Paul F. Hudson, PhD
p.f.hudson@luc.leidenuniv.nl / pfh@austin.utexas.edu

ACADEMIC POSITIONS

2012 – present: Associate Professor, Leiden University College, Leiden University (The Netherlands)

2010-2012: Lecturer: Amsterdam University College, University of Amsterdam (The Netherlands)

2007 – 2008: Fulbright Fellow and Visiting Researcher, Dept. Physical Geography, Utrecht University (The Netherlands)

1998 – 2012: Assistant Professor ('98-'04) and Associate Professor ('04-'12), Department of Geography and the Environment, University of Texas at Austin (on leave 2010-2012)

- Director of Geomorphology and Geoarchaeology Laboratory
  Affiliations:
  - Teresa Lozano Long Institute of Latin American Studies
  - Center for European Studies
  - Environmental Science Institute

EDUCATION

Ph.D, 1998: Department of Geography & Anthropology, Louisiana State University, Baton Rouge, LA; Advisor, RH Kesel.

MS, 1993: Geography, University of Florida, Gainesville, FL; Advisor: J Mossa.

BSc (with honors), May 1991: Geography, Jacksonville University, Jacksonville, FL

RESEARCH AND TEACHING INTERESTS

Fluvial geomorphology; hydrology, river and flood management, water resources, river dynamics, floodplain processes, sediment transport, climate change, soil erosion and land degradation, Quaternary geomorphology, environmental change, GISc; Regional interests: Brazilian Amazon, lower Rhine River, Mexico and Texas Gulf Coastal Plain, Lower Mississippi

PUBLICATIONS

Books and Edited Journal Volumes (*former student)

In progress:

Hudson, P.F. and Middelkoop, H.. "Geomorphic Approaches to Integrated Floodplain Management along North American and European Fluvial Systems in an Era of Global Environmental Change". (for 2013, under contract with *Springer*).

Hudson, P.F. and *LaFevor, M. Management and Monitoring Land Degradation and Environmental Change. *Journal of Environmental Management* (proposal accepted, planned for 2013).

Hudson, P.F., Frings, R., Winterscheid, A., and Erkens, G. Sediment Budgets and Morphodynamics of Rivers and Estuaries. *Geomorphology* (proposal accepted, planned for 2013).

Hudson, P.F. Flooding and Environmental Change in Fluvial Lowlands: Global Lessons and Implications of Dutch Flood Management. (monograph under contract with *Cambridge University Press*).

Published or in press:

Hudson, P.F. and Inbar, M. 2012. Geodiversity and Land Degradation: Anthropogenic and Natural Drivers of Environmental Change. *Land Degradation and Development*.

Hudson, P.F., Butzer, K.W., and Beach, T.P. 2008. Fluvial Deposits and Environmental History: Geoarchaeology, Paleohydrology, Adjustment to Environmental Change. 39th Annual Binghamton Geomorphology Symposium. Elsevier, Amsterdam, The Netherlands (also published by *Geomorphology* 101, 1-2), 412 pp.

Hudson, P.F. and Alcántara-Ayala, I. 2006. Geomorphology and Land Degradation. *Catena* 65, 2, 101-199.

Hudson, P.F. 2003. Floodplains: Environment and Process. *Geomorphology* 56, 3-4, 225-352.

Steinberg, M.K. and **Hudson**, P.F. 2002. Cultural and Physical Expositions: Geographic Studies in the Southern U.S. and Latin America, 2002. *Geoscience & Man*, Louisiana State University, Baton Rouge, LA, 36, 339 p.

Manuscripts in Journals, Book Chapters, and Major Reports

Hudson, P.F., *Slittine-Soune, A., *LaFevor, M. Geomorphic controls on hydrologic connectivity along the Lower Mississippi River. Hydrological Processes (under revision)

Hudson, P.F. and Inbar, M. 2012. Geodiversity and Land Degradation: Anthropogenic and Natural Drivers of Environmental Change. *Land Degradation and Development*. (Introduction to special issue)

Hudson, P.F, *Heitmuller, F.T., and *Leitch, M.B. 2012. Hydrologic connectivity of two oxbow lakes along the lower Guadalupe River, Texas: Geomorphic controls on the flood pulse concept. *Journal of Hydrology* 414-415, 174-183.

Hudson, P.F., 2012. Geomorphic Adjustment of the San Marcos River, Texas to Environmental Management for Removal of an Invasive Water Plant, *Cryptocoryne beckettii*. Final Report, Texas Parks and Wildlife and US Fish and Wildlife. (reviewed)

Hudson, P.F. 2010. Formation and Dynamics of Floodplain Lakes along the Lower Guadalupe, San Antonio, and Brazos Rivers, Texas. Final Report. Texas Water Development Board. (reviewed)

Benito, G. and **Hudson**, P.F. 2010. Flood hazards: The context of fluvial geomorphology, Ch. 10. In, I. Alcántara-Ayala and A. Goudie (Eds.), *Geomorphological Hazards and Disaster Prevention*. Cambridge University Press, 111-128.

*Heitmuller, F.T. and **Hudson**, P.F. 2009. Downstream trends in sediment size and composition of channel bed, bar, and bank deposits related to hydrologic and lithologic controls in the Llano River watershed, Central Texas, USA. *Geomorphology* 112, 246-260.

Hudson, P.F., Middelkoop, H., Stouthamer, E. 2008. Flood management along the Lower Mississippi and Rhine Rivers (The Netherlands) and the continuum of geomorphic adjustment. *Geomorphology* 101 (1-2), 209-236.

Hudson, P.F., Butzer, K.W. and Beach, T.P. 2008. Fluvial deposits and environmental history: Synthesis. *Geomorphology* 101 (1-2), xvii-xx.

Hudson, P.F., Butzer, K.W., and Beach, T.P. 2008. Scope and context of the 39th Annual Binghamton Geomorphology Symposium. *Geomorphology* 101 (1-2), viii – xi.

Hudson, P. F. and *Heitmuller, F.T. 2008. Rivers and landscapes of the Texas Gulf Coastal Plain. *The Southwestern Geographer* 12, 90-123.

