

Vita, updated 10 June, 2026
Frank J. Pazzaglia

A. Biographical Information

Professor Dept. of Earth and Environmental Sciences

1 West Packer Ave, Lehigh University, Bethlehem, PA, 18015-3001

Contacts: fjp3@lehigh.edu; <http://www.lehigh.edu/~fjp3/fjp3.html>; ++1.610.758.3667

Professional interests

Geology, geomorphology, and active tectonics; Quaternary geology; sedimentology and stratigraphy; Rock-magnetic cyclostratigraphy; Detrital zircon provenance; Exogenic forcing and autogenic processes in the construction of stratigraphic archives; River terraces and mechanisms of terrace genesis; GIS applications to geomorphology and surficial processes; compilation and quantitative manipulation of DEM data for descriptive, mapping, denudation, morphometric and hydrologic modeling.

Educational History

NSF Post-Doctoral Research Fellow, 1993-94, Department of Geology and Geophysics, Yale University, Dr. Mark T. Brandon, research collaborator.

Doctor of Philosophy in Geosciences, May, 1993 from the Pennsylvania State University. Dr. T.W. Gardner, advisor. Thesis title: Tectonic geomorphology and late Cenozoic geology of the middle U.S. Atlantic passive margin.

Master of Science in Geology, December 1989 from the University of New Mexico, Dr. S.G.Wells, advisor. Thesis title: Tectonic and climatic influences on the evolution of Quaternary depositional landforms along a segmented range-front fault, Sangre de Cristo Mountains, north-central New Mexico.

Bachelor of Science in Geosciences, May 1986 from the Pennsylvania State University, Dr. T.W. Gardner, senior thesis advisor. Senior thesis: Geomorphic indicators of neotectonism of the Osa and Burica Peninsulas, southwest Costa Rica.

Employment History

<u>Director</u>	2023-present	Advising and Academic Planning, College of Arts and Sciences, Lehigh University.
<u>Co-Director</u>	2012 – 2013	Lehigh Field Camp, Dept of Earth and Environmental Sciences, Lehigh University.
<u>Co-Director</u>	July 2010–June 2012	Environmental Initiative Program, Lehigh University.
<u>Adjunct Professor</u>	2008	Department of Earth Sciences, Swiss Federal Technical Institute
<u>Chair</u>	July 2007–July 2013	Dept of Earth and Environmental Sciences, Lehigh University.

<u>Professor</u>	August 2007–present	Dept of Earth and Environmental Sciences, Lehigh University.
<u>Director</u>	2004 – 2012	Lehigh Field Camp, Dept of Earth and Environmental Sciences, Lehigh University.
<u>Associate Professor</u>	1999 – 2007	Department of Earth and Environmental Sciences, Lehigh University.
<u>Assistant Professor</u>	Aug 1994–July 1999	Department of Earth and Planetary Sciences, Univ. of New Mexico, Albuquerque, NM.
<u>NSF Postdoc Fellow</u>	July 1993-July 1994	Department of Geology and Geophysics, Yale University, New Haven, CT.
<u>Graduate Fellow</u>	Aug 1990-May 1993	Earth System Science Research Fellowship and Shell Research Fellowship, Department of Geosciences, The Pennsylvania State Univ.
<u>Principal investigator</u>	June 1990-June 1992	COGEOMAP surficial geologic mapping project for the Maryland Geological Survey and the United States Geological Survey.
<u>Assistant Geologist</u>	June 1986- July 1987	Ground Water Quality Control Section, Division of Water Resources, New Jersey Department of Environmental Protection.

B. Publications and Other Scholarly Work (Jan, 2026 h-factor = 47 Google Scholar; 35 Web of Science)

Book Chapters

- (11) Pazzaglia, F. J., **2022**, Fluvial Terraces, *in* Shroder, J., (Editor-in-chief), Wohl, E. (Volume Editor), *Treatise on Geomorphology*, second edition, volume 6.2, *Fluvial Geomorphology*, Elsevier Academic Press, doi:10.1016/B978-0-12-409548-9.12088-3.
- (10) Pazzaglia, F. J. and Fisher, J., **2022**, A reconstruction of Apennine uplift history and the development of transverse drainages from longitudinal profile inversion, *in* Koeberl, C. Claeys, P., and Montanari, S., eds, *From the Guajira desert to the Apennines, and from Mediterranean microplates to the Mexican killer asteroid: Geological Society of America Special Paper 557*, doi.org/10.1130/2022.2557(09).
- (9) Pazzaglia, F. J., Carter, M., Berti, C., Counts, R., Hancock, G., Harbor, D., Harrison, R., Heller, M., Mahan, S., Malenda, H., McKeon, R., Nelson, M., Prince, P., Rittenour, T., Spotila, J., and Whittecar, R., **2015**, Geomorphology, active tectonics, and landscape evolution in the mid-Atlantic region, *in* Brezinski, D. K., Halka, J. P., and Ortt, R. A., Jr., eds., *Tripping from the Fall Line: Field Excursions for the GSA Annual Meeting, Baltimore, 2015: Geological Society of America Field Guide 40*, p. 109-169, doi:10.1130/2015.0040(06).
- (8) Berti, C., Pazzaglia, F. J., Meltzer, A. S., and Harrison, R. J., **2014**, Geomorphic evidence for persistent, cumulative deformation of the Virginia Piedmont in the vicinity of the 23 August, 2011 Mineral earthquake: *Geological Society of America Special Paper*, 509, doi:10.1130/2015.2509(21).

- (7) Pazzaglia F.J., **2013**, Fluvial Terraces, *in*, John F. Shroder (Editor-in-chief), Wohl, E. (Volume Editor), *Treatise on Geomorphology*, Vol 9, Fluvial Geomorphology, San Diego: Academic Press, p. 379-412.
- (6) Gunderson, K. L., Anastasio, D. J., Kodama, K. P., and Pazzaglia, F. J., **2012**, Rock-magnetic cyclostratigraphy for the late Pleistocene Stirone section, northern Apennine mountain front, Italy *in* Jovane, L., Housen, B., Herrero-Berrera, E., and Hinnov, L., eds., *Temporal variation of geological processes revealed by magnetic methods*: Geological Society of London, Special Publication 373, doi:10.1144/SP373.8
- (5) Frankel, K. L. and Pazzaglia, F. J., **2006**, Mountain fronts, base level fall, and landscape evolution: Insights from the southern Rocky Mountains, *in* Willett, S. D., Hovius, N., Brandon, M. T., and Fisher, D. eds., *Tectonics, climate, and landscape evolution*: Geological Society of America Special Paper 398, p. 419-434, doi: 10.1130/2006.2398(26).
- (4) Pazzaglia, F. J., ed., **2006**, *Excursions in Geology and History: Field Trips in the Middle Atlantic States*: Geological Society of America Field Guide 8, doi: 10.1130/2006.fld008.
- (3) Pazzaglia, F. J. and Gardner, T. W., **2000**, Late Cenozoic large-scale landscape evolution of the U.S. Atlantic passive margin, *in* Summerfield, M. ed., *Geomorphology and Global Tectonics*: John Wiley, New York, p.283-302.
- (2) Pazzaglia, F. J., Gardner, T. W., and Merritts, D., **1998**, Bedrock fluvial incision and longitudinal profile development over geologic time scales determined by fluvial terraces, *in* Wohl, E. and Tinkler, K., eds., *Bedrock Channels: American Geophysical Union, Geophysical Monograph Series*, v. 107, p. 207-235.
- (1) Gardner, T. W., Hare, P. W., Pazzaglia, F. J., and Sasowsky, I. D., **1987**, Evolution of drainage systems along a convergent plate margin, Pacific Coast, Costa Rica, *in* Graf, W. L., ed., *Geomorphic systems of North America: The Geology of North America, Decade of North American Geology*, Geological Society of America, special centennial volume 2, Boulder, Colorado, p. 357-372.

Articles in Refereed Journals

- (73) Roberge, L., Gasparini, N.M., Straub, K. M., Campforts, B., Pazzaglia, F. J., 2026, Can autogenic landslide noise disrupt allogenic sedimentary signal transmission?: *Journal of Geophysical Research, Earth Surface*, doi:
- (72) Mills, J.R., Tanski, N.M., Rittenour, T. M., Pazzaglia, F.J., Pavano, F., and Roberge, L., 2026, Downstream dilution of quartz luminescence sensitivity due to rapid erosion in the tectonically active Peloritani Range, NE Sicily: *Quaternary Research*, DOI: <https://doi.org/10.1017/qua.2026.10085>.
- (71) Consuegra, N. P., Ruetnick, G., Codilean, A., Pazzaglia, F. J., and Wilkinson, B., **2025**, Ontogenies of orogenies and erodibilities of landscapes: *Journal of Geology*, <https://doi.org/10.1086/739562>.
- (70) Huang, Z., Peters, S.C., Pazzaglia, F. J., and Hernandez, M., **2024**, A chemical weathering and paleoclimatic reconstruction of the early Cambrian environment of the Wyoming craton from the Wind River Canyon, WY paleosol on the Great Unconformity: *Precambrian Research* 409, 107447; <https://doi.org/10.1016/j.precamres.2024.107447>.
- (69) Tanski, N. M., Rittenour, T. M., Pavano, F., Pazzaglia, F. J., Mills, J., Corbett, L. B., and Bierman, P., **2024**, Quartz luminescence sensitivity enhanced by residence time in the

- critical zone: *Quaternary Geochronology*, 84, 101613, <https://doi.org/10.1016/j.quageo.2024.101613>.
- (68) Pavano, F., Pazzaglia, F. J., Rittenour, T., Catalano, S., Corbett, L. B., and Bierman, P., **2024**, Integrated uplift, subsidence, erosion, and deposition in a tightly coupled source to sink system, Pagliara basin, NE Sicily, Italy: *Basin Research*, DOI: 10.1111/bre.12845.
- (67) Kodama, K. P. and Pazzaglia, F. J., **2023**, New paleomagnetic and rock magnetic cyclostratigraphy-determined age, deposition rates, and processes for a part of the Calvert Cliffs (Miocene) passive margin deposits: *Earth Science Reviews* 245, <https://doi.org/10.1016/j.earscirev.2023.104570>.
- (66) Marder, E., Galen, S. F., and Pazzaglia, F. J., **2023**, Late Cenozoic deformation in the US southern Colorado Front Range revealed by river profile analysis and fluvial terraces: *Geological Society of America Bulletin*, <https://doi.org/10.1130/B36440.1>.
- (65) Fisher, J. A., Pazzaglia, F. J., Anastasio, D. J., and Gallen, S. F., **2022**, Linear inversion of fluvial topography in the northern Apennines: comparison of base level fall to crustal shortening: *Tectonics*, 41, e2022TC007379, doi.org/10.1029/2022TC007379
- (64) Lanari, R., Reitano, R., Giachette, E., Pazzaglia, F. J., Clementucci, R., Faccenna, C., and Fellin, G., **2022**, Is the Anti-Atlas of Morocco still uplifting?: *Journal of African Earth Sciences*, 188, <https://doi.org/10.1016/j.jafrearsci.2022.104481>.
- (63) Anastasio, D. J., Pazzaglia, F. J., Pares, J. M., Kodama, K. P., Berti, C., Fisher, J. A., Montanari, A., and Carnes, L. K., **2021**, Applications of anisotropy of magnetic susceptibility (AMS) fabrics to determine the kinematics of active tectonics: Examples from the Betic Cordillera, Spain and the northern Apennines, Italy: *Solid Earth Journal*, doi:10.5194/se-12-1125-2021.
- (62) Ott, R., Wegmann, K. W., Gallen, S. F., Pazzaglia, F. J., Brandon, M. Kosuke, U., and Fassoulas, C., **2021**, Reassessing Eastern Mediterranean tectonics and earthquake hazard from the AD 365 earthquake: *AGU Advances*, 10.1029/2020AV000315.
- (61) Pazzaglia, F. J., Malenda, H.F., McGavick, M. L., Raup, C., Carter, M.W., Berti, C., Mahan, S., Nelson, M., Rittenour, T.M., Counts, R., Willenbring, J., Germanoski, D., Peters, S. C., and Holt, W.D., **2021**, River terrace evidence of tectonic processes in the eastern North American plate interior, South Anna River, Virginia: *Journal of Geology*, 000, 000-000, doi:10.1086/712636.
- (60) Lanari, R., Fellin, M.G., Faccenna, C., Balestrieri, M. L., Pazzaglia, F.J., Youbi, N., and Maden, C., **2020**, Exhumation and surface evolution of the western High Atlas and surrounding regions as constrained by low-temperature thermochronology: *Tectonics*, 39, 10.1029/2019TC005562.
- (59) Bruno, P. P., Berti, C., and Pazzaglia, F. J., **2019**, Accommodation, slip inversion, and fault segmentation in a province-scale shear zone from high-resolution, densely spaced wide-aperture seismic profiling, Centennial Valley, MT, USA: *Scientific Reports*, 9:9214, <https://doi.org/10.1038/s41598-019-45497-1>.
- (58) Gunderson, K. L., Anastasio, D. J., Pazzaglia, F. J., and Kodama, K. P., **2018**, Intrinsically variable blind thrust faulting: *Tectonics*, 37, doi:10.1029/2017TC004917.
- (57) Moodie, A. J., Pazzaglia, F. J., and Berti, C., **2017**, Exogenic forcing and autogenic processes on continental divide location and mobility: *Basin Research*, 30, 344-369, doi: 10.1111/bre.12256.

- (56) Pavano, F., Pazzaglia, F. J., and Catalano, S., **2016**, Knickpoints as geomorphic markers of active tectonics: a case study from northeastern Sicily (southern Italy): *Lithosphere*, 8, 633-648.
- (55) Sembroni, A., Molin, P., Pazzaglia, F. J., Faccenna, C., and Abebe, B., **2016**, Evolution of continental-scale drainage in response to mantle dynamics and surface processes: An example from the Ethiopian Highlands: *Geomorphology*, 261, 12-29.
- (54) Schmidt, J. L., Zeitler, P. K., Pazzaglia, F. J., Tremblay, M. M., Schuster, D. L., and Fox, M., **2015**, Knickpoint evolution on the Yarlung River: Evidence for late Cenozoic uplift of the southeastern Tibet plateau margin: *Earth and Planetary Science Letters*, 430, 448-457, <https://doi.org/10.1016/j.epsl.2015.08.041>.
- (53) Gallen, S. F., Pazzaglia, F. J., Wegmann, K. W., Pederson, J. L., and Gardner, T. W., **2015**, The dynamic reference frame of rivers and apparent transience in incision rates: *Geology*, doi: 10.1130/G36692.1.
- (52) Giachetta, E., Refice, A., Copolongo, D., Gasparini, N., and Pazzaglia, F. J., **2014**, Orogen-scale drainage network evolution and response to erodibility changes: insights from numerical experiments: *Earth Surface Processes and Landforms*, 39, 1259-1268.
- (51) Gallen, S. F., Wegmann, K. W., Bohnenstiehl, Pazzaglia, F. J., Brandon, M. T., and Fassoulas, C., **2014**, Active simultaneous uplift and margin-normal extension in a forearc high, Crete, Greece: *Earth and Planetary Science Letters*, 398, 11-24, doi.org/10.1016/j.epsl.2014.04.038.
- (50) Gunderson, K. L., Pazzaglia, F. J., Picotti, V., Anastasio, D. J., Kodama, K. P., Rittenour, T., Frankel, K. F., Ponza, A., Berti, C., Negri, A., and Sabbatini, A., **2014**, Unraveling tectonic and climatic controls on synorogenic stratigraphy: *Geological Society of America Bulletin*, 126, 532-552, doi.org/10.1130/B30902.1.
- (49) McKeon, R. E., Zeitler, P. K., Pazzaglia, F. J., Idleman, B. D., and Enkelmann, E., **2013**, Decay of an old orogen: Inferences about Appalachian landscape evolution from low-temperature thermochronology: *Geological Society of America Bulletin*, doi: 10.1130/B30808.1.
- (48) Gunderson, K. L., Anastasio, D. J., Pazzaglia, F. J., and Picotti, V., **2013**, Fault slip rate variability on 10^4 - 10^5 yr timescales for the Salsomaggiore blind thrust fault, Northern Apennines, Italy: *Tectonophysics*, 608, 356-365, doi.org/10.1016/j.tecto.2013.09.018.
- (47) DiNaccio, D., Boncio, P., Brozzetti, F., Pazzaglia, F. J., and Lavecchia, G., **2013**, Morphotectonic analysis of the Lunigiana and Garfagnana grabens (northern Apennines, Italy): Implications for active normal faulting: *Geomorphology*, 201, 293-311.
- (46) Ferraris, F., Firpo, M., and Pazzaglia, F. J., **2012**, DEM analyses and morphotectonic interpretation: The Plio-Quaternary evolution of the eastern Ligurian Alps, Italy: *Geomorphology*, doi: [10.1016/j.geomorph.2012.01.009](https://doi.org/10.1016/j.geomorph.2012.01.009).
- (45) Wolin, E., Stein, S., Pazzaglia, F. J., Meltzer, A., Kafka, A., and Berti, C., **2012**, Mineral, Virginia earthquake illustrates seismicity of a passive-aggressive margin: *Geophysical Research Letters*, 39, doi:10.1029/2011GL050310.
- (44) Bruno, P. P., Pazzaglia, F. J., and Picotti, V., **2011**, High-resolution shallow imaging of the northern Apennines mountain front near Bologna, Italy, using wide-aperture shallow seismic reflection data: *Geophysical Research Letters*, 38, L16302, doi:10.1029/2011GL047828.

