# **DAVID STUART LEIGH**

Department of Geography University of Georgia Athens, GA 30602-2502

### **EDUCATION**

- **1982 B.A. in Geography**, University of Colorado at Boulder, 1977-1982; Major in Physical Geography, Minor in Anthropology.
- 1988 M.S. in Geography, University of Wisconsin at Madison, 1985-1988; Major in Physical Geography (Geomorphology), Minor in Environmental Studies. Thesis: "Pleistocene Stratigraphy and Geomorphology of the Bridgeport Terrace of the Lower Wisconsin River Valley near Muscoda and Blue River, Wisconsin," 167 pp. Advised by Dr. James C. Knox
- **Ph.D. in Geography**, University of Wisconsin at Madison, 1988-1991; Major in Physical Geography (Geomorphology), Minor in Geology and Soil Science. Dissertation: "Origin and Paleoenvironment of the Upper Mississippi Valley Roxana Silt," 186 pp. Advised by Dr. James C. Knox

### **EXPERTISE**

Geomorphology, Quaternary Geology, Geoarchaeology, Environmental Geology, Geoecology

### PROFESSIONAL EMPLOYMENT

June 1982 to September 1985: Assistant Geomorphologist, Center for American Archeology, Kampsville, IL 62053. Worked on geomorphic mapping of alluvial river valleys and archaeological site formation processes; Archaeological site excavation experience also was gained. Work was supervised by Dr. Edwin R. Hajic.

September 1985 to August 1990: Research and Teaching Assistant, Department of Geography, University of Wisconsin, Madison, WI 53706. Research Assistant to Dr. James C. Knox on NSF research projects in fluvial geomorphology 1985-1990; Teaching Assistant Fall 1989 for Introductory Physical Geography Laboratory.

September 1990 to September 1991: Lecturer, Department of Geography, University of Wisconsin, Madison, WI 53706. Taught Introductory Physical Geography.

September 1991 to September 1992 - Temporary Assistant Professor, Department of Geography, University of Georgia, Athens, GA 30602. Taught Earth Science Survey and Weather & Climate classes.

September 1992 to 1997 - Assistant Professor, Director of the Geomorphology Laboratory, and Graduate Faculty Member, Department of Geography, University of Georgia, Athens, GA 30602.

1997 to 2004 - Associate Professor, Director of the Geomorphology Laboratory, and Graduate Faculty Member, Department of Geography, University of Georgia, Athens, GA 30602.

2004 to 2008 - Professor, Director of the Geomorphology Laboratory, and Graduate Faculty Member, Department of Geography, University of Georgia, Athens, GA 30602.

2008 to 2011 - Professor, Graduate Coordinator, Director of the Geomorphology Laboratory, and Graduate Faculty Member, Department of Geography, University of Georgia, Athens, GA 30602.

2011 to 2015 - Professor, Associate Head, Director of the Geomorphology Laboratory, and Graduate Faculty Member, Department of Geography, University of Georgia, Athens, GA 30602.

2015 to Present - Professor, Director of the Geomorphology Laboratory, and Graduate Faculty Member, Department of Geography, University of Georgia, Athens, GA 30602.

### PROFESSIONAL MEMBERSHIPS

American Association of Geographers (AAG), American Quaternary Association (AMQUA), Geological Society of America (GSA), American Geophysical Union (AGU), Southeastern Division of the Association of American Geographers (SEDAAG), International Association of Landscape Archaeology (IALA).

### **HONORS AND AWARDS**

- 1995 University of Georgia M.G. Michael Award for Excellence in Research
- 2008 U.S. Department of State Fulbright Award Argentina/Uruguay Joint Award in Environmental Sciences
- 2008 AAG Geomorphology Specialty Group Excellence in Research-G.K. Gilbert Award (2004 QSR paper)
- 2012 University of Georgia Disability Resource Center Outstanding Faculty Award.
- 2018 Geological Society of America Geological Society of America Fellow

# **RESEARCH ACTIVITY**

#### **PUBLICATIONS**

#### Refereed Journal Articles:

1989: (Leigh, D.S., McSweeney, K., and Knox, J.C.). Micromorphology of a "welded" Sangamonian to Wisconsinan age paleosol in southwestern Wisconsin. <u>Catena</u> 16, 575-587.

1992: (Stafford, C.R., Leigh, D.S., and Asch, D.L.). Prehistoric settlement and landscape change on alluvial fans in the upper Mississippi Valley. <u>Geoarchaeology</u> 7, 287-314.

1993: (Leigh, D.S. and Knox J.C.). AMS Radiocarbon age of the Upper Mississippi Valley Roxana Silt. Quaternary Research 39, 282-289.

1994: (Leigh, D.S.). Roxana Silt of the Upper Mississippi Valley: lithology, source, and paleoenvironment. Geological Society of America Bulletin 106, 430-442.

1994: (Leigh, D.S. and Knox, J.C.). Loess stratigraphy of the upper Mississippi Valley Driftless Area. <u>Quaternary</u> Research 42, 30-40.

1994: (Leigh, D.S.). Mercury contamination and floodplain sedimentation from former gold mines in north Georgia. <u>Water Resources Bulletin</u> 30, 739-748.

1995: (Leigh, D.S. and Feeney, T.P.). Paleochannels indicating wet climate and lack of response to lower sea level, Southeast Georgia. <u>Geology</u> 23, 687-690.

1995: (Webb, P.A. and Leigh, D.S.). Geomorphological and archaeological investigations of a deep site along the Yadkin River floodplain. <u>Southern Indian Studies</u> 44, 1-36.

1996: (Leigh, D.S.). Alluvial soil chronosequence of Brasstown Creek in the Blue Ridge Mountains of north Georgia, U.S.A. <u>Catena</u> 26, 99-114.

1996: (Evans, J., Parker, A., Parker, K., Leigh, D.S.). Edaphic properties and foliar elemental concentrations for sand pine (*Pinus clausa*) populations throughout Florida. Physical Geography 17, 219-241.

1997: (Leigh, D.S.). Mercury tainted overbank sediment from past gold mining in north Georgia, USA. Environmental Geology 30, 244-251.

1998: (Leigh, D.S.). Evaluating artifact burial by eolian versus pedoturbation processes, South Carolina Sandhills, U.S.A. <u>Geoarchaeology</u> 13, 309-330.

1998: (Leigh, D.S.). A >12,000 year record of natural levee sedimentation along the Broad River near Columbia, South Carolina. Southeastern Geographer 38, 95-111.

2000: (Leigh, D.S.). Geomorphology, Stratigraphy, and Soil Chronosequence. [In] Archaeological Excavations in Brasstown Valley. <u>Early Georgia</u> 28, 22-3.

2001: (Ivester, A.H., Leigh, D.S., Godfrey-Smith, D.I.). Chronology of inland eolian dunes on the Coastal Plain of Georgia, USA. <u>Quaternary Research</u> 55, 293-302.

2003: (Ivester, A.H., and Leigh, D.S.). Riverine Dunes on the Coastal Plain of Georgia, U.S.A. <u>Geomorphology</u> 51, 289-311.

2003: (Roy, A.H., Rosemond, A.D., Paul, M.J., Leigh, D.S., and Wallace J.B.). Stream macroinvertebrate response to catchment urbanization (Georgia, U.S.A.). <u>Freshwater Biology</u> 48, 329-346.

2003: (Roy, A.H., Rosemond, A.D., Leigh, D.S., Paul, M.J., and Wallace, J.B.). Habitat-specific responses of stream insects to land cover disturbance: biological consequences and monitoring implications. <u>Journal of the North</u> American Benthological Society 22, 292-307.

2003: (Walters, D.M., Leigh, D.S. and Bearden, A.B.). Urbanization, Sedimentation, and Homogenization of fishes in the Etowah River Basin, Georgia Piedmont, USA. Hydrobiologia, 494, 5-10.

2003: (Walters, D.M., Leigh, D.S., Freeman, M.C., Freeman, B.J., and Pringle, C.M.). Geomorphology and fish assemblages in a Piedmont river basin, USA. <u>Freshwater Biology</u> 48, 1950-1970.

2004: (Leigh, D.S., Srivastava, P., Brook, G.A.). Late Pleistocene braided rivers of the Atlantic Coastal Plain, USA. Quaternary Science Reviews 23, 65-84. \*This paper won the 2008 G.K. Gilbert Award of the AAG Geomorphology Specialty Group.

2004: (Goman, M., Leigh, D.S.) Wet early to middle Holocene conditions on the upper Coastal Plain of North Carolina, USA. <u>Quaternary Research</u> 61, 256-264.

2004: (Shaw, J.N., West, L.T., Bosch, D.D., Truman, C.C., and Leigh, D.S.) Parent material influence on soil distribution and genesis in a Paleudult and Kandiudult (Southeastern USA) complex. <u>Catena</u> 57, 157-174.

2005: (Martin, J.K., Jackson, C.R., Leigh, D.S., West, L.T.) Historical Agricultural Sediments in a Southeastern Piedmont River; a Multi-Millenial Legacy. <u>Journal of Soil and Water Conservation</u> 60, 298-310.

2006: (Leigh, D.S.) Terminal Pleistocene Braided to Meandering Transition in Rivers of the Southeastern USA. Catena 66, 155-160.

2006: (Leigh, D.S. and Webb, P.W.) Holocene Erosion, Sedimentation, and Stratigraphy at Raven Fork, Southern Blue Ridge Mountains, USA. <u>Geomorphology</u> 78, 161-177.

2006: (Price, K. and Leigh, D.S.) Stream morphological and sedimentological response to human impact in the southern Blue Ridge Mountains, USA. <u>Geomorphology</u> 78, 142-160.

2006: (Price, K. and Leigh, D.S.) Comparative water quality of lightly- and moderately-impacted streams in the southern Blue Ridge Mountains, USA. <u>Environmental Monitoring and Assessment</u> 120, 269-300.

2008: (Leigh, D.S.). Late Quaternary Climates and River Channels of the Atlantic Coastal Plain, Southeastern USA. Geomorphology 101, 90-108.

2008: (Markwith, S.H., Leigh, D.S.) Subaqueous Hydrochory: Open-Channel Hydraulic Modeling of Non-Buoyant Seed Movement. <u>Freshwater Biology</u> 53, 2274-2286.

2009: (Walters, D.M., Roy, A.H., Leigh, D.S.) Environmental indicators of macroinvertebrate and fish assemblage integrity in urbanizing watersheds. <u>Ecological Indicators</u> 9, 1222-1233.

2009: (Carter, T. L., Jackson, C. R., Rosemond, A. D., Pringle, C. M., Radcliffe, D. E., Tollner, E. W., Maerz, J. C., Leigh, D. S.). Beyond the urban gradient: barriers and opportunities for real t-time studies of urbanization effects on aquatic ecosystems. Journal of the North American Benthological Society 28, 1038-1050.

2010: (Leigh, D.S.) Morphology and channel evolution of small streams in the southern Blue Ridge Mountains of western North Carolina. Southeastern Geographer 50, 397-421.

- 2010: (Suarez, R., Leigh, D. S.) Tres Árboles Site (RN2-2b): Tres Árboles Site (RN2-2b), a Buried Late-Pleistocene Fishtail Site in Alluvium, Central Uruguay. Current Research in the Pleistocene 27, 31-33.
- 2011: (Suther, B. E., Leigh, D. S., Brook, G. A.) Fluvial terraces of the Little River valley, Atlantic Coastal Plain, North Carolina. Southeastern Geology 48, 73-93.
- 2011: (McDonald, J. and Leigh, D.S.) Terminal Pleistocene through Holocene evolution of Whiteoak Bottoms, a Southern Blue Ridge Mountain peatland. Wetlands 31, 783-797.
- 2012: (Markwith, S.H., Leigh, D.S.) Comparison of estimated and experimental subaqueous seed transport. <u>Ecohydrology</u> 5, 346-350.
- 2012: (Bain, D.J., Green, M.B., Campbell, J., Chamblee, J., Chaoka, S., Fraterrigo, J., Kaushal, S., Martin, S., Jordan, T., Parolari, T., Sobczak, B., Weller, D., Wollheim, W., Boose, E., Duncan, J., Gettel, G., Hall, B., Kumar, P., Thompson, J., Vose, J., Elliott, E., Leigh, D.S.). Legacies in material flux: structural catchment changes predate long term studies. <u>Bioscience</u> 62, 575-584.
- 2012: (Wang, L. and Leigh, D.S.) Late Holocene paleofloods in the Upper Little Tennessee River Valley, Southern Blue Ridge Mountains, USA. <u>The Holocene</u> 22, 1061-1066.
- 2012: (Benstead, J. P. and Leigh, D.S.) Expanding the global role of streams and rivers. Nature Geoscience 5, 678-679.
- 2013: (Leigh, D.S., Kowalewski, S.A., Holdridge, G.H. 3400 Years of Agricultural Engineering in Mesoamerica: Lama-Bordos of the Mixteca Alta, Oaxaca, Mexico. <u>Journal of Archaeological Science</u> 40, 4107-4111.
- 2013: (Rogers, J.C., and Leigh, D.S.) Modeling stream bank erosion in the Southern Blue Ridge Mountains. Physical Geography 34, 354-372.
- 2014: (Jensen, C.K. and Leigh, D.S., and Jackson, R.C.) Scales and Arrangements of Large Wood in First-through Fifth-order Streams of the Blue Ridge Mountains. <u>Physical Geography</u> 35, 532-560.
- 2015: (Jackson, C.R., Leigh, D.S., Long, L.S., Chamblee, J.F.), Herbaceous versus forested riparian vegetation: Narrow and simple versus wide, woody and diverse stream habitat USA. <u>River Research and Applications</u> 31, 847-857.
- 2015: (Leigh, D.S., Gragson, T.L, Coughlan, M.R.) Pedogenic effects of mid- to late-Holocene conversion of forests to pastures in the French western Pyrenees. <u>Zeitschrift für Geomorphologie</u> 59, 225-245.
- 2015: (Gragson, T. L., Leigh, D. S., & Coughlan, M. R.). Basque Cultural Landscapes of the French Western Pyrenees. Il Capitale Cultural: Studies on the Value of Cultural Heritage, 12, Special Issue: Archaeology of Europe's mountain areas: methods, problems and case studies, 565-596.
- 2015: (Wang, L. and Leigh, D.S.) Anthropic signatures in alluvium of the Upper Little Tennessee River valley, Southern Blue Ridge Mountains, USA, <u>Anthropocene 11</u>, 35-47.
- 2016: (Leigh, D.S., Gragson, T.L, Coughlan, M.R.) Colluvial legacies of millennial landscape change on individual hillsides, place-based investigation in the western Pyrenees Mountains. <u>Quaternary International</u> 402, 61-71.
- 2016: (Gragson, T.L., Hautefeuille, F., Thompson, V., Leigh, D.S.) Ground-Penetrating Radar Discovery and Imaging of the Early Christian Church of Notre Dame de Baudes near Labastide-du-Temple, France. <u>Journal of Archaeological Science</u>: Reports 6, 584-593.
- 2016: (Gragson, T.L., Thompson, V., Leigh, D.S., Hautefeuille, F.) Ground penetrating radar data used in discovery of the early Christian church of Notre Dame de Baudes near Labastide-du-Temple, France. <u>Data in Brief</u> 7, 1588-1593.