Hudson P.F., +Colditz, R., Aguilar-Robledo, M. 2006. Spatial relations between floodplain environments and land use / land cover in a large lowland tropical river valley, Pánuco basin, Mexico. *Environmental Management* 38 (3), 487-503.

Hudson, P.F., and Kesel, R.H. 2006. Spatial and temporal adjustment of the lower Mississippi River to major human impacts, *Zeitschrift fur Geomorphologie*, Supplementbänd 143, 17-33.

Hudson, P.F. and Alcántara-Ayala, I. 2006. Ancient and modern perspectives on land degradation. *Catena* 65, 102-106.

Hudson, P.F, Hendrickson, D.A., Benke, A.C., Rodiles-Hernandez, R., and Minckley, W.L. 2005. Rivers of Mexico, in Benke A.C. and Cushing C.E. (Eds.) *Rivers of North America*. Elsevier, Academic Press, Ch. 23, 1030-1084.

Hudson, P.F. 2004. The geomorphic context of prehistoric *Huastec* floodplain environments: Pánuco basin, Mexico. *Journal of Archaeological Science* 31, 653-668.

Crews-Meyer, K.A., **Hudson**, P.F., and +Colditz, R. 2004. Landscape Complexity and Remote Classification in Eastern Mexico: Applications of Landsat 7 ETM Data. *GeoCarto International* 19, 45-56.

Hudson, P.F. 2003. The influence of the El Nino Southern Oscillation on sediment yield in the Lower Pánuco Basin, Mexico. *Geografiska Annaler – A* 85 (3-4), 263-275.

Hudson, P.F. and *Heitmuller, F.T. 2003. Local- and watershed-scale controls on the spatial variability of natural levee deposits in a large fine-grained floodplain: Lower Pánuco basin, Mexico. *Geomorphology* 56, 255-269.

Walker, H.J. and **Hudson**, P.F. 2003. Hydrologic and Geomorphic Processes in the Colville Delta, Alaska. *Geomorphology* 56, 291-304.

Hudson, P.F. and *Colditz, R. 2003. Flood delineation in a large and complex alluvial valley: The lower Pánuco basin, Mexico. *Journal of Hydrology* 280, 229-245.

Hudson, P.F. 2003. Floodplains: Environment and process. *Geomorphology* 56, 223-224.

Hudson, P.F. 2003. Event sequence and sediment exhaustion in the Lower Pánuco basin, eastern Mexico, *Catena*, 52 (1), 57-76.

Hudson, P.F. 2002. Floodplain styles of the lower Pánuco basin, Mexico. *Journal of Latin American Geography* 1, 58-68.

Hudson, P.F. 2002. Pool – riffle morphology in an actively migrating channel: The Lower Mississippi River, *Physical Geography* 23, 154-169.

Steinberg, M.K. and **Hudson**, P.F. 2002. Introduction, In M.K. Steinberg and P.F. Hudson (Eds.) *Cultural and Physical Expositions: Geographic Studies in the Southern United States and Latin America*: Geoscience & Man, Baton Rouge, LA, 36, 9-12.

Hudson, P.F. 2002. Historic Channel Behavior of the Lower Mississippi River, In M.K. Steinberg and P.F. Hudson (Eds.) *Cultural and Physical Expositions: Geographic Studies in the Southern United States and Latin America*: Geoscience & Man, Baton Rouge, LA, 36, 309-323.

Hudson, P.F., and Kesel, R.H., 2000, Relationships between lateral migration rates and channel geometry in the Lower Mississippi River, *Geology*, 28, No. 6, 531-534.

Hudson, P.F. 2000. Discharge, sediment, and channel characteristics of the Rio Pánuco, Mexico, *Conference of Latin Americanist Geographers*, 26, 61-70.

Hudson, P.F. and Mossa, J., 1997. Discharge and suspended sediment dynamics of Texas rivers, in; Hudak, P.F., Ed., *Geographical Perspectives on the Texas Region*, Guidebook of the Association of American Geographers Annual Meeting in Ft. Worth, TX., pp. 139-146.

Hudson, P.F., and Mossa, J., 1997. Suspended sediment transport effectiveness of three large impounded rivers, U.S. Gulf Coastal Plain. *Environmental Geology*, 32, no. 4, 263-273.

<u>Other published scholarly materials</u> (* = peer reviewed)

Hudson, P.F., Gísladóttir, G. 2012. Report of Activities 2008 – 2012 of the Commission on Land Degradation and Desertification (COMLAND), International Geographical Union / Union Géographique Internationale (IGU / UGI): submitted to Executive Committee of the IGU / UGI.

Hudson, P.F. 2010. Overview of Meeting and Fieldtrip Highlights, Meeting of the Commission on Land Degradation and Desertification (COMLAND), July 5-11 in Haifa, Israel in association with the Regional Congress of the International Geographical Union / Union Géographique Internationale (IGU / UGI) Regional Congress in Tel Aviv, July 12-16, 2010 (2,270 words)

Verslype, L., LeRoy, I., Defgnee, A., Woods, W., Young, B., **Hudson,** P., and Myer, D. 2008. Approche historique, archéologique et environnementale des aménagements paysager et bâti du château de Walhain (Walhain-saint-Paul, XI-XIXe s., Brabant Wallon, Belgique), pp. 1-6.

Hudson, P.F., Butzer, K.W., and Beach, T.P. 2008. Guidebook and Abstracts: 39th Annual Binghamton Geomorphology Symposium - Fluvial Deposits and Environmental History, The University of Texas at Austin.

Hudson, P.F. and Beach, T.P. 2008. Dedication to K.W. Butzer. *Geomorphology* 101 (1-2).