- (43) Anastasio, D. J., Majerowicz, C. N., Pazzaglia, F. J., and Regalla, C. A., **2010**, Late Pleistocene – Holocene ruptures of the Lima Reservoir fault, SW Montana: *Journal of Structural Geology*, 32, 1996-2008, doi:10.1016/j.jsg.2010.08.012.
- (42) Ponza, A., Pazzaglia, F. J., and Picotti, V., **2010**, Thrust-fold activity at the mountain front of the northern Apennines (Italy) from quantitative landscape analysis: *Geomorphology*, 123, 211-231.
- (41) Wilson, L. F., Pazzaglia, F. J., and Anastasio, D. J., **2009**, A fluvial record of active fault-propagation folding, Salsomaggiore anticline, northern Apennines, Italy: *Journal of Geophysical Research*, 114, doi:10.1029/2008JB005984.
- (40) Picotti, V., Ponza, A., Pazzaglia, F. J., **2009**, Topographic expression of active faults in the foothills of the northern Apennines: *Tectonophysics*, 474, 285-294.
- (39) Belmont, P., Morris, D. P., Pazzaglia, F. J., and Peters, S. C., **2009**, Penetration of ultraviolet radiation in streams of eastern Pennsylvania: Topographic controls and the role of suspended particulates: *Aquatic Sciences*, DOI 10.1007/s00027-009-9120-7.
- (38) Wegmann, K. W. and Pazzaglia, F. J., **2009**, Late Quaternary fluvial terraces of the Romangna and Marche Apennines, Italy: Climatic, lithologic, and tectonic controls on terrace genesis in an active orogen: *Quaternary Science Reviews*, 28, 137-165, doi:10.1016/j.quascirev.2008.10.006.
- (37) Eppes, M. C., Bierma, R., Vinson, D., and Pazzaglia, F. J., **2008**, A soil chronosequence study of the Reno valley, Italy: insights into the relative role of climate versus anthropogenic forcing on hillslope processes during the mid-Holocene: *Geoderma*, 147, 97-107.
- (36) Picotti, V. and Pazzaglia, F. J., **2008**, A new active tectonic model for the construction of the Northern Apennines mountain front near Bologna (Italy): *Journal of Geophysical Research*, v. 113, doi:10.1029/2007JB005307.
- (35) Galster, J. C., Pazzaglia, F. J., and Germanoski, D., **2008**, Measuring the impact of urbanization on channel widths using historic aerial photographs and modern surveys: *Journal of the American Water Resources Association*, v. 44, 1-14.
- (34) Wegmann, K. W., Zureck, B. D., Regalla, C. A., Bilardello, D., Wolleburg, J. L., Kopczyński, S. E., Ziemann, J. M., Haight, S. L., Apgar, J. D., Zhao, C., and Pazzaglia, F. J., **2007**, Position of the Snake River watershed divide as an indicator of geodynamic processes in the greater Yellowstone region, western North America: *Geosphere*, v. 3, p. 272-281.
- (33) Regalla, C. A., Anastasio, D. J., and Pazzaglia, F. J., **2007**, Characterization of the Monument Hill fault system and implications for the active tectonics of the Red Rock Valley, Southwestern Montana: *Journal of Structural Geology*, 29, 1339-1352.
- (32) Picotti, V. and Pazzaglia, F. J., **2007**, Comment on “Shale diapirism in the Quaternary tectonic evolution of the Northern Apennine, Bologna, Italy by Andrea Borgia et al.": *Journal of Geophysical Research*, 112, B05403, doi:10.1029/2006JB004741.
- (31) Pazzaglia, F. J., J. Selverstone, M. Roy, K. Steffen, S. Newland-Pearce, W. Knipscher, and J. Pearce, **2007**, Geomorphic expression of midcrustal extension in convergent orogens: *Tectonics*, 26, TC6010, doi:10.1029/2006TC001961.
- (30) Frankel, K. L., Pazzaglia, F. J., and Vaughn, J. D., **2007**, Knickpoint evolution in a vertically bedded substrate and upstream-dipping terraces: *Geological Society of America Bulletin*, v. 119, p.476-486.

- (29) Belmont, P. W., Pazzaglia, F. J., and Gosse, J., **2007**, Cosmogenic ^{10}Be as a tracer for hillslope and channel sediment dynamics in the Clearwater River, western Washington State: *Earth and Planetary Science Letters*, v. 264, p. 123-135.
- (28) Galster, J. C., Pazzaglia, F. J., Hargreaves, B., Morris, D. P., Peters, S. C., and Weissman, R. N., **2006**, The effects of urbanization on watershed hydrology: the scaling of discharge with drainage area: *Geology*, v. 34, p. 713-716.
- (27) Zaprowski, B., Pazzaglia, F. J., and Evenson, E. B., **2005**, Climatic influences on profile concavity and river incision: *Journal of Geophysical Research – Earth Surface*, v. 110, F03004, doi:10.1029/2004JF000138. **(2, 0)**
- (26) Spagnolo, M. and Pazzaglia, F. J., **2005**, Testing the geological influences on the evolution of river profiles: a case from the northern Apennines, Italy: *Geografia Fisica and Dinamica Quaternaria*, v. 28, p. 103-113.
- (25) Harkins, N. W., Anastasio, D. J., and Pazzaglia, F. J., **2005**, Tectonic geomorphology of the Red Rock fault, insights into segmentation and landscape evolution of a developing range front normal fault: *Journal of Structural geology*, v. 27, p. 1925-1939.
- (24) Frankel, K. and Pazzaglia, F. J., **2005**, Tectonic geomorphology, drainage basin metrics, and active mountain fronts: *Geografia Fisica and Dinamica Quaternaria*, v. 28, p. 7-21.
- (23) Molin, P., Pazzaglia, F. J., and Dramis, F., **2004**, Geomorphic expression of active tectonics in a rapidly deforming forearc, Sila massif, Calabria, southern Italy: *American Journal of Science*, v. 304, p. 559-589. **(1, 0)**
- (22) Etheredge, D., Gutzler, D. S., and Pazzaglia, F. J., **2004**, Geomorphic response to seasonal variations in rainfall in the Southwest United States: *Geological Society of America Bulletin*, v. 116, p. 606-618. **(2, 0)**
- (21) Pearce, S. A., Pazzaglia, F. J., and Eppes, M. C., **2004**, Ephemeral stream response to growing folds: *Geological Society of America Bulletin*, v. 116, p. 1223-1239. **(2, 0)**
- (20) Roy, M., Kelley, S. A., Pazzaglia, F. J., Cather, S., and House, M., **2004**, Middle Tertiary buoyancy modification and its relationship to rock exhumation, cooling, and subsequent extension at the eastern margin of the Colorado Plateau: *Geology*, v. 32, p. 925-928.
- (19) Pazzaglia, F. J., **2003**, Landscape evolution models, *in* Gillespie, A. R., Porter, S. C., and Atwater, B. F., eds., *The Quaternary Period in the United States*: Amsterdam, Elsevier, p. 247-274, doi:10.1016/S1571-0866(03)01012-1.
- (18) Pearce, J. P., Pazzaglia, F. J., Evenson, E. B., Germanoski, D., Alley, R., Lawson, D., and Denner, J., **2003**, Bedload component of glacially discharged sediment: Insights from the Matanuska Glacier: *Geology*, v. 31, p. 7-10.
- (17) Koning, D. J., Connell, S. D., Pazzaglia, F. J., and McIntosh, W. C., **2002**, Redefinition of the Ancha Formation and Pliocene-Pleistocene deposition in the Santa Fe embayment, north-central New Mexico: *New Mexico Geology*, v. 24, n. 3., p. 75-87.
- (16) Tomkin, J.H., Brandon, M.T., Pazzaglia, F.J., Barbour, J.R., Willett, S.D., **2003**, Quantitative testing of bedrock incision models, Clearwater River, NW Washington State, *Journal of Geophysical Research*, v. 108, no. B6, 2308, doi:10.1029/2001JB000862.
- (15) Wisniewski, P. and Pazzaglia, F. J., **2002**, Epeirogenic controls on Canadian River incision and landscape evolution, High Plains of northeastern New Mexico: *Journal of Geology*, v. 110, n. 4, p. 437-456.

- (14) Wegmann K. and Pazzaglia, F. J., **2002**, Holocene strath terraces, climate change, and active tectonics: the Clearwater River basin, Olympic Peninsula, Washington State: Geological Society of America Bulletin, v. 114, n.6, p. 731-744.
- (13) Karlstrom, K. E. et al., including Pazzaglia, F. J., **2002**, Structure and Evolution of the Lithosphere Beneath the Rocky Mountains: Initial Results from the CD-ROM Experiment: v. 12, n. 3, p. 4-10.
- (12) Pederson, J. L., Smith, G. A., and Pazzaglia, F. J., **2001**, Comparing the modern, Quaternary, and Neogene records of climate-controlled hillslope sedimentation in Southeast Nevada: Geological Society of America Bulletin, v. 113, no. 3, p. 305-319.
- (11) Pazzaglia, F. J. and Knuepfer, P., eds., **2001**, The steady-state orogen; concepts, field observations, and models: American Journal of Science Special Volume 301, no. 4-5 p. 313-512.
- (10) Zaprowski, B. J., Evenson, E. B., Pazzaglia, F. J., and Epstein, J., **2001**, Knickzone propagation in the Black Hills and northern High Plains; a different perspective on the late Cenozoic exhumation of the Laramide Rocky Mountains: Geology, v. 29, no. 6, p. 547-550.
- (9) Pazzaglia, F. J. and Brandon, M. T., **2001**, A fluvial record of long-term steady-state uplift and erosion across the Cascadia forearc high, western Washington State: American Journal of Science, v. 301, no. 4-5, p. 385-43.
- (8) Pederson, J. P., Pazzaglia, F. J., and Smith, G., **2000**, Ancient hillslope deposits: Missing links in the study of climate controls on sedimentation: Geology, v. 28, p. 27-30.
- (7) Pazzaglia, F. J. and Kelley, S. A., **1998**, Large-scale geomorphology and fission-track thermochronology in topographic and exhumation reconstructions of the southern Rocky Mountains, in Karlstrom, ed., Lithospheric evolution of the Rocky Mountains: Rocky Mountain Geology, v. 33, n.2, p. 229-257.
- (6) Formento-Trigilio, M. L. and Pazzaglia, F.J., **1998**, Tectonic geomorphology of Sierra Nacimiento; traditional and new techniques in assessing long-term landscape evolution of the southern Rocky Mountains: Journal of Geology, v. 106, p. 433-453.
- (5) Pazzaglia, F. J., Robinson, R., and Traverse, A., **1997**, Palynology of the Bryn Mawr Formation (Miocene): Insights on the age and genesis of middle Atlantic margin fluvial deposits: Sedimentary Geology, v. 108, p. 19-44.
- (4) Pazzaglia, F. J. and Brandon, M. T., **1996**, Macrogeomorphic evolution of the post-Triassic Appalachian Mountains determined by deconvolution of the offshore basin sedimentary record: Basin Research, 8, 255-278.
- (3) Pazzaglia, F. J. and Gardner, T. W., **1994**, Late Cenozoic flexural deformation of the middle U.S. Atlantic passive margin: Journal of Geophysical Research, v. 99, n. B6, p. 12,143-12,157.
- (2) Pazzaglia, F. J. and Gardner, T. W., **1993**, Fluvial terraces of the lower Susquehanna River: Geomorphology, v.8, p.83-113.
- (1) Pazzaglia, F. J., **1993**, Stratigraphy, petrography, and correlation of late Cenozoic middle Atlantic Coastal Plain deposits: Implications for late-stage passive margin geologic evolution, Geol. Soc. of Am. Bull., v.105, p.1617-1634.

Edited Field Guides, Circulars, Software.

- (34) Zelt, F., Shaulis, J., and Pazzaglia, F. J., **2023**, Special geologic features of Ohiopyle State Park, Pennsylvania, USA, in McLaurin, B. T., ed., Field Excursions to the Appalachian Plateaus and the Valley and Ridge for GSA Connects 2023: Geological Society of America, GSA Field Guide, [https://doi.org/10.1130/2023.0066\(03\)](https://doi.org/10.1130/2023.0066(03)).
- (33) Simoneau, M., Pazzaglia, F. J., and Fleeger, G., **2022**, Pleistocene drainage reversals and gorge cutting at the Laurentide ice margin in northwestern Pennsylvania interpreted from new cosmogenic exposure and luminescence ages: Field Conference of Pennsylvania Geologists, 86th Field Conference, p. 000-000.
- (32) Fisher, J.A., Gallen, S. F., and Pazzaglia, F. J., **2022**, jamesfisher-gis/LongProfile LinearInversion: Linear Inversion of River Longitudinal Profile. Zenodo. <https://doi.org/10.5281/zenodo.6499845>.
- (31) Kurak, E., Pazzaglia, F. J., Li, C.X., Patching, A., Shaulis, J., Corbett, L., Bierman, P., Nelson, M., and Rittenour, T., **2021**, Incision of the Youghiogheny River through the Laurel Highlands determined by a new river terrace stratigraphic age model, Ohiopyle State Park, southwestern Pennsylvania, *in* Anthony, ed., Geology of Ohiopyle State Park and the Laurel Highlands of southwestern Pennsylvania: Field Conference of Pennsylvania Geologists Guidebook 85, 51-73.
- (30) Pazzaglia, F. J., Kodama, K. P., Kidwell, S., and Vogt, P., **2018**, Stratigraphic, rock-magnetic, and geomorphic record of environmental change on a passive margin, Calvert Cliffs, Maryland, USA: Boulder, Colorado, Geological Society of America, field guide prepared for the American Geophysical Union fall meeting, 10-14 December, 2018, in celebration of AGU's Centennial year.
- (29) Pazzaglia, F. J., Etzel, N., Davison, K., Idleman, B. D., and Zeitler, P.K., **2018**, Syn- and post-rift erosional unroofing and Atlantic slope drainage development inferred from detrital zircon geochronology of the Perkasio Member of the Passaic Formation, Newark Basin, Holland Township, NJ, in Temporal, tectonic, climatic and environmental context of the Triassic-Jurassic rift system on eastern North America: Emerging concepts from the Newark rift basin: 83rd Annual Field Conference of Pennsylvania Geologists, Center Valley, PA, 05-06 October, 2018, <http://fcopg.org/>.
- (28) Huntington, K.W., and Klepeis, K.A., with 66 community contributors (including Pazzaglia, F. J.), **2018**, Challenges and opportunities for research in tectonics: Understanding deformation and the processes that link Earth systems, from geologic time to human time. A community vision document submitted to the U.S. National Science Foundation. University of Washington, 84 pp., <https://doi.org/10.6069/H52R3PQ5>.
- (27) Pazzaglia, F. J., **2014**, Brief thoughts on long-term landscape evolution in the mid-Atlantic region with a focus on the Pond Bank lignite, *in* Anthony, R., Pennsylvania's Great Valley and bordering mountains near Carlisle: Guidebook, 79th Annual Field Conference of Pennsylvania Geologists, 23-34.
- (26) Pazzaglia, F. J., Peters, S. C., and Cummins, K. T., **2014**, Late Cenozoic sedimentology, stratigraphy, and pedogenesis of the Furnace Creek fan exposed in the Valley Quarries pit, Mainsville, PA, *in* Anthony, R., Pennsylvania's Great Valley and bordering mountains near Carlisle: Guidebook, 79th Annual Field Conference of Pennsylvania Geologists, 101-112.
- (25) Gallen, S. and Pazzaglia, F. J., **2013**, Field trip to the Fall Zone, Cape Fear River, Raven Rock State Park: EarthScope National Meeting, Raleigh, N.C., http://www.iris.edu/hq/earthscope_meeting/page/agenda

- (24) Pazzaglia, F. J., Meltzer, A. S., Berti, C., Barstow, N., McNamara, D., Leeds, A., Meremonte, M., Luetgert, J., Hole, J., Chapman, M., Brown, L., Kim, W-Y, Horton, S., Herrmann, B., Stein, S., **2012**, Mineral, VA earthquake demonstrates the passive-aggressive margin of eastern North America: EarthScope InSights, Spring 2012 issue, http://insights.asu.edu/download_index.html.
- (23) Pazzaglia, F. J., Zeitler, P. K., Idleman, B. D., McKeon, R., Berti, C., Enkelmann, E., Laucks, J., Ault, A., Elasmr, M., and Becker, T., **2010**, Tectonics and topography of the Cenozoic Appalachians: Field Conference of Pennsylvania Geologists, 75th Field Conference, Lancaster, PA, 111-126.
- (22) Pazzaglia, F. J., Braun, D. D., Pavich, M., Bierman, P., Potter, N., Merritts, D., Walter, R., and Germanoski, D., **2006**, Rivers, glaciers, landscape evolution, and active tectonics of the central Appalachians, Pennsylvania and Maryland, *in* Pazzaglia, F. J., ed., Excursions in Geology and History: Field Trips in the Middle Atlantic States: Geological Society of America Field Guide 8, p. 169-197, doi: 10.1130/2006.fld008(09).
- (21) Pazzaglia, F. J., **2005**, River responses to Ice Age (Quaternary) climates in New Mexico, *in* Lucas, S. G., Morgan, G. S., and Zeigler, K. E., eds., New Mexico's Ice Ages: New Mexico Museum of Natural History and Science Bulletin No 28., p. 115-124.
- (20) Pazzaglia, F. J. and Hawley, J. W., **2004**, Neogene (rift flank) and Quaternary geology and Geomorphology in, Mack, G. and Giles, K., eds., The Geology of New Mexico-A Geologic History: New Mexico Geological Society Special Publication 11, Albuquerque, NM, p. 407-437.
- (19) Pazzaglia, F. J., Thackray, G. D., Brandon, M. T., Wegmann, K.W., Gosse, J., McDonald, E., Garcia, A. F., and Prothero, D., **2003**, Tectonic geomorphology and the record of Quaternary plate boundary deformation in the Olympic Mountains, *in* Swanson, T.W., ed., Western Cordillera and adjacent areas: Boulder, Colorado, Geological Society of America Field Guide 4, p. 37-67.
- (18) Braun, D. D., Pazzaglia, F. J., and Potter, N. Jr., **2003**, Margin of the Laurentide ice to the Atlantic Coastal Plain: Miocene-Pleistocene landscape evolution in the central Appalachians, *in* Easterbrook, D. J., ed., Quaternary Geology of the United States, INQUA 2003 Field Guide Volume, Desert Research Institute, Reno, NV, p. 219-244.
- (17) Koning, D. J. and Pazzaglia, F. J., **2002**, Alluvial Fan Stratigraphy along the Southern Sacramento Mountains, NM, and Implications Regarding Late Quaternary Paleoclimate, Soil Genesis, and Sedimentation Processes: New Mexico Geological Society Guidebook 53.
- (16) Koning, D. J. and Pazzaglia, F. J., **2002**, Paleoseismicity of the southern Alamogordo fault along the Sacramento Mountains, southern Rio Grande rift, New Mexico: New Mexico Geological Society Guidebook 53.
- (15) Pazzaglia, F. J., Brandon, M. T., and Wegmann, K., **2002**, A fluvial record of plate-boundary deformation in the Olympics Mountains, *in* Moore, G., ed., Field Guide to Geologic Processes in Cascadia: Oregon Department of Geology and Mineral Industries, Special Paper 36, p. 223-256.
- (14) Pazzaglia, F. J., Brandon, M. T., and Wegmann, K., **2002**, A fluvial record of plate-boundary deformation in the Olympics Mountains, *in* Moore, G., ed., Field Guide to Geologic Processes in Cascadia: Oregon Department of Geology and Mineral Industries, Special Paper 36, p. 223-256.