2018: (Leigh, D.S.) Vertical accretion sand proxies of gaged floods along the upper Little Tennessee River, Blue Ridge Mountains, USA, <u>Sedimentary Geology</u> 364, 342-350. (http://www.sciencedirect.com/science/article/pii/S0037073817301963)

2018: (McDonald, J.M., Leigh, D.S., Jackson, C.R.) Watershed- to continental-scale influences on winter stormflow in the Southern Blue Ridge Mountains, <u>Journal of Hydrology</u> 563, 633-656. https://doi.org/10.1016/j.jhydrol.2018.06.013.

2018: (Cecala, K., Maerz, J., Halstead, B., Frisch, J., Gragson, T., Cymerman, J., Leigh, D.S., Jackson, C.R., Peterson, J., Pringle, C.). Multiple drivers, scales, and interactions influence southern Appalachian stream salamander occupancy. <u>Ecosphere</u> 9, 1-19. https://doi.org/10.1002/ecs2.2150

2018: (Suther, B.E., Leigh, D.S., Brook, G.A., LinHai, Y.) Mega-meander paleochannels of the southeastern Atlantic Coastal Plain, USA, <u>Palaeogeography</u>, <u>Palaeoclimatology</u>, <u>Palaeoecology</u> 511, 52-79. https://doi.org/10.1016/j.palaeo.2018.07.002

2018: (Holdridge, G., Leigh, D.S.) Stable Carbon Analysis of Alluvial Paleosols in the Mixteca Alta, Oaxaca, Mexico, Quaternary International 490, 60-73. https://doi.org/10.1016/j.quaint.2018.05.020

2019: (Leigh, D.S., Gragson, T.L., LeFebvre, B.) Rapid alluvial sedimentation aided expansion of Moissac during the Middle Ages in southern France, <u>Geomorphology</u> 331, 49-58. https://doi.org/10.1016/j.geomorph.2018.08.002

2020: (Suther, B.E. and Leigh, D.S.) Soil morphology of an alluvial chronosequence from the Little River, North Carolina Coastal Plain, USA. <u>Geomorphology</u> 351, *accepted and in press*. https://doi.org/10.1016/j.geomorph.2019.106921

2020: (Gragson, T.L., Coughlan, M.R., Leigh, D.S.) Contingency & Agency in the Mountain Landscapes of the western Pyrenees: A Place-Based Approach to the Long Anthropocene. <u>Sustainability 12, 22pp.</u>, Special Issue "Historical Ecology and Landscape Archeology: Cross-Disciplinary Approaches to the Long Anthropocene".

2020: in press: (Fesenmyer, K., Wenger, S., Leigh, D., & Neville, H.). Large portion of USA streams lose protection with new interpretation of Clean Water Act. Freshwater Science. doi:10.1086/713084

#### Chapters in Books:

1988: (McSweeney, K., Leigh, D.S., Darmody, R.H., and Knox, J.C.). Micromorphological analysis of "mixed zones" associated with loess deposits of the midcontinental United States. *In* (D.N. Eden and R.J. Furkert, Eds.) "Loess: Its Distribution, Geology, and Soils", Balkma, Rotterdam, pp. 117-130.

1992: (Leigh, D.S.). Geomorphology. *In* (C.R. Stafford, Ed.) "Early Woodland occupations at the Ambrose Flick Site, Sny Bottoms, Illinois". Center for American Archeology Research Series 10, Kampsville, Illinois.

1998: (Leigh, D.S.). Nonpoint trace metal delivery to Lake Sidney Lanier, Georgia. *Chapter 4, In* (Kundell, J.E. and others Eds.), pp 4.1-4.39 and Appendix C, pp. C1-C25. "Diagnostic/Feasibility Study of Lake Sidney Lanier, Georgia." Prepared for the Georgia Environmental Protection Division under the U.S. Environmental Protection Agency's Clean Lakes Program. Carl Vinson Institute of Government, Athens, GA.

2001: (Leigh, D.S.). Buried artifacts in sandy soils: techniques for evaluating pedoturbation versus sedimentation. *In* (P. Goldberg, V. T. Holliday, R. Ferring, eds.), "Earth Science and Archaeology", pp. 269-293, Plenum, New York.

2005: (Walters, D.M., Freeman, M.C., Leigh, D.S., Freeman, B.J., Pringle, C.M.) Effect of urbanization on fish assemblages and habitat quality in a Piedmont river basin. In (Brown, L.R., Ed.) "Urban Effects on Aquatic Ecosystems," American Fisheries Society, Bethesda, Maryland.

- 2008: (Leigh, D.S.). Late Quaternary Climates and River Channels of the Atlantic Coastal Plain, Southeastern USA. In (P.F. Hudson, K.W. Butzer, and T. Beach, Eds.) "Fluvial Deposits and Environmental History: Geoarchaeology, Paleohydrology, and Adjustment to Environmental Change", pp. 90-108, Elsevier, Amsterdam.
- 2012: (Webster, J.,Benfield, E.F., Cecala, K.K., Chamblee, J.F., Dehring, C.A., Gragson, T., Cymerman, J.H., Jackson, C.R.Knoepp, J.D., Leigh, D.S. Maerz, J.C., Pringle, C., and Valett, H.M.). Water quality and exurbanization in southern Appalachian streams. In "River Conservation and Management" (Philip J. Boon and Paul J. Raven, eds.), Wiley, New York, pp 91-106.
- 2016: (Leigh, D.S.). Multi-millennial Record of Erosion and Fires in the Southern Blue Ridge Mountains, USA. In (K. Greenberg & B. Collins, Eds.), pp. 167-202. "Natural Disturbances and Range of Variation: Type, Frequency, Severity, and Post-disturbance Structure in Central Hardwood Forests". Springer, Basel, Switzerland.
- 2019: (Mason, J., Jacobs, P., Leigh, D.S.). Loess, Eolian Sand, and Colluvium in the Driftless Area. Chapter in (E. Carson et al., Eds), "The Physical Geography and Geology of the Driftless Area: The Career and Contributions of James C. Knox", Geological Society of America Special Paper 543, pp. 61-73. Geological Society of America, Boulder, CO. https://doi.org/10.1130/2019.2543(04)
- 2019: (Daniels, M., Leigh, D.S., Carson, E.). Holocene paleohydrology and paleofloods in the Driftless Area. Chapter in (E. Carson et al., Eds), "The Physical Geography and Geology of the Driftless Area: The Career and Contributions of James C. Knox", Geological Society of America Special Paper 543, pp. 75–92, Geological Society of America, Boulder, CO. https://doi.org/10.1130/2019.2543(05)
- 2020: *In Press*: (Coughlan, M.R., Leigh, D.S., Gragson, T.L., Le Couédic, M.). Holocene anthropization of midelevation landscapes around Pic d'Orhy, Western Pyrenees. Chapter contribution in: Archaeology Of Mountain Landscapes: Interdisciplinary Research Strategies of Agro-Pastoralism In Upland Regions. Institute of Mediterranean and European Archaeology. SUNY Press, Binghamton, New York.

## Conference Proceedings Papers:

- 1994: (Leigh, D.S.). Gold mining's impact on north Georgia floodplains. *In* (R.A. Marston and V.R. Hasfurther, Eds.) Proceedings paper for the American Water Resources Association Symposium on "Effects of Human-Induced Changes on Hydrologic Systems", Jackson Hole, Wyoming, June 26-29, 1994. American Water Resources Technical Publication Series TPS-94-3, pp. 215-224.
- 1995: (Leigh, D.S.). Mercury contamination of stream sediment in north Georgia from former gold mines in the Dahlonega Gold Belt . *In* (Hatcher, K.) Proceedings of the 1995 Georgia Water Resources Conference. Carl Vinson Institute of Government, Athens, GA, pp. 218-220.
- 1997: (Leigh, D.S. and Cable, J.). Stratigraphy and soil chronosequence of the Brasstown Sites: A model for age assessment of alluvium in the southern Blue Ridge. *In* (A.C. Goodyear, J. Foss, K. Sassaman Eds.) Proceedings of the Second International Conference on Pedo-Archeology. S. Carolina Institute. of Archeology, Anthropological Studies 10, pp. 1-9.
- 1997: (Leigh, D.S. and Gamble, D.). Survey of Nonpoint Trace Metal Inputs to Lake Sidney Lanier. *In* (Hatcher, K.) Proceedings of the 1997 Georgia Water Resources Conference. University of Georgia Institute of Ecology, Athens, GA, pp. 170-173.
- 1999: (Rosemond, A.D., Freeman, B.J., Freeman, M.C., Leigh, D.S., Pringle, K.). Development of a scientific understanding of the effects of land use on stream ecosystems. *In* (K. Hatcher ed.) "Proceedings of the 1999 Georgia Water Resources Conference." March 30-31, 1999, The University of Georgia, Athens.
- 2000: (Leigh, D.S., Freeman, B.J., Freeman, M.C., Kramer, E. A., Paul, M. J., Pringle, C.M., Rosemond, A.D., Cifaldi, R., Roy, A., Walters, D.M.). Land use and geomorphic Indicators of biotic integrity in Piedmont streams. In "Proceedings: 2000 STAR Ecosystem Indicators Progress Review Workshop." May 8-10, 2000, Las Vegas, NV.

United States Environmental Protection Agency Office of Research and Development, EPA/600/R-00/017, Washington, D.C.

2001: (Leigh, D.S., Freeman, B.J., Freeman, M.C., Kramer, M.J., Pringle, C.M., Rosemond, A.D., Paul, M.J Walters, D. M., Roy, A.). Overview of land cover and geomorphic indicators of biotic integrity in the Etowah River basin, Georgia. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 225-228.

2001: (Roy, A.H., Rosemond, A.D., Leigh, D.S., Paul, M.J., and Wallace, J.B.). Effects of changing land use on macroinvertebrate integrity: identifying indicators of water quality impairment. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, University of Georgia, Athens, pp. 229-232.

2001: (Walters, D.M.., Freeman, M.C., Leigh, D.S., Freeman, B.J., Paul, M.J., and Pringle, C.M.). Bed texture and turbidity as indicators of fish biotic integrity in the Etowah River system. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 233-236.

2001: (Rosemond, A.D., Weyers, H.S., Paul, M.J., Greenwood, J.L., and Leigh, D.S.). Benthic algal biomass in the Etowah basin and implications to establishing nutrient criteria in streams. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 237-240.

2001: (Paul, M.J., Leigh, D.S., and Lo, C.P.). Urbanization in the Etowah River basin: effects on stream temperature and chemistry. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 241-245.

2001: (Cifaldi, R.L., Kramer, E.A. and Leigh, D.S.). Land cover and stream morphology indicators of variation in riparian forest patches of the Etowah River basin, Georgia. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 255-258.

2001: (Martin, J.K., Jackson, C.R., Leigh, D.S., West, L.T.) Sediment flux and storage in a Southeastern Piedmont river system. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 574-577.

2003: (Roy, A.H., Freeman, M.C., Meyer, J., Leigh, D.S.). Patterns of land use change in upland and riparian areas in the Etowah River basin. *In* (K.J. Hatcher, ed). "Proceedings of the 2003 Georgia Water Resources Conference." Held April 23-24, 2003, Institute of Ecology, The University of Georgia, Athens, Georgia, pp. 331-334.