*** Hudson**, P.F.2008. Alluvial River Channels. In S. W. Trimble, B.A. Steward, T.A. Howell (Eds.), Encyclopedia of Water Science, 2nd Edition. Pages 991 – 997, DOI: 10.1081/E-EWS2-120038047

*** Hudson**, P.F.2008. Deltas. In S. W. Trimble, B.A. Steward, T.A. Howell (Eds.), Encyclopedia of Water Science, 2nd Edition. Pages 152 – 156, DOI: 10.1081/E-EWS2-120038076

*** Hudson**, P.F. 2008. Natural Levees. In S. W. Trimble, B.A. Steward, T.A. Howell (Eds.), Encyclopedia of Water Science, 2nd Edition. Pages 763-767, DOI: 10.1081/E-EWS2-120038052

Hudson, P.F. Gísladóttir, G. 2008. Report of Activities 2004 – 2008 of the Commission on Land Degradation and Desertification (COMLAND), International Geographical Union / Union Géographique Internationale (IGU / UGI): submitted to Executive Committee of the IGU / UGI, 33 pp.

Texas Alcalde (UT alumni journal) September – October 2002, pp. 15-16, write up of new Guadalupe River flood project.

Hudson, P.F. 2001. Fluvial and Karst Processes and Landforms, In *Encyclopedia of World Geography*, Salem Press, Pasadena, CA.

Nature (405, 6/1/2000, p. 525). Comment and summary of: **Hudson**, P.F., and Kesel, R.H., 2000, Relationships between lateral migration rates and channel geometry in the Lower Mississippi River, *Geology*, V. 28, No. 6, pp. 531-534.

*** Hudson**, P.F. Assessment of historic erosion rates in the Lower Mississippi River, *GIS/LIS '98*, Ft. Worth, TX, pp. 17-24 (published conference proceedings)

Mossa, J., **Hudson**, P.F., Lower, J., Wilder, M. Rahn, J. 1993. Suspended Sediment Supply from Large Rivers Entering the Northern Gulf of Mexico. Final report submitted to the U.S. Army Waterways Experiment Station in fulfillment of Contract no. DACA39-M-4918.

Hudson, P.F., 1993. Hydrogeology of Paynes Prairie, in; Mossa, J., Ed., *Physical and Human Geography of the Paynes Prairie Solution Basin, Alachua County, Florida*; Field Trip Guide for the Florida Society of Geographers Annual Meeting, 11-20.

Published Book Reviews

Brown, A.G. and Quine, T.A., 1999, *Fluvial Processes and Environmental Change*, John Wiley & Sons, 413 p. *River Research and Applications*, 2004.

Miller, A.J. and Gupta, A. 1999. *Varieties of Fluvial Form*, John Wiley & Sons, 521 p. *Geomorphology*, 35, 2000.

Knighton, David 1998. *Fluvial Form and Process: A New Perspective*, John Wiley & Sons, 383 p., *Geomorphology*, 28, 1999.

Reviews of Manuscripts

Annals of the Association of American Geographers; American Geophysical Union – Earth Surface; Journal of the American Water Resources Association; Journal of Archaeological Science; Catena; Earth Surface Processes and Landforms; Journal of Environmental Management; Estuarine, Coastal, and Shelf Science; Geofizika (Journal of Geophysics - Croatia); Geografiska Annaler – A (Physical Geography); Geomorphology; Geographical Research; Geology; The Holocene; Journal of Hydrology; Hydrological Processes; International Association of Hydrological Sciences (Red Book series); Journal of Latin American Geography (includes Yearbook – Conference of Latin Americanist Geographers); Land Degradation and Development; Netherlands Journal of Geosciences, Physical Geography; Progress in Physical Geography; Professional Geographer; Quaternary Science Reviews; Remote Sensing of Environment; River Research and Applications; Journal of Sedimentary Research; Sedimentology; Singapore Journal of Tropical Geography; The Southeastern Geographer; The Southwestern Geographer; University of Texas Undergraduate Research Journal; U.S. Geological Survey – Water Resource Investigations; Water Resources Research.

Reviewer of Proposals

National Science Foundation (NSF); NASA; American Association for the Advancement of Science (AAAS - Canon National Parks Science Scholars Program for the Americas);National Geographic

Society – Research; Netherlands Organization for Scientific Research (NWO); North Carolina Sea Grant; University of Texas at Austin Summer Research Assignments; University of Texas at Austin Environmental Science Institute Graduate Fellowships

GRANTS, CONTRACTS, AND FELLOWSHIPS

2011-2012. National Science Foundation (NSF). Sedimentation from an extreme flood event along the Lower Mississippi River, $55,000 (co-PI with FT Heitmuller and RH Kesel).

2009 – 2012. *US Fish and Wildlife Service* (USWFS). Removal of Capes Dam, San Marcos River: Modeling Hydrologic, Geomorphic, and Ecological Response (in collaboration with USFWS staff scientists), $53,000.

2008. *National Science Foundation* (NSF). Fluvial Deposits and Environmental History – 39th Annual Binghamton Geomorphology Symposium (Co-PIs: KW Butzer and TP Beach), March 2008 to August 2009, $20,648.

2007 – 2008. *Fulbright Fellowship.* (Utrecht University, Netherlands). Flood Management and Environmental Change along the Rhine-Maas Delta, Netherlands, AY 2007-2008, €12,000.

2007. *Special Research Grant, Office of Vice President for Research, University of Texas at Austin*. Project: Flood Management and Environmental Change along the Rhine-Maas Delta, Netherlands, $750.

2007. *Faculty Research Assignment, University of Texas at Austin*. Project: Flood Management and Environmental Change along the Rhine-Maas Delta, Netherlands, Fall 2008, 1 semester of salary.

2006-2007. *Texas Water Development Board*: Formation and Sedimentation Dynamics of Floodplain Lakes Along the Brazos, Guadalupe, and San Antonio Rivers, Texas Gulf Coastal Plain, $64,701.

2006 – 2007. *National Science Foundation*. Downstream channel adjustment in an extreme hydrologic setting. Llano River, Texas (Doctoral Research Improvement awarded to Franklin T. Heitmuller), $12,000.

2005 – 2010. *U.S. Fish and Wildlife Service and Texas Parks and Wildlife*: Geomorphic Monitoring of the San Marcos River for removal of *Cryptocoryne Becketti*, $79,628.

2002 – 2003. *National Science Foundation* (#0237050), Spatial Variability in Flood Sedimentation of an Extreme Event, Guadalupe River, TX, $20,000.