- (13) Pederson, J. L., Pazzaglia, F. J., Smith, G. A., and Mou, Y., **2000**, Neogene through Quaternary hillslope records, basin sedimentation, and landscape evolution of southeastern Nevada, *in* Lageson, D. R., Peters, S. G., and Lahren, M. M., eds., Great Basin and Sierra Nevada Field Guide: Geological Society of America Field Guide 2, p. 117-134.
- (12) Karlstrom, K.E., Cather, S. M., Kelley, S.A., Heizler, M. T., Pazzaglia, F.J., and Roy, M., **1999**, Sandia Mountains and Rio Grande rift: Ancestry of structures and history of deformation: New Mexico Geological Society Guidebook 50, p.155-166.
- (11) Roy, M., Karlstrom, K., Kelley, S., Pazzaglia, F. J., and Cather, S., **1999**, Topographic setting of the Rio Grande rift, New Mexico: Assessing the role of flexural “rift-flank uplift” in the Sandia Mountains: New Mexico Geological Society Guidebook 50, p. 167-174.
- (10) Pazzaglia, F. J., Woodward, L. A., Lucas, S. G., Anderson, O. J., Wegmann, K. W., and Estep, J. W., **1999**, Phanerozoic geologic evolution of the Albuquerque area: New Mexico Geological Society Guidebook 50, p. 97-114.
- (9) Pazzaglia, F. J. and Lucas, S., eds., **1999**, Albuquerque Geology: Albuquerque, New Mexico Geological Society Guidebook 50, 448 p.
- (8) Pazzaglia, F. J. and Pinter, N., **1996**, Continuing Education Manual on Geomorphic Expression of Active Tectonics: Geological Society of America, Boulder, Colorado, 234p.
- (7) Rogers, M.A., Kues, B. S., Goff, F., Pazzaglia, F. J., Woodward, L. A., Lucas, S. G., and Gardner, J., **1996**, First-day road log, from Bernalillo to San Ysidro, southern Nacimiento Mountains, Guadalupe Box, Jemez Springs, Valles Caldera, and Los Alamos, *in* Goff, F., Kues, B. S., Rogers, M. A., McFadden, L. D., and Gardner, J. N., The Jemez Mountains region: New Mexico Geological Society Forty-Seventh Annual Field Conference Guidebook, p. 1-39.
- (6) Formento-Trigilio, M. L. and Pazzaglia, F. J., **1996**, Quaternary stratigraphy, tectonic geomorphology, and long-term landscape evolution of the southern Sierra Nacimiento, *in* Goff, F., Kues, B. S., Rogers, M. A., McFadden, L. D., and Gardner, J. N., The Jemez Mountains region: New Mexico Geological Society, 47th annual field Guidebook, p. 335-346.
- (5) Smith, G. A. and Pazzaglia, F. J., **1995**, The Pliocene (?) Borrego pediment surface and development of the western Sangre de Cristo mountains front, *in* Bauer, P.W., Kues, B. S., Dunbar, N.W., Karlstrom, K. E., and Harrison, B., Geology of the Santa Fe region, New Mexico Geological Society Forty-Sixth Annual Field Conference Guidebook, 6-8.
- (4) Thackray, G. D. and Pazzaglia, F. J., **1994**, Quaternary stratigraphy, tectonic geomorphology, and fluvial evolution of the western Olympic Peninsula, Washington, *in* Swanson, D. A. and Haugerud, R. A., eds., Guides to Field Trips, 1994 Geological Society of America Annual Meeting, Seattle, Washington, p. 2A-1 - 2A-30.
- (3) Gardner, T. W., Braun, D. D., Pazzaglia, F. J., and Sevon, W. D., **1993**, Late Cainozoic landscape evolution of the Susquehanna River basin: Third International Geomorphologic Conference fieldtrip guidebook, Hamilton, Ontario, 288 pp.
- (2) Pazzaglia, F. J., **1991**, Natural factors affecting archeological site formation on Guadalupe Mountain, *in* Seaman, T. J., ed., Archeological investigations on Guadalupe Mountain, Taos County, New Mexico: University of New Mexico Office of Contract Archeology, University of New Mexico Press, Albuquerque, New Mexico.

- (1) Pazzaglia, F. J. and Wells, S. G., 1990, Quaternary stratigraphy, soils, and geomorphology of the northern Rio Grande Rift: New Mexico Geological Society, *in* Bauer, P. W., Lucas, S. G., Mawer, C. K., and McIntosh, W.C., eds., Tectonic development of the southern Sangre de Cristo Mountains, New Mexico: New Mexico geological Society Forty-First Guidebook, Albuquerque, New Mexico, p. 423-430.

Geologic Maps and Technical Reports

- (21) Pazzaglia, F. J., 2020, USGS Award G18AP00061: River knickpoint paleogeodesy and measurement of crustal deformation in the Central Virginia Seismic Zone (CVSZ) and Reading Lancaster Seismic Zone (RLSZ): USGS EHP Report, 64 p.
- (20) Burton, W.C., Harrison, R.W., Malenda, H.F., Pazzaglia, F.J., and Crider, E.A., Jr., **2019**, Geologic map of the Ferncliff and Louisa quadrangles, Louisa, Fluvanna, and Goochland Counties, Virginia: U.S. Geological Survey Scientific Investigations Map 3429, 1 sheet, scale 1:24,000, <https://doi.org/10.3133/sim3429>.
- (19) Pazzaglia, F. J., 2017, USGS Award G15AP00092: Geomorphic expression of the seismotectonics and seismic potential of source zones in CEUS: CVSZ and Charleston.
- (18) Malenda, H. F., Raup, C., Pazzaglia, F. J., and Berti, C., **2014**, Surficial geologic map of the South Anna River in the Ferncliff and Pendleton quadrangles, Virginia: U.S. Geological Survey EDMAP G13AC000115: scale 1:24,000.
- (17) Majerowicz, C.N., Troy, J.K., Anastasio, D.J., Pazzaglia, F. J., **2010**, Bedrock and Surficial Geologic Map of the Lima Dam 7.5' Quadrangle, Beaverhead County, Southwest Montana. Montana Bureau of Mines and Geology EDMAP 7, 17 p. 2 sheets, scale 1:24,000.
- (16) Majerowitz, C., Troy, J., Anastasio, D. J., and Pazzaglia, F. J., **2008**, Bedrock and surficial geologic map of the Lima Dam 7.5' Quadrangle, Beaverhead County, Southwest Montana: Montana Bureau of Mines and Geology Open File Report 000, scale 1:24,000.
- (15) Majerowitz, C., Anderson, L. D., Anastasio, D. J., and Pazzaglia, F. J., **2007**, Bedrock and surficial geologic map of the Henry Gulch 7.5' Quadrangle, Beaverhead County, Southwest Montana: Montana Bureau of Mines and Geology Open File Report 563, scale 1:24,000.
- (14) Regalla, C. A., Reyman, D. K. S., Anastasio, D. J., and Pazzaglia, F. J., **2006**, Bedrock and Surficial Geologic Map of the Red Rock 7.5 minute quadrangle, Beaverhead County, Southwestern Montana: Montana Bureau of Mines and Geology Open File Report 533, scale 1:24,000.
- (13) Wendell, M. and Pazzaglia F. J., **2005**, Geologic map and cross section of Lehigh Gorge State Park, Carbon Co, PA: U.S. Geological Survey, EDMAP, 1:24,000.
- (12) Harkins, N. W., Latta, D. K., Anastasio, D. J., and Pazzaglia, F. J., **2004**, Surficial and bedrock geologic map of the Dixon Mountain 7.5' quadrangle, southwest Montana: Montana Bureau of Mines and Geology Open File Report 495, scale 1:24,000, text 12 p., 2 pl.
- (11) Harkins, N. W., Newton, Mike, Anastasio, D. J., and Pazzaglia, F. J., **2004**, Bedrock and surficial geologic map of the Caboose Canyon 7.5' quadrangle, southwest Montana: Montana Bureau of Mines and Geology Open File Report 494, scale 1:24,000, text 14 p., 2 pl.

- (10) Frankel, K. and Pazzaglia, F. J., **2002**, Surficial geologic map of the Ponderosa quadrangle, NM: New Mexico Bureau of Geology Digital Open File Map, scale 1:24,000.
- (9) Osburn, G.R., Kelley, S., Rampey, M., Ferguson, C. Frankel, K., and Pazzaglia, F. J., **2002**, Geologic map of the Ponderosa, NM 7.5 minute quadrangle: New Mexico Bureau of Geology and Mineral Resources, Open-file Geologic Map, OF-GM 57b, scale 1:24,000.
- (8) Pazzaglia, F. J., Smith, G. A., and Wegmann, K., **1999**, Geologic map and report of the Loma Creston quadrangle, NM, New Mexico Bureau of Mines Open File Report, scale 1:24,000.
- (7) Koning, D., Pederson, J. L., and Pazzaglia, F. J. **1999**, Geologic map and report of the Sky Village NE quadrangle, NM, U.S. Geological Survey Open File Report, scale 1:24,000.
- (6) Chamberlin, R.M., Pazzaglia, F.J., Wegmann, K.W. and Smith, G.A., **1999**, Preliminary geologic map of the Loma Creston 7.5-min. quadrangle, Sandoval County, New Mexico, New Mexico Bureau of Mines and Mineral Resources, Open-file Geologic Map OF-GM 25, scale 1:24,000.
- (5) Pazzaglia, F. J., Pederson, J. L., Garcia, A., Koning, D., and Toya, C., **1998**, Geologic map and report of the Jemez Pueblo quadrangle, NM: New Mexico Bureau of Mines and Mineral Resources, scale 1:24,000.
- (4) Pazzaglia, F. J. and Cleaves, E. T., **1998**, Surficial geology of the Delta quadrangle, Harford County Maryland and York County Pennsylvania (COGEOGMAP): Maryland Geological Survey Report of Investigations 67, 43 p., scale 1:24,000.
- (3) Formento-Trigilio, M. L. and Pazzaglia, F. J., **1998**, Geologic map and report of the San Ysidro quadrangle, NM: New Mexico Bureau of Mines and Mineral Resources Open File Report, scale 1:24,000.
- (2) Ferguson, C. A., Timmons, J. M., Pazzaglia, F. J., Karlstrom, K. E., and Bauer, P. W., **1998**, Geologic map of the Sandia Park quadrangle, Bernalillo and Sandoval Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open File Report DM-1, 12 p., scale 1:24,000.
- (1) Formento-Trigilio, M. L., Wegmann, K., and Pazzaglia, F. J., **1997**, Geologic map and report of the Ojito Springs quadrangle, New Mexico: U.S. Geological Survey Open File Report, scale 1:24,000.

Conference Proceedings

- (182) Vaughan, N. and Ganbold, B., 2026, **Growth and incision of Pleistocene transpressional foreburg anticlines from a burial luminescence and ¹⁰Be cosmogenic surface exposure ages of transverse fan and terrace surfaces, Zereg basin, western Mongolia.**
- (181) Vaughan, N., Pazzaglia, F. J., Kodama, K., Kumar, D., Bertoldo, A., Bayasgalan, G., Ganbold, B., Sainbayar, Z., Tsagaan, B., Sanchez, G., Rugenstein, J., 2026,

Cyclostratigraphic-based sediment accumulation rates of late Cenozoic sediments in the Khyargas Nuur and Zereg basins, Mongolian Altai, western Mongolia.

- (180) Pazzaglia, F. J., Vaughan, N., and Rugenstein, J. K. C., 2026, Understanding the history of Altai Mountain uplift through an inversion of fluvial topography and implications for the Late Cenozoic aridification of continental interiors
- (179) Ortiz, G.S., Vaughan, N., Kratzer, B. E., Bertoldo, A., Meegan-Kumar, D., Bayasgalan, G., Tsagaan, B., Sainbayar, Z., Ganbold, B., Ibarra, D.F., Pazzaglia, F. J., Rugenstein, J.K.C., 2026, Understanding the history of Altai uplift using stable and clumped isotope analysis in western Mongolia
- (178) Sainbayar, Z., Adiya, M., Bayarsaikhan E., 2026, **Landslide Hazards in the Altai Mountains, Western Mongolia**
- (177) Kratzer, B. E., Vaughan, N., Kodama, K. P., Pazzaglia, F. J., Kumar, D., Bertoldo, A., Bayasgalan, G., Ganbold, B., Sainbayar, Z., Tsagaan, B., Sanchez, G., Rugenstein, J. 2026, **Paleomagnetic Age Model for Late Cenozoic Sediments at Khyargas Nuur and Zereg, Altai Mountains, Western Mongolia**
- (176) Suzuki, Y., Nakata, T., Goto, H., Bayasgalan, G., Bayasgalan, A., Adiya, M., Narangerel, S.-Y., and Chimed, O., 2026, **Ulaanbaatar fault systems and its potential threat to the urban settlement in central Mongolia**
- (175) Ganbold, B., Vaughan, N., and Pazzaglia, F. J., 2026, **High-resolution drone-based photogrammetry measures of syn-tectonic geomorphic marker deformation in an intracontinental transpressional orogen piedmont, Bumbat nuruu range, western Mongolia: Geological Society of America Abstracts with Programs. Vol. 58**
- (174) Vaughan, N. and Pazzaglia, F. J., 2025, Quaternary base level history, valley bottom wetland formation, and carbon storage across tectonic and climatic gradients for the Appalachian piedmont: Geological Society of America Abstracts with Programs. Vol. 57, 6, doi: 10.1130/abs/2025AM-8825
- (173) Bertoldo, A., Pazzaglia, F. J., Vaughan, N., Rugenstein, J. K. C., Sanchez Ortiz, G., Ganbold, B., Tsagaan, B., Zagdsuren, S., and Bayasgalan, G., 2025, Cyclostratigraphic analysis of a rhythmically bedded lacustrine deposit (upper Hargas Nuur Formation), Khyargas Nuur, Great Lakes Depression of western Mongolia: Geological Society of America Abstracts with Programs. Vol. 57, No. 3, doi: 10.1130/abs/2025NE-407816.
- (172) Wallace, J., Pazzaglia, F. J., Germanoski, D., and Peters, S. C., 2025, A new age model for the glacial reversal, assembly, and incision of the Allegheny River, northwestern

- Pennsylvania: Geological Society of America Abstracts with Programs. Vol. 57, No. 3, doi: 10.1130/abs/2025NE-408964.
- (171) Vaughan, N., Pazzaglia, F. J., Rugenstein, J., Ganbold, B. Bertoldo, R., Kodama, K. P., and Gelwick, K., **2024**, Growth of Mongolian Altai encoded in sedimentologic and geomorphic markers with rates constrained by a paleomagnetic and rock-magnetic cyclostratigraphic age model: Abstract, AGU, EP23B-1321.
- (170) Berti, C., Hopkins, N., Pazzaglia, F. J., Baker, G. S., and Burkhart, P., **2024**, The vision and impact of classroom and field education designed by Ed Evenson: GSA Annual Meeting, 10.1130/abs/2024AM-405615.
- (169) Silvani F., Mirabella F., Pazzaglia F. J., and Barchi M. R., **2024**, A previously unknown loess deposit in the Quaternary Gubbio basin (Umbria, central Italy): a stratigraphical registration of the paleoenvironment of the area: Abstract, EGU.
- (168) Silvani F. , Melelli L., Mirabella F., Cardinali M, Bucci F, Santangelo M, Pazzaglia F. J., Barchi M. R., **2024**, Geomorphic signature of the eastward marching of Quaternary extensional tectonics in the Northern Apennines (central Italy): the Colfiorito intermontane basins key area: Abstract, EGU.
- (167) Barnes, L., Pazzaglia, F. J., Pavano, F., and Kodama, K., **2023**, Coupled analyses of sediment magnetic properties, texture, erosion rate, and stratigraphic periodicity in rapidly accumulating fan deltas: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, 2023, doi: 10.1130/abs/2023AM-394880.
- (166) Stevens, P., Pazzaglia, F. J., Anastasio, D. J., Kodama, K. P., and Silvani, F., **2023**, Anisotropic magnetic susceptibility (AMS) fabric as a paleogeodetic measure of tectonic deformation in Quaternary deposits: An example from the Italian Apennines: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, 2023, doi: 10.1130/abs/2023AM-394013.
- (165) Pazzaglia, F. J., Pavano, F., Ritternour, T. M., Tanski, N., Gasparini, N., Roberge, L., Barnes, L., Bierman, P. R., and Corbett, L. B., **2023**, A fan-delta archive of earthquakes, basin inversion, and mountain building in the Peoritani Mountains of northeastern Sicily: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, 2023, doi: 10.1130/abs/2023AM-392284.
- (164) Consuegra, N. P., Ruetnick, G., Codilean, A., Pazzaglia, F. J., and Wilkinson, B., **2023**, Ontogenies of orogenies and landscape erodibility: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, 2023, doi: 10.1130/abs/2023AM-393268.
- (163) Kurak, E., Pazzaglia, F. J., Shaulis, J., Bierman, P. R., and Corbett, L. B., **2023**, Geochronologic constraints on the age of the Carmichaels Formation, associated lacustrine deposits, rates of landscape change, glacial assembly of continental drainage, and differential crustal warping, middle-lower Youghioghney watershed, Ohio-pyle State Park, south-western Pennsylvania: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, 2023, doi: 10.1130/abs/2023AM-393926.
- (162) Wallace, J., Pazzaglia, F. J., Fleeger, G., and Spencer, J., **2023**, Multiple Pleistocene cut-and-fill terrace-forming episodes indicated by surficial deposits along the middle Allegheny River, western Pennsylvania: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, 2023, doi: 10.1130/abs/2023AM-394205.
- (161) Huang, Z., Peters, S., Pazzaglia, F.J., and Hernandez, M., **2023**. The Neoproterozoic Wind River Canyon Paleosol: Implications for Chemical Weathering and Climate

