Amanda Keen-Zebert

Assistant Research Professor – Geomorphology, Director E.L. Cord Luminescence Laboratory
Division of Earth and Ecosystem Science, Desert Research Institute
2215 Raggio Parkway, Reno, NV 89512-1095
akz@dri.edu

PROFESSIONAL PREPARATION

2008-2010 National Science Foundation International Research Post-Doctoral Fellow,

Institute of Geography and Earth Science, Aberystwyth University, Aberystwyth,

Wales, UK.

Host scientist: Stephen Tooth

2002-2007 Ph.D. Environmental Geography, Texas State University.

Adviser: Joanna Curran

Dissertation: Spatial variation of alluvial and bedrock channel type in the Upper

Guadalupe River, Texas

1999-2001 M.A. Geography, University of Arkansas.

Adviser: John Dixon

Thesis: Channel geometry change of two streams in urban catchments: Scull and

Mud Creeks, Fayetteville, Arkansas.

1994-1999 B.A. Geography, University of Arkansas.

APPOINTMENTS

July 2013-present

Assistant Research Professor of Geomorphology, Director E.L. Cord

Luminescence Laboratory, Division of Earth and Ecosystem Sciences, Desert

Research Institute, Reno, NV, USA.

2010-2013

Assistant Professor, Department of Geosciences, Murray State University,

Murray, KY, USA.

2008-2010

Visiting Researcher (NSF International Research Post Doctoral Fellow), Institute

of Geography and Earth Sciences, Aberystwyth University, Aberystwyth, Wales,

UK.

2007-2008

Adjunct Professor, Texas State University.

2002-2006

Teaching Assistant, Research Assistant, Texas State University.

1999-2001

Teaching Assistant, University of Arkansas.

RECOGNITION & AWARDS

2015 Nevada Regents' Rising Star Researcher Award (\$5,000)

PEER REVIEWED PUBLICATIONS (* Indicates student advisee co-author)

In submittal

- *Beeson, H. McCoy, S., **Keen-Zebert, A.**, (Accepted) Geometric disequilibrium of river basins produces long-lived transient landscapes. *Earth and Planetary Science Letters*.
- Furbish, D., Roering, J., **Keen-Zebert, A.**, Almond, P., Doane, T., Schumer, R. (In Review) Soil particle transport and mixing near a hillslope crest: 2. Cosmogenic nuclide and optically stimulated luminescence tracers. *Journal of Geophysical Research-Earth Surface*.
- *Rodrigues, K., **Keen-Zebert, A.**, Schumer, R., Crews, J., Zhang, L. (In submittal) An overview of the physical basis of luminescence. *Quaternary Science Reviews*.

2017

- **Keen-Zebert, A.**, Shepherd, S., Hudson, M, Thaler, E. (2017). The impact of lithology on valley width, terrace distribution, and bedload provenance in a fluvial system with flat-lying stratigraphy and low uplift. *Earth Surface Processes and Landforms*. doi: 10.1002/esp.4116
- Larkin Z., Ralph, T., Tooth, S., Duller, G.A.T., McCarthy, T.S., **Keen-Zebert, A.**, Humphries, M. (2017). Timescales and mechanisms of river avulsion in a rapidly adjusting South African floodplain wetland. *Geomorphology* **238:** 158-172. doi: 10.1016/j.geomorph.2017.01.021

2016

- **Keen-Zebert A.**, Tooth, S., Stuart, F. (2016). Cosmogenic ³He measurements provide insight on lithological controls on bedrock river incision and valley formation: an example from the South African Interior. *Journal of Geology* 124: 423-434. doi:10.1086/685506
- Nicoll, K. and **Keen-Zebert, A.** (2016). Initial chronological determinations at an Archaic site discovered near Stockton, Utah. *Journal of Archaeological Science Reports* 6: 418–423. doi:10.1016/j.jasrep.2016.02.026
- *Rodrigues, K., Rink, W.J., Collins, M.B., Williams, T.J., **Keen-Zebert, A.**, Lopez, G.I., and Rodrigues, K. (2016). OSL ages of the Clovis, Late Paleoindian and Archaic components at Area 15 of the Gault Site, Central Texas, U.S.A. *Journal of Archaeological Science Reports* 7: 94-103. doi:10.1016/j.jasrep.2016.03.014