2001. *UT-Austin Special Research Award*, Office of Vice President for Research, Floodplain processes on the Lower Amazon Valley, $750.

2001. *UT-Austin Center for Instructional Technologies, Digital Watersheds: Creating Continuity between Teaching and Research*, Student and professional staff support (100 hours) for development of Internet based teaching resources.

2000 – 2002. *UT-Austin Interdisciplinary Research Initiative*: *Paleoflooding in the Pánuco Watershed, Mexico*, $98,775.

2000 – 2001. *UT-Austin Faculty Research Internship*. Funding to recruit new graduate student to work on the Rio Pánuco, Mexico project, ~$17,500.

2000. *Mellon Foundation (UT – LLILAS)*: *Establishing the Holocene Flood History of the Rio Pánuco, Mexico*, $5,000.

2000. *UT Faculty Research Award*: *Morphologic Adjustment of the Rio Pánuco, Mexico to Holocene Climate Change*, $5,980.

2000. *UT-Austin Center for Instructional Technologies*: *Digital Watersheds*, Student and professional staff support (50 hours) for development of Internet based teaching resources.

1999. *UT-Austin Special Research Grant*: Historic Channel Processes of the Lower Mississippi River, travel funds for archival research at the *Mississippi River Commission*, Vicksburg, MS, $590.

1996. *R.J. Russell and R.C. West Field Research Grant*: $500, Louisiana State University Department of Geography & Anthropology, Funding for dissertation research in Vicksburg, MS.

Financial Support of Students from Grants and Contracts:

Graduate students:

1. Anthony Layzell (PhD), Jan. 2011 (field project)
2. Maraigh Leitch (MA), AY 2008-2010, Jan. 2011 (field and lab work)
3. Alexandra Myers (PhD), AY 2006-2007, including summer
4. Rene Colditz (MA); spring 2003
5. Larry Teng (PhD), summer 2002
6. Augustine Avwunudiogba (PhD); AY 2001-2002
7. Amy Nuenschwander (PhD); summer-B 2002

Bachelor students:

1. Rebecca Lin, spring 2010
2. Tanner Arrington; spring and summer 2009
3. Clay Spivey; AY 2007-2008, AY 2008-2009, including summers
4. Rahda Vyes, AY 2006-2007, including summer
5. Jameson Courtney; spring 2006
6. Ashley Summers; AY 2005-2006, including summer

7. Kimberly Meitzen (Blancas); fall 2003
8. Sean White; summer 2002
9. Rodger Hamilton; fall semester 2000
10. Timothy Gibbons; AY 2000-2001

ORGANIZED SYMPOSIA AND CONFERENCE SESSIONS

Human Impacts on Landscapes. Paper sessions for the International Association of Geomorphology, Paris, France, August 2013 (co-organized with A. Goudie)

Global Environmental Change and Land Degradation Management. Three paper sessions organized for the Commission on Land Degradation and Desertification (COMLAND), *International Geographical Union (IGU) Congress* in Cologne, Germany: August 26-30, 2012

Sediment Transport and Morphologic Adjustment. Paper sessions organized for the *European Geophysical Union (EGU) Congress* in Vienna, Austria: April, 2012 (co-organized with G. Erkens, R. Frings, A. Winterscheid).

Land Degradation and Environmental Change. Paper sessions organized for the Commission on Land Degradation and Desertification (COMLAND), International Geographical Union (IGU) Regional Congress in Santiago, Chile: November, 2011

Fluvial Deposits and Environmental History: Geoarchaeology, Paleohydrology, Environmental Change. 39th Annual Binghamton Geomorphology Symposia, UT-Austin, October 2008 (with Karl W. Butzer and Tim Beach).

Fluvial Geomorphology: Three sessions held at the Association of American Geographers Annual Meeting, San Francisco, CA, 2007 (sponsored by the AAG Geomorphology Specialty Group). Co-organizer with Michael Slattery.

Integrated Watershed Sciences Symposium. UT-Austin - Nov. 12, 2003.

Geomorphic Features of Land Degradation, International Association of Geomorphologists, International Geographical Union Commission on Land Degradation and Desertification (COMLAND), Mexico City, November 2003.

Floodplain Processes I (Floodplain adjustment to Holocene Climate Change), Floodplain Processes II (Floodplain Variability from the Arctic to the Amazon), Floodplain Processes III (Modeling and Anthropogenic Influences on Floodplain Processes). Association of American Geographers Annual Meeting, Los Angeles, CA, March 2002 (sponsored by the AAG Geomorphology Specialty Group).

Research Traditions in LSU Physical Geography: organized for the 70th anniversary of LSU Geography, Southwest Association of American Geographers Annual Meeting, Baton Rouge, LA 1998.

PRESENTATIONS

Invited Presentations (* = published abstract)

* April 2010. *Floodplain Management for Climate Change: A Lowlands Perspective from the Dutch Rhine*. Presented at, "After Copenhagen: Collaborative Response to Climate Change", International symposium held at the University of Texas at Austin, April 6-10, 2010.

April 2009. Marsico Visiting Scholar (public research presentation and classroom lecture), Department of Geography, University of Denver.

November 2008. *Flood Management Along the Lower Mississippi and Rhine Rivers and the Continuum of Geomorphic Adjustment*, New College and Department of Geography Colloquia Series, University of Alabama.

*October 2008. Binghamton Geomorphology Symposium, Austin, Texas. *Flood Management Along the Lower Mississippi and Rhine Rivers (The Netherlands) and the Continuum of Geomorphic Adjustment*.

*March 2008. 16th Annual Netherlands American Studies Conference, Nijmegen, The Netherlands. *Flooding of New Orleans from Hurricane Katrina: Causes and consequences.* Keynote address.

January 2008. Department of Physical Geography, Johann Wolfgang Goethe-University Frankfurt aan Main, Germany. *Spatial and temporal adjustment of the Lower Mississippi River to major human impacts*.

*February 2006. Texas Water Development Board, Austin, TX. *Floodplain connectivity and riparian sediment delivery along the Guadalupe River*, Texas. Texas Rivers Symposium.