- Conditions at the Wyoming Craton during the Precambrian-Cambrian Transition. AGU23.
- (160) Kodama, K. and Pazzaglia, F. J., **2023**, Magnetostratigraphy and rock magnetic cyclostratigraphy for a part of the Miocene passive margin deposits at Calvert Cliffs, Maryland, USA: EGU23-2392, <https://doi.org/10.5194/egusphere-egu23-2392>.
- (159) Roberge, L. O., Gasparini, N. M., Straub, K. M., Campforts, B., and Pazzaglia, F. J., **2022**, Exploring Signal Shredding by Landslides and Fluvial Processes in a Dynamic Numerically Modeled Steady State Landscape: AGU Fall meeting, EP55A-05.
- (158) Kodama, K. P. and Pazzaglia, F. J., **2022**, New paleomagnetic and rock magnetic cyclostratigraphy for a part of the Calvert Cliffs (Miocene) passive margin deposits: AGU Fall meeting, GP42B-0272.
- (157) Pavano, F., Pazzaglia, F. J., Roberge, L. O., Gasparini, N. M., Rittenour, T. M., and Tanski, N., **2022**, Sediment provenance and encoding of geomorphic processes in a Pleistocene fan-delta driven by periodic exogenic forcings: AGU Fall meeting, EP52B-0763.
- (156) Polashenski, M. J., Kodama, K. P., and Pazzaglia, F. J., **2021**, High Resolution Paleomagnetic and Cyclostratigraphic Late Cenozoic Age Model for a Mid-Atlantic Coastal Sediment Core (Qj32-27 from ODP Leg 174AX) Providing Constraints on Dynamic Uplift of Eastern North America Mid-Atlantic Region: AGU Fall Meeting, GP34A-04.
- (155) Pavano, F., Pazzaglia, F. J., Bliss, B., Rittenour, T. M., Tanski, N., Roberge, L. O., Gasparini, N. M., and Lyons, N. J., **2021**, Distinguishing multi-decadal, quasi-periodic autogenic processes from external forcings in deltaic stratigraphy: AGU Fall Meeting, EP35D-1347.
- (154) Polashenski, M., Pazzaglia, F. J., and Kodama, K. P., **2021**, Unsteady late Cenozoic epeirogeny of the central Appalachians encoded in the Delaware River – Atlantic Coastal Plain source to sink system: Geological Society of America Abstracts with Programs, Vol 53, No., 2021, doi: 10.1130/abs/2021AM-365410.
- (153) Pazzaglia, F. J. and Fisher, J., **2021**, Apennine uplift history and development of transverse drainages from longitudinal profile inversion: Geological Society of America Abstracts with Programs, Vol 53, No. 6 2021 doi: 10.1130/abs/2021AM-367305.
- (152) Gonzales, J. M., Pazzaglia, F. J., Anastasio, D., Germanoski, D., Gallen, S., Corbett, L., Bierman, P. R., Caffee, M. W., **2020**, Crustal strain in the Pennsylvania Piedmont revealed by long profile modeling and its relation to active seismicity: Geological Society of America Abstracts with Programs. Vol 52, No. 6, 2020, doi: 10.1130/abs/2020AM-358491
- (151) Kurak, E., Pazzaglia, F. J., Shaulis, J., Li, C. X., Corbett, L. B., Bierman, P. R., Rittenour, T. M., and Nelson, M., **2020**, Multiple dating techniques to determine transient knickpoint propagation, terrace formation, and incision of the Allegheny Plateau, Youghiogheny River, Ohio, PA: AGU Fall Meeting Abstract EP029-0009.
- (150) Pazzaglia, F. J., Gelwick, K., Ganbold, B., Guo, H., Gallen, S., Zeitler, P.K., Meltzer, A. S., Corbett, L., Bierman, P. R., **2020**, Synchronous transpressional uplift along widely-space intracontinental strike-slip faults, Gobi and Mongolian Altai, central Asia: Geological Society of America Abstracts with Programs, Vol 52, No. 6, 2020, doi: 10.1130/abs/2020AM-355525.

- (149) Pavano, F., Lyons, N., Bliss, B., Gallen, S. F., and Pazzaglia, F. J., **2020**, Encoding periodic tectonic forcings in the stratigraphy and geomorphology of a fault-controlled late Pleistocene source to sink system: Geological Society of America Abstracts with Programs, 52, 6, doi: 10.1130/abs/2020AM-352954
- (148) Pavano, F., Gallen, S. F., Pazzaglia, F. J., **2020**, Reconstructing Forearc Migration Geodynamics by Inverting River Long Profiles: the Case Study of the Calabrian Forearc (Central Mediterranean), AGU Fall Meeting 2020, EP031-0010.
- (147) Bliss, B., Pazzaglia, F. J., and Pavano, F., **2020**, Exogenic Forcing Encoded in the Lithostratigraphy of Sand-Quarry Deltas, AGU Fall Meeting 2020, EP019-0017.
- (146) Gelwick, K., Pazzaglia, F.J., Kodama, K., Corbett, L., Bierman, P., and Caffee, M., **2020**, Decoupled lithostratigraphy, orbitally-driven climate, and tectonics for a middle Pleistocene stratigraphic section in the Northern Apennines, Italy: EGU General Assembly Conference Abstracts, 4114.
- (145) Rittenour, T. M., Pazzaglia, F. J., Pavano, F., Lyons, N. J., and Gasparini, N., **2019**, Interpreting tectonic, climate, and autogenic signals from alluvial packages in northern Sicily, initial results and projections of ESPRESSO: Geological Society of America Abstracts with Programs. Vol. 51, No. 5, ISSN 0016-7592, doi: 10.1130/abs/2019AM-340550.
- (144) Pazzaglia, F. J. and Anastasio, D. J., 2019, Active tectonics and surface faulting in central Italy: stress reorientation, blind normal faults, and the march of a continental divide above an active, low-angle detachment: CRUST workshop, Perugia, Italy.
- (143) Anastasio, D. J., Pazzaglia, F. J., Pares, J. P., Montanari, A., and Carnes, L. K., **2019**, Novel application of the anisotropy of magnetic susceptibility (AMS) in Cenozoic strata across the central Apennines as a paleogeodetic measure of strain and the eastward march of extension above a foreland dipping detachment: AGU Fall meeting abstract GP14A-06.
- (142) Carnes, L. K., Kim, W., Whipple, K. X., and Pazzaglia, F. J., **2019**, An experimental approach to evaluate river meander response to gradient change: AGU Fall Meeting Abstract, EP51E-2123.
- (141) Rittenour, T. M., Pazzaglia, F. J., Pavano, F. Lyons, N. J., and Gasparini, N., **2019**, Interpreting tectonic, climatic, and autogenic signals from alluvial packPazzaglia, F. J.ages in northern Sicily, initial results and projections of ESPRESSO: Geological Society of America Abstracts with Programs. Vol. 51, No. 5, doi: 10.1130/abs/2019AM-340550.
- (140) Dent, E., Gelwick, K. D., Pazzaglia, F. J., Peters, S. C., and Kodama, K. P., **2019**, Reconstruction of middle Pleistocene interglacial paleoclimate from two buried paleosols in the Po Plain, Italy, and comparison to paleosols in the eastern U.S.: Geological Society of America Abstracts with Programs. Vol. 51, No. 1, doi: 10.1130/abs/2019NE-326625.
- (139) Gelwick, K D. and Pazzaglia, F. J., **2018**, Testing the canonical process geomorphology model of climate-driven sedimentation in the building of basin stratigraphy: Abstract [EP43D-2742] presented at 2018 Fall Meeting, AGU, Washington D.C., 10-14 Dec.
- (138) Gonzales, J. M., Pazzaglia, F. J., and Sur, B., **2018**, Using knickpoints as geomorphic markers of crustal deformation in a seismically active intraplate setting: Abstract [EP53E-1947] presented at 2018 Fall Meeting, AGU, Washington D.C., 10-14 Dec.

- (137) Carnes, L. K., Magnani, M. B., and Pazzaglia, F. J., **2018**, Reconciling sinuosity changes in ancient Mississippi River meanders in the context of Late-Pleistocene and Holocene active faults: Abstract [T33D-0431] presented at 2018 Fall Meeting, AGU, Washington D.C., 10-14 Dec.
- (136) Carrigan, J. H., Anastasio, D., J., Berti, C., and Pazzaglia, F. J., **2018**, Post-Miocene drainage reorganization in an active orogen, Sierra Nevada, Betic Cordillera, Spain: Geological Society of America Abstracts with Programs. Vol. 50, No. 6, ISSN 0016-7592, doi: 10.1130/abs/2018AM-322226.
- (135) Gelwick, K. D., Pazzaglia, F. J., and Kodama, K. P., **2018**, Lithologic and rock magnetic cyclostratigraphy in Pleistocene terrestrial sediments: Geological Society of America Abstracts with Programs. Vol. 50, No. 6, ISSN 0016-7592, doi: 10.1130/abs/2018AM-317318.
- (134) Pazzaglia, F. J., **2018**, Tectonic geomorphology insights to frontier research in plate tectonics with examples from plate boundary and plate interior settings: Geological Society of America Abstracts with Programs. Vol. 50, No. 6, ISSN 0016-7592, doi: 10.1130/abs/2018AM-316427.
- (133) Benfield, A. J., Welkey, J. M., and Pazzaglia, F. J., **2018**, Drainage evolution of mid-Atlantic slope transverse streams: knickpoints, wind gaps, and drainage captures of the Delaware and Lehigh Rivers: Geological Society of America Abstracts with Programs. Vol. 50, No. 2, doi: 10.1130/abs/2018NE-310705.
- (132) Lanari, R., Fellin, M. G., Faccenna, C., Balestrieri, M. L., Pazzaglia, F. J., Nasreddine, Y., and Maden, C., **2018**, Exhumation and topography of the High Atlas (Morocco): Geophysical Research Abstracts, 20, EGU2018-14352. Pazzaglia, F. J.
- (131) Markely, L. A., Peters, S. C., Pazzaglia, F. J., and Kodama, K. P., **2017**, Characterization of the Goethite-Hematite ratio in modern and ancient soils in the mid-Atlantic region as a paleoprecipitation proxy: Abstract [PP13C-1088] presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- (130) Anastasio, D. J., Gunderson, K. L., Pazzaglia, F. J., and Kodama, K. P., **2017**, Intrinsic and extrinsic controls on unsteady deformation rates, northern Apennine Mountains, Italy: Abstract [T42A-05] presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- (129) Carnes, L. K., Pazzaglia, F. J., and Pratt, T., **2017**, Spectral analysis of river sinuosity for identifying intraplate crustal deformation: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-303430.
- (128) Moodie, A. J., Pazzaglia, F. J., and Berti, C., **2017**, Exogenic forcing and autogenic processes on continental divide location and mobility: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-300848.
- (127) Pazzaglia, F. J., Etzel, N., Idleman, B., and Zeitler, P. K., **2017**, U-Pb detrital (DZ) geochronology of lower Jurassic Newark Basin paleo-alluvial fans, Atlantic Slope drainage development, and dynamic interactions in the post-orogenic landscape evolution of the Appalachians: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-303798.
- (126) Summerfield, C., Pazzaglia, F. J., Peters, S. C., and Markley, L., **2017**, Paleoclimatic reconstruction from Bryn Mawr Formation (Miocene) paleosol, U.S. Mid-Atlantic

- Coastal Plain: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-303655.
- (125) Markley, L A., Peters, S. C., and Pazzaglia, F. J., **2017**, Characterization of the Goethite/Hematite ratio in modern and ancient soils in the mid-Atlantic region as a paleoclimatic indicator: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017NE-290570.
- (124) Huntington, K. W., Klepeis, K., Cassel, E. J., Currie, C. A., DiBiase, R. A., Kirby, E., Lang, K A., Pazzaglia, F. J., Riebe, C. S., and Zeitler, P. K., **2017**, Understanding the dynamic interactions between Earth-surface processes and tectonic: opportunities for progress from outcrop to global scales: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-304720.
- (123) Pazzaglia, F. J., Meltzer, A. S., Soto-Codero, L., Carnes, L., Holt, W. E., and Ghosh, A., **2016**, Topography: from the surface to the mantle in eastern North America (ENAM), a seismically active and deforming plate interior: Societa` Geologica Italiana, Napoli.
- (122) Carnes, L., Pazzaglia, F. J., and Kodama, K., **2016**, River sinuosity response to central and eastern US (CEUS) intraplate seismicity with a focus in the central Virginia and Charleston seismic zones: Geological Society of America Abstracts with Programs, 48, 7, doi: 10.1130/abs/2016AM-285047.
- (121) Pavano, F., Pazzaglia, F. J., and Catalano, S., **2016**, Interplay of rock uplift, eustasy, climate, and knickpoint migration on the rate of landscape evolution: A case study from northeast Sicily, Italy: Geological Society of America Abstracts with Programs, 48, 7, doi: 10.1130/abs/2016AM-284790.
- (120) McGavick, M., Pazzaglia, F. J., Carter, M. W., Mahan, S. A., Counts, R., Rittenour, T., and Nelson, M. S., **2016**, Landscape evolution on the Virginia Piedmont: A new soil chronosequence, luminescence (OSL and IRSL) and cosmogenic (TCN) dating, and intraplate seismicity-driven river incision: Geological Society of America Abstracts with Programs, 48, 7, doi: 10.1130/abs/2016AM-285877.
- (119) Pazzaglia, F. J. and Malenda, H. F., **2015**, Geomorphic paleogeodesy and intraplate deformation associated with the Mineral, VA earthquake and surrounding central Virginia seismic zone (CVSZ): Geological Society of America Abstracts with Programs, 47, 7, 466.
- (118) Pazzaglia, F. J., Carter, M. W., Rittenour, T., and Malenda, H. F., **2015**, Fluvial responses to base level, climate, and active tectonics: South Anna River, central Appalachian Piedmont, Louisa County, Virginia: Geological Society of America Abstracts with Programs, 47, 7, 219.
- (117) Pettit, M., Carnes, L., Cummins, T., Giampa, R., Johnson, N., Sowell, E., Kimball, K., Vogt, P. R., Pazzaglia, F. J., and Kodama, K., **2015**, Rock magnetic cyclostratigraphy and paleomagnetic study of the Plum Point Member of the Calvert Formation, Calvert Cliffs, MD: Geological Society of America Abstracts with Programs, 47, 7, 179.
- (116) Peters, S. C., Cummins, K., T., and Pazzaglia, F. J., **2014**, Pedogenesis and stability of two late Cenozoic paleosols developed on alluvium in east-central Pennsylvania [abstract]: American Geophysical Union EP33B-3647.
- (115) Gallen, S. F., Pazzaglia, F. J., Wegmann, K. W., Pederson, J. L., and Gardner, T. W., **2014**, Dynamic base level and deterministic climate forcing as a possible explanation for

- transience in bedrock river incision rates [abstract]: American Geophysical Union EP12A-01.
- (114) Moodie, A. and Pazzaglia, F. J., **2014**, Exhumation, dynamic topography, and drainage divides in active and ancient orogenic settings, the Gibraltar Arc and Appalachians [abstract]: Geological Society of America Abstracts with Programs, 46, 2, 95.
- (113) Peters, S. C., Pazzaglia, F. J., Blake, J. M. T., and Dykman, J. N., **2014**, Chemical weathering and soil formation from multiple parent materials in central Pennsylvania [abstract]: Geological Society of America Abstracts with Programs, 46, 2, 72.
- (112) Dykman, J. N., Pazzaglia, F. J., Peters, S. C., and Blake, J. M. T., **2014**, Alignment and divergence of pedologic, geomorphic, and geochemical data for hillslope soils in central PA [abstract]: Geological Society of America Abstracts with Programs, 46, 2, 72.
- (111) Pazzaglia, F. J., Gallen, S. F., Wegmann, K. W., Pederson, J. L., and Gardner, T. W., **2014**, River incision, the fluvial sadler effect, and geomorphic interpretation of uplift [abstract]: Geological Society of America Abstracts with Programs, 46, 178.
- (110) Berti, C., Anastasio D. J., Pazzaglia, F. J., Brocard, G. Y., and Moodie, A., **2014**, Drainage network reorganization and divide migration in response to active tectonics in the Betic Range, Spain [abstract]: Geological Society of America Abstracts with Programs, 46, 662.
- (109) Malenda, H. F., Pazzaglia, F. J., Berti, C., Rittenour, T., and Harrison, R. W., **2014**, Investigating the presence of historical seismicity's effect on landscape evolution in the central Virginia seismic zone, USA, using fluvial stratigraphy and geodesy [abstract]: Geological Society of America Abstracts with Programs, 46, 663.
- (108) Pazzaglia, F. J. and Berti, C., **2013**, Appalachian Paleotopography: Geological Society of America, Abstracts with Programs, 45, 7, 31.
- (107) Berti, C., Pazzaglia, F. J., and Bruno, P. P., **2013**, Tectonic geomorphology and structural evolution of Centennial Valley, MT: Exploring the linkage between subsurface structure, surface faulting, and landscape evolution in the wake of Yellowstone: Geological Society of America, Abstracts with Programs, 45, 7, 56.
- (106) Peters, S. C., Pazzaglia, F. J., and Blake, J. M. T., **2013**, Chemical weathering and soil formation from multiple parent materials in a complex regolith, Shale Hills, Pennsylvania: Geological Society of America, Abstracts with Programs, 45, 7, 511.
- (105) Gallen, S. F., Wegmann, K. W., Bohnenstiehl, D. R., Pazzaglia, F. J., Brandon, M. T., and Fassoulas, C., **2013**, Quaternary topographic development of the Hellenic forearc: insights from the tectonic geomorphology of south-central Crete, Greece: Geological Society of America, Abstracts with Programs, 45, 7, 177.
- (104) Pazzaglia, F. J., Meltzer, A., Berti, C., Stachnik, J. C., Stein, S. A., and Holt, W. E., **2012**, Evidence for persistent faulting consistent with the 23 August, 2011 Louisa County VA earthquake: Abstract S531-08 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
- (102) Gunderson, K. L., Anastasio, D. J., and Pazzaglia, F. J., **2012**, Determining the causes of fault slip rate variability for Northern Apennine thrusts on intermediate timescales: Abstract T41E-07 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
- (101) Dempsey, C., Morris, D. P., Pazzaglia, F. J., Osburn, C. L., and Peters, S. C., **2012**, The use of PARAFAC components in studying headwater catchments: a stream and soil study:

- Abstract B21E-0418 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
- (100) Baxter, R. T., Pazzaglia, F. J., Hargreaves, B. R., Peters, S. C., and Yasko, G., **2012**, Conceptual model for the provenance and flux of suspended sediment from a mid-Atlantic watershed: Geological Society of America Abstracts with Programs, 44, 7, 343.
- (99) Dempsey, C., Morris, D. P., Pazzaglia, F. J., Raymond, P., and Peters, S. C., **2012**, The age and lability of organic carbon in headwater catchments with varying land use: Geological Society of America Abstracts with Programs, 44, 7, 576.
- (98) Gunderson, K. L., Pazzaglia, F. J., Anastasio, D. J., Ponza, A., Frankel, K. L., Kodama, K. P., Berti, C., and Picotti, V., **2012**, Unravelling tectonic and climatic controls on synorogenic growth strata, northern Apennines, Italy: Geological Society of America Abstracts with Programs, 44, 7, 188.
- (97) Berti, C., Pazzaglia, F. J., Meltzer, A. S., and Harrison, R. W., **2012**, Geomorphic evidence for persistent faulting consistent with the 23 August, 2011 Louisa County earthquake: Geological Society of America Abstracts with Programs, 44, 7, 382.
- (96) McKeon, R. E., Zeitler, P. K., and Pazzaglia, F. J., **2011**, Teasing out an unsteady past in the southern Appalachians using apatite U-Th/He thermochronology: presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.
- (95) Gunderson, K. L., Anastasio, D. J., and Pazzaglia, F. J., **2011**, Milankovitch time-scale record of unsteady fault slip, Salsomaggiore thrust, Northern Apennines, Italy: presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.
- (94) Dempsey, C., Morris, D., Pazzaglia, F. J., and Peters, S. C., **2011**, Determining the age and lability of dissolved organic carbon in headwater streams: A multiple land use study: presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.
- (93) Stein, S. A., Pazzaglia, F. J., Meltzer, A. S., Berti, C., Wolin, E., and Kafka, A. L., **2011**, Mineral, Virginia earthquake illustrates seismicity of a passive-aggressive margin: presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.
- (92) Pazzaglia, F. J., Berti, C., McKeon, R., Gunderson, K. L., and Semmens, K. A., **2011**, Tectonic geomorphology and EarthScope in eastern North America: Geological Society of America *Abstracts with Programs*, 43, p. 363.
- (91) Pazzaglia F. J. **2011**, EarthScope targets for eastern North America: Tectonics and topography on a passive margin: EarthScope national meeting, Austin Texas, 20 May.
- (90) Ponza, A., Pazzaglia, F. J., and Picotti, V., **2010**, Thrust-fold activity at the mountain front of the northern Apennines (Italy) from quantitative landscape analysis: Abstract EP41B-0705 presented at 2010 Fall Meeting, AGU, San Francisco, Calif.
- (89) Berti, C., Pazzaglia, F. J., Ramage, J. M., Miccadei, E., and Piacentini, T., **2009**, Integration of short-term co-seismic deformation (InSAR) in the geomorphic development of an actively uplifting footwall, L'Aquila earthquake (06 April, 2009), Italy: Eos Trans, AGU, 89(53), Fall Meeting Supplement, Abstract U23C-0048.
- (89) Pazzaglia, F. J., Zeitler, P. K., McKeon, R. E., Idleman, B. D., and Berti, C. **2010**, Unsteady rock uplift and erosion in a decaying orogen in response to surface and dynamic mantle processes: Abstract T31F-07 presented at 2010 Fall Meeting, AGU, San Francisco, Calif.