2015

Keen-Zebert, A., (2015) Luminescence, Fluvial Sediments. In Rink, W.J., Thompson, J.W. (Eds.) *Encyclopedia of Scientific Dating Methods*, Springer-Verlag, Berlin-Heidelberg. 465-469. doi:10.1007/978-94-007-6326-5_3-1

2014

Tooth, S., McCarthy, T., Rodnight, H., **Keen-Zebert, A.**, Rowberry, M., Brandt, D. (2014) Late Holocene development of a major fluvial discontinuity in floodplain wetlands of the Blood River, eastern South Africa. *Geomorphology* 205: 128-141. doi:10.1016/j.geomorph.2011.12.045

2013

Keen-Zebert, A., Tooth, S., Rodnight H., Duller, G.A.T., Roberts, H.R., Grenfell, M. (2013). Late Quaternary floodplain reworking and the preservation of alluvial sedimentary archives in unconfined and confined valleys of mixed bedrock-

alluvial rivers in the eastern interior of South Africa. *Geomorphology* 185: 54-66. doi:10.1016/j.geomorph.2012.12.004

2011

- **Keen-Zebert, A.**, Tooth, S., Grenfell, M. (2011). Floodplain chronology of the Stillerust Vlei, Mooi River floodplain wetland, in western KwaZulu-Natal, South Africa. In: Bierman P, Montgomery D (eds.) *Key Concepts in Geomorphology, Vignettes*. http://serc.carleton.edu/60232
- **Keen-Zebert, A.**, Shepherd, S. (2011). Effects of urbanization on stream morphology in the Illinois River watershed, AR. In: Bierman P, Montgomery D (eds.) *Key Concepts in Geomorphology, Vignettes.* http://serc.carleton.edu/60231

2009

Keen-Zebert, A., Curran, J.C. (2009). Regional and local controls on the spatial distribution of bedrock reaches in the Upper Guadalupe River, Texas. *Geomorphology:* 112: 295-305. DOI: 10.1016/j.geomorph.2009.06.017. doi:10.1016/j.geomorph.2009.06.017

2007

Keen-Zebert, A. (2007). Channel response to precipitation in urban catchments: Scull and Mud Creeks in Fayetteville, Arkansas. *Physical Geography* 28: 249-260. doi: 10.2747/0272-3646.28.3.249

OTHER PUBLICATIONS

2009

Keen-Zebert A. 2009. Steel Creek. In R. Hayes (ed.) *Thoreau's Legacy, American Stories of Global Change*. Penguin Classics: Cambridge, MA.

EXTERNAL FUNDING

GRANTS (Total awarded as lead PI: USD \$865,266)

Pending awards

- **Keen-Zebert, A.** 2017-2022. Laboratory Technician Support: Luminescnece Geochronology. NSF Instrumentation and Facilities. \$680,536
- Cowgill, E., **Keen-Zebert, A.** 2017-2018. Determining the Holocene slip rate ofn the Mojave San Andreas via Lumienscence dating at Pearblosson and Ranch Center. Southern California Earthquake Center. \$40,833

Current awards

- Wriston, T., Adams, K., **Keen-Zebert, A.** 2017-2020. Late Pleistocene to Middle Holocene Landscape use in Coal Valley, Basin and Range National Monument, Lincoln County, Nevada. Bureau of Land Management Lincoln County Archaeology Investigation. \$247,709
- **Keen-Zebert, A**. 2014-2017. MRI: Acquisition of a Canberra Broad Energy Germanium Detector BE3830 Gamma Spectroscopy System. NSF Major Research

- Instrumentation, USD \$162,357.
- **Keen-Zebert, A**. 2013-2017. Collaborative Research: Defining the role of heterogeneous lithology in bedrock channel incision and terrace formation in the Buffalo National River, Arkansas. NSF Geomorphology and Land Use Dynamics, USD \$312,809 (Research Collaborative grant with S. Shepherd, Auburn University).
- Tooth, S., **Keen-Zebert, A.**, and Stuart, F. A paired cosmogenic isotope (³He, ³⁶Cl) approach to determine rates of bedrock river incision on the South African Highveld: implications for landscape development in a post-orogenic setting. Natural Environment Research Council, Cosmogenic Isotope Analysis Facility, GBP £7,210. (~USD \$8,915)