November 2005. Dept. of Geography and the Environment, University of Texas at Austin, *Hurricane Katrina-Rita Flooding in New Orleans: Controls, Consequences, and Questions*. Faculty-Graduate Student Panel, UT-Austin.

*May 2005. Texas River and Reservoir Management Society (TRRMS) Annual Meeting, Waco, TX (keynote address). *Flood Sediment Delivery to Floodplain Riparian Environments in an Impounded System*. In "Importance of Fluvial Geomorphology in Maintenance and Restoration of Stream Systems".

April 2005. Lozano Long Institute of Latin American Studies (LLILAS), *Floodplain Landscapes of the Lower Pánuco Basin, Mexico*.

April 2003, University of Texas, Lozano Long Institute of Latin American Studies (LLILAS): panelist for Landscape Change in the Brazilian Amazon (*Brazil Week*)

November 2002, University of Texas, Lozano Long Institute of Latin American Studies (LLILAS):

Pánuco Basin Research, a brief (~7.5 minute) overview of research activities in eastern Mexico to PEMEX officials (panel of 5)

October 2002, Department of Geography, Michigan State University, *Adjustment of the Lower Mississippi River to human modifications.*

October 2002, Center for Latin American and Caribbean Studies, Michigan State University: *Floodplain landscapes in eastern Mexico, the Lower Pánuco Basin*

April 2002, Center for Environmental Research in Latin America – Brown Bag Series, co-sponsored by the Lozano Long Institute for Latin American Studies and the Department of Geography, University of Texas at Austin, *The Amazon vs. the Mississippi: Field Investigations of Continental-Scale Catchments.*

February 2002, Baylor University Department of Geology Colloquium series, *Floodplain Morphology of the Lower Pánuco Basin, Mexico.*

February 2002, University of Memphis, Department of Geography and Geology Colloquium series, *Response and Recovery of the Lower Mississippi to Human Modification*.

February 2002, Texas A&M University Department of Geography Colloquium Series, *Floodplain Morphology of the Lower Pánuco Basin, Mexico.*

March 2000: Southwest Texas State University Colloquium Series, Engineering modifications to the Lower Mississippi River, San Marcos, TX.

April 1999: University of Texas at Austin Department of Geological Sciences Hydrogeology Brown Bag Series, Historic erosion rates in the Lower Mississippi River.

March 1998: Meandering Processes in the Lower Mississippi River (colloquium series), Department of Geography, University of Missouri – Columbia (*job interview*).

March 1998: Human impacts to alluvial river systems (class lecture), Department of Geography, University of Missouri – Columbia (*job interview*).

February 1998: Meandering Processes in the Lower Mississippi River (colloquium series), Department of Geography, University of Alabama – Tuscaloosa (*job interview*).

February 1998: Meandering Processes in the Lower Mississippi River (colloquium series), Department of Geography, University of Texas – Austin (*job interview*).

Conference Presentations, Symposia, Other… (* = published abstract)

* November 2011. Flooding and land degradation along the Lower Mississippi River. To be presented at the Commission on Land Degradation (COMLAND) sessions at the International Geographical Union (IGU) Regional Congress, Santiago, Chile.

* April 2011. Complex inundation processes along the Lower Mississippi River. Presented at the International Conference on the Status and Future of the World's Large Rivers, Vienna, Austria.

*July 2010. Land degradation along large lowland floodplains: A perspective from the lower Mississippi and Dutch Rhine. International Geographical Union (IGU) Commission on Land Degradation (COMLAND), Haifa, Israel.

*April 2010. Fluvial complexity and the importance of local-scale factors in the management of global environmental change: A lowlands perspective from the Dutch Rhine. Association of American Geographers Annual Meeting, Washington DC.

*March 2009. Contrasting hydrologic connectivity of oxbow lakes along the lower Guadalupe River, Texas. Poster presentation at the Association of American Geographers Annual Meeting, Las Vegas, NE (with Maraigh Leitch as co-presenter).

*October 2008. Downstream trends in channel and bank particle size: The roles of lithology and flow variability along the Llano River, Central Texas, USA. Poster presentation at the 39th Annual Binghamton Geomorphology Symposium in Austin, TX (with Franklin T. Heitmuller, presenter)

*April 2008. Soil erosion modeling and land use history in the Sierra Madre Oriental, Mexico, Paper presentation at the Association of American Geographers Annual Meeting, Boston, MA (with Augustine Avwunudiogba, presenter).

*April 2008. Fluvial Deposits and Environmental History, 39th Annual Binghamton Geomorphology Symposium, Poster presentation at the Association of American Geographers Annual Meeting, Boston, MA (with Karl Butzer and Timothy Beach – presenter).

*June 2007. The importance of understanding lower Mississippi floodplain geomorphology to applied research, IAG – Large Rivers Symposium in Lyon, France. With R.H. Kesel (presenter).

*April 2007. Floodplain lake variability along the lower Guadalupe Texas, Annual Meeting of the Association of American Geographers, San Francisco, CA. (with Alexandra Myers, UT Geography)

*April 2007. Geomorphic response of the San Marcos River to an environmental disturbance (illustrated poster presentation), Annual Meeting of the Association of American Geographers, San Francisco, CA. (with Alexandra Myers and Radha Vyes, UT Geography).

*April 2007. The influence of Land use and land history on soil erosion, Sierra Madre Oriental, Mexico. Annual Meeting of the Association of American Geographers, San Francisco, CA. (with Augustine Avwunudiogba, UT Geography as presenter)

*February 2007. Spatial variability in flood sedimentation, Guadalupe River, Texas. Florida Society of Geographers Annual Meeting in Jacksonville, Fl.

*May 2006. Consideration of fluvial geomorphology for management of Texas Rivers, Texas River and

Reservoir Management Society (TRRMS) Annual Meeting in Austin, TX. (co-presented with Franklin T. Heitmuller and Gregory Malstaff)

*November 2005. Flood sedimentation along the Guadalupe River, Texas. Annual Meeting of the Southwestern Association of American Geographers, Fayetteville, AR.