- (88) Ponza, A., Pondrelli, S., Picotti, V., and Pazzaglia, F. J., **2009**, The active deep mountain front of Northern Apennines (Italy): seismicity and geomorphology: *Eos Trans, AGU*, 89(53), Fall Meeting Supplement, Abstract T51B-1525.
- (88) Pazzaglia, F. J., Wegmann, K. W., and Brandon, M. K., **2010**, Climatic, lithologic, and tectonic controls on terrace genesis in active orogens: Geological Society of America Tectonics Crossroads meeting, Ankara Turkey.
- (87) Gunderson, K. L., Anastasio, D. J., Kodama, K. P., and Pazzaglia, F. J., **2009**, Milankovitch orbital cycles encoded by diagenetic iron sulfides in Neogene sediments, Stirone River section, Northern Apennines, Italy: *Eos Trans, AGU*, 89(53), Fall Meeting Supplement, Abstract GP43B-0854.
- (86) Gunderson, K. L., Anastasio, D. J., Kodama, K. P., and Pazzaglia, F. J., **2009**, Unsteady fold growth at Milankovitch time scales encoded in marine growth strat, Salsomaggiore Anticline, Italy: Geological Society of America Abstracts with Programs, 41, 7, 184.
- (85) DiNaccio, D., Boncio, P., Brozzetti, F., and Pazzaglia, F. J., **2008**, Morhotectonics of LANF-controlled Plio-Quaternary graben (Lunigiana-Garfagnana, Italy): *Eos Trans, AGU*, 89(53), Fall Meeting Supplement, Abstract T21B-1947.
- (84) Anastasio, D., J., Kodama, K. P., and Pazzaglia, F. J., **2008**, Fluvial-deltaic strata as a high-resolution recorder of fold growth and fault slip: *Eos Trans, AGU*, 89(53), Fall Meeting Supplement, Abstract T44A-01.
- (83) Pazzaglia, F. J., Willett, S., Brandon, M. T., and Picotti, V., **2008**, Resolution of the master structures partitioning shortening and extension in the northern Apennines, Italy: *Eos Trans, AGU*, 89(53), Fall Meeting Supplement, Abstract T13D-1988.
- (82) Wilson, L. F., Anastasio, D. J., and Pazzaglia, F. J., **2008**, Quantifying active hinge migration and fault propagation from a fluvial terrace record, Apennine mountain front, Italy: Geological Society of America, Abstracts with Programs, v. 40, p. 000.
- (81) Galster, J. C., Pazzaglia, F. J., and Germanoski, D., **2007**, Measuring the Erosion of River Channel Widths Impacted by Watershed Urbanization Using Historic Aerial Photographs and Modern Surveys: *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract H41D-0768.
- (80) Wilson, L., Pazzaglia, F. J., Anastasio, D. J., Picotti, V., and Ponza, A., **2007**, A fluvial record of active fault-propagation folding, Salsomaggiore anticline, northern Apennines, Italy: Geological Society of America, Abstracts with Programs, v. 39, p. 263.
- (79) Majerowicz, C. N., Harkins, N. W., Regalla, C. A., Troy, J. K., Pazzaglia, F. J., and Anastasio, D. J., **2007**, Transtension along the northeastern boundary of the Snake River Plain: Geological Society of America, Abstracts with Programs, v. 39, p. 292.
- (78) Pazzaglia, F. J., and Picotti, V., **2007**, Active basement-cored foreland shortening in the northern Apennines, Italy: Geological Society of America, Abstracts with Programs, v. 39, p. 53.
- (77) Belmont, P., Pazzaglia, F. J., and Morris, D. P., **2007**, Strong geomorphic controls on stream optical environments in eastern Pennsylvania: Geological Society of America, Abstracts with Programs, v. 39, p. 181.
- (76) Wegmann, K. W., Zureck, B. D., Regalla, C. A., Bilardello, D., Wolleburg, J. L., Kopczynski, S. E., Ziemann, J. M., Haight, S. L., Apgar, J. D., Zhao, C., and Pazzaglia, F. J., **2007**, Position of watershed divides from filtered topography as an indicator of geodynamic process: using the Snake River and greater Yellowstone area as a case study: Geological Society of America, Abstracts with Programs, v. 39, p. 261.

- (75) Belmont, P., Pazzaglia, F. J., and Gosse, J., **2006**, Using the 10-Be grain size dependency in alluvial sediments to investigate hillslope and channel processes: EOS Transactions, American Geophysical Union, v. 87(52), Fall Meeting Supplement Abstract H21H-06.
- (74) Brandon, M. T., Bennett, R. A., Cowan, D. S., Granger, D. E., Levin, V., Okaya, D., Park, J., Pazzaglia, F. J., Reiners, P. W., and Willett, S. D., **2006**, Synconvergent extension associated with a retreating subduction zone, northern Apennines, Italy: Geological Society of America Abstracts with Programs, v. 38, n. 7., p. 211.
- (73) Flanagan, S. M., Pazzaglia, F. J., Potter, N., and Ramage, J., **2006**, Transverse drainages, divides, and landscape evolution in the Great Valley, eastern United States: Geological Society of America Abstracts with Programs, v. 38, n. 7., p. 63.
- (72) Wegmann, K. W., Pazzaglia, F. J., and Fassoulas, C., **2006**, Chronostratigraphy of late Quaternary marine terraces of Crete, Greece: Vertical tectonics and implications for seismic slip on the Hellenic subduction zone: Geological Society of America Abstracts with Programs, v. 38, n. 7., p. 508.
- (71) Galster, J. C., Pazzaglia, F. J., and Germanoski, D., **2006**, Measuring the impact of urbanization on two watersheds using historic aerial photographs: implications for restoration efforts: Geological Society of America Abstracts with Programs, v. 38, n. 7., p. 187.
- (70) Wendell, M., Pazzaglia, F. J., Anastasio, D. J., and Bodzin, A. M., **2006**, A new geologic map of Lehigh Gorge State Park and development of a web, inquiry-based learning model for middle school geoscience education: Geological Society of America Abstracts with Programs, v. 38, n. 2., p. 15.
- (69) Laucks, J., Pazzaglia, F. J., Zeitler, P. K., and Idleman, B. D., **2006**, Unroofing the Appalachians; insights from geomorphology and U-Th/He thermochronology: Geological Society of America Abstracts with Programs, v. 38, n. 2., p. 84.
- (68) Pazzaglia, F. J., Cascione, J. J., Eppes, M. C., Bierma, R.M., Granger, D., Bennett, R. A., Picotti, V., and Brandon, M. T., 2005, Active folding, growth strata, and terraces at the northern Apennine mountain front, Bologna, Italy: Geological Society of America Abstracts with Programs, Vol. 37, No. 7, p. 481.
- (67) Wegmann, K. W., Pazzaglia, F. J., Bennett, R. A., and Hreinsdottir S., 2005, Fluvial terraces as growth strata markers of active tectonic deformation in the Emilia-Romagna and Marche Apennines, Italy: Geological Society of America Abstracts with Programs, Vol. 37, No. 7, p. 481.
- (66) Regalla, C. A., Anastasio, D. J., Newton, M. L., and Pazzaglia, F.J., **2005**, The Monument Hill fault zone as a natural laboratory for studying the boundary of Basin and Range extension north of the Snake River Plain, Red Rock valley, southwestern Montana: Geological Society of America *Abstracts with Programs*, Vol. 37, No. 7, p. 204.
- (65) Galster, J. C. and Pazzaglia, F. J., 2005, Quantifying the effects of urbanization on two watersheds: How does discharge scale with drainage area in an urban area?: Geological Society of America Abstracts with Programs, Vol. 37, No. 7, p. 454.
- (64) Bierma, R. M., Eppes, M. C., and Pazzaglia, F. J., **2005**, Evidence for late Quaternary faulting in the Reno River valley, northern Apennine Mountains, Italy: Geological Society of America *Abstracts with Programs*, Vol. 37, No. 7, p. 233.
- (63) Roy, M., Kelley, S. A., Pazzaglia, F. J., Cather, S., and House, M., **2004**, Middle Tertiary buoyancy modification and its relationship to rock exhumation, cooling, and subsequent

- extension at the eastern margin of the Colorado Plateau: Geological Society of America *Abstracts with Programs*, Vol. 36, No. 5, p. 119.
- (62) Galster, J C. and Pazzaglia, F. J., **2004**, Linking increased urbanization to changes in stream morphology and pool-riffle spacing: Geological Society of America Abstracts with Programs, Vol. 36, No. 2, p. 144.
- (61) Frankel, K. and Pazzaglia, F. J., **2003**, Using Digital Topography to Differentiate Erosionally Exhumed and Tectonically Active Mountain Fronts [abstract]: *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., p. 0.
- (60) Stewart, R J, Brandon, M T., Campbell, K A., Nesbitt, E A., Pazzaglia, F J., **2003**, Tectonic Surfing: Evidence of Rapid Landward Transport in the Cascadia Subduction Wedge, NW Washington State [abstract]: *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., p. 0.
- (59) Harkins, N., Pazzaglia, F. J., Anastasio, D. J., and Newton, M., **2003**, Tectonic and rock-type influences on terraces and channel morphology: Big Sheep Creek, Beaverhead and Tendoy Mountains, southwestern Montana [abstract]: Geological Society of America, Abstracts with Programs, v. 00, n.0., p. 0.
- (58) Frankel, K. and Pazzaglia, F. J., **2003**, Surficial geology of the Ponderosa, NM 7.5 minute quadrangle: implications for regional hydrology, water resources, and landscape evolution in the southern Rocky Mountains [abstract]: Geological Society of America, Abstracts with Programs, v. 00, n.0., p. 0.
- (57) Zaprowski, B. and Pazzaglia, F. J., **2003**, Investigations into landscape evolution through the EDMAP program [abstract]: Geological Society of America, Abstracts with Programs, v. 00, n.0., p. 0.
- (56) Pazzaglia, F. J., Eppes, M., Granger, D., Reiners, P., Willett, S., and Brandon, M.T., **2003**, Active tectonics, orogeny, and erosion in the northern Apennines, Italy; initial results of the RETREAT project [abstract]: Geological Society of America, Abstracts with Programs, v. 00, n.0., p. 0.
- (55) Zeitler, P. K., Ault, A. L., Idleman, B. D., Pazzaglia, F. J., and Koons, P. O., **2002**, Evolution of Shallow Isotherms Under Dynamic 3D Topography and Sampling Strategies for U-Th/He Dating: Examples From the Appalachian Blue Ridge and Southeastern Tibet [abstract]: *EOS Transactions*, v. 34.
- (54) Shimabukuro, D. H., Alvarez, W., Barchi, M. R., and Pazzaglia, F. J., **2002**, Translational steady state orogeny in the northern Apennines: do coupled fronts really exist [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 6.
- (53) Zaprowski, B. J. and Pazzaglia, F. J., **2002**, Using GIS to estimate climatic influences on river incision [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 6.
- (52) Frankel, K. L. and Pazzaglia, F. J., **2002**, Quantitative Topographic differences between erosionally exhumed and tectonically active mountain fronts: implications for late Cenozoic evolution of the southern Rocky Mountains [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 6.
- (51) Pazzaglia, F. J. and Brandon, M. T., **2002**, Reconstructing paleoelevation using a deconvolution of unroofed sediments [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 6.

- (50) Brandon, M., Tomkin, J. H., Pazzaglia, F. J., Barbour, J. R., and Willett, S. D., **2002**, Using the Clearwater River to test models for long-term incision of bedrock rivers: Kirk Bryan award [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 6.
- (49) Pazzaglia, F. J. and Brandon, M. T., **2002**, Fluvial incision across actively uplifting forearcs: lessons learned from the Olympic Mountains, Washington, and northern Apennines, Italy [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 6.
- (48) Pederson, J. L. and Pazzaglia, F. J., **2002**, Middle Cenozoic qu Base level fall, knickpoints, and post-orogenic landscape evolution: incision and late Cenozoic exhumation – how base level change through drainage development and epeirogenesis has sculpted the west [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 6
- (47) Pazzaglia, F. J., Zeitler, P. K., Idelman, B. D., Becker, T., Roden, M., and Ault, A., **2002**, The long-term evolution of a continental divide determined from U/Th-He thermochronology: late stage uplift of the Appalachians [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 6.
- (46) Brandon, M. T., Pazzaglia, F. J., and Batt, G. E., **2002**, Direction and rate of shortening across the Olympic Peninsula [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 5.
- (45) Wegmann, K. and Pazzaglia, F. J., **2002**, Holocene strath terraces of the Clearwater River basin: insights into terrace genesis and their suitability for determining long-term rates of deformation for the Olympic Mountains, Washington State [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 5.
- (44) Tomkin, J. H., Brandon, M., Pazzaglia, F. J., Barbour, J. R., and Willett, S. D., **2002**, Quantitative testing of bedrock incision models in a steady state drainage, Clearwater River, Olympic Mountains, WA, [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 5.
- (43) Pazzaglia, F. J. and Brandon, M. T., **2002**, Terrace genesis and fluvial incision over Pleistocene time scales, Clearwater River, Olympic Mountains, Washington [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 5.
- (42) Harkins, N. W., Anastasio, D. J., Pazzaglia, F. J., and Latta, D. K., **2002**, Neotectonics along the Red Rock fault, SW Montana [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 4.
- (41) Pazzaglia, F. J. and Brandon, M. T., **2002**, Terrace genesis and fluvial incision over Pleistocene time scales, Clearwater River, Olympic Mountains, Washington [abstract]: Geological Society of America, Abstracts with Programs, v. 34, n. 5.
- (40) Vaughn, J., Frankel, K., Kodama, K., and Pazzaglia, F. J., **2001**, Flume Study Investigating the Effects of AMS and AAR Fabric on Paleomagnetic Results: AGU, 82(47), Fall Meet. Suppl., Abstract GP41A-0245.
- (39) Tomkin, J. H., Brandon, M., Pazzaglia, F. J., Barbour, J., and Willett, S., **2001**, Quantitative Testing of Bedrock Incision Models, Clearwater River, Eos Trans. AGU, 82(47), Fall Meet. Suppl., Abstract NG51A-0450.

- (38) Pearce, J., Pazzaglia, F. J., Evenson, E. B., and Lawson, D., **2001**, Bedload Component of Glacially Discharged Sediment: Insights From the Matanuska Glacier: AGU, 82(47), Fall Meet. Suppl., Abstract IP51B-09.
- (37) Pazzaglia, F. J., Wisniewski, P., and Zaprowski, B. J., **2001c**, The fluvial record of Rocky Mountain epeirogeny; a review: Geological Society of America, Rocky Mountain Section, 53rd annual meeting; Geological Society of America, South-Central Section, 35th annual meeting, Abstracts with Programs, v. 33, no. 5 p. 51.
- (36) Pazzaglia, F. J., Selverstone, J., Roy, M., Steffen, K., Pearce, J., Newland, S., and Knipsher, W., **2001b**, The influence of high-angle brittle faulting on subsequent landscape evolution development in extensional terranes: Geological Society of America Abstracts with Programs.
- (35) Pazzaglia, F. J., Brandon, M. T., Molin, P., Eppes, M. C., and Ault, A., **2001a**, Contrasting rates and processes of river incision in actively uplifting forearcs, Olympic Mountains, Washington, USA and northern Apennines, Italy: INQUA workshop on uplift and erosion, Università degli Studi Firenze and Università degli Studi Siena, p. 64.
- (34) Pazzaglia, F. J., Ault, A., Molin, P., Spagnolo, M., Brandon, M. T., and Willett, S. D., **2001**, Geomorphic Evidence for the Style of Quaternary Uplift and an Orogenic Standing Wave, Apennines, Italy: AGU, 82(47), Fall Meet. Suppl., Abstract T51F-08.
- (33) Molin, P., Pazzaglia, F. J., and Dramis, F., **2001**, Relief and Drainage Integration as Geomorphic Expressions of Regional Uplift and Local Footwall Flexure in a Portion of Sila Massif, Southern Apennines (Calabria, Italy): AGU, 82(47), Fall Meet. Suppl., Abstract T52B-0937.
- (32) Koning, D. J., Connell, S. D., McIntosh, W. C., Love, D. W., Pazzaglia, F. J., **2001**, Stratigraphy of the Ancha and Tuerto formations (upper Santa Fe Group), Santa Fe and Hagan embayments, north-central New Mexico: Geological Society of America, Rocky Mountain Section, 53rd annual meeting; Geological Society of America, South-Central Section, 35th annual meeting, Abstracts with Programs, v. 33, no. 5, p. 48.
- (31) Frankel, K., Vaughn, J., and Pazzaglia, F. J., **2001**, Knickpoint retreat and long profile evolution through a vertically bedded substrate: a flume study: Geological Society of America Abstracts with Programs.
- (30) Becker, T., Zeitler, P., Pazzaglia, F. J., Idleman, B., and Ault, A., **2001**, The Importance of Lithology in the Interpretation of Apatite U-Th/He Ages: AGU, 82(47), Fall Meet. Suppl., Abstract V22C-1062.
- (29) Ault, A., Burnett, B. N., Johnson, A. D., Knipscher, W. P., and Pazzaglia, F. J., **2001**, Active tectonics in the northern Apennines and southeastern Po Plain, Italy: INQUA workshop on uplift and erosion, Università degli Studi Firenze and Università degli Studi Siena, p. 11.
- (28) Zaprowski, B., Evenson, E., and Pazzaglia, F. J., **2000**, Late Cenozoic geomorphic evolution of the Black Hills, SD: "knickpoint propagation": Geological Society of America Abstracts with Programs, v. 32, n.7, p. 26.
- (27) Pederson, J. L., Pazzaglia, F. J., and Smith, G. A., **2000**, Long-term hillslope sedimentary records: implications for understanding overall landscape responses to climate change: Geological Society of America Abstracts with Programs, v. 32, n.7.