2003: (Riedel, M.S., Vose, J.M., Leigh, D.S.) The road to TMDL is paved with good intentions - Total Maximum Daily Loads for a Wild and Scenic River in the southern Appalachians. Proceedings of the Second Conference on Watershed Management to Meet Emerging TMDL Environmental Regulations, Amer. Soc. Ag. Engr., Albuquerque, NM, Nov. 18 - 12.

# **Book Reviews:**

1993: (Leigh, D.S.). Review of "Soil Geomorphology," by J. Gerrard. New York: Chapman and Hall, 1992. <u>The Professional Geographer</u> 45, 483-484.

1998: (Leigh, D.S.). Review of "Plutonium and the Rio Grande," by W. L. Graf. Oxford University Press: New York, 1994. Geomorphology 24, 363-366.

# Selected Technical Reports:

1983: (Stafford, C.R., Deiss, R.N., Hajic, E.R., and Leigh, D.S.). Archeological Survey and Limited Soil Coring and Test Excavations of Cultural Resources in the F.A.P. 408 Flint and Blue Creek Alternatives. Center for American Archeology Contract Archeology Program, Reports of Investigations 140.

- 1984: (Leigh, D.S.). Geomorphology and Site Burial Potential for the F.A.P. 408 Illinois Valley Proposed Borrow Pit Survey Area. *In* (M.D. Connor Ed.) An Archeological and Geomorphological Assessment of the F.A.P. 408 Illinois River Bluffline Borrow Area. Center for American Archeology Contract Archeology Program, Reports of Investigations 152, pp. 26-48.
- 1984: (Leigh, D.S.). Geomorphology and Site Burial Potential for the F.A.P. 408 Mississippi Valley Proposed Borrow Pit Survey Area. *In* (M.D. Connor Ed.) An Archeological and Geomorphological Assessment of the F.A.P. 408 Mississippi Valley Bluffline Borrow Area. Center for American Archeology Contract Archeology Program, Reports of Investigations 154, pp. 26-53.
- 1985: (Hajic, E.R. and Leigh, D.S.). Shallow Subsurface Geology, Geomorphology and Limited Cultural Resource Investigations of the Meredosia Village and Meredosia Lake Levee and Drainage Districts, Scott, Morgan, and Cass Counties, Illinois. U.S. Army Corps of Engineers, St. Louis District Cultural Resource Management Report 17.
- 1987: (Knox, J.C. and Leigh, D.S.). Late Wisconsin and Holocene Geomorphic History of the Lower Onion River Valley, Sheboygan County, Wisconsin. Report of Investigations, Wisconsin State Historical Society, Highway Archaeology Program, 89 p.
- 1990: (Knox, J.C. and Leigh, D.S.). Rountree Formation (New). Appendix *In* (L. Clayton and J.W. Attig) Geology of Sauk County, Wisconsin. Wisconsin Geological and Natural History Survey Information Circular 67, p. 64-67.
- 1993: (Leigh, D.S. and Knox, J.C.). Lithostratigraphic Description and Classification of Loess-Stratigraphic Units in Wisconsin. Wisconsin Geological and Natural History Survey Open File Report 93-3.
- 1994: (Leigh, D.S.). Mercury Storage and Mobility in Floodplains of the Dahlonega Gold Belt. Georgia Institute of Technology Environmental Resources Center, Technical Completion Report ERC 02-94.
- 1996: (Webb, P.A., Leigh, D.S., Lilly, T.G.) Archaeological and Geomorphological Testing of Site 38ML235, Marlboro County, South Carolina. Prepared for AT&T Communications, Inc. and Commtech, Inc. by Garrow & Associates, Inc., Raleigh, North Carolina.
- 1998: (Leigh, D.S. and Ivester, A.H.). Eolian Dunes at Fort Stewart, Georgia: Geomorphology, Age, and Archaeological Site Burial Potential. University of Georgia Geomorphology Laboratory Research Report 1, Athens, Georgia, 108 pp.
- 2002: (Leigh, D.S.). Geomorphology and Archeological Contexts of the Pee Dee River Valley along U.S. Route 15/401, Darlington and Marlboro Counties, South Carolina. In (E.C. Poplin, B.G. Harvey, and B. Sutherlin Eds.) "Cultural Resources Survey of the US Route 15/401 Bridge Replacement Project, Darlington and Marlboro Counties, South Carolina, State File Number 1635.100B, PIN 23432, prepared for the South Carolina Department of Transportation and Ralph Whitehead Associates by Brockington and Associates, Inc., Atlanta.
- 2002: (Webb, P.A., Leigh, D.S., Benyshek, T.) Cultural and Historical Resource Investigations of the Ravensford Land Exchange Tract, Great Smoky Mountains National Park, Swain County, North Carolina, Volumes I and II. ARPA Permit 99-001, Amendment 1, SEAC Accession No. 1580. Prepared for the Eastern Band of Cherokee Indians, Cherokee North Carolina by TRC Garrow Associates, Inc., Durham, North Carolina.
- 2002: (Leigh, D.S., Walters, D.M., Roy, A.H., Freeman, B.J., Freeman, M.C., Kramer, E.A., Paul, M.J., Pringle, C.M. Rosemond, A.D.). Landscape Indicators of Biotic Integrity in Piedmont Streams of the Etowah Basin, North Georgia, USA. Final Technical Report Submitted to the United States Environmental Protection Agency to Fulfill Requirements of a Science to Achieve Results (STAR) Grant (#R826597-01-0), University of Georgia Geomorphology Laboratory Research Report 2, Athens, GA.
- 2002: (Leigh, D.S., Walters, D.M., Roy, A.H., Freeman, B.J., Freeman, M.C., Kramer, E.A., Paul, M.J., Pringle, C.M. Rosemond, A.D.). Landscape Indicators of Biotic Integrity in Piedmont Streams of the Etowah Basin, North Georgia, USA. Final Executive Summary Report Submitted to the United States Environmental Protection Agency to Fulfill Requirements of a Science to Achieve Results (STAR) Grant (#R826597-01-0).

2005: (Ruiz, M., and Leigh, D.S.). Summary of Geomorphic Processes Influencing Archeological Site Burial at Fort Bragg: A research component of GIS modeling for predicting archaeological site locations, University of Illinois. Technical Report for the Fort Bragg Environmental Division.

2008: (Leigh, D.S.) Geomorphology and Related Archaeological Site Burial Potential at Fort Stewart and Hunter Army Airfield, Georgia. University of Georgia Geomorphology Laboratory Research Report 4, Athens, Georgia. 83p.

2014: Leigh, D. S. Chapter 8.2.1. Observations Geomorphologiques et Potential de Recouvrement des Sites Archeologiques - Geomorphic Observations and Archaeological Site Burial Potential in the Castelsarrasin Region of the Garonne and Tarn River Valleys, France. In (Nicolas Poirier, Ed.) "Recherches sur les Espaces, le Peuplement et les Réseaux Anciens de la Garonne Rapport de Prospection-Inventaire Autorisation N°14/2014", University of Toulouse, Toulouse, France, pp. 36-39.

2016: Leigh, D. S., & Gragson, T. L. Preliminary Report of Geomorphic and Stratigraphic Investigations in Moissac, France. Bastien Lefebvre, TRACES (UMR 5608), Université Toulouse - Jean Jaurès, France: Preliminary Report of Geomorphic and Stratigraphic Investigations in Moissac, France. Bastien Lefebvre, TRACES (UMR 5608), Université Toulouse - Jean Jaurès, France.

2017: Leigh, D. S., Milewski, A.M., Speakman, J. Paleofloods in the Tennessee River Basin: Pilot Demonstration by The University of Georgia. University of Georgia Geomorphology Laboratory Research Report 6 Submitted to the Electrical Power Research Institute (EPRI) on January 31, 2017 for EPRI Task ID: 1-071143-01-01

### Field Trip Guidebooks:

1990: (Knox, J.C. and Leigh, D.S.). Valley Trenching at the Driftless Area Boice Site (Stop 7). *In* (W.R. Hammer and D.F. Hess Eds.) Geology Field Guidebook: Current Perspectives on Illinois Basin and Mississippi Arch Geology. Field Trip Guidebook for the 24th Annual Meeting of the North Central Section of the Geological Society of America, Western Illinois University, Macomb, Illinois, pp.F26-F32.

1990: (Leigh, D.S. and Knox, J.C.). The Bridgeport Terrace and Hegery Site 1 (Stop 8). *In* (W.R. Hammer and D.F. Hess Eds.) Geology Field Guidebook: Current Perspectives on Illinois Basin and Mississippi Arch Geology. Field Trip Guidebook for the 24th Annual Meeting of the North Central Section of the Geological Society of America, Western Illinois University, Macomb, Illinois, pp. F33-F42.

1992: (Knox, J.C., Leigh, D.S., and Jacobs, P.M.). Quaternary Loess Deposits, Paleosols, River Terraces, and Alluvial Fills of the Wisconsin Driftless Area. *In* (E. Nater ed.) Soil-Geomorphology Pre-Conference Tour Guidebook for the Soil Science Society of America Annual Meeting in Minneapolis, MN, Nov. 1-6, 1992.

1996: (Leigh, D.S.). Fluvial Geomorphology of the Southern Piedmont near Athens, Georgia. Guidebook for Field Trip C of the 1996 Southeastern Division of the Association of American Geographers Meeting in Athens, Georgia, November 24, 1996, Department of Geography, University of Georgia, Athens, 15 p.

2004: Leigh, D.S. and Price, K.T. Geomorphology field trip sites. In (T. Gragson, J. Vose, and B. Kloeppel Eds.) Field Trip of Research Sites for the Coweeta Long Term Ecological Research in the Little Tennessee River Valley, Coweeta NSF Summer Meeting, June 2004. The Institute of Ecology, The University of Georgia.

2005: Leigh, D.S. Human Impact on Stream Morphology and Sedimentation. In (Vose, J. and Kloeppel, B. eds.) "Field Trip Guidebook for the Coweeta LTER National Science Foundation Review", June 2005, University of Georgia and USDA Forest Service, pp. 9-12.

2009: Leigh, D.S. Southeastern Friends of the Pleistocene Field Trip Guidebook. Field trip of December 5, 2009 in southern Georgia. The University of Georgia, Department of Georgraphy,

2014: Leigh, D. S., Katie, P., Jacob, M. Geomorphology and Physical Geography of Tallulah Gorge, Northeast Georgia. Athens, Ga: The University of Georgia. Field trip for the Southeastern Division of the Association of American Geographers meeting in Athens, GA, November 23, 2014.

#### **GRANTS**

#### Research Grants:

\$9,000 for the period 2/15/90 to 9/30/92; National Science Foundation, Doctoral Dissertation Research Grant in Geography and Regional Science: "Roxana Loess of the Upper Mississippi Valley: Provenance and Paleoenvironment." J.C. Knox (PI) and D.S. Leigh (Co-PI)

\$6,500 for the period 1/4/93 to 6/31/95; University of Georgia Faculty Research Grant: "Paleohydrology of the Ogeechee River." D.S. Leigh (sole PI)

\$13,245 for the period 4/1/93 to 4/1/94; U.S. Geological Survey/Georgia Water Resources Institute: "Floodplain Storage and Mobility of Mining-Related Trace Metals in the Dahlonega Gold Belt." D.S. Leigh (sole PI)

\$20,000 for the period 7/1/94 to 8/31/96; American Chemical Society Petroleum Research Fund: "Image and Isotope Analysis of Opal Phytoliths in Sedimentary Sequences." D.S. Leigh (sole PI)

\$25,500 for the period 10/1/96 to 10/1/97; U.S. Environmental Protection Agency and the Georgia Environmental Protection Division: "Source and Distribution of Nonpoint Trace Metal Contaminants in Lake Sidney Lanier." D.S. Leigh (sole PI)

\$2,500 for the 1995 University of Georgia M. G. Michael Award for Excellence in Research: "Extreme Floods in South Georgia: Extending the Record with Geomorphic Evidence." D.S. Leigh (sole PI)

\$3,448 for the period 10/1/95 to 10/1/96; Gwinnett County Public Utilities: "Watershed Metal Inputs to Lake Sidney Lanier." D.S. Leigh (sole PI)

\$80,000 for the period 9/1/96 to 9/1/98; Department of Defense / Fort Stewart Environmental Division: "Geomorphology and Buried Archeology Potential of Dunes at Fort Stewart". D.S. Leigh (sole PI)

\$9,250 for the period 3/31/97 to 3/31/99; National Science Foundation, Doctoral Dissertation Research Grant in Geography and Regional Science: "Riverine Dunes of South Georgia: Age, Morphology, and Paleoclimate Implications." D.S. Leigh (PI) and A.H. Ivester (Co-PI).

\$60,000 for the period 9/1/98 to 8/31/00; National Council for Air and Stream Improvement (NCASI). "Sediment Fluxes and Storage in a Southeastern Piedmont/Coastal Plain River System." C. R. Jackson (PI), D. S. Leigh, and L.T. West (Co-PIs.).

\$780,834 for 10/1/98 to 12/31/01; U.S. Environmental Protection Agency. "Land Use and Geomorphic Indicators of Biotic Integrity in Piedmont Streams." D. S. Leigh (P. I.), B. S. Freeman, M. C. Freeman, E. A. Kramer, C. M. Pringle, and A. D. Rosemond (Co-PIs).