*October 2005. Spatial Relations between floodplain environments and land use – land cover of the Lower Pánuco Basin, Mexico. Conference of Latin American Geographers, Morelia, MI, Mexico.

*September 2005. Local and watershed scale controls on the lower Pánuco floodplain geomorphology. International Association of Geomorphology, Zaragoza, Spain.

*April 2005. Local- and watershed-scale controls on flood deposits, lower Guadalupe River, Texas. Annual Meeting of the Association of American Geographers, Denver, CO.

*April 2005. Spatial variability in recent flood deposits along the lower Guadalupe River, Texas, Annual Meeting of the Association of American Geographers, Denver, CO (poster presentation), Co-presenter with Jillian S. Aldrin.

*March 2004. Patterns and processes of flood sedimentation along the lower Guadalupe River, Texas., TX. Annual Meeting of the Association of American Geographers, Philadelphia, PA. With Kimberly M. Blancas as co-presenter.

*November 2003. Sediment transport in Texas' rivers: Is there a problem? Integrated Watershed Sciences Symposium. UT-Austin - Nov. 12, 2003

*October 2003. Response and Recovery of the Lower Mississippi River to Human Modifications, Geomorphic Features of Land Degradation, International Association of Geomorphologists, International Geographical Union Commission on Land Degradation and Desertification, Mexico City, October - November 2003

*January 2003, Floodplain landscapes of the lower Pánuco basin, Mexico. Conference of Latin Americanist Geographers, Tucson, AZ.

*March, 2003, Anthropogenic and geomorphic controls on soil variability in a humid tropical mountainous environment: The upper Pánuco basin, Sierra Madre Oriental, eastern Mexico, with Avwunudiogba (presenter), Annual Meeting of the Association of American Geographers, New Orleans, LA.

*March 2003, Land use / land cover classification of a large and complex floodplain environment, lower Pánuco Basin, Mexico, with Colditz (presenter), Association of American Geographers, New Orleans, LA.

*March 2002, Spatial variations of natural levee deposits in the Lower Pánuco Basin, Mexico. Annual Meeting of the Association of American Geographers, Los Angeles, CA.

*November 2001, Event Sequence and Sediment Exhaustion in the Lower Panuco Basin, eastern Mexico. Annual Meeting of the Southwestern Division of the Association of American Geographers, Ft. Worth, TX

*August 2001, Decadal and Seasonal Trends in Suspended Sediment Transport in the Lower Pánuco Basin, Mexico, 7th International Conference on Fluvial Sedimentology University of Nebraska, Lincoln, NE.

*May 2001: The impact of the El Nińo Southern Oscillation (ENSO) on the magnitude and frequency of sediment transport in the Rio Panuco, Mexico (poster presentation); International Geographical Union (IGU), Commission on Land Degradation and Desertification (COMLAND), Instituto de Geografía - Instituto de Ecología, Universidad Nacional Autónoma de México (UNAM).

April, 2001. Annual and Seasonal Discharge and Sediment Transport Dynamics of the Lower Panuco Basin, Mexico (Poster presentation); Environmental Science Institute and College of Natural Sciences Outreach lecture series, University of Texas at Austin, with Franklin T. Heitmuller and Rachel A. Rebecca.

*February 2001: Streamflow and suspended sediment transport characteristics of the Lower Panuco Basin, eastern Mexico (Poster presentation), Annual Meeting of the Association of American Geographers, New York, NY

*April 2000: The Influence of channel revetments on thalweg morphology of the Lower Mississippi River. Annual Meeting of the Association of American Geographers, Pittsburgh, PA.

*January 2000: Channel and sediment characteristics of the Rio Panuco, Mexico, Annual Meeting of the Conference of Latin Americanist Geographers, Austin, TX

*October 1999: Relationships between channel migration and pool - riffle morphology in the Lower Mississippi River, Annual Meeting of the Southwestern Division of the Association of American Geographers, San Marcos, TX

* March 1999: Lateral migration rates in the Lower Mississippi River prior to channel modification (poster presentation), Annual Meeting of the Association of American Geographers, Honolulu, HI

* November 1998. Assessment of historic erosion rates in the Lower Mississippi River, Published conference proceedings, *GIS/LIS '98*, Ft. Worth, TX.

* October 1998. Channel adjustment in the Lower Mississippi River prior to large scale human modification, Annual Meeting of the Southwestern Association of American Geographers, Baton Rouge, LA

* April 1998: Relationships between lateral migration rates and channel geometry in a large alluvial river, The Lower Mississippi River. Annual Meeting of the Association of American Geographers, Boston, MA

January 1998: The Spatial Distribution of Channel Migration Rates in the Lower Mississippi River Prior to Major Human Modification, Annual Meeting of the Florida Society of Geographers, Jacksonville, FL.

* 1997 Association of American Geographers Annual Meeting, in Ft. Worth, TX. Title: Meandering Processes in the Lower Mississippi River.

* 1995 Association of American Geographers Annual Meeting, in Chicago, IL. Title: The Effects of Changing Sediment Regime on Channel Morphology in the Lower Mississippi River.

* 1994 Association of American Geographers Annual Meeting, in San Francisco, CA. Title: Magnitude and Frequency Characteristics of Discharge and Suspended Sediment Transport for Three Large Rivers Draining Into the Northern Gulf of Mexico.

* 1993 Florida Society of Geographers Annual Meeting, in Gainesville, FL. Field trip guide. Title: Hydrogeology of Paynes Prairie.

* 1992 West-Central Florida Physical Geography Symposium, at the University of South Florida in Tampa, FL. Title: Trends in Discharge and Suspended Sediment Transport for Four Rivers Flowing into the Northern Gulf of Mexico; Rio Grande, Brazos, Colorado, and Pearl Rivers.

Other Invited Presentations

November 2009. Flood management and environmental change in the Netherlands. UT Geographical Society.

February 2007. Sediment transport dynamics of Texas coastal plain rivers. Guest lecturer for "Coastal Watersheds" graduate seminar, J. McCleland, UT Marine Sciences Institute.

November 2006. Contribution to graduate seminar, GRG 391-K: Issues and Research in Geography.

October 2006. Graduate School in Geography, UT Geographical Society.