- (26) Wisniewski, P. and Pazzaglia, F. J., **1999**, Active tectonics astride the Jemez lineament determined from terraces of the Canadian River, northeastern New Mexico: Geological Society of America Abstracts with Programs, v. 31, n.7., p.000.
- (25) Pazzaglia, F. J., Selverstone, J., Roy, M., and Steffan, K., **1999b**, Topographic expression of extension in a convergent orogen: Hillslope and fluvial processes in the central and eastern Alps: EOS Transactions, American Geophysical Union, v. 80, n.46, p. F442.
- (24) Pazzaglia, F. J., Dueker, K., and Wisniewski, P., **1999a**, Post-Laramide rock uplift and exhumation of the southern Rocky Mountains: impacts of “hot mantle blobs”: Geological Society of America Abstracts with Programs, v. 31, n.7., p.000.
- (23) Mitchell, D. and Pazzaglia, F. J., **1999**, A field based test of the stream power erosion law: Geological Society of America Abstracts with Programs, v. 31, n.7., p.000.
- (22) Brandon, M. T., Pazzaglia, F. J., Batt, G. and Willett, S. D., **1999**, A case for erosional steady state at a subduction-related wedge: Geological Society of America Abstracts with Programs, v. 31, n.7., p.000.
- (21) Becker, T. P., Pazzaglia, F. J., Zeitler, P. K., and Idleman, B. D., **1999**, Late-stage exhumation of the central and northern Appalachians utilizing U-Th/He dating of apatite: EOS Transactions, American Geophysical Union, v. 80, n.46, p. F1171.
- (20) Wegmann, K. and Pazzaglia, F. J., **1998**, Rock uplift and deformation of the Olympic subduction complex determined by fluvial terraces in the Clearwater river basin, northwest Washington State: Geological Society of America abstracts with programs, v. 000, p. 000.
- (19) Pederson, J. L., Pazzaglia, F. J., and Smith, G. A., **1998b**, A long-term record of buried, relict and modern hillslopes: Climate and rock-type controls on the production of detritus: American Geophysical Union, EOS Transactions Supplement, v. 000, p.000.
- (18) Pederson, J. L., Smith, G. A., and Pazzaglia, F. J., **1998a**, Comparing the Quaternary and Neogene records of hillslope sediment productivity and delivery to basins in southeast Nevada: Geological Society of America abstract with programs, v. 30, n. 7, p. 361.
- (17) Pazzaglia, F. J., Wegmann, K., and Garcia, A. F., **1998b**, Bedrock fluvial incision in the tectonically active setting evaluated in the context of the stream power law and the W_v/W_c ratio: Geological Society of America abstracts with programs, v. 000, p. 000.
- (16) Pazzaglia, F. J., Brandon, M. T., Wegmann, K., and Garcia, A. F., **1998a**, Geomorphic evidence for long-term evolution of the Cascadia forearc high, Olympic Mountains, Washington: American Geophysical Union, EOS Transactions Supplement, v. 000, p. 000.
- (15) Koning, D. J. and Pazzaglia, F. J., **1998**, Paleoseismicity and fault segmentation in a continental rift setting, Alamogordo fault, southern New Mexico: Geological Society of America abstracts with programs, v. 000, p. 000.
- (14) Pazzaglia, F. J., Gardner, T. W., and Merritts, D. J., **1997**, Bedrock fluvial incision and longitudinal profile development over geologic time scales determined by fluvial terraces [abstract]: American Geophysical Union, EOS Transactions Supplement, v. 78, n. 46, p. F298.
- (13) Pazzaglia, F. J. and Gardner, T. W., **1997**, Late Cenozoic large-scale landscape evolution of the U.S. Atlantic passive margin [abstract]: Supplementi di Geografia Fisica e Dinamica Quaternaria Supplemento III, p. 306.

- (12) Pazzaglia, F. J. and Fawcett, P. J., **1997**, Earth's environment and global change: A new course in ESS at the University of New Mexico [abstract]: Geological Society of America abstracts with programs, v. 29, n. 6.
- (11) Pazzaglia, F. J. and Brandon, M. T., **1997**, Orogen exhumation determined by deconvolution of offshore basin sediments: The post-Triassic Appalachian Mountains [abstract]: Geological Society of America abstracts with programs, v. 29, n. 6.
- (10) Kelley, S. A., and Pazzaglia, F. J., **1997**, Fission-track thermochronology and the interplay between tectonic and surface processes in post-Laramide denudation of the Southern Rocky Mountains: Geological Society of America abstracts with programs, v. 29, n. 6, p. 477.
- (9) Pazzaglia, F. J., **1996**, Late Cenozoic evolution of middle Atlantic margin rivers: The fluvial response to J.P. Owen's "rolling basins" [Abstract]: Geological Society of America abstracts with programs, v. 28, n. 7, p. 62.
- (8) Pazzaglia, F. J. and Brandon, M. T., **1994b**, Uplift, denudation, and accretionary wedge processes of the Cascadia margin constrained by Quaternary fluvial terraces of the Clearwater River, Olympic Peninsula, Washington [Abstract]: American Geophysical Union, EOS Transactions, v. 75, n. 44, p. 288-289.
- (7) Pazzaglia, F. J. and Brandon, M. T., **1994a**, Deconvolving the evolution of mean topography and uplift for the post-orogenic Appalachians using the offshore sedimentary record [Abstract]: Geological Society of America, Abstracts with Programs, v. 26, n.7.
- (6) Brandon, M. T. and Pazzaglia, F. J., **1994**, Late Quaternary deformation of fluvial terraces at the Cascadia convergent margin, northwest Washington State [Abstract]: Geological Society of America, Abstracts with Programs, v. 26, n.7.
- (5) Pazzaglia, F.J. and Gardner, T. W., **1993**, Late Cenozoic isostasy, eustasy, and tectonism of the Atlantic passive margin [abstract]: Geological Society of America Abstracts with Programs, v. 25, n.6, p. A-333.
- (4) Pazzaglia, F.J. and Gardner, T.W., **1992**, Post-rift evolution of passive continental margins: U.S. Atlantic-type vs. South African-type; Part I, [abstract]: Chapman Conference of Topography and Tectonics, American Geophysical Union.
- (3) Pazzaglia, F.J. and Gardner, T.W., **1991**, Fluvial response to eustatic and isostatic base level changes along a passive continental margin [abstract]: Geological Society of America, Abstracts with programs, v. 23, n. 5.
- (2) Pazzaglia, F. J., Cleaves, E. T., and Gardner, T. W., **1991**, Surficial geology and landform evolution of a portion of the eastern Piedmont, Maryland and Pennsylvania [Abstract]: Geological Society of America, Abstract with Programs, v. 23, n. 1, p. 113.
- (1) Pazzaglia, F. J. and Wells, S. G., **1989**, Relative role of tectonism and climatic change on the evolution of Quaternary depositional landforms along a segmented range-front fault, Rio Grande Rift, [abstract]: Geological Society of America, Abstract with Programs v. 21, n. 6, p. 269.

Working Papers

- (1) Roberge, L., Gasparini, N. M., Straub, K. M., Campforts, B., and Pazzaglia, F. J., **in review**, Can autogenic landslide noise disrupt allogenic sedimentary signal transmission: JGR Earth Surface

- (2) Tanski, N. M., Rittenour, T. M., Pavano, F., Pazzaglia, F. J., Catalano, S., Corbett, L. B., and Bierman, P., in review, Middle Pleistocene fan-delta records the development of a normal fault: the case study of the eastern Peloritani Mountains, Sicily (Italy): Basin Research.
- (3) Silvani, F., Di Rita, F., Magri, D., Uda, L., Spadoni, G., Monaco, L., Giaccio, B., Mazzini, I., Porreca, M., Mirabella, F., Melelli, L., Pazzaglia, F. J., and Barchi, M. R., in review, The Late Pleistocene sedimentary record of the Colfiorito basin (Umbria-Marche Apennines, central Italy): morphotectonic advances from the new data of the Pleistial borehole: Quaternary Science Reviews.

C. Honors and Awards

- Outstanding teaching award, University of New Mexico, 1998.
- Kirk Bryan Award for the best paper in Quaternary geology and geomorphology, Quaternary Geology and Geomorphology Division, Geological Society of America, 2002.
- Fellow, Geological Society of America, 2002.
- Lindback Teaching Award, Lehigh University, 2014.

D. Research Funding

Competitively awarded research grants

- (36) PENDING: Commonwealth of Pennsylvania EGS Pilot Demonstration, USDOE, \$1,600,000, 08/2025-07/2030.
- (35) Collaborative Research: Using a weather model and geologic data to test tectonic mechanisms in an intercontinental setting: The Altai Mountains of Central Asia, NSF-Tectonics, \$290,936, 08/01/2023-07/31/2026.*
- (34) Ice-marginal stream re-sculpting of fluvial topography interpreted from a surficial geologic map, cross-section age models, and longitudinal profiles of Allegheny and Clarion river terraces, Pennsylvania, USGS-EDMAP, \$35,000, 08/15/2022-08/14/2023.*
- (33) Carbon Mineralization Options for the Cement and Aggregate Industries in Pennsylvania: with C. Romero, S Peters, PITA, \$29,770, 01/01/2022-06/30/2023.*
- (32) Collaborative Research: TESPRESSO, Tectonic Encoding, Shredding, and Propagation of Environmental Signals as Surface Observables (Supplement): NSF-EAR-Tectonics-2139107, \$106,471. 06/15/2022-06/14/2023.*
- (31) Surficial Geological Map of the Carmichaels Formation, Ohiopyle State Park, PA: USGS EDMAP, \$17,485, 01 June, 2020 – 31 May, 2021.
- (30) Collaborative Research: TESPRESSO, Tectonic Encoding, Shredding, and Propagation of Environmental Signals as Surface Observables: NSF-EAR-Tectonics-1904262, \$756,000, \$340,000 to Lehigh lead organization, 16 June, 2019 – 15 June, 2022*.
- (29) Evolution and deformation of continents: Insights for the Mongolian Altai: Lehigh FIG, \$30,000 (with A S Meltzer and P K Zeitler), 2018.

- (28) River knickpoint paleogeodesy and measurement of crustal deformation in the Central Virginia Seismic Zone (CVSZ) and Reading Lancaster Seismic Zone (RLSZ): USGS - EHP program; \$78,552; 01 July, 2018 – 30 June, 2019.*
- (27) Faculty Grant for International Connections: Lehigh Office of International Affairs, \$3,800, May, 2016-Dec 2016.
- (26) Geomorphic expression of the seismotectonics and seismic potential of source zones in CEUS: CVSZ and Charleston; USGS Earthquake Hazards Program, \$57,197, 01 July 2015 – 30 June, 2016; products: 6.
- (25) Cities in the Fall Zone: Earthquake hazard, vulnerability, and resiliency in the U.S. mid-Atlantic region, Lehigh CORE, co-Pis: A. Meltzer, S. Friedman, J. Littau, J. Ricles, R. Sause, May, 2013 – May 2014, no-cost extension to May 2015; \$59,711.
- (24) Reconciling physical and chemical profile in the complex soils of the Shale Hills CZO, co-P.I. with S. C. Peters, SSF subcontract from Penn State University, \$4,668.
- (23) Surficial Geologic Map of the South Anna River in the Ferncliff and Pendleton Quadrangles, Virginia: USGS-EDMAP, 29 May 2013-28 May 2014, co-P.I. with C. Berti, \$17,500.
- (22) National Science Foundation project OISE-1157746 CNIC: Understanding Continental Collision in the Betic Cordillera, Spain. August 2012-July 2013. PI D. Anastasio. \$28,539.
- (21) EarthScope RAPID: Geodetic and seismological response to the Mineral, VA Earthquake, 23 August, 2011; NSF-EarthScope EAR-1202798; 10/15/11-12/31/14; 28,330.
- (20) Collaborative Research: Geologic, Tectonic, and Geodynamic Processes of the Eastern North American (ENAM) Passive Margin Workshop; NSF-EarthScope; 05/01/11-04/30/12; \$33,943.
- (19) Quantification of Unsteady Fault Slip and Fold Growth, Apennine Front, Italy; NSF-Tectonics; EAR 0809722; 09/15/08-09/31/11; \$302,551 (co-P.I. with Dave Anastasio and Ken Kodama). <https://www.agu.org/>
- (18) Centennial Seismic Belt in Southwest Montana: Henry Gulch 7.5 min quadrangle (co-PI with Dave Anastasio); USGS-EDMAP program; 06/01/06-05/31/07; \$13,300.
- (17) Centennial Seismic Belt in Southwest Montana: Lima Dam 7.5 min quadrangle (co-PI with Dave Anastasio); USGS-EDMAP program; 06/01/06-05/31/07; \$14,500.
- (16) SGER: TCN, grain size, and the processes of erosion; National Science Foundation; 06/01/07 – 05/31/08; \$24,684.
- (15) Watershed assessment and management of the Saucon Creek Watershed; Pennsylvania Growing Greener fund, subcontract to Northampton Conservation district; 08/01/07-07/31/08; \$40,000.
- (14) Geologic Map and Cross-Section of Lehigh Gorge State Park, Pennsylvania; U.S. Geological Survey; 04/01/04 – 03/31/05; \$13,318.
- (13) Collaborative Research: Retreating-trench, Extension, and Accretion Tectonics (RETREAT): a Multidisciplinary Study of the Northern Apennines (w/ M. Brandon, S. Willett, D. Cowan, R. Bennett, P. Reiners, D. Granger, J. Park); NSF-Continental Dynamics (EAR-0207980); \$338,118.
- (12) Assessing the Interactive Effects of Land Use, Climate, and UV Radiation of River Ecosystems: Modeling Transparency and the Response of Biota to UVR; U.S.

- Environmental Protection Agency; (w/ D. Morris, C. Williamson); 06/01/02-05/31/07; \$825,850.
- (11) Surficial Geologic Map of the Jemez Springs Quadrangle, New Mexico; DOI-U.S. Geological Survey; 06/01/02-05/31/03; \$15,000.
 - (10) Surficial Geological Map of the Ponderosa Quadrangle, New Mexico; DOI-U.S. Geological Survey; 06/01/01-05/31/02; \$15,000.
 - (9) Collaborative Research. Lithospheric structure and evolution of the Rocky Mountains: Phase II – Geodynamic processes. (w/ K.E. Karlstrom); NSF-Continental Dynamics (EAR-0087526); 06/01/01-05/31/02; \$20,000.
 - (8) Geomorphic and Geodynamic Response to Extension in Convergent Orogens (w/Selverstone and Roy); NSF-Tectonics; (EAR- 9902828); 06/01/99-05/31/01; \$83,021
 - (7) Exhumation and Topographic Evolution in the Post-Orogenic Setting Determined by Apatite U-Th/He Dating (w/ Zietler, Idelman); NSF-Tectonics; (EAR- 9909393); 03/01/00-02/28/03; \$197,153.
 - (6) REU (research experiences for undergraduates) senior thesis project funded by the National Science Foundation (K. Karlstrom, P.I.); 1996.
 - (5) Variable hillslope processes and sediment delivery to tectonically-quiet basins: A late Miocene through Quaternary record of buried, relict and modern hillslopes and their deposits. NSF - Geology and Paleontology; (EAR- 9706051); 01/01/98-12/31/99; \$95,000.
 - (4) Lithospheric Structure and Evolution of the Rocky Mountain Transect of the Western U.S. NSF - Continental Dynamics. (EAR-9716787); 10/01/97-09/30/00; \$35,000.
 - (3) Tectonic Geomorphology of the western Olympic Peninsula (EAR-9736748); 06/01/97-05/31/99; \$97,000.
 - (2) Computational and GIS applications in quantitative geomorphologic analyses funded by the National Science Foundation (EAR-9509954); 06/01/95-05/31/96; \$22,000.
 - (1) Postdoctoral research funded through a National Science Foundation Earth Sciences Postdoctoral Research Fellowship (EAR-9302661); 09/01/93-08/31/94; \$30,000.