\$38,250 for 10/1/98 to 6/30/1999 The University of Georgia Research Foundation, Inc., matching equipment funds for "Land Use and Geomorphic Indicators of Biotic Integrity in Piedmont Streams. "D. S. Leigh (PI), B. S. Freeman, M. C. Freeman, E. A. Kramer, C. M. Pringle, and A. D. Rosemond (Co-PIs).

\$170,000 for the period 10/1/99 to 9/30/2001; Department of Defense / United States Army at Fort Stewart, Directorate of Public Works. "Geomorphic Mapping of Fort Stewart." D.S. Leigh (sole PI).

\$43,250 for 10/1/99 to 6/30/2000; The University of Georgia Research Foundation, Inc., Matching equipment funds for the "Geomorphic Mapping of Fort Stewart." D.S. Leigh (sole PI).

\$162,918 for 10/1/2002 to 10/1/2004; U.S. Army Corps of Engineers via subcontract through the University of Illinois. "Geomorphic Processes Influencing Archaeological Site Burial at Fort Bragg, NC." D.S. Leigh (sole PI).

\$20,000 for 10/1/2002 to 6/30/2003: The University of Georgia Research Foundation, Inc. Matching equipment funds related to grant for work at Fort Bragg. D.S. Leigh (sole PI).

\$7,216,963.00 for the period 11/1/2002 to 10/31/2009: National Science Foundation-LTER. "Consequences of Land Use Change in the Southern Appalachian Mountains." T. Gragson (PI). Leigh is one of many co-PIs. https://www.nsf.gov/awardsearch/showAward?AWD\_ID=0218001

\$60,000 for 7/1/2004 to 7/1/2007: U.S.D.A. Forest Service. "Geomorphic Analysis of Stream Channels in the Southern Appalachian Highlands." . D.S. Leigh (sole PI)

\$34,172 for 2003-2007: U.S. Environmental Protection Agency. "Entrenched Stream Channels of the Southern Blue Ridge Mountains". U.S. EPA Science to Achieve Results (STAR) fellowship funding for masters student Michelle Luebke.

\$217,772 for the period 7/1/2008 to 3/31/2009: Georgia Department of Natural Resources. "Development of a Habitat Conservartion Plan for Imperiled Aquatic Species of the Etowah River Basin: Funding for Transition to Implementation." Leigh is a Co-PI along with Seth Wenger PI.

\$201,247 for the period 9/1/2010 to 8/31/2012: National Science Foundation, "Archaeological Survey Of Coixtlahuaca Valley, Oaxaca, Mexico." Leigh is co-PI along with Steven Kowalewski (Anthroplogy) as PI.

\$19,900 for the period 11/30/2010 to 12/31/2012: National Geographic Society, "Ancient Mega-Meanders In River Valleys Of The Atlantic Coastal Plain, USA. Leigh is the sole PI.

\$5,835 for the period 6/1/2011 to 6/1/2012: U.S. Geological Survey -EDMAP Program, "Quaternary Allostratigraphy of the Lower Oconee River Valley. Uvalda Quadrangle, Georgia Leigh and Brad Suther are co\_PIs, as it is in support of Suther's dissertation research.

\$12,000 for the period 6/1/2012 to 5/31/13: National Science Foundation, Doctoral Dissertation Improvement Grant for Bradley Suther, "Spatio-Temporal Soil Variability on Late Quaternary Fluvial Surfaces of the Southeastern Atlantic Coastal Plain."

\$1,500 for July 2013. Anne White Fund, Association of American Geographers. In support of research on the "Soil Hydrology and Agropastoral Land-Use in the Western Pyrenees Mountains, France."

\$8,026,132 for the period 11/1/2008 to 10/31/2015: National Science Foundation-Coweeta LTER: "Southern Appalachia on the Edge –Exurbanization & Climate Interaction in the Southeast", T. Gragson (PI). Leigh is one of many other co-PIs. https://www.nsf.gov/awardsearch/showAward?AWD\_ID=0823293

\$20,000 for 12/31/2014 to 7/30/2016: National Geographic Society. "Fire, Society, and Holocene Landscape Evolution in the French Pyrenees Mountains" D. Leigh (PI) and T. Gragson co-PI.

\$2,593,333 for the period 2/1/2015 to 1/31/2018. National Science Foundation-Coweeta LTER: "The Interacting Effects of Hydroclimate Variability and Human Landscape Modification in the Southern Appalachian Mountains". T. Gragson (PI), and Leigh is one of many other co-PIs. https://www.nsf.gov/awardsearch/showAward?AWD ID=1440485&HistoricalAwards=false

\$33,059 for 5/23/2016 to 1/31/2017: Electrical Power Research Institute (EPRI). Collaborative Research: Phase I Paleoflood Investigations-Blue Ridge part of the Tennessee River basin, D.S. Leigh (PI) and A. Milewski (co-PI).

\$2,559,998 for 3/1/2017 to 2/28/2021: National Science Foundation-Coweeta LTER: Examining Long-term Southern Appalachian Ecosystem Dynamics through Interactions and Indirect Effects, C. Rhett Jackson (PI), and Leigh is one of many other PIs.

https://www.nsf.gov/awardsearch/showAward?AWD\_ID=1637522&HistoricalAwards=false

#### **PRESENTATIONS**

#### Invited Lectures and Colloquia:

1994: "Mercury Contamination of Stream Sediments from Former Gold Mining Operations in North Georgia." Guest Lecture for the U.S. Environmental Protection Agency Region IV Research Branch, Athens, GA, July 28, 1994.

1994: "Mercury Contamination in the Lake Lanier Watershed." Guest Lecture for Lake Lanier Clean Lakes Task Force Public Meeting, Gainesville, GA, October 10, 1994.

1994: "Gold Mining's Impact on North Georgia Floodplains." Colloquium for the University of South Carolina Department of Geography, November 10, 1994.

1997: "Water Quality and Trace Metal Delivery to Lake Lanier from Watersheds." Guest Speaker at the 1997 annual meeting of the Georgia Lake Management Society, Gainsville, GA, April 11, 1997.

1997: "Evaluating Eolian Sedimentation as a Process of Archeological Site Burial in the Southeast." Journal Club Colloquium for the University of Georgia Department of Geology, June 4, 1997.

1997: "Water Quality and Trace Metal Delivery to Lake Lanier from Watersheds." Guest Speaker at the monthly meeting of the Georgia Chapter of the American Water Resources Association, June 10, 1997.

1998: "Geomorphic History of the Piedmont." Invited guest lecture for the banquet of the National Collegiate Soil Judging Contest held in Athens, Georgia, April 2, 1998.

1998: "Nonpoint Trace Metal Delivery to Lake Sidney Lanier, Georgia." Final public presentation of the USEPA-sponsored Clean Lakes Task Force. Coordinated by State Representative Carl Rogers, Gainesville College, Gainesville, Georgia, May 19, 1998.

1998: "Soils and Geomorphology of Eolian Dunes at Fort Stewart, Georgia." Invited lecture for the Soils Science Department on November 6, 1998, Miller Plant Sciences Building, University of Georgia.

2000: "Geomorphology and Land Cover as Indicators of Biotic Integrity in Piedmont Streams of the Etowah Basin, North Georgia." Invited Colloquium for the Geoscience Department at the University of West Georgia, Carrollton, GA, December 1, 2000.

2002: "Late Quaternary riverine landscapes and soils of the Coastal Plain." Invited lecture at the UGA Crop and Soil Science Department, December 6, 2002.

2005: "River environments at the end of the Pleistocene, southeast USA." Invited lecture for the plenary conference on Clovis in the Southeast: Technology, Time, and Space, October 26-29, 2005, Columbia South Carolina.

2008: "Late Quaternary Climates and River Channels of the Atlantic Coastal Plain, Southeastern USA." Invited lecture for the 39th annual Binghampton Symposium in Geomorphology held in Austin Texas, October 9-11, 2008.

2009: "Sediment Records of Late Quaternary Environmental Change in the Southeastern United States". Colloquim presentation to the University of Iowa Department of Geology, January 24, 2009, Iowa City, IA.

2009: "Comparative Paleonvironments in Uruguay and the United States" Invited lecture to the Uruguayan National Museum of Natural History and Anthropology, sponsored by Fulbright-Argentina, Montevideo, Uruguay, May 29, 2009.

2009: "Rivers and Paleoenvironments of the Southeastern United States" Invited lecture to the Museum of Natural History and Anthroplogy, sponsored by Fulbright-Argentina, San Rafael, Argentina, June 20, 2009.

- 2010: "Human Impact on Stream Channels in the Blue Ridge Mountains, U.S.A.," Invited seminar lecture for collaborative exchange between The University of Georgia and the University of Pau (France), November 9, 2010, University of Pau-Anglet, France.
- 2011: "Anthropic production of late Holocene fluvial stratigraphy and landscapes in the Mixteca Alta of Oaxaca, Mexico", Journal Club Colloquium of The University of Georgia Department of Geology, April 21, 2011.
- 2011: "The Universal Model of the Driftless Area, Geomorphic Benchmarks, and Tribute to the Career of James C. Knox", Yi-Fu Tuan Lecture Series, The University of Wisconsin Department of Geography, November 11, 2011.
- 2012: Multi-millennial human influence on erosion and sedimentation in the Mixteca Alta of Oaxaca, Mexico", Guest lecture to the Department of Geography, West Point Military Academy, Department of Geography, February 23, 2012
- 2013: "Prehistoric Human Influence on Erosion and Sedimentation in the Context of Global Climate Change" Invited guest speaker for the 2013 Geological Society of America special session: "Geomorphic Response to Quaternary Climate Change: A Session in Memory of James C. Knox" 27 October 2013 in Denver, Colorado, USA, Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p.191.
- 2013: "Holocene record of human influence on soil erosion and sedimentation in the Mixteca Alta of Oaxaca, Mexico". Invited speaker for the University of Alabama, Department of Geography Colloquium, November 11, 2013.
- 2014: "Late Quaternary Changes in River Channel Morphology in the Southeastern United States". Invited colloquium speaker for the University of North Carolina-Chapel Hill, Geosciences Department, February 20, 2014.
- 2014: "Chronology and pedogenic effects of prehistoric agropastoral landscape conversion in the French western Pyrenees'. Invited colloquium speaker for the University of South Carolina, Department of Geography, September 26, 2014.
- 2015: "Dynamic Late Quaternary Fluvial Systems of the Atlantic Coastal Plain". Invited colloquium speaker for the University of South Carolina, Department of Earth and Ocean Sciences, Columbia, SC, January 29, 2015.
- 2015: "Landscape Changes in the Western Pyrenees Mountains by Pastoral Activities since the Neolithic", Invited colloquium speaker for the Biology Department, Western Carolina University, Cullowee, NC, December 4, 2015
- 2015: "Terraces and Paleoflood Deposits in the Blue Ridge Province of the Tennessee River Basin", Invited workshop speaker for the Paleoflood Workshop sponsored by the Electrical Power Research Institute, Tennessee Valley Authority, and Nuclear Regulatory Committee, Chattanooga, TN, December 9, 2015.
- 2018: "UGA Paleoflood Investigations in the Tennessee River Basin" Invited workshop speaker for the Paleoflood Workshop sponsored by the Tennessee Valley Authority, Chattanooga, TN, February 21-22, 2018.

### **Conference Presentations:**

- 1985: (Leigh, D.S.). Geomorphology and stratigraphy of Mississippi Valley alluvial fans in west-central Illinois, Geological Society of America Abstracts of the North-Central Section, V. 17, No. 5, p. 299.
- 1987: (Leigh, D.S. and Knox, J.C.). Pre- and post-Sangamon deposits within the Bridgeport terrace of the Lower Wisconsin River Valley. Geological Society of America Abstracts of the North-Central Section, V. 19, No. 4, p. 231. (invited paper)
- 1988: (Leigh, D.S., McSweeney, K., and Knox, J.C.). Micromorphological characteristics of a Sangamon-Wisconsin stratigraphic boundary in the Driftless Area of southwestern Wisconsin. Abstracts of the International Working Meeting on Soil Micromorphology, San Antonio, TX, July 10-15, p. 61.