October 2005. Geomorphic Considerations of Hurricane Katrina-Rita Flooding in New Orleans, LA. Guest lecture for Prof. J. Banner's introductory environmental course (~250 att.) 'Living with the Planet", UT-Austin Dept. of Geological Sciences.

October 2005, Field research in Geomorphology, guest seminar for Prof. K.W. Butzer's graduate seminar on Issues and Research in Geography, Department of Geography, University of Texas at Austin.

September 2005. Dept. of Geography and the Environment, UT-Austin, *Why you should consider Graduate School in Geography*, presented to University of Texas Undergraduate Geographical Society.

November 2003, Field work and Geomorphology: Traditions and Foundations in Geography, guest seminar for Prof. W.E. Doolittle's graduate seminar on Issues and Research in Geography, Department of Geography, University of Texas at Austin

October 2003, Guest lecture on Eastern Mexico Hydrology for Prof. W.E. Doolittle's course on Mexico

and Caribbean, Department of Geography, University of Texas at Austin

September 2002, Guest seminar for Issues and Research in Geography (Prof. K.W. Butzer), Department of Geography, University of Texas at Austin

October 2002, Guest seminar for Wetlands and floodplains (Prof. K.R. Young)

September 2002, University of Texas Geographical Society (UTGS), Department of Geography, University of Texas, *Muddy Boots and Muddy Water: Geographical Field Research Activities of a UT Prof.*

October 2001, Guest seminar for Issues and Research in Geography (Professor K.W. Butzer), Department of Geography, University of Texas at Austin.

May 2001, Introduction for Troy Kimmel, Natural Sciences Outreach Lecture Series

November 2000: Personal research experiences in fluvial geomorphology, talk to GRG 391-K Issues and Research in Geography (Professor W.E. Doolittle), UT Department of Geography

October 2000: Fluvial geomorphological perspectives on riparian landscapes, talk to GRG 356T Landscape Ecology (Prof. K.R. Young), UT Department of Geography

August 2000: University of Texas – Austin Center for Teaching Effectiveness, discussion with new faculty on experiences of being an assistant professor at UT, luncheon.

August 1999: University of Texas – Austin Center for Teaching Effectiveness Workshop, Presentation to New Faculty on 1st year experiences.

March 1999: Geomorphic perspectives on human-environment interaction, GRG 374 Frontiers in Geography (Prof. P. K. English and P. Wagoner)

TEACHING

Amsterdam University College (Univ. of Amsterdam)
System Earth (process geomorphology)

Hydrology and Watershed Management

Big Questions in Science (1/3 of course)

Energy, Climate, and Sustainability (1/3 of course)

University of Texas at Austin (1998 – present)
Process Geomorphology

Fluvial Geomorphology and Environmental Change

Watershed Systems and Environmental Management (graduate seminar)

Large Rivers: Geomorphology, Environmental Change, Management (co-taught with E. Latrubesse)

The Natural Environment (Intro. Physical Geography)

Environmental GIS

Advanced GIS (graduate)

Study abroad: The British Landscape; UT Summer Program at Oxford University (Jesus College),

England

History and Research Traditions in Geography (graduate seminar)

Utrecht University, The Netherlands (on sabbatical, 2008)
Coastal Zone and River Management (graduate, with H. Middelkoop, P. Hoekstra, J. van Alphen, A. Oost)

Louisiana State University (as PhD candidate)
Air Photo Interpretation and Photogrammetry

Physical Geography (Surface processes and weather/climate)

University of Florida (as MS student)
Physical Geography Laboratory (stand alone course)

Technical Seminars / Short Courses

April 2006. *Fluvial Geomorphology for River Management*. Nacional Autonoma Universidad de Mexico, Mexico City. One week, including three day fieldtrip to lower Rio Tecolutla (Veracruz coastal plain).

January 1999. *Introduction to Geographic Information Systems*, half-day technical seminar for participants of the Annual Texas GIS Symposium, University of Texas, Austin, TX.

STUDENT THESES COMMITTEE SERVICE

Chaired Student Committees (as "promoter")
PhD (doctoral)
Franklin T. Heitmuller (PhD, May 2009): Dissertation title: Hydrologic and lithologic controls on geomorphic adjustment of the Llano River, Texas. Assistant Professor of Geology at University of Southern Mississippi

Augustine Avwunudiogba (May 2012): Dissertation title: Geomorphic sensitivity of soil erosion to slash and burn (swidden) agriculture, Sierra Madre Oriental, Mexico. Assistant Professor at California State University – Stanislaus

Masters

Maraigh Leitch (May, 2011): Thesis topic: Sedimentary characteristics of oxbow lakes along the lower Guadalupe River, Texas

Jillian Aldrin (May, 2005): Thesis title: Downstream Spatial Variability of Recent Flood Deposits, Lower Guadalupe River, Texas. Employed in Sacramento, CA as environmental consultant

Rene Coldiz (December, 2003): Thesis title: Land Cover and Geomorphic Classification of the Rio Pánuco Floodplain, Mexico. With exchange program from University of Wurzburg, Germany. Received PhD in Geography from Univ. Wurzburg, Germany. Presently employed by CONABIO, Mexico City.

Franklin T. Heitmuller (December, 2001): Spatial Variability of Natural Levee Sedimentology, Rio Pánuco, Mexico.

Undergraduate Honors

Frank Politiek (winter 2012): Hydrologic connectivity along the Nederrijn-Lek Rivers, AUC – University van Amsterdam

Tanner Arrington (May 2010). Thesis title: Changes in the Sediment Budget of the San Marcos River, Texas to Environmental Change. (awarded King-Rappaport College of Liberal Arts Undergraduate Research Fellowship)

Rebecca Lin (May 2010). Thesis title: Impact of Capes Dam on the San Marcos River, Texas

Jameson Courtney (May 2006). Thesis title: Geomorphic Response of Little Walnut Creek, Austin to Urbanization

Kimberly Meitzen (Blancas) (December 2003). Thesis title: Flood Sedimentation Along the Lower Guadalupe River, Texas (Completing PhD in geomorphology at Univ. South Carolina).

