Curriculum Vitae

Katharine W. Huntington, née Ruhl

Associate Professor, Geology and Geochemistry
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RESEARCH INTERESTS

- Interactions of tectonics, erosion and climate in shaping Earth's surface;
- Paleotopography, paleoclimate, diagenesis and fluid-fault interactions;
- Geochemistry, including geochronology, thermochronology and clumped isotope thermometry; field geology, geomorphology, structural geology, sedimentology, and thermo-kinematic modeling.

EDUCATION

2006 Ph.D., Geology, Massachusetts Institute of Technology
Thesis advisor Kip Hodges: "The use of detrital mineral thermochronology to explore relationships among climate, erosion, and tectonics in the Nepal Himalaya"

2001 B.S., Geology and Economics, University of North Carolina at Chapel Hill, *Summa cum laude* and with Highest Distinction. Honors thesis advisor Kevin Stewart: "Raman microspectroscopic identification of mineral inclusion in zircons associated with the Ashe Metamorphic Suite eclogite, Blue Ridge Mountains, northwestern North Carolina"

PROFESSIONAL EXPERIENCE

2014-present Associate Professor with Tenure, Dept. of Earth and Space Sciences, University of Washington
2008-2014 Assistant Professor, Department of Earth and Space Sciences, University of Washington
2006-2008 Postdoctoral Fellow, Geology and Geochemistry, Division of Geological and Planetary Sciences, California Institute of Technology, supervisors Brian Wernicke and John Eiler
2002-2006 Graduate Research/Teaching Assistant, Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology
2001-2002 Presidential Fellow, Massachusetts Institute of Technology
1999-2000 Science Opportunity Research Fellow, UNC-Chapel Hill

GRANTS

Funded

NSF-EAR Geomorphology and Land-use Dynamics. "Impact of Quaternary megafloods on erosion of the Tsangpo River gorge, southeastern Tibet." 2014-2017, $224,001. Sole PI.

NSF–EAR Geobiology & Low-Temperature Geochemistry Program EAR-1252064. "Collaborative Research: Interpreting clumped isotope temperatures and $\delta^{18}O$ records from pedogenic carbonate: influence of climate, seasonality, and elevation." 2013-2016: $170,709 (UW portion). Co-PI with G. Hoke (Syracuse).

NSF–EAR Instrumentation and Facilities Program EAR-1156134. "Early Career: acquisition of a gas-source isotope-ratio mass spectrometer for research and education in tectonics and paleoclimate." 2012-2013: $365,362. Sole PI.

NSF–EAR Tectonics Program EAR-0955309: "CAREER: The detrital record of focused rock uplift and exhumation, northeast Indian Himalaya." 2010-2016, $487,197. Sole PI.

ACS Petroleum Research Fund Grant #49704: "The Use of Carbonate 'Clumped Isotope' Thermometry to Quantify Temperatures of Burial and Diagenesis from 0-200 ºC." 2009-2012, $100,000. Sole PI.

Royalty Research Fund Grant #65-2771: "Development of a sample preparation system for measurement of clumped isotopes in carbonate for paleoclimate and paleoelevation reconstructions," 2010-2011, $35,503. Sole PI.

HONORS AND AWARDS

2014	SEPM Society for Sedimentary Geology Outstanding Paper Award
2013	Fellow of the Geological Society of America
2013	Bassett Distinguished Teaching Award, Dept. of Earth and Space Sciences
2012	Donath Medal, Geological Society of America Young Scientist Award
2011	NSF Early Career PI invitee to White House
2011	NSF Geosciences Directorate Distinguished Lecturer
2010	NSF CAREER Award
2009	*Geological Society of America Bulletin* Exceptional Reviewer Award
2009	*Geosphere* Exceptional Reviewer Award
2006	Caltech Postdoctoral Fellowship
2001	MIT Presidential Fellowship; Cornell University Sage Fellowship (declined)
1997-2001	NSF Graduate Research Fellowship Honorable Mention; University of North Carolina Davies Scholar; Phi Beta Kappa; Op White Prize in Geological Sciences; Ingram Grant in Geological Sciences; North Carolina Science Opportunity Fellowship

TEACHING

ESS 211: Physical Processes of the Earth, Fall 2008, 2011, 2013, 2014 (geomorphology half of course, co-taught with D. Cowan).

ESS 211: Physical Processes of the Earth, Fall 2009 (structural geology half of course, co-taught with J. Stone).

ESS 418: Geoscience Communication, Winter 2011, Winter 2012, Spring 2013, Winter 2015, Spring 2017.
ESS 480/580: Advanced Methods in Isotope Geochemistry, Winter 2010, Winter 2013. Spring 2014, Winter 2017
ESS 590: Tectonics and Climate, Spring 2009 (co-taught with G. Roe).
ESS 595a: Tectonics & Erosion. Inquiry-based courses for graduate students as part of NSF CAREER project. Spring 2010 (Himalayan Tectonics), Spring 2011 (Thermochronology), Spring 2012 (Detrital Record of Orogenesis and Erosion), Winter 2013 (River Incision), Fall 2016 (Colorado plateau topographic evolution)
ESS 595b: Earth and Space Sciences Research Methods, Spring 2011, Fall 2011, Winter 2012, Fall 2012, Winter 2013, Fall 2013, Winter 2014, Fall 2016 and thereafter.
ESS 599: Earth and Space Sciences Colloquium, Fall 2010.