Past awards

- **Keen-Zebert,** A. 2014-2015. A natural experiment for luminescence signal resetting. Army Research Office (ARO) Short Term Innovative Research (STIR). Environmental Sciences Division, USD \$49,994.
- **Keen-Zebert, A**. 2010-2013. Constraining the depositional age of sediments at the Gault Archaeology Site using OSL. National Science Foundation subcontract. USD \$13,000.
- **Keen-Zebert, A**. 2008-2010. Determining bedrock incision rates using cosmogenic isotope (³He) analysis to chronologically constrain the wetland development cycle in the South African Highveld. National Science Foundation International Research Fellowship Program, USD \$218,797.
- **Keen-Zebert, A.,** Curran, J.C. 2005-2007. Spatial and temporal variation of sediment transport capacity and channel reach type in two mixed alluvial-bedrock rivers in central Texas. National Science Foundation Doctoral Dissertation Research Improvement, USD \$11,500.
- Curran, J.C., **Keen-Zebert A**. 2003-2005. Model analysis of the effects of small dams on the Guadalupe River. National Texas Advanced Research Program, USD \$87,895.

CONTRACTS (Total USD \$82,840)

Current contracts

- **Keen-Zebert, A.** 2015-2016. Phase I Erosion Studies at the West Valley Demonstration Project and Western New York Nuclear Service Center. Enviro Compliance Solutions, Inc., USD \$50,000.
- **Keen-Zebert, A.** 2015-2016. Evaluation of Slip Rates on King Mountain Fault using OSL. Bureau of Land Management., USD \$12,500.

Past contracts

- **Keen-Zebert, A.** 2015. Luminescence dating of sediment from sand dunes at Antioch Dunes National Wildlife Reserve. Alison McNally, UC Davis. USD \$6,780.
- **Keen-Zebert, A.,** 2015. Luminescence dating: Trench 2, Anderson Dam, Morgan Hill, CA. Chris Bloszies, Lettis Consultants International. USD \$5,424.
- **Keen-Zebert, A.,** 2015. Luminescence dating of sediment from the City of San Francisco's southeast water pollution control plant building 521 replacement

project. Phil Kaijankoski. Far Western Anthropological Research Group, Inc. USD \$2,712.

Keen-Zebert, A. 2014. Luminescence dating of sediment from sand dunes at the San Francisco Penninsula, California. Phil Kaijankoski. Far Western Anthropological Research Group, Inc. USD \$5,424.

COMPETITIVE INTERNAL FUNDING (Total: USD \$65,312)

Keen-Zebert, A. 2017. Expanding the geochronology of the Cooper's Ferry Archaeological Site. DRI Lander Foundation Fund, \$18,000.

Keen-Zebert, A., Rhode, D. 2016. Refining the geochronology of the Cooper's Ferry Archaeological Site. DRI Lander Foundation Fund, \$23,907.

Keen-Zebert, A. 2015-16. Elucidating the relationship between luminescence sensitivity and signal resetting in a natural, known-discharge flow. DRI Institute Project Assignment, \$16,405.

Keen-Zebert, A. 2015. Colorado River Pulse Flow. DRI Division of Earth and Ecosystem Services, \$3,000.

Keen-Zebert, A. 2014. Controls on the formation and stability of tree-covered islands on the anabranching Vaal River, Free State South Africa: biodiversity hotspots along a semi-arid river. Vice President for Research Office, \$12,000.

Keen-Zebert, A. 2014. Course development: Introduction to Luminescence Dating. DRI Vice President for Academic and Faculty Affairs Office, \$10,000.