Other Graduate Student Committees Serve(d)

Matthew LaFevor, Geography, PhD (ABD) (W.E. Doolittle, advisor)
Anwar M. Sounny-Slitine, masters, Geography (E. Latrubesse, advisor)
Sara W. Cottingham, masters, LBJ School of Public Policy (S. Dooling, advisor)
Matthew Fry, Geography (W.E. Doolittle, advisor)
Cyrus Reed, Ph.D., Geography (G.W. Knapp , advisor)
Marla K.Knebl, PhD., Geology (Zong-Liang Yang, advisor)
Donald Hubener, Ph.D., Geography (S. Hall, advisor)
Rachel Rebecca, masters, Geography (S. Hall, advisor)
Oscar Robayo, PhD, Hydrology and Civil Engineering (D. Maidment, advisor)

William Asquith, PhD, Geology (J. Sharpe, advisor)
Kristin Miller, masters, Geology (J. Sharpe, advisor)
David Bezanson, masters, Geography (I. Manners, advisor)

SIGNIFICANT SERVICE AND HONORS (incomplete record)

August 2012 – present, Chair (elected): Commission on Land Degradation and Desertification (COMLAND), International Geographical Union
2011 – 2014 (3 yr term): Co-editor of "Geomorphology and Hydrology" section, *Geography Compass* (international peer reviewed journal, Wiley)
July 2006 – 2012, Secretary (elected): Commission on Land Degradation and Desertification (COMLAND), International Geographical Union
2009 – 2010: Chair of Bachelor Committee, Department of Geography, University of Texas at Austin
2010: Elected to Guadalupe – San Antonio River Expert Science Team (for recommendations to state)
2010. King-Rappaport College of Liberal Arts Fellowship for support of undergraduate research, University of Texas at Austin.
2010. Chair of "Water and Environment" paper session for Undergraduate Research Conference, College of Liberal Arts, University of Texas at Austin
2009: Recipient of the *Services for Students with Disabilities Award*, University of Texas at Austin
2009 - 2011. National Science Foundation Review Panel, Washington DC
2008. Fulbright Foundation Graduate Student Review Panel, Amsterdam, The Netherlands
2007 – present: Web master for the Commission on Land Degradation and Desertification (COMLAND) of the International Geographical Union / Union Géographique Internationale (IGU / UGI): hpps://webspace.utexas.edu/hudsonpf/comland/index.html
2006 – 2010. Binghamton Geomorphology Symposium, Steering Committee
Spring 2009. Chair, Search Committee for full professor of "Environmental Fluvial Geomorphology"
2006 –, Director of Geomorphology and Geoarchaeology Laboratory
Sept. 2004 – Aug. 2007: Director of Graduate Studies, Chair of Graduate Studies Committee
Sept. 2002 – 2010: Coordinator for Earth Science track for Geography undergraduate program
2001- 2002. Chair, Graduate Studies Committee
Fall 2003, Chair of Search Committee for Quaternary environmental science faculty position
Sept. 2003 – 2007, Coordinator: Integrated Watershed Sciences; campus working group to promote collaborative research, includes UT-Austin faculty in earth sciences (geology, biology, geography), engineering, policy, and personnel from federal, state, and local government agencies
1999 – 2001: Founder and former director: Digital Landscape Laboratory, UT Department of Geography
Fall 2000 – present, Fellow, Environmental Science Institute (includes members of three working groups)
Spring 1999, Elected faculty rep to the dean (1 of 3) regarding the geography chair
Fall 1999, Chair of Search Committee for remote sensing faculty position
1998 – 2010, attended University commencement every year
1998 –2010, member of Graduate Admissions Committee
1998. William C. Haag Award, LSU, Department of Geography & Anthropology ($100), Annual Award for the best paper presented by a graduate student
1993-96 Assistantship, Department of Geography and Anthropology, Louisiana State University
1993 Conference Co-Organizer, 8th Annual Florida-Georgia Graduate Student Geography Conference,

University of Florida
1993 Field Trip Co-Leader, Florida Society of Geographers Annual Meeting in Gainesville, Florida
1992 Co-President of Gamma Theta Upsilon (Geography Honors Society) University of Florida
1991 Semester Internship, Jacksonville City Planning Department
1991 Geography Student of the Year Award, Jacksonville University

FIELD RESEARCH INVESTIGATIONS (1 week minimum)

2005 - present; Rhine-Maas River system, Netherlands; flood management and floodplain geomorphology

July 2002 – present; Guadalupe River, Texas Gulf Coastal Plain; floodplain sedimentation (> 30 trips

July 2004, July 2005; July 2008 Walhain-Saint-Paul, Belgium; geoarchaeology of floodplain deposits and cultural materials

Fall 2005 –2009; Llano River, Texas Hill Country; channel and flood processes with doctoral student

May 2003, October 2004; eastern Sierra Madre Orientals, Mexico; soil erosion, with doctoral student

Spring 2005 – 2008; Urban streams, Austin, TX; disturbance, knickpoint incision, bank erosion

May 2005 – 2010; San Marcos River, TX; geomorphic investigation for river restoration (~40 trips)

Dec. 2000-Jan. 2001; Brazilian Amazon; floodplain geomorphic research (12 days)

August 1999 – present; Rio Pánuco, Mexican Gulf Coastal Plain; floodplain processes (10 trips)

July 1999, fall 2003, present; Lower Mississippi River, human impacts on channel geomorphology, archival research.

COLLABORATORS

Alcántara-Ayala, I., Institute of Physical Geography, UNAM, Mexico City, Mexico
Aguilar-Robledo, M., Geography, UNAM, San Louis Potosi, SLP, Mexico
Beach, T. Science, Technology, & International Affairs, Georgetown University
Butzer, K.W., Geography and the Environment, University of Texas at Austin
Kesel, R.H. Geography and Anthropology, Louisiana State University
Middelkoop, H. Physical Geography, Utrecht University, The Netherlands
Stouthamer,E. Physical Geography, Utrecht University, The Netherlands
Verslype, L . History and Archaeology, University of Louvain, Belgium
Woods, W. Geography, University of Kansas