GRADUATE STUDENTS

Key: formal advisor, †major research advisor, §committee member with research input

Current:
Megan Mueller (Ph.D. student, 2016-)
UW: Top Scholar Award
Michael Turzewski (Ph.D. student, 2012-)
UW: Top Scholar Award; NSF GRF Honorable Mention
Landon Burgener (Ph.D. student, 2012-)
Brigham Young University: Outstanding Thesis Award for M.S. thesis
Julia Kelson (Ph.D. student, 2013-)
NSF Graduate Research Fellowship
UW: Top Scholar Award; GSA Student Research Award;

Former:
Christopher French (M.S., 2016, MESSAGe Program)†
Karl Lang (Ph.D., 2014)
Humboldt Postdoctoral Fellow, Germany (7/2015-6/2018)
Visiting Assistant Prof. Pomona College (2014-2015)
National Science Foundation EAPSI Fellow; NSF Graduate Research Fellowship Honorable Mention; AGU Outstanding Student Paper Award; Geological Society of America Graduate Research Grant; UW Program on Climate Change (PCC) Fellowship; UW College of the Environment Community Impact Award; Dept. Teaching Award; Dept. Service Award
Kristina Sumner (M.S., 2014, MESSAGe Program)†
Sarah Bergman (M.S., 2012)
UW: Top Scholar Award; Goodspeed and Stephens Fellowships
Current: Faculty, Denver Center for International Studies at Montbello
Nathan Peters (M.S., 2012)
UW: Goodspeed and Misch Fellowships
Gabriele Casale§ (Ph.D., 2012)
Current: Assistant Professor, Appalachian State University
Amanda Henck Schmidt† (Ph.D., 2010)
Current: Assistant Professor, Oberlin College
Gerd Winterleitner (visiting M.S. student from University of Leoben, 2010)
Marshall Plan Foundation Fellowship for study at U. of Washington
Current: Ph.D. student, Royal Holloway, University of London

UNDERGRADUATE STUDENTS

Former: Mariah Danner, Project: megaflood erosion
Aaron Reding, Project: Himalayan tectonics and erosion
Rebecca Smith, Clumped isotope thermometry of Morrison Formation
Adrienne Scott, Clumped isotope thermometry of synthetic calcite
Kristina Sumner, Sediment provenance and magnetostratigraphy
Katelyn Atakturk, Sediment provenance, eastern Himalaya
2012 Undergraduate Dean's Medal winner
Geology graduate student at U. of Texas Austin
Evan Lewarch (co-advised with E. Steig), Clumped isotope methods
David Birlenbach, Clumped isotope thermometry calibration, diagenesis
Geobiology graduate student at U. of Illinois
Nathan Peters (co-advised with J. Bourgeois), Sedimentology
M.S. Geology U. of Washington
Christopher Maffucci, Megafloods in the eastern Himalaya, GIS
M.S. Civil Engineering U. of Washington
Jeff Whitman, Bedrock thermochronology, central Nepal
M.S. Geotechnical Engineering, Cal. Poly. San Luis Obispo
Mika Usher, Detrital thermochronology and point counting methods
Current: Research Assistant, UW Cosmogenics Laboratory
Luke Bergman, Green River flood modeling

POSTDOCTORAL SCHOLARS

Ethan Hyland (2014-2016), UW Future of Ice/QRC Postdoctoral Fellow
Current: Assistant Prof. North Carolina State University
Ph.D. University of Michigan, 2014; *Farouk El-Baz Student Research Award*, Geological Society of America; *Graduate Research Award*, Geological Society of America; *Raymond C. Moore Award in Paleontology*, American Association of Petroleum Geologists
Alex Lechler (2013-2014)
Current: Assistant Prof. Pacific Lutheran University
Ph.D. University of Michigan, 2011; Postdoctoral scholar University of New Mexico 2011-2013

PROFESSIONAL SERVICE

Peer Review:
2013-15: Editorial Board, *Geology*
2013-15: Associate Editor, *Earth Surface Dynamics (Journal of the European Geosciences Union)*
2014,15 Panelist for NSF-EAR Geomorphology and Land-use Dynamics
2011 Panelist for NSF-EAR Geobiology and Low-Temp. Geochemistry
2010 Panelist for NSF-EAR Tectonics
2007-present: Manuscript Reviewer for journals including *Nature*; *Science; Proceedings of the National Academy of Sciences; Geology; Earth and Planetary Science Letters; Journal of Geophysical Research; Tectonics;*

Chemical Geology; Geological Society of America Bulletin; Geosphere; Applied Geochemistry; Geochimica et Cosmochimica Acta; Geological Society of London Special Publications; Paleontological Society Papers; Applied Geochemistry; Rapid Communications in Mass Spectrometry

2007-present: Ad-hoc proposal reviewer for U.S. National Science Foundation (programs include Tectonics, Geobiology and Low-Temperature Geochemistry, Sedimentary Geology and Paleobiology, Geomorphology and Land Use Dynamics, Ocean Drilling Program, CAREER, Earthscope, Instrumentation and Facilities); European Science Foundation; Swiss National Science Foundation; U.S. Department of Energy

National and International organizations:

2015-present Writing Committee co-Chair, Tectonics white paper (NSF-funded)
2016 Co-organizer, Future of Tectonics Workshop, U Wisconsin-Madison
2015 Session Organizer, Outstanding Student Presentation awards liaison, AGU Fall Meeting, San Francisco, CA
2012 Judge, Student Presentation Awards, Goldschmidt Geochemistry Conference, Montreal, Canada
2012 Workshop participant, MYRES VI: The Sedimentary Record of Earth Surface Dynamics, Salt Lake City, UT
2011 Judge, Outstanding Student Presentation Awards, AGU Fall Meeting, San Francisco, CA
2011 Session co-convener, AGU Fall Meeting 2011: Terrestrial Sedimentary Record of Cenozoic Topography, Paleoclimate and Paleoenvironments
2010 Conference co-organizer, QRC Spring Workshop 2010: First International Meeting on Clumped Isotope Geochemistry, Seattle, WA
2010 Session co-convener, GSA Fall Meeting: Cryptic uplift of the interior of the U.S. Cordilleran Orogen
2009 Invited workshop participant, NSF Earthscope Science Plan Workshop, Snowbird, Utah

University Service:

2014-2015 QRC Resources Committee
2014-2015 QRC Distinguished Lecture Series Committee
2014 ESS Chair Search Committee
2014 UW New Assistant Professor Discussion Panel
2013 PCC visiting committee, interview participant
2013 CoEnv COMPASS communication training, participant
2011-2012 Program on Climate Change (PCC) Board, board member
2011-present Quaternary Research Center, member
2013 ADVANCE workshop on CAREER proposals, presenter
2011 ADVANCE workshop on peer mentoring, presenter
2011 College of the Env., Conversations on Defining Diversity, panelist

Departmental Service:

2008-present Curriculum Committee
2014 MESSAGe and Space Tech program impact evaluation Committee
2013-2015 Spring Geoclub communication workshop leader

2010, 2013 Research Gala Awards Committee
2011 Applied Geomorphology Faculty Search Committee
2011 Graduate Admissions Committee
2010, 2011 Annual Earth and Space Sciences Children's Day, activity leader
2010-2011 Colloquium Committee
2009-2010 Executive Committee
2009, 2017 Scholarships and Awards Committee

Outreach to Promote Diversity and Education:

2014-present Annual STEM-futures field trip host for hundreds of high school students from minority and economically challenged groups
2013-present Highline Public Schools high school teacher externship program, field and lab externship host
2010-2015 UW in the High School - Earth science teacher professional development program, project lead (NSF CAREER project)
2012 Tahoma Senior High School job shadow program, student host
2011 2nd grader career day (Gainseville, FL), interviewee
2011 The Nature School (Seattle, WA), science field trip host
2010 University Prep Middle School (Seattle, WA), field trip host
2009 Women in Science & Engineering Conference (Seattle, WA), panelist

INVITED KEYNOTE ADDRESSES, CONFERENCE TALKS, AND SEMINARS

2017 Scheduled - Utah State University, *Craig Forester Lecture*
2016 Scheduled - Rice University, *Department Seminar*
Scheduled - University of Houston, *Special Seminar*
University of Wollongong, Australia, *Invited talk*
2015 University of California, Berkeley, *Department Seminar*
University of California, Berkeley, *Special Seminar*
Portland State University, *Department Seminar*
Oregon State University, *Department Seminar, Women's mentoring lunch*
University of Oregon, *Department Seminar*
Syracuse University, *Department Seminar*
University of Wisconsin, Madison, *Weeks Lecture, Women's mentoring lunch*
2014 Geological Society of America Annual meeting, *Keynote*
University of Idaho, *Department Seminar*
4th Int. Wkshp. on Clumped Isotopes, Zurich Switzerland, *Keynote*
Goldschmidt Conference, Sacramento CA, *Invited talk*
University of Illinois, Urbana-Champaign, *Department Seminar*
Geological Society of America Penrose Conference, *Keynote*
University of California, Los Angeles, *Department Seminar*
University of California, San Diego, *Department Seminar*
2013 American Geophysical Union Fall Meeting, *Invited talk*
Geological Society of America Annual Meeting, Pardee Symposium, *Keynote*
University of Texas at Austin, Bureau of Economic Geology, *Dept. Seminar*
University of Washington, Tacoma, *Department Seminar*
Northwest Geological Society, Research Symposium, *Invited talk*

2012 Geological Society of America Annual Meeting, *Gold Medal Lecture*
Lehigh University, *Department Seminar*
University of Arizona, 40th Annual GeoDaze *Keynote Lecture*
University of Southern California, *Department Seminar*
University of North Carolina at Chapel Hill, *Department Seminar*
Brigham Young University, *Department Seminar*
Western Washington University, *Department Seminar*

2011 American Geophysical Union Fall Meeting, San Francisco, CA, *Invited talk*
NSF Geosciences Directorate *Distinguished Lecture*, Arlington, VA
Pennsylvania State University, *Department Seminar*
Dickinson College, Potter Lectures, *public Keynote and Department Seminar*
University of California Santa Barbara, *Department Seminar*
University of London, England (declined)
University of Leoben, Austria (declined)

2010 American Geophysical Union, Fall Meeting, San Francisco, CA, *Invited talk*
Geological Society of America National Meeting, Denver, CO, *Keynote*
Central Washington University, *Department Seminar*
Washington State University, *Department Seminar*

2009 American Geophysical Union, Fall Meeting, San Francisco, CA, *Invited talk*
American Geophysical Union Joint Assembly, Toronto, Canada, *Invited talk*
Yale University, *Department Seminar*
University of Colorado at Boulder, *Department Seminar*
University of Wyoming, *Distinguished Lecture*
University of Chicago, *Department Seminar*

2008 University of Oregon, *Department Seminar*
University of Montana, *Department Seminar*
University of Southern California, *Department Seminar*

2007 University of Washington, *Department Seminar*
California Institute of Technology, *Geoclub Seminar*
California State University Long Beach, *Department Seminar*

2006 Arizona State University, *Geomorphology Seminar*
Georgia Institute of Technology, *Department Seminar*
California State University Northridge, *Department Seminar*
Colorado College, *Department Seminar*
ExxonMobile Exploration Company, Technical Exchange, *Invited talk*

2005 Dickinson College, *Department Seminar*
American Geophysical Union Fall Meeting, San Francisco, CA, *Invited talk*

Bibliography

Citation record and indices:
http://scholar.google.com/citations?user=WxWbKjsAAAAJ&hl=en
PDFs of papers published or in press available at:
http://faculty.washington.edu/kate1/Publications.html
Key: **Huntington = Ruhl**, advisee, #invited, *corresponding author

Submitted for Peer Review:

34. Hyland EG, **Huntington KW**, Sheldon ND, Reichgelt T. Temperature seasonality in the North American continental interior during the early Eocene climatic optimum. *In review, Geology*.
33. Kelson JR, **Huntington KW**, Schauer AJ, Saenger C, Lechler AR. Towards a universal carbonate clumped isotope calibration: diverse synthesis and preparatory methods suggest a single temperature relationship. *In review, GCA*.
32. Schauer AJ, Kelson J, Saenger C, **Huntington KW**. Choice of ^{17}O correction impacts clumped isotope (Δ_{47}) values of CO_2 measured with mass spectrometry. In review, *Rapid Communications in Mass Spectrometry*.
31. Quade J, Rasbury ET, **Huntington K**, Hudson A, Vonhof H, Anchukaitis K, Betancourt J, Latorre C, Pepper M. An 11.5-million year record of hyper-aridity from the central Atacama Desert, Chile. *Submitted to Earth and Planetary Science Letters*.
30. Licht A, Quade J, Kowler A, De Los Santos M, Hudson A, Schauer A, **Huntington K**, Copeland P, Lawton T. Paleoaltimetry of the American Southwest: insights and estimates from stable and clumped isotope proxies. *Submitted to American Journal of Science*.