INVITED SEMINARS AND COLLOQUIA

Oct. 6, 2016. Oberlin College, Department of Geology

Sept. 9, 2016. University of Arkansas, Department of Geosciences

June 4, 2015. Oregon State University, Department of Geology

June 5, 2015. University of Oregon, Department of Geography

Sept., 24, 2014. University of Nevada, Reno, Dept. of Geological Sci & Engineering

March 4, 2013. Auburn University, Dept. of Geology and Geography

April 3, 2012. University of Texas at Austin, Jackson School of Geosciences

March 30, 2012. Vanderbilt University, Department of Earth and Envt. Sciences

January 23, 2012. University of Missouri, Department of Geography

April 19, 2011. University of Louisville, Department of Geosciences

January 18, 2010. University of Cincinnati, Department of Geology

TEACHING EXPERIENCE (G=GRADUATE, U=UNDERGRADUATE)

Desert Research Institute

2013-present

Special topics: Quaternary Environments (G)

Special topics: Introduction to Luminescence Dating (G)

Seminar: Physical Basis of Luminescence (G)

Special topics: Advanced Instrumentation and Analysis (G)

Special topics: Environmental Dosimetry (G)

Special topics: Thermoluminescence (G)

Murray State University

2010-2013

Introductory Geomorphology (U)

Conservation and Environmental Geosciences (U)

Scientific Communication (G)

Special topics: Fluvial Processes (U/G)

Special topics: Fluvial landscape evolution (U)

Texas State University

2002-2008

Water Resources & Management (field and laboratory section) (U)

World Geography (U)

Physical Geography (U)

University of Arkansas

1999-2001

Environmental Geology and Hazards, Laboratory (U)

Physical Geography Laboratory (U)

Geosciences Tutor for the University of Arkansas Athletic Department.

STUDENT RESEARCH ADVISING

Graduate Student Advisees

Kathleen Rodrigues, Ph.D. student, Department of Geological Sciences and Engineering, University of Nevada Reno. Expected graduation 2019.

Helen Beeson, Ph.D. candidate, Department of Geological Sciences and Engineering, University of Nevada Reno. Expected graduation 2018.

Ryan Prusinski, M.S., Murray State University, 2011-2013. Thesis: Spatial distribution and characterization of knickpoints in the in the Buffalo National River watershed, Arkansas.

Undergraduate Student Advisees

Rachel Pober, B.S. student, Department of Geological Sciences and Engineering, Department of Anthropology, University of Nevada, Reno, 2017. Senior Thesis: Geochronology of the Cooper's Ferry Archaeological Site.

Hayden Brown, B.S, Dept. of Geosciences, Murray State University, 2013. Senior Thesis: Variation in erosion rates with different lithology and grain size.

Kristen Reynolds, B.S., Dept. of Geoscineces, Murray State University, 2012. Senior Thesis: Quantifying changes in late Quaternary sediment transport capacity of the Buffalo National River, Arkansas.

PRESENTATIONS AND ABSTRACTS (* Indicates student advisee co-author)

2017

*Pober, R., Keen-Zebert, A., Davis, L. 2017. Refinement of the chronostratigraphy and age of pit features at the Cooper's Ferry site, Idaho. Society for American Archaeology. Vancouver, British Columbia, Canada.

- Keen-Zebert, A., Tooth, S. 2016. Growth Rates and Stability of Tree Covered Islands on the Anabranching Vaal River, Free State South Africa, Established Using Quartz Optically Stimulated Luminescence. EOS Transactions: AGU Fall Meeting Supplement, DP53C-0979. v 97, Abstract . San Francisco, CA.
- Larkin, Z., Ralph, T., Tooth, S., Duller, G.A.T., McCarthy, T.S., **Keen-Zebert, A.,** Humphries, M. 2016. Implications of channel avulsion for the structure and functioning of semiarid floodplain wetlands: Examples from South Africa. INTECOL International Wetlands Conference. Sept., 19-24, Changshu, China.
- *Beeson, H., McCoy, S., **Keen-Zebert, A.** 2016. Drainage area exchange between river basins produces long-lived transient landscapes. Geological Society of America Annual Meeting Abstracts with Programs, v 48. Denver, CO. DOI: 10.1130/abs/2016AM-287955.
- **Keen-Zebert, A.**, Granger, D.E., Paces, J.B., Hudson, M.R. 2016. (Invited) Combined use of cosmogenic nuclide, U-series disequilibrium, paleomagnetism, and optically stimulated luminescence within Fitton Cave to evaluate the landscape evolution of the Buffalo National River, Arkansas. Geological Society of America Annual Meeting Abstracts with Programs, v 48. Denver, CO. DOI:10.1130/abs/2016AM-287955.
- Wang, H., Curry, B.B, McKay, D.E., Berg, R.C., Stumph, A.J., Huot, S., **Keen-Zebert A.** 2016. Evidence of meltwater megafloods near the southernmost ice margins of the Laurentide Ice Sheet between 20.5 and 18.5 ka. North Central Geological Society of America Annual Meeting Abstracts with Programs. Champaign, IL.