- 1988: (Baker, R.W., Knox, J.C., Lively, R.S., Williams, I.S., Leigh, D.S., and Olson, B.M.). Deep entrenchment of the upper Mississippi Valley is preglacial. Geological Society of America Abstracts of the Annual Meeting, V. 20.
- 1989: (Knox, J.C. and Leigh, D.S.). Late-glacial and Holocene geomorphology of the Onalaska Terrace, Mississippi Valley, Southwestern Wisconsin, 47th Annual Plains Conference Programs and Abstracts, p. 52. (invited paper, presented by D.S. Leigh)
- 1989: (Knox, J.C. and Leigh, D.S.). Geomorphic history of the Upper Mississippi Valley Driftless Area. Geological Society of America Abstracts of the National Meeting, V. 21, No. 6, p.4123. (invited paper).
- 1990: (Leigh, D.S.). Roxana Loess of the Upper Mississippi Valley: genesis and paleoenvironment. Association of American Geographers Annual Meeting Program and Abstracts, p. 138.
- 1990: (Leigh, D.S.) Roxana Loess of the Upper Mississippi Valley: lithology and genesis. Geological Society of America Abstracts of the North-Central Section, V. 22, No. 4, p. 38. (invited paper)
- 1991: (Leigh, D.S.). Roxana Loess depositional system in the ancient Mississippi Valley. Association of American Geographers 1991 Annual Meeting Abstracts, pp. 112-113.
- 1992: (Leigh, D.S.). Paleopedology of the Sangamonian-Wisconsinan transition in loess of the upper Mississippi Valley Driftless Area, Wisconsin. Geological Society of America Abstracts of the 1992 Annual Meeting, V. 24, No. 7, p. A286. (invited paper)
- 1993: (Leigh, D.S.). Gold mining's impact on floodplains of the Dahlonega Gold Belt in North Georgia. Southeastern Division of the Association of American Geographers Annual Meeting in Greensboro, NC, November 22-24, 1993.
- 1994: (Leigh, D.S., Cable, J.S., and Gard, H.S.). Mountain Park Site: a model for age assessment of alluvium in the southern Blue Ridge. Program and Abstracts of the Second International Conference on Pedo-Archaeology, April 6-9, 1994 Columbia SC, p. 12.
- 1994: (Leigh, D.S.). Gold mining in north Georgia and its impact on floodplains. Paper presented at the Summer Symposium of the American Water Resources Association, "Effects of Human-Induced Changes on Hydrologic Systems" in Jackson, WY, June 26-29, 1994.
- 1994: (Leigh, D.S.) Alluvial Soil Chronosequence of Brasstown Creek in the north Georgia Blue Ridge Mountains. Abstract for the Southeastern Division of the American Geographers Annual Meeting in Virginia Beech, VA, November 19-22, 1994.
- 1995: (Leigh, D.S.and Feeney, T.P.). Paleo-hydrology of the Ogeechee River, southeast Georgia Coastal Plain. Abstract for the Association of American Geographers Annual Meeting in Chicago, IL, March 14-18, 1995
- 1995: (Leigh, D.S.). Mercury contamination of stream sediment in north Georgia from former gold mines in the Dahlonega Gold Belt. Paper for the 1995 Georgia Water Resources Conference, Athens, GA, April 11-12, 1995.
- 1995: (Knox, J.C., Jacobs, P.M., Mason, J.A., and Leigh, D.S.). Loess Deposits in the Upper Mississippi Valley Driftless Area. Abstract of the North-Central and South-Central Sections of the Geological Society of America, 29th Annual Meeting in Lincoln, NE, April 27-28, 1995, V. 27, No 3, p. 65.
- 1995: (Jacobs, P.M., Knox, J.C., Mason, J., and Leigh, D.S.). Mid and late Pleistocene Paleopedology of the Upper Mississippi Valley Driftless Area, U.S.A. Abstract of the International Quaternary Association, Biennial Meeting in Berlin, Germany, August 8-12, 1995.
- 1995: (Schroeder, P.A., Melear, N.D., Leigh, D.S., West, L.T., and Kormanik, T.L.). Residual versus polygenetic soil/saprolite weathering profiles on granites in the Georgia Piedmont. Geological Society of America Abstracts of the 1995 Annual Meeting in New Orleans, V. 27, November 5-9, 1995

1995: (Webster, J.W., and Leigh, D.S.). Grain size analysis of sediment in a terraced paleochannel, southeast Georgia. Abstracts of the Southeastern Division of the Association of the American Geographers Annual Meeting in Knoxville Tennessee, November 19-21, 1995.

1996: (Parker, A.J., Evans, J.K., Parker, K.C., Leigh, D.S.). Soil and foliar elemental concentrations from Florida sand pine populations. Abstract of the Association of American Geographers Annual Meeting in Charlotte, NC, April 9-13, 1996.

1996: (Leigh, D. S.). Soil chronosequence data for late Quaternary pedons in the southeastern United States. Abstract of the Association of American Geographers Annual Meeting in Charlotte, NC, April 9-13, 1996.

1996: (Webb, P., and Leigh, D. S.). Geomorphological and archeological investigations of a buried site on the Yadkin River floodplain. Abstract of the Society of American Anthropologists Annual Meeting in New Orleans, April 10-14, 1996.

1996: (Leigh, D.S. and Brook, F.Z). Paleochannels and a pollen record indicative of enhanced monsoonal circulation and wetness during the early and middle Holocene in southeastern Georgia. Geological Society of America Abstracts of the 1996 Annual Meeting in Denver, V. 28, October 28- November 3, 1996.

1997: (Ivester, A.H. and Leigh, D.S.). Potential for buried archeological material in the riverine eolian dunes of southeast Georgia: soil and geomorphic evidence. Southeastern Division of the Geological Society of America, Abstracts of the 1997 Annual Meeting in Auburn, Alabama, March, 1997.

1997: (Leigh D.S.). Site burial processes on uplands of the South Carolina Sandhills: Pedoturbation versus eolian sedimentation. Southeastern Division of the Geological Society of America, Abstracts of the 1997 Annual Meeting in Auburn, Alabama, March, 1997.

1997: (Leigh, D.S. and Gamble, D.). Survey of Nonpoint Trace Metal Inputs to Lake Sidney Lanier. *In* (Hatcher, K., ed) Proceedings of the 1997 Georgia Water Resources Conference. University of Georgia Institute of Ecology, Athens, GA 1997, pp. 170-173.

1998: (Leigh, D.S.). Evaluating bioturbation versus eolian sedimentation as a site burial process in the Southeastern United States. Invited symposium presentation a the 63<sup>rd</sup> Annual Meeting of the Society of American Archaeology, Seattle, Washington, March 25-29, 1998.

1998: (Ivester, A.H. and Leigh, D.S.). The geomorphology and stratigraphy of Georgia's riverine eolian dunes: an update on field investigations. Annual Meeting of the Georgia Academy of Science, Savannah, Georgia

1998: (Ivester, A.H. and Leigh, D.S.). Late Quaternary source-bordering dunes as indicators of paleoenvironment in the southern Atlantic Coastal Plain. Annual Meeting of the Geological Society of America, Toronto, Ontario, Canada, October 26-29, 1998.

1998: (Leigh, D.S. and Ivester, A.H.). Geomorphology of source-bordering dunes along the Canoochee River, Fort Stewart, Georgia. Annual Meeting of the Geological Society of America, Toronto, Ontario, Canada, October 26-29, 1998.

1999: (Leigh, D.S. and Ivester, A.H.). Dunes at Fort Stewart, Southeast Georgia: Geomorphology and Age. Paper presented at the 54<sup>th</sup> Annual Meeting of the Southeastern Division of the Association of American Geographers, November 20-23, Tampa, Florida.

1999: (Leigh, D.S., Brook, F.Z., and , Ivester, A.H.). Lack of a middle Holocene "Hypsithermal" signal in Georgia and the Carolinas. Paper presented at the Annual Meeting of the Southeastern Division of the Geological Society of America, March 24-26, 1999, Athens, Georgia

- 1999: (Ivester, A.H., Leigh, D.S., and Godfrey-Smith, D.I.). Paleoenvironmental implications of Georgia's source-bordering, riverine dunes. Paper presented at the Annual Meeting of the Southeastern Division of the Geological Society of America, March 24-26, 1999, Athens, Georgia
- 1999: (Rosemond, A.D., Freeman, B.J., Freeman, M.C., Leigh, D.S., Pringle, C.M.). Development of a scientific understanding of the effects of land use on stream ecosystems. Paper presented at the 1999 Georgia Water Resources Conference, March 30-31, 1999, The University of Georgia, Athens.
- 2000: (Leigh, D.S. and Paul, M.J.). Variation in the response of Piedmont streams to human-induced sedimentation. Paper presented at the Annual Meeting of the Association of American Geographers, Pittsburgh, PA, April.
- 2000: (Leigh, D.S., Walters, D.M., Paul, M.J., Freeman, B.J. and Freeman, M.C). Stream gradient and bed sediment as indicators of fish communities in the Etowah Basin, North Georgia. Geological Society of America Abstracts of the Annual Meeting, November 13-17, Reno, NV.
- 2000: (Leigh, D.S.). Aeolian versus bioturbation burial of artifacts on upland divides in the Coastal Plain. Invited presentation for a symposium at the Southeastern Archaeological Conference, November 8-11, Macon, Georgia, Southeastern Archaeological Conference, Abstracts of the Fifty-Seventh Annual Meeting, published as Bulletin 43, The Savannah River Archaeological Research Program and the South Carolina Institute of Archaeology and Anthropology, The University of South Carolina, Columbia, SC.
- 2000: (Walters, D.M., Freeman, B.J., Freeman, M.C., Kramer, E.A., Leigh, D.S., Paul, M.J., Pringle, C.P., and Rosemond, A.D.). A multi-scale approach to predicting stream fish assemblages. Ethology, Evolution (and Conservation) Ecology of Fishes. May 20-24, 2000. University of Georgia, Athens, Georgia.
- 2001: (Leigh, D.S., Walters, D.M., Paul, M.J., Lo, C.P., Freeman, B.J. and Freeman, M.C.). Geomorphology and Land Cover as Indicators of Fishes in Piedmont Streams. Paper presented at the Annual Meeting of the Association of American Geographers, New York.
- 2001: (Leigh, D.S., Freeman, B.J., Freeman, M.C., Kramer, M.J., Pringle, C.M., Rosemond, A.D., Paul, M.J. Walters, D.M., Roy, A.H.). Overview of Land Cover and Geomorphic Indicators of Biotic Integrity in the Etowah River Basin, Georgia. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 225-228.
- 2001: (Roy, A.H., Rosemond, A. D., Leigh, D.S., Paul, M.J., and Wallace, J.B.). Effects of Changing Land Use on Macroinvertebrate Integrity: Identifying Indicators of Water Quality Impairment. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 229-232.
- 2001: (Walters, D.M., Freeman, M.C., Leigh, D.S., Freeman, B.J., Paul, M.J., and Pringle, C.M.). Bed Texture and Turbidity as Indicators of Fish Biotic Integrity in the Etowah River System. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 233-236.
- 2001: (Rosemond, A.D., Weyers, H.S., Paul, M.J., Greenwood, J.L., and Leigh, D.S.). Benthic Algal Biomass in the Etowah Basin and Implications to Establishing Nutrient Criteria in Streams. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 237-240.
- 2001: (Paul, M.J., Leigh, D.S., and Lo, C.P.) Urbanization in the Etowah River Basin: Effects on Stream Temperature and Chemistry. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 241-245.
- 2001: (Cifaldi, R.L., Kramer, E.A. and Leigh, D.S.). Land Cover and Stream Morphology Indicators of Variation in Riparian Forest Patches of the Etowah River Basin, Georgia. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 255-258.

- 2001: (Martin, J.K., Jackson, C.R., Leigh, D.S., West, L.T.). Sediment Flux and Storage in a Southeastern Piedmont River System. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 574-577.
- 2001: (Walters, D.M., Freeman, M.C., Leigh, D.S., Freeman, B.J., Paul, M.J., and Pringle, C.M.). Geomorphology, Land Cover, and Water Quality as Indicators of Fish Biotic Integrity in the Etowah River System. Paper presented at the 2001 Annual meeting of the Southeastern Association of Fish and Wildlife.
- 2001: (D. M. Walters. M.C. Freeman, D.S. Leigh\*, B.J. Freeman, M.J. Paul, and C.M. Pringle). The Effects of Urbanization on Stream Fishes in a Piedmont River System in Georgia. Paper presented at the 2001 North American Benthological Society meeting in LaCrosse, WI, June 2001.
- 2001: (Leigh, D.S., Freeman, B.J., Freeman, M.C., Kramer, M.J., Pringle, C.M., Rosemond, A.D., Paul, M.J. Walters, D.M., Roy, A.H.). Overview of Land Cover and Geomorphic Indicators of Biotic Integrity in the Etowah River Basin, Georgia. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 225-228.
- 2001: (Roy, A.H., Rosemond, A.D., Leigh, D.S., Paul, M.J., and Wallace, J.B.). Effects of Changing Land Use on Macroinvertebrate Integrity: Identifying Indicators of Water Quality Impairment. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 229-232.
- 2001: (Walters, D.M., Freeman, M.C., Leigh, D.S., Freeman, B.J., Paul, M.J., and Pringle, C.M.). Bed Texture and Turbidity as Indicators of Fish Biotic Integrity in the Etowah River System. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 233-236.
- 2001: (Rosemond, A.D., Weyers, H.S., Paul, M.J., Greenwood, J.L., and Leigh, D.S.). Benthic Algal Biomass in the Etowah Basin and Implications to Establishing Nutrient Criteria in Streams. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 237-240.
- 2001: (Paul, M.J., Leigh, D.S., and Lo, C.P.). Urbanization in the Etowah River Basin: Effects on Stream Temperature and Chemistry. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 241-245.
- 2001: (Cifaldi, R.L., Kramer, E.A. and Leigh, D.S.). Land Cover and Stream Morphology Indicators of Variation in Riparian Forest Patches of the Etowah River Basin, Georgia. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 255-258.
- 2001: (Martin, J.K., Jackson, C.R., Leigh, D.S., West, L.T.). Sediment Flux and Storage in a Southeastern Piedmont River System. *In* (K. Hatcher ed.) "Proceedings of the 2001 Georgia Water Resources Conference." March 26-27, 2001, The University of Georgia, Athens, pp. 574-577.
- 2002: (Leigh, D.S. and D.M. Walters). Geomorphic predictors of fishes in a southern Piedmont drainage basin. Geological Society of America. Denver, CO.
- 2002: (Leigh, D.S., D.M. Walters, and Roy, A.H.). Sediment mobility as a predictor of biotic integrity in Piedmont Streams of the Etowah River basin, North Georgia, USA. North American Benthological Society. Pittsburgh, PA.
- 2002: (Walters, D.M. Freeman, M.C., Leigh, D.S., Freeman, B.J., and Pringle, C.M.). The influence of stream geomorphology on fish assemblages in a Piedmont River system. North American Benthological Society. Pittsburgh, PA.
- 2002: (Walters, D.M., Leigh, D.S., and Bearden, A.B.). Urbanization, sedimentation, and homogenization of fishes in a Piedmont River system. International Association of Sediment and Water Scientists, Banff, Alberta.