Published or In Press – Peer Reviewed:

29. Luetkemeyer PB, Kirschner DL, **Huntington KW**, Chester JS, Chester FM, Evans JP. Constraints on paleofluid sources using the clumped-isotope thermometry of carbonate veins from the SAFOD (San Andreas Fault Observatory at Depth) borehole. *In press, Tectonophysics Special Issue: Faults, Fractures, Fluids*.
28. Hodson K, Crider J, **Huntington K**. Multi-stage cementation and paleo fluid temperature in a faulted sandstone reservoir, Moab Fault, Utah, USA. *In press, Tectonophysics Special Issue: Faults, Fractures, Fluids*.
27. Lang KA, **Huntington KW**, Burmister R, Housen B. (2016). Rapid exhumation of the eastern Himalayan syntaxis since the Late Miocene. *GSA Bulletin 128*, doi:10.1130/B31419.1. *in press*
26. Burgener L, **Huntington KW**, Hoke GD, Schauer A, Ringham M, Latorre C, Díaz F. (2016). Variations in soil carbonate formation and seasonal bias over >4 km of relief in the western Andes (30 °S) revealed by clumped isotope thermometry. *Earth and Planetary Science Letters 441*, 188-199. doi: 10.1016/j.epsl.2016.02.033
25. Ringham MC, Hoke GD, **Huntington KW**, Aranibar JN. (2016). Influence of vegetation type and site-to-site variability on soil carbonate clumped isotope records, Andean piedmont of Central Argentina (32-34 °S). *Earth and Planetary Science Letters 40,* 1-11. doi:10.1016/j.epsl.2016.02.003.
24. **#Huntington KW**, Lechler AR (2015). Carbonate clumped isotope thermometry in continental tectonics. *Invited Review, Tectonophysics 647*, 1-20, doi: 10.1016/j.tecto.2015.02.019.
23. Quade J, Dettinger MP, Carrapa B, DeCelles P, Murray KE, **Huntington KW,** Cartwright A, Canavan RR, Gherels G, Clementz M. (2015). The Growth of the Central Andes, 22-26°S. In: DeCelles PG, Ducea MN, Carrapa B, and Kapp PA, eds., Geodynamics of a Cordilleran Orogenic System: The Central Andes of

Argentina and Northern Chile. *Geological Society of America Memoir 212*, doi:10.1130/2015.1212(15).

22. **Huntington KW,** Saylor J, Quade J, and Hudson AM (2014). High Late Miocene-Pliocene elevation of the Zhada basin, SW Tibetan plateau, from clumped isotope thermometry. *Geological Society of America Bulletin 127*, 181-199, doi: 10.1130/B31000.1.
21. Carrapa B, **Huntington KW,** Clementz M, Quade J, Bywater-Reyes S, Schoenbohm LM, Canavan RR (2014). Uplift of the Central Andes of NW Argentina associated with upper crustal shortening, revealed by multi-proxy isotopic analyses. Tectonics, 33, 1039-1054, doi: 10.1002/2013TC003461.
20. Lang KA, **Huntington KW** (2014). Antecedence of the Yarlung-Siang-Brahmaputra River, eastern Himalaya. Earth and Planetary Science Letters, v 397, 145-158. doi: 10.1016/j.epsl.2014.04.026.
19. Lang KA, **Huntington KW**, Montgomery DR (2013). Erosion of the Tsangpo Gorge by megafloods, eastern Himalaya. *Geology*, v. 41, doi:10.1130/G34693.1.
    -Highlighted in the 23 August issue of *Science,* "Editor's Choice" section
    -Subject of 7/23/13 ScienceShot story for *AAAS Science Now* by Sid Perkins
18. Bergman SC, **Huntington KW***, Crider JG (2013). Tracing paleofluid sources using clumped isotope thermometry of diagenetic cements along the Moab Fault, Utah. *American Journal of Science* 313, 490-515, doi: 10.2475/05.2013.03.
17. Budd DA, Frost III EL, **Huntington KW**, Allwardt PF (2013). Syndepositional deformation features in high-relief carbonate platforms: Long-lived conduits for diagenetic fluids. *J Sedimentary Res*. 82, 12-36, doi: 10.2110/jsr.2013.3.
16. Peters, N.A., **Huntington, K.W**.*, Hoke, G.D., (2013). Hot or not? Impact of seasonally variable soil carbonate formation on paleotemperature and O-isotope records from clumped isotope thermometry. *Earth and Planetary Science Letters 361,* 208-218. doi: 10.1016/j.epsl.2012.10.024.
15. Adlakha, V., Lang, K.A., Patel, R.C., Lal, N., and **Huntington, K.W.*** (2012). Rapid long-term erosion in the rain shadow of the Shillong Plateau, Eastern Himalaya, *Tectonophysics* 582, 76-83. doi: 10.1016/j.tecto.2012.09.022.
14. **Huntington KW***, DA Budd, BP Wernicke, and JM Eiler (2011) Use of clumped-isotope thermometry to constrain the crystallization temperature of diagenetic calcite, *J Sedimentary Res*. 81, 656-669, doi: 10.2110/jsr.2011.51.
13. Schmidt (née Henck) A*, Montgomery DR, **Huntington KW**, Liang C (2011) The question of communist land degradation: new evidence from local erosion and basin-wide sediment yield in SW China and SE Tibet, *Annals of the Association of American Geographers* 101(3), 1-20, doi: 10.1080/00045608.2011.560059.
12. Henck, A.*, **K.W. Huntington**, J.O. Stone, D.R. Montgomery, B. Hallet (2011). Spatial controls on erosion in the Three Rivers Region, southeastern Tibet and southwestern China, *Earth and Planetary Science Letters* 303, 71-83, doi: 10.1016/j.epsl.2010.12.038.
11. Henck, A.*, Montgomery, D.R., **Huntington, K.W.**, Liang, C. (2010). Monsoon control of effective discharge, Yunnan and Tibet, *Geology* 38(11), 975-978, doi: 10.1130/G31444.1.
    (Role: assisted in data interpretation, edited paper)