2015

- *Beeson, H., McCoy, S., **Keen-Zebert, A.** 2015. Persistent river-basin disequilibrium in a cratonic landscape: Ozark dome, USA. EOS Transactions: AGU Fall Meeting Supplement, v 96, Abstract EP41A-0911. San Francisco, CA.
- **Keen-Zebert, A**. 2015. (Invited) Using OSL to investigate the impact of lithological heterogeneity on sediment preservation in fluvial systems. Abstracts of the Annual Meeting of the Association of American Geographers. Chicago, IL.
- Shepherd, S, **Keen-Zebert**, A. 2015. Heterogeneous lithology and valley width in the Buffalo River watershed, northern Arkansas. Abstracts of the Annual Meeting of the Association of American Geographers. Chicago, IL.

2014

- **Keen-Zebert, A.** 2014. Lithological controls on bedrock river incision and valley formation in the eastern South African Interior. EOS Transactions: AGU Fall Meeting Supplement, v 95, Abstract EP53A-3595. San Francisco, CA.
- Shepherd, S., **Keen-Zebert, A**. 2014. Lithologic heterogeneity and variable valley width in the Buffalo River watershed, AR. EOS Transactions: AGU Fall Meeting Supplement, v 95, Abstract EP53A-3594. San Francisco, CA.
- Bacon, S., Adams, K., Bullard, T., **Keen-Zebert, A.**, Decker, D. 2014. Sill Failure and catastrophic outburst floods from Owens Lake, California: implications for latest Pleistocene and Holocene paleohydrology of the Owens River drainage basin. Geological Society of America Annual Meeting Abstracts with Programs, v 46.

- Vancouver, BC.
- **Keen-Zebert, A.**, Baker, S. 2014. Comparison of single- and multi-grain quartz luminescence ages from terraces in the Buffalo National River, Arkansas. 14th International Luminescence and Electron Spin Dating Conference and Workshop. Montreal, CA.
- Hendricks, R., Rink, W.J., Mallinson, D., Alexander, C., **Keen-Zebert, A.** 2014. Timing and emplacement of ancient coastal deposits of Georgia as determined by ESR optical dating: A work in Progress Part II. 14th International Luminescence and Electron Spin Dating Conference and Workshop. Montreal, CA.
- **Keen-Zebert, A.,** Hudson, M., and Shepherd, S. 2014. Characterization and ages of Quaternary river terraces in the Buffalo National River, Arkansas. South-Central Geological Society of America Regional Meeting. Fayetteville, Arkansas.
- Shepherd, S., **Keen-Zebert, A.**, Hudson, M. 2014 Valley width and heterogeneous lithology in the Buffalo River Watershed, Northern Arkansas. South-Central Geological Society of America Regional Meeting. Fayetteville, Arkansas.
- **Keen-Zebert, A.,** Hudson, M., and Shepherd, S., 2014. Post meeting field trip: Quaternary geology and geomorphology of the Buffalo National River, Arkansas. South-Central Geological Society of America Regional Meeting. March 19, 2014 Fayetteville, Arkansas.

Shepherd, S., **Keen-Zebert, A.**, Hudson, M., Turner, K. 2013. Variable valley width and heterogeneous lithology in the Buffalo National Scenic River, Arkansas. Geological Society of America Annual Meeting Abstracts with Programs, v 45 No. 7, P. 577. Denver, CO.