- 2003: (Leigh, D.S. and Walters, D.M.). Natural geomorphic variation drives stream habitat quality scores in Piedmont streams. Paper accepted for Annual Meeting of the North American Benthological Society held in Athens, Georgia, May 27-31, 2003.
- 2003: (Walters, D.M., Freeman, M.C., Leigh, D.S., Freeman, B.J., and Pringle, C.M.). Fish assemblage changes along an urban gradient in the southern Piedmont. Paper accepted for Annual Meeting of the North American Benthological Society held in Athens, Georgia, May 27-31, 2003.
- 2003: ((Walters, D.M., Freeman, M.C., Leigh, D.S., Freeman, B.J., and Pringle, C.M.). Effect of urbanization on fish assemblages and habitat quality in a Piedmont river basin. In (Brown, L.R., Ed.). Paper accepted for the national meeting of the American Fisheries Society, Québec City, Canada, August 10-14, 2003
- 2003: (Leigh, D.S.). Geomorphic and human influences on stream quality in the Southern Appalachian Highlands. Invited Speaker for a Special Session on Watersheds and Water Quality for the Annual Meeting of the Geological Society of America, Seattle, Washington, November 2-5, 2003.
- 2003: (Riedel, M.S., Vose, J.M., Leigh, D.S.) The road to TMDL is paved with good intentions Total maximum daily load for a wild and scenic river in the Southern Applalachians. Paper accepted for the meeting of the American Society for Agricultural Engineers, Second Conference on Watershed Management to Meet Emerging TMDL Environmental Regulationis held in Albuquerque, New Mexico, November 8-12, 2003.
- 2004: (Leigh, D.S.) Latest Pleistocene Braided to Meandering Transition in Rivers of the Atlantic Coastal Plain. Abstract of paper presented at the Annual Meeting of the Association of American Geographers, Philadelphia, PA, March 2004.
- 2004: (Price, K, and Leigh, D.S.) Human impact on Blue Ridge Streams. Abstract of paper presented at the Annual Meeting of the Association of American Geographers, Philadelphia, PA, March 2004.
- 2004: (Riedel, M.S., Vose, J.M., Leigh, D.S.) Elemental analysis of clastic sediments to determine fluvial sediment sources. Abstract for the 2004National Water Quality Monitoring Conference, United States Advisory Committee on Water Information National Water Quality Monitoring Conference to be held in Chattanooga, TN, May 17-20, 2004.
- 2004: (Price, K. and Leigh, D. S.) Human impact on Blue Ridge streams. Abstract of paper presented at the 30th Congress of the International Geographical Union Incorporating the Joint International Geomorphology Conference, Glagow, Scotland, UK, August 15-20, 2004.
- 2004: (Price, K. and Leigh, D. S.) Comparative water quality of lightly- and moderately-impacted Blue Ridge Mountain Streams, USA. Abstract of poster presented at the 30th Congress of the International Geographical Union Incorporating the Joint International Geomorphology Conference, Glagow, Scotland, UK, August 15-20, 2004.
- 2004: (Leigh, D.S., Srivastava, P., Brook, G.A.) Terminal Pleistocene to early Holocene braided to meandering transition for rivers of the unglaciated southern Atlantic Coastal Plain, Georgia and the Carolinas, USA. Abstract of paper presented at the 30th Congress of the International Geographical Union Incorporating the Joint International Geomorphology Conference, Glagow, Scotland, UK, August 15-20, 2004.
- 2006: (Leigh, D.S.) Holocene Landscape Evolution and Soils in the Raven Fork Valley, Southern Blue Ridge Mountains, USA. Paper presented a the Annual Meeting of the Association of American Geographers, April 2006, Chicago, IL.
- 2006: (Suther, B.E. and Leigh, D.S.) Soil Chronosequence of the Little River Valley, Atlantic Coastal Plain, North Carolina. Paper presented a the Annual Meeting of the Association of American Geographers, April 2006, Chicago, IL.
- 2007: (Rogers, J.C., Leigh, D.S.) Estimating sediment yield from tributary stream banks in the Southern Blue Ridge Mountains. Paper presented at the Annual Meeting of the Association of American Geographers, April 2007, San Francisco, CA.

- 2007: (Leigh, D.S.) Human influence on Floodplain Sedimentation in the Upper Little Tennessee River Valley, Southern Blue Ridge Mountains, USA. Paper presented at the Annual Meeting of the Association of American Geographers, April 2007, San Francisco, CA.
- 2008: (Leigh, D.S., Rogers, J.C., Suther, B.) Hydraulic Geometry of Small Streams in the Southern Blue Ridge Mountains, Western North Carolina, USA. Paper presented at the Annual Meeting of the Association of American Geographers, April 17, 2008, Boston, MA.
- 2008: (Leigh, D.S.). Late Quaternary Climates and River Channels of the Atlantic Coastal Plain, Southeastern USA. Paper presented at the 39<sup>th</sup> Annual Binghampton Geomorphology Symposium, Austin, Texas, October 9-11, 2008.
- 2009: (Leigh, D.S.) Morphology and Channel Evolution of Small Streams in the Southern Blue Ridge Mountains of Western North Carolina. Paper presented at the Southeastern Division of the Association of American Geographers, Knoxville, TN, November 23, 2009.
- 2010: (Leigh, D.S.). Latest Holocene channel and floodplain evolution for small streams in the Southern Blue Ridge Mountains. Paper presented at the Southeastern-Northeastern Geological Society of America meeting,, March 12-16, 2010, Baltimore, MD.
- 2010: (Suther, B.E, and Leigh, D.S.). Ages of fluvial terraces in the Little River Valley, Upper Coastal Plain, North Carolina. Paper presented at the Southeastern-Northeastern Geological Society of America meeting,, March 12-16, 2010, Baltimore, MD.
- 2010: (Leigh, D.S.) Riverine eolian dunes in Uruguay: Landscapes, paleoenvironments, sedimentation history, and repositories for the earliest American sites. Paper presented at the Fifth International Symposium of Early Man in America, National University of Argentina, La Plata, Argentina, November 22-26
- 2011: (Leigh, D.S.) Human and Climate influence on Floodplain Sedimentation in the Upper Little Tennessee River Valley, Southern Blue Ridge Mountains, USA. Invited paper presented at the 27 bi-annual International Quaternary Union (INQUA) conference in Bern, Switzerland, July 26, 2011.
- 2011: (McDonald, J.M. and Leigh, D.S.) Geomorphic Mapping of Holocene alluvium using LiDAR in the Upper Little Tennessee River valley, North Carolina. Poster presented at the annual meeting of the Geological Society of America, Minneapolis, MN, October 10, 2011, Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 250.
- 2011: (Leigh, D.S., Holdridge, G.H., and Kowalewski, S.A.) Human influence on late Holocene fluvial landscape and stratigraphy in the Mixteca Alta of Oaxaca, Mexico. Poster # EP31D-0846 presented at the American Geophysical Union meeting in San Francisco, CA, December 7, 2011.
- 2012: (Leigh, D.S., Holdridge, G.H., and Kowalewski, S.A.) Millennial-Scale Human Influence On Erosion, Sediment Yield, And Stratigraphy In The Mixteca Alta, Oaxaca, Mexico. Paper presented at the Association of American Geographers annual meeting in New York, NY, February 27, 2012
- 2012: (Leigh, D.S.) Pre- Versus Post-Settlement Alluvial Sedimentation Rates in the Upper Little Tennessee River Valley, Blue Ridge Mountains. Paper presented at the Southeastern Geological Society of America annual meeting in Asheville, NC, April 2, 2012. Geological Society of America Abstracts with Programs, Vol. 44, No. 4, p. 66.
- 2012: (Suther, B.E., Leigh, D.S.) Ages and stratigraphy of "mega-meander" paleochannels of the Oconee and Pee Dee Rivers, Atlantic Coastal Plain, Georgia and South Carolina. Poster presented at the Southeastern Geological Society of America annual meeting in Asheville, NC, April 2, 2012. Geological Society of America Abstracts with Programs, Vol. 44, No. 4, p. 78.
- 2012: (Jackson, C.R. Leigh, D.S., Long, L.S., Chamblee, J.F.) Channel morphology, local riparian condition, and basin landcover associations, Southern Appalachians. Paper presented at the Geological Society of America annual

- meeting in Charlotte, NC, November 6, 2012, Geological Society of America Abstracts with Programs. Vol. 44, No. 7, p.463.
- 2012: (Leigh, D.S.) Late Quaternary Records in the Atlantic Coastal Plain: problems and challenges for future research. Paper presented at the Geological Society of America annual meeting in Charlotte, NC, November 5, 2012, Geological Society of America Abstracts with Programs. Vol. 44, No. 7, p.197.
- 2012: (Suther, B.E. and Leigh, D.S.) Ages and stratigraphy of "mega-meander" paleochannels of the Atlantic Coastal Plain, southeastern USA. Paper presented at the Geological Society of America annual meeting in Charlotte, NC, November 5, 2012, Geological Society of America Abstracts with Programs. Vol. 44, No. 7, p.197.
- 2012: (Rogers, J. Leigh, D.S.) Modeling Stream Bank Erosion of Tributaries in the Southern Blue Ridge Mountains. Paper presented at the Southeastern Division of the Association of American Geographers annual meeting, November 19, 2012, Asheville, NC.
- 2012: (Leigh, D.S.) Riverine Eolian Dunes in Uruguay: OSL Ages and Paleoenvironmental Significance. Poster # GC21D-0999 presented at the American Geophysical Union meeting in San Francisco, CA, December 7, 2012.
- 2013: (Leigh, D.S., Gragson, T.L. Coughlan, M.R.) Pedogenic Effects of Mid- to Late-Holocene Conversion of Forest to Pasture in the Western French Pyrenees. Presentation at the 8<sup>th</sup> International Association of Geomorphologists Conference on Geomorphology, Session 13 Human Impacts on Landscapes, Paris, France, August 27-31, 2013.
- 2013: (Leigh, D.S., Kowalewski, S.A, Holdridge, G.H.) Lama-bordos and late Holocene agricultural engineering systems controlling sediment yield in the Mixteca Alta, Oaxaca, Mexico. Poster presented at the International Association of Geomorphologists conference held in Paris, France, August 27-31, 2013
- 2013: (Leigh, D.S.) Prehistoric Human Influence on Erosion and Sedimentation in the Context of Global Climate Change. Paper presented at the national meeting of the Geological Society of America annual meeting in Denver, Colorado, 27 October 2013, Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p.191.
- 2014: Leigh, D.S.) Paleoenvironmental Range of Variation in Floods, Fires, and Biomes in the Upper Little Tennessee River Valley, Blue Ridge Mountains, USA. Paper presented at the Annual Meeting of the Association of Southeastern Biologists. Association of Southeastern Biologists, Spartanburg, SC. April 3, 2014.
- 2014: (McDonald, J. and Leigh, D.S.) The Influence of Climate and Land Cover Change on Flooding in the Southern Blue Ridge Mountains. Paper presented at the Annual Meeting of the Association of American Geographers. Association of American Geographers, Tampa, FL. April 11, 2014.
- 2014: (Champagne, A., Le Coudedic, M., Gragson, T.L., Coughlan, M.R., Leigh, D.S. Evolucion del agropastoralism y de los subsuelos al oeste de los Pirineos. CTP-DE PART: Dynamiques des Espaces Pyrénéens d'Altitude. Toulouse, France. May 2014.
- 2014: (Leigh, D.S., Gragson, T.L., Coughlan, M.R.) Place-Based Detection of the Transition to Agropastoralism from Colluvial Sediments of the French Western Pyrenees Mountains. Paper presented at the 17th International Congress of the Union Internacional de Ciencias Prehistoricas y Protohistoricas, Burgos, Spain. September 2014.
- 2014: (Suther, B., and Leigh D.S.) Mega-meander" Paleochannels of the Southeastern Atlantic Coastal Plain, USA. Paper presented at the Annual Meeting of the Geological Society of America. Vancouver, British Columbia October 20, 2014.
- 2014: (Leigh, D.S.) Landforms Favoring Buried Pre-Clovis and Paleoindian Sites on the Atlantic Coastal Plain. Paper presented at the Southeastern Archaeological Conference (SEAC), Greenville, SC. November 14, 2014
- 2014: (Leigh, D.S.) Multi-millennial record of erosion and fires in the Southern Blue Ridge Mountains, USA. Paper presented at the annual meeting of the Southeastern Division of the Association of American Geographers, Athens, GA November 24, 2014.