10. **Huntington, K.W.*,** Wernicke, B.P., and Eiler, J.M. (2010). The influence of climate change and uplift on Colorado Plateau paleotemperatures from carbonate 'clumped isotope' thermometry, *Tectonics* 29, TC3005, doi: 10.1029/2009TC002449.
9. **Huntington, K.W**.*, J.M. Eiler, H.P. Affek, W. Guo, M. Bonifacie, L.Y. Yeung, N. Thiagarajan, B. Passey, A. Tripati, M. Daëron, R. Came (2009). Methods and limitations of 'clumped' CO_2 isotope (Δ_{47}) analysis by gas-source isotope-ratio mass spectrometry, *Journal of Mass Spectrometry* 44, 1318-1329. doi: 10.1002/jms.1614.
8. **Huntington, K.W.*,** Bourgeois, J., Gelfenbaum, G., Lynette, P., Jaffe, B., Yeh, H., and Weiss, R. (2007). Sandy signs of a tsunami's onshore depth and speed, *EOS, Trans., AGU. Lead article,* v. 88(52), 577-578.
7. **Huntington, K.W.*,** Ehlers, T.A., Hodges, K.V., Whipp, D.M. Jr. (2007). Topography, exhumation pathway, age uncertainties, and the interpretation of thermochronometer ages, *Tectonics* 26, TC4012, doi: 10.1029/2007TC002108.
6. **Huntington, K.W**.*, Hodges, K. (2006), A comparative study of detrital mineral and bedrock age-elevation methods for estimating erosion rates, *Journal of Geophysical Research – Earth Surface* 111, F03011, doi: 10.1029/2005JF000454.
5. **Huntington, K.W**.*, Blythe, A., and Hodges, K. (2006). Climate change and Late Pliocene acceleration of erosion in the Himalaya, *Earth and Planetary Science Letters* 252, 107-118, doi: 10.1016/j.epsl.2006.09.031.
4. Whipp, D.M.*, Ehlers, T.A., Blythe, A., **Huntington, K.W.,** Hodges, K.V., Burbank, D.W. (2006). Plio-Quaternary erosion and kinematic history of the central Himalaya: Thermo-kinematic model of thermochronometer exhumation, *Tectonics* 26, TC3003, doi: 3010.1029/2006TC001991.
3. Hodges, K.*, **Ruhl, K.,** Wobus, C., and Pringle, M. (2005). $^{40}Ar/^{39}Ar$ thermochronology of detrital minerals, *Reviews in Mineralogy and Geochemistry* 58, 239-257, doi: 10.2138/rmg.2005.58.9.
2. **Ruhl, K.W**.*, and Hodges, K.V. (2005). The use of detrital mineral cooling ages to evaluate steady-state assumptions in active orogens: An example from the central Nepalese Himalaya, *Tectonics* 24, TC4015, doi: 10.1029/2004TC001712.
1. Hodges, K.*, Wobus, C., **Ruhl, K.,** Schildgen, T., Whipple, K. (2004). Quaternary deformation, river steepening, and heavy precipitation at the front of the Higher Himalayan ranges, *Earth and Planetary Science Letters* 220, 379-389, doi: 10.1016/S0012-821X(04)00063-9.

Teaching materials – Peer Reviewed:

Ruhl, K.W. (2005). Teaching geologic time and rates of landscape evolution with dice, *On the Cutting Edge* teaching activity collection. http://serc.carleton.edu/NAGTWorkshops/time/activityposter/11569.html.

Published – Essay:

Ruhl, K.W. (1998). Honor Society Service Requirements, in *Elements of Writing*, Revised Edition (Fifth Course), James L. Kinneavy and John E. Warriner, eds., Holt, Rinehart and Winston, Inc: Austin, TX, p. 311.

Conference Abstracts and Papers:

Turzewski MD, **Huntington KW**, LeVeque RJ (2016). The geomorphic impact of outburst floods: integrating field observations and numerical flood simulations of an extreme flood event, eastern Himalaya. Geological Society of America Fall Meeting, Denver, CO.

Huntington KW, Sumner KK, French C, Cladouhos TC, Camp E, Uddenberg M, Swyer M (2016). Stable and clumped isotope record of fault-related fluid flow and mineralization in the Blue Mountain geothermal field, Basin and Range, Nevada USA. Geological Society of America Fall Meeting, Denver, CO.

Hodson KR, Crider JG, **Huntington KW** (2016). Clumped isotopes reveal temporal variability in permeability distribution at the fault-segment scale on the Moab Fault, Utah. Geological Society of America Fall Meeting, Denver, CO.

Hodson KR, Crider JG, **Huntington KW** (2016). Parsing the structurally-controlled fluid migration history of the Moab Fault, UT, with carbonate clumped isotope thermometry. 4th Biennial Structural Geology and Tectonics Forum, Sonoma State University, CA.

Turzewski MD, **Huntington KW**, LeVeque RJ (2016). Reconciling geomorphic observations with simulations of a modern landslide-dam outburst flood using GeoClaw software, eastern Himalaya. CSDMS Conference, Boulder, CO.