2012

- **Keen-Zebert,** A., Mahan, S. 2012. Equivalent dose distributions demonstrate that varied fluvial transport processes are a major component in the construction of floodplains. New World Luminescence Workshop. Los Angeles, CA.
- Hendricks, R., Rink, W.J., Mallinson, D., Alexander, C., **Keen-Zebert, A.** 2012. Timing of the emplacement of ancient coastal deposits of Georgia as determined by ESR optical dating. New World Luminescence Workshop. Los Angeles, CA.
- **Keen-Zebert, A.**, Tooth, S., Rodnight, H., Duller, G.A.T., Roberts, H., Grenfell, M. 2012. Late Quaternary floodplain reworking and the preservation of alluvial sedimentary archives in the eastern interior of South Africa. Meeting of Young Researchers in Earth Sciences V (MYRES V). The Sedimentary Record of Landscape Dynamics. Salt Lake City, UT.
- Curran, J.C., **Keen-Zebert, A**. 2012. Selective sediment transport through a gravel mantled bedrock channel. EOS Transactions: AGU Fall Meeting Supplement, v 93, Abstract EP23B-0813. San Francisco, CA.
- *Prusinski, M.R., **Keen-Zebert, A.**, *Reynolds, K. 2012. Identifying the spatial distribution of knickpoints in the Buffalo National River watershed, northern Arkansas. Abstracts of the Annual Meeting of the Association of American Geographers, New York, NY.

2011

*Prusinski, M.R., **Keen-Zebert, A.** 2011. A GIS approach to identifying the spatial distribution of knickpoints in the Buffalo National River watershed, northern

- Arkansas. Presented at the Kentucky Academy of Sciences Annual Meeting. (Awarded first place in geology student paper competition.)
- **Keen-Zebert, A.**, Shepherd, S., Hudson, M., Turner, K. 2011. Characterization of Quaternary alluvial terraces in the Buffalo National River valley, Arkansas. Geological Society of America Annual Meeting Abstracts with Programs, v 43, Abstract 96-13. Minneapolis, MN.
- **Keen-Zebert, A.**, Tooth, S., Stuart, F. 2011. Cosmogenic ³He erosion rates suggest that river incision and landscape evolution in the eastern interior of South Africa are weathering limited. EOS Transactions: AGU Fall Meeting Supplement, v 92, Abstract EP43C-0712. San Francisco, CA.

- **Keen-Zebert, A.**, Tooth, S., Stuart, F. 2010. Using cosmogenic ³He to quantify bedrock channel erosion rates on the Mooi River, South Africa. EOS Transactions: AGU Fall Meeting Supplement, v 91, Abstract EP41C-0713. San Francisco, CA.
- **Keen-Zebert, A.**, Tooth S. 2010. What is the historical rate of variation of floodplain wetlands in the South African Highveld? Geological Society of America Annual Meeting Abstracts with Programs, v 42, Abstract 171-9. Denver, CO.
- **Keen-Zebert, A.**, Tooth, S. 2010. How do floodplain ages compare in adjacent alluvial and bedrock reaches in the South African Highveld? Geological Society of America Annual Meeting Abstracts with Programs, v 42, Abstract 99-8. Denver, CO.
- **Keen-Zebert, A.**, Tooth, S., Duller, G.A.T. 2010. Using OSL to determine rates of floodplain reworking in the South African Highveld. Presented at the New World Luminescence Workshop, Montreal, Canada.
- **Keen-Zebert, A.**, Tooth, S. 2010. Contrasting bedrock channel morphology on three rivers in the South African Highveld. Geophysical Research Abstracts, v 12, Abstract EGU2010-861-2. European Geosciences Union General Assembly. Vienna, Austria.
- Tooth, S., McCarthy, T.S., Rodnight, H., **Keen-Zebert A.**, Rowberry, M.D., Brandt, D. 2010. Geomorphological dynamics of South African floodplain wetlands and the implications for management planning. Abstracts of the Annual Meeting of the Association of American Geographers. Washington, D.C.
- Tooth, S., McCarthy, T., Rodnight, H., **Keen-Zebert, A.**, Rowberry, M., Brandt, D. Geomorphological dynamics of southern African floodplain wetlands: implications for land degradation assessment and management planning. South African Association of Geomorphologists Biennial Conference.