- 2014: (McDonald, J.M. and Leigh, D.S.) Spatial and Temporal Drivers of Flooding in the Southern Blue Ridge Mountains. Paper presented at the annual meeting of the Southeastern Division of the Association of American Geographers, Athens, GA November 24, 2014.
- 2014: (Holdridge, G., Leigh, D.S., Kowelewski, S.) Late Quaternary Arroyo Formation in the Mixteca Alta, Oaxaca, Mexico. Paper presented at the annual meeting of the Southeastern Division of the Association of American Geographers, Athens, GA, November 24, 2014.
- 2014: (Gragson, TL., Leigh, D.S., Coughlan, M.R.) Co-Evolutionary Dynamics of Mid- to Late-Holocene Landscape Transformation in the Western French Pyrenees. ICREA Conference on Small-Scale Societies and Environmental Transformations. Barcelona Spain, December 2014.
- 2014: (Leigh, D.S., Gragson, T.L., Coughlan, M.R.) Colluvial Stratigraphic Sections as Proxies for Place-Based Analysis of Agropastoralism in the Western French Pyrenees Mountains. Poster presented at the ICREA Conference on Small-Scale Societies and Environmental Transformations: Co-evolutionary Dynamics. Barcelona, Spain, December 2014.
- 2015: (Coughlan, M.R., Gragson, T.L., Leigh, D.S.). Place-based investigation of the role of agropastoral fire use in forest-grassland transition in the Northwest Pyrenees using archaeological and biogeological archives. Paper presented at the Association of American Geographers Annual Meeting, Chicago, IL, April 22, 2015.
- 2015: (Leigh, D.S., Gragson, T.L., Coughlan, M.R.) Positive effects of millennial grazing on soils in the western French Pyrenees. Paper presented at the European Geosciences Union General Assembly, Vienna, Austria, April 2015.
- 2015: (Leigh, D.S.). Stratigraphic Records of Past Erosion and Sedimentation in the Southern Blue Ridge Mountains, USA. Paper presented at the 4th Biennial Symposium of the International Society for River Science (ISRS) 2015, (Conference), LaCrosse, Wisconsin, August 25, 2015
- 2015: (Leigh, D.S., Gragson, T.L., Coughlan, M.R.). Neolithic and younger legacy sediments and soils along summits of the western Pyrenees Mountains, France. Paper presented at the Annual Meeting of the Geological Society of America, Baltimore, Maryland, November 2, 2015.
- 2015: (Holdridge, G., and Leigh, D.S.). Late Pleistocene and Holocene arroyo stratigraphy of the Mixteca Alta, Oaxaca, Mexico. Paper presented at the Annual Meeting of the Geological Society of America, Baltimore, Maryland, November 4, 2015.
- 2016: (Suther, B.E. and Leigh, D.S.). Quaternary allostratigraphy of the lower Oconee River valley, Uvalda Quadrangle, Georgia, USA. Poster presented at the Annual Meeting of the Southeastern Section of the Geological Society of America, Columbia, South Carolina, April 1, 2016.
- 2016: (Leigh, D. S., Gragson, T. L., & Coughlan, M. R). Multi-proxy record of human induced land use change derived from colluvial soils of the western Pyrenees Mountains, France. Invited keynote speaker for the Soil System Science Division Soils as Records of the Past. European Geosciences Union General Assembly, April 2016.
- 2016: (Coughlan, M. R., Gragson, T. L., & Leigh, D. S.). Reinterpreting high altitude forest to pasture conversion in the Holocene. Paper presented a the 4th International Landscape Archaeology Conference, Uppsala University, Sweden, 22-25 August 2016.
- 2016: (Leigh, D.S.) Paleoflood analysis of meander scars and natural levees of the upper Tennessee River Basin, Blue Ridge Mountains. Invited paper presented at the annual meeting of the Geological Society of America, Denver, Colorado, September 28, 2016.
- 2017: (Leigh, D.S., Gragson, T.L., LeFebvre, B.) Rapid alluvial sedimentation aided expansion of Moissac during the Middle Ages in southern France. Paper presented at the Association of American Geographers Annual Meeting in Boston, Massachusetts, on April 6, 2017.

- 2017: (Coughlan, M.R., Leigh, D.S., Gragson, T.L., Le Couédic, M.) Holocene anthropization of mid-elevation landscapes around Pic d'Orhy, Western Pyrenees. Paper presented a the 10th Institute for European and Mediterranean Archaeology (IEMA) Visiting Scholar Conference on Archaeology of Mountain Landscapes: Interdisciplinary Research Strategies of Agro-Pastoralism in Upland Regions, April 8-9, University at Buffalo, Buffalo, NY.
- 2017: (Leigh, D. S., Gragson, T. L.) Anthropic changes to the biotic factor of soil formation from forests to managed grasslands along summits of the western Pyrenees Mountains, France. Paper presented at the European Geosciences Union General Assembly, Vienna, Austria, April 28,2017.
- 2017: (Holdridge, G., Leigh, D.S.) Late Quaternary Paleohydrology of Arroyo Cycles in the Mixteca Alta, Mexico: Insights from Past and Present Alluvial Stratigraphy. Paper presented at the European Geosciences Union General Assembly, Vienna, Austria, April 26, 2017.
- 2017: (Gragson, T.L., Coughlan, M.G., Leigh, D.S.) Contingency & Agency in the Holocene Anthropization of Mountain Landscapes of the Western Pyrenees. Paper presented at the European Geosciences Union General Assembly, Vienna, Austria, April 27, 2017.
- 2017: (Kimball LR, Leigh DS, Idol B, Newsome L, Mohler P, Webb P.) A Late Archaic Period Pronged Spruce Dart Point from 31JK487. Paper presented at the Cherokee Archaeological Symposium, Cherokee, NC, Sponsored by the Eastern Band of the Cherokee Indians, .
- 2017: (Milewski, A., Leigh, D.S.) Paleofloods in the Tennessee River Basin: Records of Megafloods using Tractive-load Deposits. Paper presented at the annual meeting of the Geological Society of America, Seattle, Washington, October 24, 2017.
- 2017: (Suther, B.E., Leigh, D.S., Brook, G.A., Linhai, Y.). Mega-meander paleochannels of the southeastern Atlantic Coastal Plain, USA. Poster presented at the American Geophysical Union annual meeting in New Orleans, LA, 13 December 2017.
- 2017: (Leigh, D.S., Gragson, T.L.) Soil Biogeochemical and Biophysical Footprint of Forest to Pasture Conversion in the Western Pyrenees Mountains, France. Paper presented at the American Geophysical Union annual meeting in New Orleans, LA, 15 December 2017.
- 2018: (Jackson, C., Webster, J., Cecala, K.K., Frisch, J.R., Kirsch, J.E., Maerz, J.C., Leigh, D.S., Peterson, J.T., Pringle, C.M., Knoepp, J,D,) Hydrologic, Morphologic, and Water Quality Effects of Rural Development in Streams of the Southern Blue Ridge Mountains. Paper presented at the annual meeting of the Society for Freshwater Science, Detroit, MI, 22 May 2018.
- 2018: (Stinchcomb, G.E., Stewart, C.L., Blackaby, E., Lombardi, R., Davis, L., Forman, S.L., Hockaday, W.C., Leigh, D.S.) Floodplains as repositories of information on carbon addition rates in depositional soil profiles. Paper presented at the annual Geological Society of America meeting, Indianapolis, IN, 7 November 2018.
- 2018. (Stewart, C. L., Stinchcomb, G.E., Forman, S.L., Davis, L., Lombardi, R., Leigh, D.S., Blackaby, E. and Hockaday, W.C.) Late Holocene paleofloods and grain size variability along the middle Tennessee River in northern Alabama. Paper presented at the annual Geological Society of America meeting, Indianapolis, 7 October 2018.
- 2018: (Leigh, D.S., Gragson, T. L., LeFebvre, B.) Chronostratigraphic Context for the Establishment and Development of the Urban Fabric of Moissac (France). Paper presented at the International Landscape Archaeology Conference (ILAC), University of Newcastle, Newcastle, UK, 18 September 2018.
- 2018: (Gragson, T.L., Coughlan, M.R., Leigh, D.S.) Response Diversity and the Evolution of Pastoral Landscapes in the Western Pyrenees from the Middle Holocene to the Present. Paper presented at the International Landscape Archaeology Conference (ILAC), University of Newcastle, Newcastle, UK, 20 September 2018.

2019: (Alarcón, T.E.; Leigh, D.S.) Preliminary phytolith results from alluvial arroyo sediments at the "Cliff Site", Mixteca Alta Highlands, Oaxaca, Mexico. Poster Paper presented at the Southeastern Geological Society of America meeting in Charleston, SC, 28 March 2019.

2019: (Leigh, D.S. and Purdy, B.A.) Stratigraphy and landscape evolution at the CCA site in northern Florida, a pre-Clovis candidate. Paper presented at the Southeastern Geological Society of America meeting in Charleston, SC, 28 March 2019.

2019: (Leigh, D.S.) Cherokee Paleofloods. Paper presented at the annual Cherokee Archaeological Symposium, Cherokee, North Carolina, September 27, 2019.

2019: (Rotz, R., Milewski, A., Craddock, R., Morgan, A., Leigh, D.S.) Investigation of Linear Dune Erosion and Lacustral Events in the Simpson Desert, Australia during the Late Quaternary. Poster presented at the annual meeting of the American Geophysical Union, San Francisco, CA, 9 December 2019.

# **INSTRUCTIONAL ACTIVITY**

#### **COURSES TAUGHT**

### Class

Earth Science Survey, 1991-1992
Introductory Weather and Climate, 1991-1992
Introduction to Landforms, occasionally 1990-2016, and 2017-present
General Geomorphology, yearly 1997-present
Field and Laboratory Methods in Physical Geography, 1992-1998; yearly 2010-2015 in Costa Rica
Fluvial Geomorphology, yearly 1992-present
Seminar in Geomorphology, yearly 1992-present
Seminar in Quaternary Paleoenvironments, occasionally 1992-present
Field Study of Geomorphology (in Costa Rica for UGA Maymester) 2010-2015
Freshman Odyssey Seminar (FYOS), yearly 2011-present

## Other Classes Taught

In addition to the normal teaching load, Dr. Leigh has given guest lectures to the following classes:

Archaeological Geology Graduate Seminars in Landscape Architecture Graduate Seminars in Aquatic Ecology

#### **GRADUATE STUDENT ADVISEMENT**

# Major Professor/Advisor:

# **Doctoral Advisees**

Andrew H. Ivester, 1999, "Quaternary Geology of Inland Dunes in Georgia, U.S.A."

David M. Walters, 2002, (Co-Advised with G. Helfman, Ecology) "Influence of Geomorphology and Urban Land Cover on Stream Fish Assemblages in the Etowah River Basin, Georgia." Awarded the 2003 Best Dissertation Award for The University of Georgia Chapter of the University Council On Water Resources and First Place Dissertation Award in the Field of Natural Science and Engineering for the National Universities Council on Water Resources.

Bradley Suther, 2013, "Late Quaternary floodplain and stream channel change in the Southern Blue Ridge."

Genevieve Holdgridge, 2016, "Millenial-scale human influence on erosion in the Mixteca Alta, Oaxaca, Mexico.

Jacob McDonald, 2017, "Millenial-scale changes in stream channels of the Southern Blue Ridge Mountains.

Robert Sorells, ABD, "Bank Erosion and its Relationship to Bank and Channel Homogeneity Across Multiple Scales in the South Fork of the Broad River, Georgia"

### Master's Advisees

Stephen D. Williams, 1994, "Geomorphic Response of Yahoola Creek to Gold Mining in North Georgia"

Jill A. Oppenheim, 1996, "Sedimentation Rates and Fluvial Response to Land-Use Changes in a Small Georgia Piedmont Watershed"

Fong Z. Brook, 1996, "A Late-Quaternary Pollen Record from the Middle Ogeechee River Valley, Southeastern Coastal Plain, Georgia"

Mark Gimigliano, 1997, "Mercury Deposition from Former, Isolated Gold Mines in Georgia"

Joseph D. Charles, 1999, "Aeolian versus Bioturbation Models of Archaeological Site Formation at Fort Stewart, Georgia"

Chris A. Sturm, 2000, "Controls of Large Woody Debris on Headwater Stream Morphology, Washington State." Candace V. Stoughton, 2000, "Channel Change in the South Fork Broad River, Georgia (1942-1993)"

Ngwa Godlove Ntumngia, 2001, "Analysis of Channel Change in Rivers of the Georgia Piedmont (1938/42/44-1993/99)"

Wendy L. Parisi, 2001, "Landscape Indicators of the Cherokee Darter (Etheostoma (Ulocentra) Scotti) in the Etowah Basin, Georgia"

Karin P. Lichtenstein (Geology), 2003, "Historic Sedimentation and Allostratigraphy of the South Fork Broad River, Northeast Georgia"

Katie Price, 2004, "Human Impact on Morphology and Water Quality of Blue Ridge Streams"

Andrew B. Bearden, (in progress), "Textural Variability in Fluvial Sediment as a Response to Land-Cover in the Etowah River Watershed, Georgia."

Heather Bartley, 2006, "Geomorphology and Archeology of the Upper Wateree River Valley"

Michelle Luebke, 2006, "Effects of Stream Entrenchment on the Channel Bed"

Bradley Suther, 2006, "Soil Chronosequence of an Upper Coastal Plain River System"

Leslie Martin, 2008, " Baseflow Turbidity of Tributaries to the Upper Little Tennessee River, North Carolina" Jacob McDonald, 2010, "Peatland formation at Whiteoak Bottoms, western North Carolina."