Schauer A, Kelson J, Saenger C, **Huntington K** (2016). Is the absolute reference frame absolute? An apparent dependency of Δ_{47} on $\delta^{13}C$ in CO_2. 5th International Clumped Isotope Workshop, Miami FL, USA.

Hodson KR, Crider JG, **Huntington KW**, Luetkemeyer BP (2015). Concurrent evolution of structural deformation and carbonate diagenesis within the Moab Fault, UT. AGU Fall Meeting, San Francisco CA, USA.

Hyland EG, **Huntington KW** (2015). Resolving paleo-floral temperatures using the clumped isotope (Δ_{47}) thermometer: implications for Colorado plateau uplift. AGU Fall Meeting, San Francisco CA, USA.

Kelson JR, **Huntington KW**, Schauer A, Saenger C, Lechler A (2015). Reconciling Empirical Carbonate Clumped Isotope Calibrations: A Comparison of Calcite Precipitation and Acid Digestion Methods. AGU Fall Meeting, San Francisco CA, USA.

Lang K, **Huntington K** (2015). Clumped isotope paleothermometry of the Mio-Pliocene freshwater Lake Mohave, Lower ancestral Colorado River, USA. AGU Fall Meeting, San Francisco CA, USA.

Huntington KW, Sumner KK, Cladouhos TC, Uddenberg M, Swyer M, Camp ER, Garrison G (2015). Assessing Past Fracture Connectivity in Geothermal Reservoirs Using Clumped Isotopes: Proof of Concept in the Blue Mountain Geothermal Field, Nevada USA. AGU Fall Meeting, San Francisco CA, USA.

Hudson AM, Quade J, Ali G, Bassett S, Boyle DP, **Huntington KW** (2015). ^{14}C/U-Th series geochronology and stable/clumped isotope geochemistry of MIS 2 lacustrine tufas of pluvial Lake Chewaucan, southern Oregon, USA. AGU Fall Meeting, San Francisco CA, USA.

Burgener L, **Huntington KW**, Hoke GD, Schauer A, Ringham M, Latorre C, Diaz F (2015). Clumped isotope thermometry reveals variations in soil carbonate seasonal biases over >4 km of relief in the semi-arid Andes of central Chile. AGU Fall Meeting, San Francisco CA, USA.

Turzewski MD, **Huntington KW**, LeVeque RJ (2015). Reconciling geomorphic observations with simulations of a modern landslide-dam outburst flood using GeoClaw software, eastern Himalaya. AGU Fall Meeting, San Francisco CA, USA.

Hyland E, **Huntington KW**, Sheldon ND (2015). Temperature seasonality in continental North America during the Early Eocene Climatic Optimum. GSA Annual Meeting, Baltimore MD, USA.

Williams R, Goodwin LB, Mozley PS, Beard BL, Johnson CM, **Huntington KW** (2015). Tectonic controls on fault-zone flow pathways in the Rio Grande Rift: insights from C, O, Sr and clumped isotope analyses of syntectonic calcite cement. GSA Annual Meeting, Baltimore MD, USA.

Ringham MC, Hoke GD, **Huntington KW** (2015). Timing of pedogenic carbonate formation in arid soils in relation to clumped isotope temperature records. GSA Annual Meeting, Baltimore MD, USA.

Crider JG, Hodson KR, **Huntington KW** (2015). Fluids in the damage zone: Insights from clumped isotope thermometry of fault-hosted carbonate cements. European Geophysical Union Annual Meeting, Vienna, Austria.

Luetkenmeyer PB, Kirschner DL, **Huntington KW** (2015). Fracture-controlled fluid flow in the Farnham Dome anticline: Insights from combined fluid-inclusion analysis and clumped-isotope thermometry of carbonate veins. European Geophysical Union Annual Meeting, Vienna, Austria.

Sumner KK, Camp ER, **Huntington KW**, Cladouhos TC, Uddenberg M (2015). Assessing fracture connectivity using stable and clumped isotope geochemistry of calcite cements. PROCEEDINGS, Fourtieth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, January 26-28, 2015.

Lang KA, **Huntington KW**, Burmester RF, Housen BA (2014). River antecedence and the onset of rapid exhumation in the eastern Himalayan syntaxis. American Geophysical Union Fall Meeting, San Francisco CA.

Luetkenmeyer PB, Kirschner DL, **Huntington KW** (2014). Clumped-isotope thermometry of carbonate veins from the SAFOD borehole. American Geophysical Union Fall Meeting, San Francisco CA.

Ringham MC, Hoke GD, **Huntington KW**, Aranibar JN (2014). Influence of environment on soil carbonate clumped isotope records, Andean piedmont of Central Argentina (32-34°S). American Geophysical Union Fall Meeting, San Francisco CA.

Turzewski MD, **Huntington KW**, LeVeque RJ, Feathers JK, Larsen I, Montgomery D (2014). Megaflood erosion of the Tsangpo gorge constrained by hydraulic modeling, geochronology and geochemical fingerprinting, Eastern Himalaya. American Geophysical Union Fall Meeting, San Francisco CA.

#Huntington, K.W. Lechler, A.R., Burgener, L., Hoke, G. (2014). Impact of carbonate depositional setting and seasonality on clumped isotope records of topography and climate. Geological Society of America Annual Meeting, Vancouver Canada.

Huntington, K., Lang, K. (2014). The persistence of rapid, focused exhumation in the eastern Himalayan syntaxis. Geological Society of America Annual Meeting, Vancouver Canada.

Lechler, A.R., **Huntington, K.W.,** Breecker, D.O., Sweeney, M.R., and Schauer, A.J. (2014). Systematic variability in clumped isotope temperatures of loess carbonates during Late Pleistocene climate change, Palouse loess, USA. Geological Society of America Annual Meeting, Vancouver Canada.

Hodson, K.R., Crider, J.G., **Huntington, K.W.** (2014). Identifying structural controls on diagenetic fluid migration using carbonate clumped isotope geochemistry: application to the Moab Fault, Utah. Geological Society of America Annual Meeting, Vancouver Canada.