2009

- **Keen-Zebert, A.**, Tooth, S. 2009. Bedrock channel incision controls Quaternary wetland development cycles on the South African Highveld. International Conference on Geomorphology (ANZIAG). Melbourne, Australia.
- Tooth, S., McCarthy, TS., Rodnight, H., **Keen-Zebert, A.**, Rowberry, M.D., Brandt, D. 2009. Morphological and sedimentary dynamics of a South African floodplain wetland: from channelled to unchannelled and back to channelled? International Conference on Fluvial Sedimentology. Tucuman, Argentina.

2007

Keen-Zebert, A. 2007. Mixed alluvial bedrock rivers, an example from central Texas.

Geography in the Americas. La Serena, Chile.

Keen-Zebert, A., Curran, J.C. 2007. Channel boundary forcing in the Guadalupe River, a mixed alluvial-bedrock river. Abstracts of the Annual Meeting of the Association of American Geographers. San Francisco, CA.

2006

- **Keen-Zebert, A.**, Curran, J.C. 2006. Convex bar formation in an alluvial-bedrock stream channel. EOS Transactions: AGU Fall Meeting Supplement, v 87, Abstract H51G-0580. San Francisco, CA.
- **Keen-Zebert, A.**, Curran, J.C. 2006. Bar spacing in alluvial and bedrock reaches of the Guadalupe River, a mixed morphology or hybrid river in central Texas. Geological Society of America Abstracts with Programs, v 38, Abstract 22-4. Philidelphia, PA.
- **Keen-Zebert, A.**, Curran JC. 2006. Alluvial-bedrock channel boundary forcing and human built forcing agents in the Guadalupe River. Presented at the Binghamton Geomorphology Symposium. Columbia, SC.
- **Keen-Zebert, A.**, Curran, J.C. 2006. Spatial variation of channel reach type and gravel deposition in the Guadalupe River in central Texas. Abstracts of the Annual Meeting of the Association of American Geographers, Chicago, IL.

2005

- **Keen-Zebert, A.**, Curran, J.C. 2005. Spatial and temporal variation of sediment transport capacity and channel reach type in two mixed alluvial-bedrock rivers in central Texas. Presented at Gravel Bed Rivers VI International Conference and Workshop. Lienz, Austria.
- **Keen-Zebert, A.**, Curran, J.C. 2005. The spatial distribution of sediment in two mixed alluvial bedrock rivers in central Texas. Abstracts of the Annual Meeting of the Association of American Geographers. Denver, CO.

2004

Keen-Zebert, A., Curran, J.C. 2004. Determining the grain size distribution and volume of sediment accumulation behind dams in bedrock channels. Abstracts of the Annual Meeting of the Association of American Geographers. Philadelphia, PA.

2003

Keen-Zebert, A. 2003. Stream channel response to precipitation in an urban catchment: Scull and Mud Creeks in Fayetteville, Arkansas. Abstracts of the Annual Meeting of the Association of American Geographers. New Orleans, LA.

UNPUBLISHED REPORTS

2016

Keen-Zebert, A., Rodrigues, K., 2016. Depositional ages of sediment from Barqa, Wadi Faynan, Jordan determined using optically stimulated luminescence on coarse grained quartz. Russell Adams, University of Waterloo.

2015

Keen-Zebert, A., Baker, S. 2015. Luminescence dating of sediment from sand dunes at Antioch Dunes National Wildlife Reserve. Alison McNally, California State University, Stanislaus.

- **Keen-Zebert, A.,** Baker, S. 2015. Luminescence dating of sediment from beach deposits of the Pleistocene highstand of Owens Lake. Steve Bacon & Ken Adams, Desert Research Institute.
- **Keen-Zebert, A.,** Baker, S. 2015. Luminescence dating results: Trench 2, Anderson Dam, Morgan Hill, CA. Chris Bloszies, Lettis Consultants International.
- **Keen-Zebert, A.,** Baker, S. 2015. Luminescence dating of sediment from the City of San Francisco's southeast water pollution control plant building 521 replacement project. Phil Kaijankoski. Far Western Anthropological Research Group, Inc.

