Parker, G., 2006, Depositional turbidity currents in diapiric minibasins on the continental slope: formulation and theory. *Journal of Sedimentary Research*, 76, doi: 10.2110/jsr.2006.071.
7. Perron, J.T., Lamb, M.P., Koven, C.D., Fung, I.Y., Yager, E. and Adamkovics, -M., 2006, Valley formation and methane precipitation rates on Titan. *Journal of Geophysical Research – Planets*, Vol. 111, E11001, doi: 10.1029/2005JE002602.
6. Lamb, M.P., Howard, A.D., Johnson, J., Whipple, K., Dietrich, W.E. and Perron, J.T., 2006, Can springs cut canyons into rock? *Journal of Geophysical Research – Planets*, 111, E07002, doi: 10.1029/2005JE002663.
5. Lamb, M.P., Toniolo, H. and Parker, G., 2006, Trapping of sustained turbidity currents by intraslope minibasins. *Sedimentology*, 53, p. 147 – 160, doi: 10.1111/j.1365-3091.2005.00754.x.
4. Dietrich, W.E., Nelson, P.A., Yager, E., Venditti, J.G., Lamb, M.P., and Collins, L., 2006, Sediment patches, sediment supply, and channel morphology. In Parker, G., and Garcia, M. (eds.), *River, Coastal, and Estuarine Morphodynamics*, IAHR Symposium, Taylor and Francis, London, vol. 1, p. 79-90.
3. Lamb, M.P. and Parsons, J.D., 2005, High-density suspensions formed under waves. *Journal of Sedimentary Research*, 79, 386-397.
2. Lamb, M.P., D'Asaro, E. and Parsons, J.D., 2004, Turbulent structure of high-density suspensions formed under waves. *Journal of Geophysical Research - Oceans*, 109, p. C12026-C12039, doi: 10.1029/2004JC002355.
1. Lamb, M.P., Hickson, T., Marr, J.G., Sheets, B., Paola, C. and Parker, G., 2004, Surging versus continuous turbidity currents: flow dynamics and deposits in an experimental intraslope basin. *Journal of Sedimentary Research*, 74(1), p. 148-155.

Other Publications

2. Lamb, M.P., 2008, *The Formation of Amphitheater-Headed Canyons*, PhD dissertation, University of California, Berkeley, California, 297 pp.
1. Myrow, P.M., Lamb, M., Lukens, C., Houck, K., Kluth, C., and Parsons, J., 2004, *Hyperpycnal wave-modified turbidites of the Pennsylvanian Minturn Formation, north-central Colorado*: Geological Society of America Field Trip Guide, 28 p.