#Huntington, K.W. (2014). Clumped isotope thermometry in continental tectonics. Clumped Isotopes Workshop, Zurich Switzerland.

Kelson, J., Lechler, A.R., **Huntington, K.,** Schauer, A.J., Smith, R. (2014). Constraining the seasonality of soil carbonate formation using clumped-isotope paleothermometry. Clumped Isotopes Workshop, Zurich Switzerland.

Burgener, L., **Huntington, K.,** Hoke, G., Schauer, A. (2014). Constraining the seasonality of soil carbonate formation using clumped-isotope paleothermometry. Clumped Isotopes Workshop, Zurich Switzerland.

Lang, K., **Huntington, K**., Montgomery, D. (2014). Quaternary erosion of the Tsangpo gorge by megafloods, eastern Himalaya. AMQUA Biennial Meeting.

Turzewski, M., **Huntington, K.,** Feathers, J., Larsen, I., Montgomery, D. (2014). Quaternary megaflood chronology from luminescence and radiocarbon dating of flood sands, eastern Himalaya. AMQUA Biennial Meeting.

#Huntington, K. (2014). Clumped isotope paleothermometry in soil carbonate. Goldschmidt, Sacramento, CA.

Breecker, D., Driese, S.G, Nordt, L.C., Beverly, E., **Huntington, K.W**. (2013). Seasonal variations in the carbon isotope composition of soil-respired CO_2 and the dominance of root/rhizsophere respiration in desert soils. AGU Fall Meeting.

*Burgener, L., **Huntington, K.W.,** Hoke, G.D., Schauer, A., Samek, K. (2013). Precipitation season as a control on the timing of pedogenic carbonate growth in the central Andes. AGU Fall Meeting

#Huntington, K.W., Saylor, J., Quade, J. (2013). New constraints on Tibetan plateau uplift from carbonate clumped isotope thermometry. AGU Fall Meeting.

Lang, K., **Huntington, K.W**. (2013). A record of Yarlung-Tsangpo river reorganization since the middle Miocene: evidence for a Himalayan-Tibetan connection. AGU Fall meeting.

#Huntington, K.W. (2013). Paleotopography from stable isotopes and clumped isotope thermometry. Geological Society of America Fall Meeting, Pardee Keynote Symposium.

Frost, E.L., Budd, D.A., Kerans, C., **Huntington, K.W**. (2013). Syndepositional fault and fracture control on diagenetic fluid-flow, Tansil Carbonates (Permian), Dark Canyon, Guadalupe Mountain, New Mexico. GSA South-Central Section Annual Meeting.

Lang, K., **Huntington, K.W**. (2012). Erosion of the Yarlung-Tsangpo Gorge sustained by episodic megaflooding, AGU Fall Meeting.

Huntington, K.W., Bergman, S.C., Crider, J.G. (2012). Clumped isotopes reveal the influence of deformation style on fluid flow and cementation along the Moab Fault, Paradox Basin, Utah. AGU Fall Meeting.

Huntington, K.W., Bergman, S.C., Crider, J.G. (2012). Use of carbonate clumped isotope thermometry to study interactions of structures and fluid flow, Moab Fault, Paradox Basin, Utah. Geological Society of America Fall Meeting.

#Huntington, K.W. (2012). Orogens, isotopes, and the evolution of Earth's surface. Geological Society of America Fall Meeting, Gold Medal Lecture.

Huntington, K.W., Peters, N., Hoke, G.D. (2012). Impact of seasonally variable soil carbonate formation on paleotemperature records from clumped isotopes. Goldschmidt Conference, Montreal, Canada.

Peters, N., **Huntington, K.W.,** Hoke, G.D. (2011). Seasonal bias in pedogenic carbonate formation: implications for interpreting paleosol temperatures from clumped isotopes. AGU Fall Meeting, San Francisco, CA.

Lang, K., **Huntington, K.W.,** Larsen, I.J., Atakturk, K.R., Montgomery, D.R. (2011). Sediment mixing and the interpretation of detrital cosmogenic radionuclide and thermochronology data, NE Indian Himalaya. AGU Fall Meeting, San Francisco, CA.

#Huntington, K.W. (2011). Topographic evolution of the Colorado Plateau: mechanisms, timing, and open questions. AGU Fall Meeting, San Francisco, CA.

Huntington, K.W., Adlakha, V., Lang, K.A., Patel, R.C., Singh, P. Lal, N. (2011). Rapid long-term erosion in the rain shadow of the Shillong Plateau, NE Indian Himalaya. AGU Fall Meeting, San Francisco, CA.

Carrapa, B., DeCelles, P., Bywater, S., Mortimer, E., **Huntington, K**., Clementz, M. (2011). Cenozoic record of paleotopography and paleoenvironment in the Central Andes of NW Argentina. AGU Fall Meeting, San Francisco, CA.

Budd, D.A., **Huntington, K.W**., Frost, E.L. (2011). Clumped-isotope thermometry: a new tool to delineate diagenetic temperatures and fluids of calcite phases. AAPG/SEPM Meeting.

#Huntington, K.W., Peters, N., Roe, G., Hoke, G., Eiler, J. (2010). Impact of surface processes and climate variability on clumped isotope thermometry of soil carbonates, southern Central Andes, Argentina. AGU Fall Meeting, San Francisco, CA.

Bergman, S., **Huntington, K**., Winterleitner, G. (2010). Carbonate clumped isotope thermometry as a tool to constrain thermal conditions in the shallow crust during deformation and diagenesis, Paradox Basin, Utah. Geological Society of America National Meeting, Denver, CO.

Lang, K., Larsen, I., **Huntington, K.** (2010). Integrating petrographic data with detrital-mineral investigations of erosion over multiple timescales in the Tsangpo-Siang-Brahmaputra river system, NE Indian Himalaya. Geological Society of America National Meeting, Denver, CO.