Lixin Wang, 2010, "Late Holocene sedimentation and paleofloods in the Little Tennessee River Valley"

Dustin Menhart, 2011 "Photo-measurement of Blue Ridge stream channels"

James Rogers, 2011, "Modeling stream bank erosion in the Blue Ridge Mountains"

Andrea Altoff, 2012, "Riparian influences on stream conditions in the Southern Piedmont"

Seth Younger, 2013, "Late Holocene sediment yield in the Blue Ridge Mountains"

Carrie Jensen, 2013 "Explaining variation in large wood in Blue Ridge streams"

Sean Cameron, 2015, "Diagnostic sedimentology of beaver ponds in Southern Appalachia"

#### **Committee Member:**

Ph.D. level

Charles Conrad, graduated 1993 Kay Williams, graduated 1995 Steve Harper (Geology), graduated 1996 Douglas Gamble, graduated 1997 Tom Feeney, graduated 1997

Deanna Hurst, graduated 1998 Brian Jackson (Crop and Soil Science), graduated 1998 Joey Shaw (Crop and Soil Science), graduated 1998 Michelle Bailey Lakly (Ecology), graduated 1999 Heidi Lamoreaux, graduated 1999 John Rogers, graduated 1999 Jeff Underwood, graduated 1999

Dorcas Franklin (Crop and Soil Science), graduated 2000 John Stallins, graduated 2000 James Webster, graduated 2000

Bruce Pruitt (Forest Hydrology), graduated 2001 Leslie Edwards, graduated 2001

Ronald Ward, graduated 2002

Rober Fuller, anticipated graduation 2003 Don Thieme (Geology), graduated 2003 Honglin Xiao, graduated 2003

Andrew Sutherland (Ecology), graduated 2005

Seth Wenger, graduated 2006 Scott Markwith, graduated 2006

Fuyaun Liang,, graduated 2008 J.B. Sharma, graduated 2008 William Duncan (Ecology), graduated 2008

Sheika Arugundi, graduated 2009

Laura Knight, graduated 2010 Denise Carrol (Forest Hydrology), graduated 2010

Bill McDowell (Ecology), graduated 2014

Amber Ignatius, graduated 2015

Peter Akers, graduated 2016

Lixin Wang, graduated 2017

Jiaying Wu, graduated in 2018

Daniel Haskett, graduated in 2020

Rachel Rotz (Geology), in progress Brett Parbus (Anthropology), in progress

M.S./ M.A. level

Carl Seielstad, graduated 1994

Drew Lucas (Landscape Architecture), graduated 1994

Julie Evans, graduated 1995 Steven Fleming, graduated 1995 Andrew Ivester, graduated 1995 Maureen Meyers (Anthropology), graduated 1995

Melanie Burke (Forest Hydrology), graduated 1996 David Conway, graduated 1996 Carol Harvey, graduated 1996 Shaw Wen Sheen, graduated 1996 Jennifer Youngberg, graduated 1996

Jeanne Epstein, graduated 1998 Andrew Sutherland, graduated 1998

Eva Fujimoto, graduated 1999 Nina Serman (Geology), graduated 1999

Wilmot Greene, graduated 2000 Sherri Littman (Geology), graduated 2000 Allison Roy (Ecology), graduated 2000

Rebecca Cifaldi (Ecology), graduated 2001 Jamie Dyer, graduated 2001 Kirk Martin (Forest Hydrology), graduated 2001 Michael Merrill (Ecology), graduated 2001

Amy Johnson, graduated 2004 Scott Markwith, graduated 2004

Elizabeth Suddeth (Ecology), graduated 2005

James Norman, graduated 2006

Megan Harlow, graduated 2008

Jiaying Wu, graduated 2012

Daniele Hasket, graduated 2013

Annaka Clement, (Geology) graduated 2015

Steven Wright, (Geology) graduated 2016

John H. Boulton, (Geology) graduated 2017 Sarah N. Wright (Geology) graduated 2017

Stephen Cooper, graduated 2019

Emily Niederman, in progress Elizabeth Tuttle (Forestry), graduated in 2020 Max Deckman (Geology), in progress Samantha Khatri (Geology), in progress

# **INSTRUCTION-RELATED ACTIVITIES**

Undergraduate Advisor for B.S. Majors in Geography 1996-1999
Coordinator for the Introductory Landforms class at The University of Georgia, 1994-present Developed a new class, "Fluvial Geomorphology" in 1992
Developed a new class, "General Geomorphology" in 1997
Faculty Mentor for Summer Undergraduate Research Program for Minority Students, 1997
Graduate Coordinator for the Geography Department 2006-2009
Developed a new class, "Field Study of Geomorphology" in 2010
Developed eight separate academic "Areas of Emphasis" for Geography Majors, 2011

#### INSTRUCTIONAL GRANTS

\$27,500 for the period 4/1/93 to 4/1/94; University of Georgia Instructional Technology Grant: "Geoscience Learning Center-Pilot Initiative"; Joint award to D.S. Leigh, P.S. Schroeder, and J.C. Thill.

\$1,000 for the period 6/1/94 to 5/31/95; University of Georgia Office of Instructional Development Grant for "Landform Images and Animation Sequence Modules for the Geosciences."

\$100,000 for 6/1/94 to 5/30/95; University of Georgia Instructional Computing Facility Grant for the "Geoscience Learning Center"; Joint award to D.S. Leigh, P.S. Schroeder, J.C. Thill, and E.L. Usery.

\$10,000 during Summer 1996 for a Curriculum Conversion to the Semester System grant to develop a World Wide Web site for the Geography Department that facilitated curriculum and instructional concerns.

\$2,000 for the period 7/1/98 to 6/30/99; University of Georgia Office of Instructional Support and Development: "Memory System Upgrade for the Geoscience Learning Center." Joint award to P.A. Schroeder and D.S. Leigh.

\$5,205 for the period 6/1/2001 to 6/3/2002; U. S. Environmental Protection Agency. "Instruction-Related Grant for a USEPA NNEMS Fellowship" involving to Ms. Karin Lichtenstein.

### STUDENTS FUNDED FROM RESEARCH GRANTS

Andrew Bearden (3 semesters)

Joseph Charles (half of masters program)

Rebecca Cifaldi (full masters program)

Andrew Ivester (full doctoral program)

Wilmot Greene (summer 1999)

Chris Kennedy (undergraduate hourly for 2 semesters)

Christopher Sturm (1 semester)

Rakesh Mahlotra (3 semesters)

Wendy Parisi (fall 2001)

Allison Roy (full masters program fall 1998-spring 2001)

David Walters (full doctoral program spring 1999-summer 2002)

James Rogers (undergraduate hourly spring and summer + 2 years as graduate student 2005-2006)

Katie Price (full masters program starting fall 2002-spring 2004)

Bradley Suther (full masters program starting fall 2003-2004)

Jason Meadows (summer 2006 research assistant)

Leslie Martin (fall 2006-winter 2007) travel expenses for field work

Bradley Suther (Ph.D. Reasearch Assistantship 2008, 2010-2011)

Jacob McDonald (Ph.D. Research Assistantship 2010-2016)

Jason Fair (undergraduate hourly 2011-2012)

Brittany McDade (undergraduate hourly 2011-2012)

Carrie Jensen (hourly 2012-2013)

Sean Cameron (hourly 2012-2013)

Austin Stone (hourly 2016)

# **SERVICE ACTIVITY**

### **EDITORIAL ACTIVITIES**

# Editorial Board Memberships:

Southeastern Geographer

## Manuscript Reviewer for:

Quaternary Research

Geology

Southeaster Geographer

Urban Geographer

Paleopedology Book

Professional Geographer

Annals of the Association of American Geographers

Earth Surface Processes and Landforms

Earth Science Reviews

Geomorphology

Geological Society of America Bulletin

Geoarchaeology

Journal of Archaeological Science

Journal of Sedimentary Research

Georgia Water Resources Conference Proceedings

Transactions of the American Fisheries Society

Southeastern Archaeology

Florida Anthroplogist

Journal of the American Water Resources Association

Sedimentary Geology

Southeastern Naturalist

Hydrological Processes

#### **Grant Proposal Reviewer:**

National Science Foundation Geography and Regional Science Division

National Science Foundation Earth Science Division

National Science Foundation Geology and Paleontology Division

National Science Foundation Ecosystem Studies Program

National Science Foundation Arctic Natural Sciences Program

American Chemical Society

National Geographic Society

National Institute of Water Resources / U.S. Geological Survey

### SERVICE TO PROFESSIONAL ORGANIZATIONS

Program Committee for the Southeastern Division of the Association of American Geographers, 1992

Paper Reviewer for the Southeastern Division of the Association of American Geographers 1992-present Resolutions Committee for the Southeastern Division of the Association of American Geographers, 1994-1995

State Representative for the American Quaternary Association, 1994

State Representative for the Southeastern Division of the Association of American Geographers, 1998-2000

Theme-Session Organizer/Convener for the Southeastern Division of the Geological Society of America, 1998

Moderator for Sessions at the Georgia Water Resources Conference, 1999

Organized Greater Atlanta Geomorphology and Hydrology Conference at UGA, 2010 and 2011

### SERVICE TO GOVERNMENTAL ORGANIZATIONS

Five-Year Program Review Panel Member for the U.S EPA, National Environmental Research Laboratory (2001)

Consultant for Tennessee Valley Authority (TVA) Projects

Consultant for National Park Service Projects

Consultant for U.S. Army Corps of Engineers Projects

Consultant for Georgia Department of Natural Resources Projects

Consultant for Alabama, Georgia, South Carolina, North Carolina, and Tennessee Highway Department Projects Consultant for geoarchaeological investigations for the Eastern Band of the Cherokee Indians

#### SERVICE TO NON-GOVERNMENTAL ORGANIZATIONS

Science Advisory Committee Member for the Upper Chattahoochee River Keeper (1996-present) Technical Advisory Committee Member for the Soque River Watershed Organization (2002-present) Technical Advisory Group Member for the Georgia Conservancy's TMDL Group (2000-2001)

# **UNIVERSITY SERVICE**

### Chair of University Committees:

Chair of the Academic Standards Committee of the Franklin College of Arts and Sciences, 2001-2002 Chair of the University Promotion and Tenure Committee for Social Sciences 2011

### Membership on University Committees:

Environmental Science and Management Institute Development Committee, 1992-1993

"Theme 6" Strategic Plan Committee, 1994

Seven-Year Program Review Committee for Evaluation of the Veterinary Teaching Hospital, 1998-1999

Environmental Safety Division Representative for Geography 2000-present

Senator, Franklin College of Arts and Science Faculty Senate, 2000-2003

Academic Standards Committee of the Franklin College of Arts and Sciences, 2000-2001

Professional Concerns Committee, 2002-2003

University Promotion and Tenure Committee for Social Sciences 2009-2011.

Member of the UGA Facilities Committee 2016-2018

Member of the University Council at UGA 2016-2018

Member of the UGA-OVPR Faculty Seed Grants Physical, Computational, and Engineering Review Committee

# Member of University Institutes, Centers, and Certificate Programs:

Ad-Hoc Executive Member of the Center for Archaeological Sciences and Certificate Program, 1992-present Member of the Water Resources Faculty and Certificate Program, 2000-present Affiliate of the Latin American and Caribbean Studies Institute, 2009-present Board Member of the UGA River Basin Center 2000-present

#### Other University Service:

Franklin College Outreach Program Participant, about 2 lectures per year from 1996-2001

## **DEPARTMENTAL SERVICE**

### Chair of Departmental Committees:

Geoscience Learning Center Committee, 1995-1996 Space Committee, 1995 Climatology Search Committee, 1998-1999 Curriculum Committee, 2000-present Advisory Committee to the Head, 2002-2005, 2008 Graduate Studies Committee, 2006-2009 Tracks/Area of Emphasis Committee, 2010-present

Job Search Committee for Joint Geography & Anthropology position, 2014-2015

Associate Head of Geography, 2011-2015

Chair of Curriculum Committee in Geography, 2020-present

# Member of Departmental Committees:

Undergraduate Studies Committee, 1992-1998
Advisory Committee to the Head, 1994-2002
Geoscience Learning Center Committee, 1994
Climatology Search and Screening Committee, 1994
Headship Search and Screening Committee, 1994
Space Committee, 1994, 2012
Graduate Studies Committee, 1994-1995, 1998-1999, 2015-present
Geography MS Degree Program Committee, 1996-1997
Anthropology Department Search and Screening Committee for Archaeologist Job, 2011

### Other Departmental Service:

Departmental Recording Secretary, 1992
Undergraduate Advisor for B.S. Majors, 1996-1998
Donate and arrange donations for the Geography Alumni Fund, about \$1000 since 2001
Purchased about \$40,000 worth of instructional equipment since 1995 for the Field Methods Class
Coordinator for the Introductory Landforms Class (GEOG 1113)
Associate Head, Department of Geography 2011-2015

### Major Assets Obtained from Research Grants:

Two 1999 Chevrolet 4x4 Vehicles (Suburban and Tahoe), \$58,000 Dual-Axel Trailer-Mounted Giddings Hydraulic Drilling Rig, \$45,000 Field Gamma Spectrometer, \$15,000 2 Electronic Total Stations, \$25,000 2 Electromagnetic Flow Velocity Meter, \$10,000 High-Sensitivity Laboratory Gamma Spectrometer \$49,000 Hydrolab Water Quality Sensor, \$7,000