- **Keen-Zebert, A.,** Hudson, M., Shepherd, S. 2014. Field Trip Guide: Post meeting field trip, Quaternary geology and geomorphology of the Buffalo National River, Arkansas. South-Central Geological Society of America Regional Meeting. March 19, 2014 Fayetteville, Arkansas.
- **Keen-Zebert, A.** 2014. Luminescence dating of sediment from sand dunes at the San Francisco Penninsula, California. Far Western Anthropological Research Group, Inc.

PROFESSIONAL AFFILIATIONS

American Geophysical Union

Earth & Planetary Surface Processes Focus Group

Geological Society of America

Quaternary Geology and Geomorphology Division

American Quaternary Association

Association of American Geographers

Geomorphology Specialty Group

Association for Women Geoscientists

SERVICE

Proposal Reviews

NSF Geomorphology and Land Use Dynamics (25 ad hoc reviews)

NSF Major Research Instrumentation (1)

NSF Hydrologic Sciences (2)

NSF Antarctic Earth Sciences (1)

Army Research Office (1)

National Geographic Committee for Research and Exploration (1)

Manuscripts Reviews for Peer-Reviewed Journals

Journal of Geophysical Research - Earth Surface (1)

GSA Bulletin (1)

Geomorphology (3)

Sedimentary Geology (1)

Journal of African Earth Sciences (1)

Journal of Archaeological Sciences (2)

Quaternary International (2)

Quaternary Research (1) Elements (1)

Other service

Panel member 2015-2018, GSA Quaternary Geology and Geomorphology Division.

Association for Women Geoscientists Distinguished Lecturer (2015-present)

Association for Women Geoscientists volunteer reviewer of student C.V.s and resumes

Session convener at SCGSA 2014: Quaternary Geology and Geomorphology

Field trip leader at SCGSA 2014: Quat Geol and Geomorphology of the Buffalo National River

National Science Foundation Geomorphology and Land Use Dynamics Panel (2)

Session convener at AGU 2012: EP23B. Beyond Grain Size: Controls on Sediment Transport

Reviewer for Geological Society of America Quaternary Geology and Geomorphology Division student proposals for the Mackin, Howard, and Morisawa awards

Judge for American Geophysical Union Earth and Planetary Surface Processes student awards Mentor to undergraduate, graduate, and post-doc women in Geosciences through MentorNet University of Nevada, Reno Department of Geological Sciences Graduate Committee University of Nevada, Reno Graduate Program in Environmental Science Committee University of Nevada, Reno Graduate Program in Hydrological Sciences Committee

CONTINUING EDUCATION & WORKSHOPS

- **2017** American Management Association: Project Team Leadership: Building Commitment Through Superior Communication. March 15-17.
- **2016** American Management Association: Preparing for Leadership: What it takes to Lead. Nov. 7-9.
 - Leadership Communication for Maximum Impact: Storytelling (online MOOC through Northwestern University)
 - High Performance Collaboration: Leadership, Teamwork, and Negotiation (online MOOC through Northwestern University)
 - UNAVCO: High Resolution Topography. April 18-19.
- 2014 Canberra Industries: Fundamentals of Gamma Spectroscopy. Aug 7-8.
- 2012 Meeting of Young Researchers in Earth Science V (MYRES V). The Sedimentary Record of Landscape Dynamics. Salt Lake City, UT. Aug 8-12.
- 2011 National Science Foundation Cutting Edge Early Career Geoscience Faculty Workshop. Geologic Applications of Cosmogenic Nuclides: Advances from the CRONUS Earth Project, GSA Short Course, 0.8 CEU credits.
- **2010** U-Pb Geochronology & Hf Isotope Geochemistry GSA Short Course, 0.8 CEU credits.
- **2009** Geochronology Summer School, University of Zurich, 2 ECTS Credit Points.
- **2008** Aberystwyth University Workshop: Large Group Teaching, 7 hours. Aberystwyth University Workshop: Writing for Publication, 7 hours.