Peters, N., **Huntington, K.,** Hoke, G. (2010). Clumped-isotope thermometry of pedogenic carbonates: quantifying the influence of climate, seasonality, and altitude in the south central Andes, Argentina. Geological Society of America National Meeting, Denver, CO.

#Huntington, K.W., Battisti, D.S., Roe, G., Wernicke, B.P., Eiler, J.M. (2009). Terrestrial climate reconstructions from carbonate clumped-isotope thermometry, AGU Fall Meeting, San Francisco, CA.

Carrapa, B., Schoenbohm, L., DeCelles, P., Clementz, M., **Huntington, K**. (2009). Surface response to lithospheric delamination: an example from the Puna Plateau of NW Argentina. Geological Society of America National Meeting (Portland).

#Huntington, K.W., Wernicke, B.P., Eiler, J.M. (2009). Constraints on Late Tertiary elevation of the Colorado Plateau from carbonate clumped-isotope thermometry, AGU Joint Assembly, Toronto, Canada.

Huntington, K.W., Mohrig, D. (2009). Submarine currents and subaerial intuition: comparing flow characteristics inferred from deposit morphology to constraints from inverted grain-size data, AGU Joint Assembly, Toronto, Canada.

#Hodges, K.V., **Huntington, K.W.,** Heimsath, A. (2009). Erosion rates over multiple timescales: the power and perils of integrated detrital-mineral thermochronology and cosmogenic-nuclide dating, AGU Joint Assembly, Toronto, Canada.

Huntington, K.W., Wernicke, B.P., Eiler, J.M. (2008). The influence of climate change and uplift on Colorado Plateau paleotemperatures from clumped isotope (Δ_{47}) carbonate thermometry, AGU Fall meeting, San Francisco, CA.

Huntington, K.W., Wernicke, B.P., Eiler, J.M., Flowers, R.M. (2008). Temperature and timing of diagenesis from carbonate clumped isotope thermometry and thermochronology. Goldschmidt Conference, Vancouver, Canada.

#Eiler, J., Affek, H., Daeron, M., Ferry, J., Guo, W., **Huntington, K.,** Thiagarajan, N., Tripati, A. (2008). Carbonate 'clumped isotope' thermometry: A status report. Goldschmidt Conference, Vancouver, Canada.

Huntington, K.W., Mohrig, D. (2007). Characterizing Turbidity Current Flow Conditions From Turbidite Grain Size Distributions, Capistrano Formation, San Clemente, CA, AGU Fall meeting, San Francisco, CA.

Huntington, K.W., Wernicke, B.P., Eiler, J. (2007). Paleoaltimetry from "clumped" ^{13}C-^{18}O bonds in carbonates, Colorado Plateau. Goldschmidt Conference, Cologne, Germany.

Huntington, K.W., Ehlers, T.A., Hodges, K.V., Whipp, D.M. Jr. (2006). Age Uncertainties, Topography, Exhumation Pathway, and the Interpretation of Erosion Rates and Exhumation Kinematics from Thermochronometer Age-Elevation Data, AGU Fall Meeting (Poster), San Francisco, CA.

Wobus, C., Pringle, M., Hodges, K.V., Whipple, K.X., **Huntington, K.W.** (2006). Miocene exhumation of the Himalayan metamorphic core: new thermochronologic constraints from the Langtang Valley, Nepal. Geological Society of America National Meeting, Philadelphia, PA.

#Huntington, K.W., Hodges, K.V. (2005). Detrital thermochronology as a tool for studying the evolution of transient landscapes. AGU Fall Meeting, San Francisco.

Ruhl, K., Blythe, A., Hodges, K. (2005). Accelerated Late-Pliocene Himalayan erosion from fission-track and $^{40}Ar/^{39}Ar$ thermochronology and the possible role of climate change. GSA National Meeting, Salt Lake City, UT.

Ruhl, K., Ruhl, S. (2005). Teaching geologic time and rates of landscape evolution with dice, sandboxes, and cutting-edge thermochronology. Geological Society of America National Meeting (Poster), Salt Lake City, UT.

Whipp, D., Ehlers, T., Blythe, A., **Ruhl, K.,** Hodges, K., Burbank, D. (2005). Kinematic and erosion history of the Greater Himalayan Sequence, Central Nepal,

from integrated thermochronology and numerical modeling, Geological Society of America National Meeting, Salt Lake City, UT.

#Hodges, K., **Ruhl, K.,** Wobus, C., Pringle, M. (2005). $^{40}Ar/^{39}Ar$ detrital mineral thermochronology in active fluvial systems. Geological Society of America National Meeting, Salt Lake City, UT.

Hodges, K., **Ruhl, K.,** Wobus, C., Boyce, J. (2005). Detrital mineral thermochronology in active fluvial systems and the evolution of modern orogenic landscapes. Goldschmidt Conference, Moscow, ID.

Ruhl, K., and Hodges, K. (2004). Exhumation rates from bedrock and detrital cooling-age elevation signals: effects of post-closure deformation in the Marsiyandi Valley, Central Nepal. AGU Fall Meeting, San Francisco, CA.

Ruhl, K., Hodges, K., and Schildgen, T. (2003). Detrital mineral cooling-age signal variability and erosion rates, Marsyandi Valley, central Nepal. AGU Fall Meeting, San Francisco, CA.

Hodges, K., **Ruhl, K.,** Whipple, K., Wobus, C., (2003). Evidence for neotectonic activity on the Main Central Thrust system, central Nepal, and coordination of erosion and deformation in the Himalayan orogenic system, Himalayan-Karakoram-Tibet Workshop, Ascona, Switzerland.

#Hodges, K., **Ruhl, K.,** Whipple, K., Wobus, C. (2002). History of the Main Central Thrust system in the Marsyandi Valley, central Nepal: evidence for steady-state orogenesis in the Himalaya? Geological Society of America National Meeting, Denver, CO.