Submitted but not funded

- (51) Magnesium and Silicon Isotopic Indicators of Pedogenic Intensity from Proterozoic and Paleozoic Paleosols (with S. C. Peters), NSF 2528167, 705,856, 08/01/2025-07/31/28.
- (50) Super-critical CO₂ harvesting of geothermal energy from Appalachian basin gas reservoirs re-purposed wells, Phase I: site selection, characterization, modeling, demonstration, US DOE ARPA-E, \$3,684,200, 01/01/2025 – 12/31/2027.
- (49) Anisotropic Magnetic Susceptibility (AMS) fabric as a paleogeodetic measure of tectonic deformation in active forearcs, NSF-EAR-Tectonics, \$290,971, 01/01/2023-12/31/2004.
- (48) Collaborative Research: At what height do intracontinental mountains modify climate?: A data-model comparison from the Altai mountains of Central Asia, NSF-EAR-Tectonics, \$307,450, 08/2022-07/2025.
- (47) Collaborative Research: APOGEE: Apparent Paradox of Great Escarpment Retreat and Erosion, NSF-EAR-2135971, \$290,594, 01/01/2022-12/31/2023.
- (46) Decarbonization of heavy industry in Pennsylvania – A feasibility study of carbon capture, utilization, and storage (CCUS) for the cement and aggregate industries in

- eastern Pennsylvania: with C. Romero, S. Neti, J. Baltrusaitis, P. Bocchini, A. Lamadrid, C. Naito, S. Peters, K. Pooley, and M. Suleiman, Lehigh Accelerator Proposal, \$100,000, 01/01/22-12/31/2022.
- (45) Super-critical CO₂ harvesting of geothermal energy from Appalachian basin gas reservoirs re-purposed wells, Phase I: site selection, characterization, modeling, demonstration: C. Romero, lead P.I., DOE, \$3,500,000, 01/01/2022-/12/31/2024.
 - (44) Geothermal piles with dual phase change materials for seasonal energy storage: C. Romero lead P.I., DOE, \$2,415,676, 01 January, 2021 – 31 December, 2023.
 - (43) Novel application of detrital zircon (DZ) geochronology in linking geomorphic landscape evolution to stratigraphic basin analysis: American Chemical Society-Petroleum Research Fund, \$100,000, 01 January, 2019-31 August, 2021.
 - (42) MAESTROS: Mentorship of Apennine Earthquake Studies on how Topography Reflects Observed Seismicity: NSF-IRES, \$300,000, 01 January 2019 – 31 December, 2021.
 - (41) Collaborative Research: ESPRESSO: Encoding, Shredding, and Propagation of Environmental Signals as Surficial Observables: NSF-EAR-GLD program, \$641,000, 01 January, 2018 – 31 December 2020.
 - (40) Collaborative Research: ENIGMA-Eastern North America Intraplate Geodynamic Model of Active Tectonics; NSF IES Program, \$1.55M, (\$3.23M total); 09/01/17-08/31/22.
 - (39) River sinuosity paleogeodesy and river terrace paleoseismology in the Central Virginia Seismic Zone (CVSZ) and Chareleston, SC, USGS-EHP program; \$70,368, 08/01/17-07/31/18.
 - (38) Project ESPRESSO: Encoding, Shredding, and Propagation of Environmental Signals as Sedimentary Observables: Partnership for International Research and Education (PIRE) 2016-2017 (preproposal white paper), 01 Sept, 2017-31 August 2021; \$4,025,083.
 - (37) Building a numeric landscape evolution model (LEM) to explore the environmental changes that conspire to build sedimentary rocks: Lehigh Faculty Innovation Grant, \$29,961, 01 September, 2016 – 31 August, 2017.
 - (36) Collaborative Research: Exogenic vs autogenic geomorphic signal genesis, propagation and preservation in coupled upstream-downstream systems, NSF GLD Program, \$203,142, (\$411 K total); 06/01/16-05/31/18.
 - (35) Collaborative Research: ENIGMA-Eastern North America Intraplate Geodynamic Model of Active Tectonics; NSF IES Program, \$1.7M, (\$3.25M total); 06/01/16-05/31/21.
 - (34) Collaborative Research: ENIGMA-Eastern North America Intraplate Geodynamic Model of Active Tectonics; NSF IES Program, \$1,586,716, (\$3.25M total); 06/01/15-05/31/20.
 - (33) Collaborative Research: Sources, causes, and persistence of active seismicity on a passive margin, an integrated seismic, geomorphic, and geodynamic approach, NSF-EarthScope, 01 Jan 2014 – 31 Dec 2016, co-P.I.s: A. Meltzer, S. Stein, W. Holt, C. Berti, J. Stachnik, \$1,186,318.
 - (32) Collaborative Research: Sources, causes, and persistence of active seismicity on a passive margin, an integrated seismic, geomorphic, geodetic, and geodynamic approach: NSF-EarthScope, 01/01/13-12/31/16; \$1,381,803 to Lehigh, \$2,302,565 Total.
 - (31) Crack Arrest at Shale/Limestone interfaces for improved control of hydraulic fracturing in unconventional shale plays; USDOE DE-FOA-0000724; 01/01/13-12/31/15; (with H. Neid and R. Bocchini).

- (30) Collaborative Research: Seismic, geomorphic, and geodetic markers of passive margin tectonic processes; NSF-EarthScope; 01/01/12-12/31/17; \$1,229,586.
- (29) Collaborative Research: Regional geodynamic modeling of the North American Passive Margin with constraints from seismic, geomorphic, sedimentology, and tectonic history data; NSF-EarthScope; 05/01/12-04/30/16; \$174,297.
- (28) Knickpoint formation, evolution, and deformation in a passive margin setting; NSF-Geomorphology and Land Use Dynamics; 08/01/12-07/31/14; \$337,250.
- (27) How do Winter Melt Anomalies Respond to Climate Change and Impact Snowmelt Runoff in Western North America?; NSF-Hydrology; 08/01/11-07/31/14; \$479,666, (co-PI with Joan Ramage).
- (26) Geomorphic and DInSAR Approaches in Bridging the Temporal Gap in Fault Unsteadiness and Interseismic Deformation; NASA; 06/01/11-05/31/14; \$653,209.
- (25) In-Stream Geochemical and Hydrologic Controls on Natural Attenuation of Acid Mine Drainage; NSF-hydrology; 05/15/11-05/14/14; \$426,225 (co-PI with Steve Peters)
- (24) Using Microwave Satellite Observations of SWE and Melt to Predict Snowmelt Runoff Hydrographs in Large Northern Watersheds; NASA, 01/01/11-12/31/13; \$486,176 (co-PI with Joan Ramage).
- (23) WSC - Category 2: Nonlinear and Threshold Responses to Environmental Stresses in Land-River Network; NSF; 01/01/11-12/31/16; \$750,000 (co-PI with Ben Felzer).
- (22) Land use effects on dissolved organic carbon (DOC) production, microbial processing, lability, and transport in the fluvial system; NASA; 01/01/11-12/31/13; 285,112 (co-PI with Don Morris).
- (21) Evaluation of new remote sensing approaches to snow melt runoff calculation in Arctic rivers; NSF-Arctic Programs; 08/01/10-07/31/13; \$472,829 (co-P.I. with Joan Ramage)
- (20) InSAR, tectonic geomorphology, and disequilibrium landscapes; NSF-Tectonics; 09/01/10 – 08/31/12; \$320,382.
- (19) Geomorphology, hydrology, and carbon export of natural and impacted watersheds; NSF GLUD; 01/01/10-12/31/12; \$348,501; (co-P.I. with Hargreaves, Morris, Peters, Yu).
- (18) PIRE – MEDTEC: Mediterranean active tectonics, plate boundaries, and orogeny; NSF OISE-PIRE; 01/01/10-12/31/14; \$2,509,050.
- (17) Drainage basin hydrology at high latitudes: key processes and predicted responses to global change; NSF-Hydrology; 07/01/09-06/30/12; \$405,981 (co-P.I. with Joan Ramage).
- (16) Environmental Baseline for Ecosystem Preservation and Restoration in the Lehigh Valley; Cora Brooks Foundation; 01/31/08-01/30/09; \$15,000.
- (15) Collaborative Research: Seismic Coupling, Great Earthquakes, and Rock Uplift: A Broadband Geodetic Experiment for the Hellenic Forearc, Crete, Greece; National Science Foundation; 06/01/07-05/31/10; \$206,863.00.
- (14) Collaborative Research: Life History of an Emergent Fold; National Science Foundation; 08/01/07-07/31/09; \$247,880
- (13) Collaborative Research: Broadband geodesy, great earthquakes, and vertical tectonics of the Hellenic subduction zone, Crete, Greece; National Science Foundation; 06/01/06-05/31/08; \$240,210

- (12) Collaborative Research: Measuring subduction underplating using tectonic geomorphology in Crete, Greece; National Science Foundation; 06/01/05 – 05/31/07; \$166,946.
- (11) TCN, Grain Size, and the Processes of Erosion; National Science Foundation; 01/01/05 – 12/31/06; \$217,131.
- (10) Active Tectonics of Growing Transpressional Structures, an Integrated Geophysical and Geomorphological Approach; National Science Foundation; \$187,656.
- (9) Geoscience Education in Active Tectonics and Geologic Hazards; National Science Foundation; \$116,940.
- (8) Topographic Comparison of the Alpi Apuane, Thasos Island, and the Olympic Peninsula: To What Degree Can Tectonic Setting be Inferred from Digital Topography; NASA Washington; \$22,000.
- (7) Active Tectonics in the Inter-Andean Valley, Ecuador; National Geographic Society; \$15,000.
- (6) Soil development control on long-term landscape evolution: A case study in the San Bernardino Mountains, California, June 1, 2000 start date, 2 yr project.
- (5) Eroding the Appalachians, NSF Sedimentology and Paleontology June 1, 2000 start date, 3 yr project (with Paul Bierman).
- (4) Collaborative Research: Retreating Trench, Extension, and Accretion Tectonics (RETREAT) a multidisciplinary study of the northern Apennines. Proposal to NSF Continental Dynamics; \$1,705,000 total, \$370,000 Lehigh University.
- (3) TRACK 1: Geoscience Education in Active Tectonics and Geologic Hazards (w/ A. Meltzer, P. Zeitler, D. Anastasio, K. Kodama); NSF-Education (GEO-0224536); 01/01/03-12/31/04; \$156,498.
- (2) Active tectonics of growing folds: an integrated geophysical, structural, and geomorphological approach (w/ A. Meltzer, D. Anastasio); NSF-Tectonics; ~\$225,000.
- (1) Rock uplift and river incision: the roles of tectonics, climate and base level. (w/ E. B. Evenson); NSF, \$84,821

Other

- (7) Lehigh Faculty Research Grant, 2000, \$1,500.
- (6) Paleoseismicity and associated earthquake hazards of the Alamogordo fault, south-central New Mexico, State of New Mexico Department of Public Safety and Federal Emergency Management Agency; \$5,952.
- (5) U.S. Geological Survey Sky Village EDMAP, 1998; \$7,000.
- (4) U.S. Geological Survey Ojito Spring and Sky Village EDMAP 1997; \$22,000
- (3) U.S. Geological Survey Ojito Spring EDMAP 1996; \$15,000.
- (2) U.S. Geological Survey COGEMAP, program; \$15,000.
- (1) Ph.D. research funded by the American Chemical Society, Petroleum Research Fund; \$30,000.

E. Current and Pending Support

Title: Collaborative Research: Using a weather model and geologic data to test tectonic mechanisms in an intercontinental setting: The Altai Mountains of Central Asia

Source of support: NSF-Tectonics; Active

Primary place of performance: Lehigh University

Start date: 08/2023

End date: 07/2026

Award amount: \$290,936

Person-months per year commitment: 0.5/0.25

Title: Commonwealth of Pennsylvania EGS Pilot Demonstration.

Source of support: US DOE; Pending

Primary place of performance: Lehigh University

Start date: 08/2025

End date: 07/2030

Award amount: \$1,600,000.

Person-months per year commitment: 0.5

F. Editorial Activities

- Geology, Editorial Board, 1998-2001.
- Geological Society of America Bulletin, Associate Editor, 1999-2007; 2013-2016.
- American Journal of Science, Associate Editor, 2002-2022.
- Geografia Fisica e Dinamica Quaternaria, Associate Editor, 2003-2014.
- Geosphere, Associate Editor, 2005-2007.
- Lithosphere, Associate Editor, 2008-2012.

G. Scholarly Presentations

Invited Presentations

2024

A fan-delta archive of earthquakes, basin inversion, and mountain building in the Peloritani Mountains of northeastern Sicily; Invited seminar at Colorado State University.

2023

Geomorphology, river incision, and earthquakes in Lancaster and York Counties, Pennsylvania Council of Professional Geologists.

Recovery of base level fall histories from an inversion of fluvial topography; examples from the Apennines, University of Perugia

2022

Uplift history of the eastern North American margin from an inversion of fluvial topography, University of Maine.

2020

Shaping the Appalachian landscape and carving the Delaware Water Gap, Nurture Nature.

Active tectonics in the central Asian continental interior determined by river long profile inversion, Gobi and Mongolian Altai, Mongolia, Southern Methodist University.

2019

Rock Magnetic cyclostratigraphy and the encoding of global environmental change in sediments: Examples and application from the Newark Basin, the Calvert Cliffs, and the Italian Apennines, Nittany Mineralogical Society

Active tectonics and surface faulting in central Italy: stress reorientation, blind normal faults, and the march of a continental divide above an active, low-angle detachment, Piali Conference, Perugia, Italy.

2018

Inraplate earthquake in the eastern U.S., infrastructure resilience, and lessons learned from the 2011 Mineral, VA earthquake, West Chester University.

Propagation of climate and tectonic signals through landscapes: Cyclostratigraphy of Pleistocene fluvial deposits and insights into exogenic vs autogenic process forcing, California Institute of Technology.

Cyclostratigraphy, fault unsteadiness, and earthquakes in the Italian Apennines, Utah State University

Building and eroding the Appalachians and how geology has shaped the history and environment of Pennsylvania, DeSales University.

2017

Appalachian landscape evolution, from orogeny to passive-aggressive margin, Rutgers University

Apennine rivers and fluvial deposit paleogeodetic markers in the study of crustal deformation and exogenic vs autogenic controls on landscape evolution, Geological Society of America Penrose Presentation, Airo, Italy.

2016

Geomorphic paleogeodesy and intraplate deformation associated with the Mineral, VA earthquake and surrounding Central Virginia Seismic Zone (CVSZ), Università Catania

Intraplate earthquakes in the eastern U.S., infrastructure resilience, and lessons learned from the 2011 Mineral, VA earthquake, Montclair University

Unsteady fold growth and exogenic vs autogenic processes in sediment deposition, northern Apennines, Italy, University of Washington

Unsteady fold growth and exogenic vs autogenic processes in sediment deposition, northern Apennines, Italy, University of New Mexico

Topography: From the surface to the mantle in eastern North America (ENAM), a seismically active and deforming plate interior, Societa' Geologica Italia, Napoli.

2015

Base level fall, knickpoints, earthquakes, and post-orogenic Appalachian landscape evolution, Tulane University

2014

Knickpoints and landscape evolution in Pennsylvania, Harrisburg area geologic society

Earthquakes, knickpoints, and Appalachian landscape evolution, Institute for the Study of the Continents, Cornell University

Base level fall, knickpoints, earthquakes, and post-orogenic Appalachian landscape evolution, University of Tennessee

2013-1999

Numerous others, undocumented.

Organized Conferences

NSF Earthscope-Geoprisms joint conference, Lehigh University, October, 2011.

H. Teaching

Courses Taught

Sem- ester	EES 004	EES 016	EES 022	EES 097	EES 213 / 115	EES 113 / 200	EES 293	EES 303	EES 319	EES 341	EES 380	EES 393	EES 411	EES 412	EES 418	CINQ
Fa 99					X				X							
Sp 00														X		
Su 00										X						
Fa 00					X				X							
Sp 01						X		X							X	

Su 20								
Fa 20		X	X			X	X	X
Sp 21							X	
Su 21								
Fa 21		X	X	X		X	X	
Sp 22	X						X	X
Su 22								
Fa 22		X	X				X	
Sp 23	X		X				X	X
Su 23					X			
Fa 23		X					X	
Sp 24								
Su 24					X			
Fa 24		X	X				X	
Sp 25	X						X	X
Su 25					X			
Fa 25		X					X	

Curriculum development

- Freshman lecture – Earth’s Environment and Global Change
- Non-major service course – Exploring Earth Lab
- Freshman Gateway – Geology of War
- Sophomore-Junior – Life, climate, and the rock record
- Sophomore-Junior – Surface Processes
- Sophomore-Junior – Earth History, lecture and labs
- Junior – Geological Field Camp
- Junior-Senior – Process Geomorphology
- Junior-Senior – Process Sedimentology
- Junior-Senior – GIS and Computational Techniques in the Earth Sciences
- Junior-Senior – Active Tectonics senior seminar
- Junior-Senior – Lehigh Geology Field Camp
- Graduate – Advanced Fluvial and Tectonic Geomorphology
- Graduate – Graduate Seminar in Geomorphology
- Graduate – Quantitative Fluvial Geomorphology
- Graduate – Dynamic Topography
- Graduate – new core course (with Steve Peters), Physical and chemical processes at the Earth’s surface.
- Graduate – Active Tectonics short course, Bologna, Italy.

I. Research Advising and Mentoring

Undergraduate

EES 293 – Supervised Research

- (17) Blythe Kratzer, **2025**, Construction of a paleomagnetic age model for the Zereg basin in western Mongolia
- (16) Yuliana Lugo-Melendez, **2025**, Carbon sequestration at the Sculpture Garden Watershed
- (15) Bianca Palomino, **2024**, English/Spanish website development for Lake Nockamixon interpretive sign.
- (14) Shreya Chawla, **2023**, Controlled experiments of diabase dissolution.
- (13) Corey Harris, **2023**, Controlled experiments of diabase dissolution.
- (12) Bianca Palomino, **2023**, Interpretive panel for Nockamixon State Park, *continuing*.
- (11) Elisha Wilson, **2023**, Web pages for Saucon Rail Trail interpretive panels, *Graduate Student, Long Island, NY*
- (10) Adam Patching, **2019**, Tracks, Trains, and the Triassic interpretive panel, *Assistant Project Manager, JDL Interiors, Inc, Boston Mass*
- (9) Neal Hafner, **2019**, Saucon Creek rating curve, *ERM Consulting*
- (8) Boo Kyo Sur, **2019**, *EarthRes Geotechnical Consulting, Pipersville, PA.*
- (7) Jocelin Gregorio, **2018**, Water Street Park interpretive panel, *National Parks Conservation Association*
- (6) Nathan Lam, **2018**, Saucon Creek interpretive panel, *Graduate student University of Miami.*
- (5) Samuel Marshall, **2018**, Saucon Creek interpretive panel, *MS Umass Lowell, Geologist CDM Smith.*
- (4) Grant Loescher, **2017**, Using Petra software for well and reservoir characterization, western Pennsylvania, *Senior consultant at Ayming.*
- (3) Jetty Vogel, **2017**, Using Petra software for well and reservoir characterization, western Pennsylvania.
- (2) Sianin Spaur, **2017**, Great unconformity interpretive panel, *New Mexico Bureau of Mines and Mineral Resources.*
- (1) Marleen Schuster, **2017**, Great unconformity interpretive panel, *Middle School Science Teacher, Providence, R.I.*

EES 393 – Senior Thesis

- (25) Rory Bertoldo, **2024**, Cyclostratigraphy of a lacustrine sequence in the Hargas Nur Fm, Mongolia, Senior Thesis Research.
- (24) Leia Barnes, **2022-23**, Magnetic susceptibility, erosion, and quasi-periodic sediment deposition, *continuing*.
- (23) Gabriela Birardi, **2023**, Modeling Climate Change with Landlab: The Topographic Response of a Watershed With Increasing Rainfall and Storm Intensity *Staff Geologist, Langan Engineering.*
- (22) Isabella Jacavone, **2023**, Pennsylvania Diabase as a Reservoir for Atmospheric Carbon Mineralization, *MS Environmental Engineering, Lehigh*
- (21) Phil Stevens, **2023**, Anisotropy of Magnetic Susceptibility (AMS) fabric as a paleogeodetic measure of tectonic deformation in Quaternary deposits: an example from the Italian Apennines.

- (20) John Krupnick, **2021**, Grain Size Control on Rock-Magnetic Cyclostratigraphy within Glacial Delta Sediments, Sciota, Pennsylvania, *Field Geologist, New Mexico Bureau of Geology and Mineral Resources*.
- (19) Mike Simoneau, **2019-2020**, Pleistocene drainage reversals and gorge cutting at the Laurentide ice margin in northwestern Pennsylvania interpreted from new cosmogenic exposure and luminescence ages, *Environmental Scientist, Verina Consulting Group LLC*.
- (18) Sianin Spaur, **2019**, Age and environmental change information encoded in middle-Pleistocene paleosols exposed in buried valleys of Schuylkill Co, Pennsylvania *Argon Geochronology Lab, New Mexico Bureau of Mines and Mineral Resources*.
- (17) Eliza Dent, **2018-19**, Reconstruction of middle Pleistocene interglacial paleoclimate from two buried paleosols in the Po Plain, northern Italy and comparison to paleosols in the eastern U.S.
- (16) Patrick Yun, **2018**, Ground water sources of the Polk Valley Run watershed, *Content and Marketing Specialist, North Tahoe Community Alliance*.
- (15) Cora Summerfield, **2017**, Pedogenesis of the Bryn Mawr Formation (late Miocene) in Cecil County, MD: encoding of past climate and implications for future environmental change in the mid-Atlantic region, *MS Univ of Florida, Maryland DEP*
- (14) Nicole Etzel, **2017**, Provenance of Triassic basin quartz-pebble conglomerates using detrital zircon petrography and geochronology, *Project Manager Biologist, US Army Corps of Engineers, Miami Fl*
- (13) Christi Li, **2016-17**, Age and retreat rate of Ohiopyle Falls, *Ph.D. University of Delaware*.
- (12) Lorrie Carnes, **2016**, River sinuosity response to central and eastern US (CEUS) intraplate seismicity with a focus on the central Virginia and Charleston seismic zones, *Ph.D. candidate, Arizona State University*.
- (11) Emily Bausher, **2015**, Ground Acceleration-Prone Soils in Philadelphia County, PA; Input to Risk-Based Models of Earthquake Hazards in the Central and Eastern United States, *Project Geologist at Terraphase Engineering*.
- (10) Taylor Cummings Carduner, **2015**, Geochemistry and Pedogenesis of Three Late Cenozoic Paleosols in East Central Pennsylvania, *Project engineer, Torcon, Inc*.
- (9) Cody Raup, **2015**, Correlating River Terraces of the South Anna River with Photogrammetric Analysis of Clasts, *Environmental Health and Safety Engineer, Nutek Disposables*
- (8) Jordan Dykman, **2014**, Alignment and divergence of pedologic, geomorphic, and geochemical data for Critical Zone hillslope soils in central PA *ExxonMobile, Oliver Wyman Management Consultant and Logistics*.
- (7) Andrew Moodie, **2014**, Dynamic topography and drainage divides in active orogenic settings, the Gibraltar Arc and Appalachians, *Ph.D. Rice University, Professor, Texas A&M*.
- (6) Pooja Potti, **2014**, Effects of a transient construction site on turbidity in a Pennsylvania stream, *Aquatic Biologist, PA DEP*
- (5) Kimberly Baldwin, **2013**, Geology and geomorphology of the Centennial accommodation zone along the Price Creek seismic line, SW Montana, *MS Rutgers, Physical Scientist Bureau of Ocean Energy Management*

- (4) Kyle Davidson, **2012**, Provenance of the Perkasie Member Conglomerate; Implications of a Permian Molasse, *MBA, Director of Management Engineering, Lehigh Valley Health Network*
- (3) Nick Gava, **2009**, Simulated erosion during mountain building in an analogue sandbox model, *STEM education specialist, Peace Corps, Washington, DC*
- (2) Anthony DiRusso, **2002**, Discharge records of Saucon Creek, *Site Specific Design, Inc.*
- (1) William Knipscher, **2001**, Drainage characteristics of Alpine detachments, *Geologist Delta Consultants, Baltimore, MD*

Masters

- (28) Leia Barnes, **2024-current**, Deciphering Human and Environmental Influences on River Systems Over Time with Field, Satellite, and Modeling.
- (27) Nyssa Notrica, **2024-current**, Base level fall landscape perturbation impact on terrestrial biodiversity.
- (26) Jonathan Wallace, **2023-2025**, Ice-marginal stream re-sculpting of fluvial topography interpreted from a surficial geologic map, cross-section age models, and longitudinal profiles of Allegheny and Clarion river terraces, Pennsylvania
- (25) James Fisher, **2019-2021**, Application of AMS paleogeodesy in central Italy, co-advised with David Anastasio, *Geospatial Data Engineering, Atomic Maps.*
- (24) Ben Bliss, **2019-2021**, Project TESPRESSO and encoding of exogenic forcings in terrestrial sediments, *Staff geologist, VHB, Vermont.*
- (23) Ethan Kurak, **2019-2021**, Youghiogheny terraces and GIA flexure in western Pennsylvania, *Quaternary Geologist, Minnesota Geological Survey.*
- (22) Joshua Gonzales, **2017-2019**, River knickpoint paleogeodesy and measurement of crustal deformation in the Central Virginia Seismic Zone (CVSZ) and Reading Lancaster Seismic Zone (RLSZ), *Hydrogeologist, USGS, Henderson, NV.*
- (21) Katrina Gelwick, **2017-2019** Testing the canonical process geomorphology model of climate-driven sedimentation in the building of basin stratigraphy. *Ph.D. candidate, ETH Switzerland.*
- (20) Matthew McGavick, **2015-2017**, Extrinsic terrace formation processes and tectonically driven river incision along the South Anna River, Virginia, *Geologist, GeoEngineers Inc, Boston, Mass.*
- (19) Helen F. Malenda, **2013-2015**, New Quaternary geochronometric constraints in river incision in the Virginia Piedmont: Relative contributions of climate, basal level fall, knickpoint retreat, and active tectonics, *Ph.D., Colorado School of Mines, Groundwater Technical advisor, LRE Water, Denver, CO.*
- (18) Rachel Baxter, **2011-12**, Sources and transport of suspended sediment in the Saucon Creek watershed, *Environmental Science Teacher, East Penn School District.*
- (17) William Betterman, **2010** – suspended, InSAR and active tectonics of Crete.
- (16) Kellen Gunderson, **2010**, Documenting steady or unsteady fold growth along the Apennine mountain front, *Ph.D. Lehigh, Chevron, then Zanskar geothermal, now Projeo Alternative Energy.*
- (15) Luke Wilson, **2008-2009** with D. Anastasio, Actively growing folds along the Apennines mountain front, *Geologist, ExxonMobile Exploration.*

- (14) Matt Bennett, **2008**, Restoration of the Saucon Creek channel.
- (13) Sarah Flanagan, **2004-2005**, Upland gravels, stream profile modeling, and landscape evolution of the Great Valley, Appalachian Mountains, *Resident Physician, St. Barnabas Hospital, Bronx, NY*.
- (12) Jeremy Laucks, **2004-2005**, Divide mobility and detrital U-Th/He thermochronology in the Appalachian Mountains, *Owner, Blackfly Canoes, LLC*.
- (11) Matt Wendell, **2005**, Geologic map, cross section, and inquiry-based education of Lehigh Gorge State Park, *Science Teacher, North Penn School District*.
- (10) Kurt Frankel, **2001-2002**, Quantitative topographic differences between erosionally exhumed and tectonically active mountain fronts: implications for late-Cenozoic evolution of the southern Rocky Mountains. *Ph.D., USC, Assistant Professor, Georgia Tech (deceased)*.
- (9) Thomas Becker, **2001**, co-advisee with Peter Zeitler, U-Th/He thermochronology of the Appalachian Mountains, *Ph.D. University of Kentucky, ExxonMobil, Astrid, now Geoscience Advisor, Nyack, NY*.
- (8) Sarah Newland Pearce, **1999-2001**, Response of ephemeral streams to active tectonics, San Bernardino Mountains, California, *Geologist, Environmental Health and Safety, Woodard and Curran, Denver, CO*.
- (7) Justin Pearce, **1999-2001**, Fluvial geomorphology of a glacial outwash stream, Matanuska River, Alaska, *Senior Engineering Geologist, USACE Risk Management, Denver, CO*.
- (6) Paul Wisniewski **1998-1999**, Fluvial terraces and late Cenozoic landform evolution of the Canadian River, *Senior Science Advisor, Integral Consulting Inc., Napa CA*.
- (5) David Mitchell **1998-1999**, Rates and controls on bedrock fluvial incision, *Senior Hydrogeologist, Jacobs, Fletcher Driscoll and Associates, Worcester, MA*.
- (4) Karl Wegmann **1997-1999**, Fluvial geomorphology and active tectonics of the Clearwater basin, Olympic Peninsula, *Ph.D., Lehigh, Associate Professor, N.C. State University*.
- (3) Daniel Koning **1997-1999**, Active tectonics of the Sacramento Mountains, *Field Geologist, New Mexico Bureau of Geology and Mineral Resources, Socorro, NM*.
- (2) Antonio Garcia, **1994-1997**, M.S., Active tectonics and glacial geology of the eastern Olympic Peninsula, *Ph.D. UCSB, Associate Professor, Cal Poly San Luis Obispo, CA*.
- (1) Merri-Lisa Formento-Trigilio, **1994-1997**, Tectonics Geomorphology and long-term landscape evolution of Sierra Nacimiento, northern New Mexico, *Ph.D. Penn State, Independent documentary film maker, Montana*.

Doctoral

- (10) Nora Vaughan, **2024-current**, Growth and uplift of the Mongolian Altai
- (9) Kellen Gunderson, **2010-2013**, Documenting steady or unsteady fold growth along the Apennine mountain front, *Chevron, then Zanskar geothermal, now Projeo Alternative Energy*.
- (8) Chris Dempsey, **2008 – 2013**, with Don Morris, Microbial ecology and DOC metabolism in natural and impacted watersheds, *Associate Professor, Gannon University*.
- (7) Matthew Bennett, **2008-2012**, Historic watershed hydrology and global change (not completed).

- (6) Ryan McKeon, **2008-2012**, with Peter Zeitler, Geochronology and thermochronology in the Appalachians, *STEM Director and computer science teacher, Kimball Union Academy.*
- (5) Karl Wegmann, **2008**, Active tectonics of the Apennine and Hellenic forearcs, *Associate Professor, N.C. State University.*
- (4) Patrick Belmont, **2004-2007**, Don Morris, Landscape evolution and aquatic ecology: long term sediment dynamics and landscape influences in stream ecosystems, *Professor and Department Head, Watershed Sciences, Utah State University.*
- (3) Josh Galster, **2003-2006**, The connections between rivers and their watersheds over multiple time scales, *Associate Professor, Montclair University.*
- (2) Brent Zaprowski, **1999-2001**, co-advisee with Ed Evenson, Long term landscape evolution of the *Black Hills, Professor, Salisbury University.*
- (1) Joel Pederson, **1995-1999**, co-advisee with Dr. Gary Smith, A late Miocene through Quaternary record of buried, relict and modern hillslopes and their deposits, *Professor and Chair, Department of Geosciences, Utah State University.*

Post-Docs

- (3) Francesco Pavano, **2020-2022**, TEPSRESSO project; Tectonic geomorphology, *Assistant Professor, Universita' degli Studi, Napoli, Italia.*
- (2) Claudio Berti, **2008-2012**, Tectonic geomorphology and Remote Sensing InSAR, *Idaho State Geologist.*
- (1) Matteo Spagnolo, **2003**, River long profile development in the northern Apennines, Italy, *Professor, University of Aberdeen, Scotland.*

J. Service and Leadership Roles

Lehigh

University

Director of Academic Planning, CAS Advising Office, 2023-present.
 Faculty Committee for Facilities Planning, 2015-2018; Chair, 2017-18.
 ADVANCE Internal Advisory Committee, 2011-2014.
 CAS representative to Centers and Programs steering committee, 2005-06.
 Global Lehigh advisory board, 2006-2012.
 Study Abroad Faculty Advisory Board, 2007-present; chair in 2008-2009.
 Faculty Awards Committee, 2016-2018; 2020-2023; Chair in 2023.
 LUSSI advisor, 2020-2022

College

Co-director for Academic Planning, CAS Advising Office, 2022-current
 Faculty excellence in teaching, research, service selection committee, 2013-present.
 Internationalization of the curriculum committee, Fall, 2005.
 Studies abroad committee, Fall, 2006.

Chair, Special Committee for Promotion of David Casagrande

Interdisciplinary programs

Co-Director, Environmental Initiative, 2011-12.

Environmental Initiative, 2005-current.

Environmental Initiative Steering Committee, 2007-2014.

Department

New faculty search committee, 2022

Field committee, 2005-06.

Chair, search committee, Soil Biogeochemistry, 2006-07.

Chair, search committee, paleoecology, 2001-02.

Faculty search committee, Remote Sensing, 2004.

Faculty search committee, Plant Ecology, 1999-2000.

Faculty search committee, 2022-23.

Department Seminar, 1999-2002; 2016.

Foster-Hewitt Organizer, The Peopling of North America, 2019.

Graduate instructional committee, 2002-2004.

Department Chair, 2007-2013.

Department Field Trip, Italy, 2009.

Department Field Trip, Utah-California, 2011.

Computer and Facilities Committee (Chair), 2014-2015.

PhD qualifying exam committee, F2017.

Undergraduate Instructional Committee, 2018-present, Chair, 2020-present.

Space and Facilities Committee, 2022-present.

External

Professional organizations

Co-leader of Geological Society of America Foundation Trip to Coldigioco, Italy, 2022.

Co-leader of 85th Field Conference of Pennsylvania Geologists, Ohiopyle, PA.

Field trip chairman, Geological Society of America, 2006.

Geological Society of America, Quaternary Geology and Geomorphology Panel
Member 2007-2010.

GSA Councilor, 2015-2019.

Coordinator of GSA-AGU field trips, AGU Fall Meeting, Washington, D.C. 2018.

Commissions, panels

U.S. Geological Survey EDMAP Panel, 2000-2002.

National Science Foundation, EAR-GEO-Geomorphology and Land Surface
Dynamics, 2005-2007.

National Science Foundation, EAR-GEO-Tectonics, 2015, 2020

USGS Earthquake Hazards Program, 2022.

International activities

Numerous invited lectures and short courses in Italy.

Other

Co-organizer, Lehigh Valley Watershed Conference, October, 2006, March, 2008, October, 2009, March, 2011, October, 2012.

Co-organizer and convener, NSF EarthScope-GeoPRISMS workshops, Bastrop, Texas (May, 2011) and Lehigh University (October, 2011).

Synergistic activities

- Coopersburg Historical Society presentation on the Coopersburg Dinosaur Trackway, March and Nov, 2025.
- Hellertown Historical Society presentation, Rivers, soil, and iron: How geology laid the foundation for the development of the Saucon Valley, Sept, 2024.
- Hellertown, PA Parks and Trails Planning Group, 2022
- Hellertown Planning Commission, 2006-2012.
- Hellertown Borough Authority, 2011-present.
- Mentor for six educational outreach geology panels, Saucon Rail Trail, Bethlehem, Hellertown, Lower Saucon Township, Upper Saucon Township, Springfield Township, PA, Lake Nockamixon State Park, PA.
- Co-convener of the Rocky Mountain mini-symposia at the national meeting of the Geological Society of America Denver meeting, 2000.
- Co-convener of several technical sessions and Pardee symposia, Geological Society of America National meetings; co-editor of planned special volume dedicated to understanding of steady-state orogens, 2001.
- Co-convener of two national GSA field trips, two regional GSA field trips, and a GSA short course on active tectonics.
- Co-convener of two international field trips: International Geomorphologic Congress, Late Cenozoic geology and geomorphology of the U.S. Atlantic passive margin (1994) and INQUA, Geology and geomorphology of the Susquehanna River basin (2003).
- Co-chair and co-editor of the 50th annual New Mexico Geological Society meeting and field trip (Sept., 1999).
- Development of a mentorship program for Native American students in the Department of Earth and Planetary Sciences, UNM involving students in field mapping and related geologic studies.
- Active participation and personal commitment to Lehigh's geology field camp dedicated to raising the competence in geologic mapping among Earth science students.
- Core involvement in USGS mapping pursuant to the Middle Rio Grande corridor project.
- Long-standing commitment to understanding of the underlying processes in fluvial terrace genesis - Member of IGPP FLAG group dedicated to global correlation of fluvial terrace sequences on passive margins.
- American Geophysical Union, Geological Society of America, National Association of Geology Teachers, and New Mexico Geological Society
- Development of an educational CDROM – “Earth’s Dynamic Surface”, published by Tasa Graphics Incorporated.
- Chinese-American Frontiers in Science (CAS) invited lecturer, Beckman Center, Irvine California, October, 2000.

- National Park Service Interpreter training, March 15-18, 2006, NPS National Training Center, Harpers Ferry, WV.
- 1st Lehigh Valley Watershed Conference, Mountaintop Campus, October 6th, 2006.
- Field trip coordinator, 2006 Philadelphia GSA meeting.
- Co-convener of GSA Pardee Symposium 1 and First-Annual Kirk Bryan Field Excursion, 2006 Philadelphia Geological Society of America meeting.
- Director (since 2004) of Lehigh Geology Field Camp.
- Earth Science secondary education outreach, High School Earth Science teachers at field camp.
- Co-convener of two technical sessions (tectonic and fluvial geomorphology) at the national GSA meeting, Houston.
- 2nd Lehigh Valley Watershed Conference, Holiday Inn, Fogelsville, March, 2008.
- 3rd Lehigh Valley Watershed Conference, DeSales University, October, 2009.
- Co-convener of a GSA technical session on steady and unsteady process rates in active tectonics.
- Field education of K-12 Earth science educators, Lehigh Field Camp.
- Co-convener of NSF EarthScope-GeoPRISMS funded workshop, Geologic, Tectonic, and Geodynamic Processes of the Eastern North American (ENAM) Passive Margin Workshop
- Co-convener and author of the Marcellus Shale Panels and Report, Lehigh University, 2011-12.
- Co-convener of 2013 NSF EarthScope National Meeting, with field trip, Raleigh, NC.
- Two pre-meeting field trips, Pardee Symposium on Appalachian Geomorphology, GSA National Meeting, Baltimore, MD, 2015.
- Coordinator, GSA-AGU field trips, 2018 AGU Fall Meeting, Washington, D.C.

Optional Statement Addendum Jan, 2026

Nothing of note to report. Just doing my best to help move the Department and University forward.