# PAUL F. HUDSON, PhD

Full Curriculum Vitae January, 2025

LUC the Hague Leiden University the Netherlands

# **ACADEMIC POSITIONS**

- 2012 present: LUC the Hague, Faculty of Governance & Global Affairs, Leiden University
  - Associate Professor in Physical Geography and Sustainability (Universitair Hoofddocent, UHD-1)
    - Major Team Lead: Earth, Energy, and Sustainability (2023 )
    - Educational Director (interim, Autumn 2022)
    - Capstone Coordinator (2012 2015)
    - Director of Studies BSc (2012 2015)
    - Senior Tutor (2012 2016)

2010-2012: Amsterdam University College, University of Amsterdam

- Lecturer and tutor (with tenure)
  - Guest researcher (0.0 fte): Vrije Universiteit Amsterdam, Earth and Climate
  - Guest Researcher (0.0 fte): University of Amsterdam, Ecosystem and Landscape Dynamics

1998 – 2012: University of Texas at Austin, Department of Geography and the Environment

- Assistant Professor 1998-2004, Associate Professor 2004 2012, adjunct 2012-2013
- Faculty Affiliate: 2017 present
- Fulbright Fellow: Utrecht University, NL. Institute of Physical Geography: 2007-2008
- Graduate Coordinator and Chair of Graduate Admissions Committee: 2000, 2004 2007
- Co-director (w/Karl Butzer) and Director, Geomorphology and Geoarchaeology Laboratory
- Research Fellow (0.0 fte):
  - Teresa Lozano Long Institute of Latin American Studies
  - Environmental Science Institute

# **EDUCATION**

Ph.D, 1998: Geography, Department of Geography & Anthropology, Louisiana State University. MSc, 1993: Geography (minor: Civil Eng.), Department of Geography, University of Florida. BSc, 1991 (*cum laude*): Geography (minor: Political Sci.), Department of Geography, Jacksonville University.

### **ACADEMIC BIO**

Paul Hudson is Associate Professor of Physical Geography and Sustainability at Leiden University in the Netherlands. After fifteen years in the Netherlands Paul is a Dutch-American academic, and joined Leiden University after fourteen years in the Department of Geography & Environment at the University of Texas at Austin, and after two years at Amsterdam University College (UvA).

Within academia Hudson has considerable managerial experience across the university landscape.

Five key appointments and accomplishments includes i. serving as graduate coordinator for masters and PhD programs at University of Texas at Austin – Geography, ii. Director of Studies (BSc) and Senior Tutor at Leiden University College, iii. development of a new BSc in Earth, Energy, and Sustainability at Leiden University, iv. serving as Chair (voorzitter) of the Basis Kwalificatie Onderwijs (BKO) Committee in the Faculty of Governance and Global Affairs at Leiden University, and v. recipient of a Senior Onderwijskwalificatie (SKO) Teaching Certification, Leiden University.

Hudson's scholarly interests concerns the environmental management of rivers and water resources within coastal lowlands and deltas, through the lens of physical geography and hydrology, and the role of governance in designing effective management strategies, including through the development of rewilding and nature based solutions. His teaching and research enjoys a symbiotic relationship due to employment of a "research-led teaching" approach, including the mentoring of students in their Capstone field projects.

Hudson has developed and taught over twenty different courses within environmental earth sciences and GIS at the bachelor and graduate levels. His five signature courses includes i. Field Methods for Land and Water Resources, ii. Climate Change and Water Resources for Sustainable Food Production, iii. Earth Systems Science, iv. Fluvial Geomorphology, and v. Watershed Systems and Environmental Management.

His field-based research is augmented with GISc mapping and analysis of satellite imagery and historic cartography. Hudson's research is both disciplinary and interdisciplinary, and he has collaborated with archaeologists, biologists, geographers, historians, geologists and engineers. Hudson has/had led research projects in the Netherlands (Rhine delta, Limburg), eastern Mexico (Veracruz), Texas coastal plain, and along the Lower Mississippi River in Louisiana and Mississippi. Funding has come from government agencies, consultancy, U.S. National Science Foundation, and U.S. Fulbright.

Hudson serves on the Programme Committee of the Netherlands Center for River Studies (NCR), and is an Editorial Board member of Geomorphology. He has provided expert advice concerning environmental water resources across a range of governmental scales; community, state, and national, including Dutch parliament (tweede kamer).

# **PUBLICATIONS** (<u>underlined authors are former students</u>)

# **Books**

*Monographs* 

**Hudson**, P.F. 2021. Flooding and Management of Large Fluvial Lowlands: A Global Environmental Perspective. Cambridge University Press, 348 pp.

- Recipient of 2022 Choice Award - American Library Association's Outstanding Academic Titles

#### Edited books

**Hudson**, P.F. and Middelkoop, H. (Eds.), 2015. Geomorphic Approaches to Integrated Floodplain Management of Lowland Fluvial Systems in Europe and North America. Springer, 356 pp. (peer reviewed)

**Hudson**, P.F., Butzer, K.W., and Beach, T.P. (Eds.) 2008. Fluvial Deposits and Environmental History: Geoarchaeology, Paleohydrology, Adjustment to Environmental Change. 39th Annual

Binghamton Geomorphology Symposium. Elsevier, 412 pp. (also published in Geomorphology vol. 101 (1-2), peer reviewed)

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

# Editor of special issues of international journals (all peer reviewed)

**Hudson**, P.F. and Park, E. 2023. Lowland rivers: Geomorphology, human impacts, and management. Earth Surface Processes and Landforms 48 (2). https://doi.org/10.1002/esp.5517 (refereed special issue).

**Hudson**, P.F. and Zorn, M. 2020. The Role of Historic Human Impacts on Modern Environmental Processes and Management. Land Degradation & Development 31 (17), https://doi.org/10.1002/ldr.3328 (refereed special issue).

**Hudson**, P.F., Goudie, A. and Asrat, A (Eds.). 2015. Human Impacts on Landscapes: Geomorphology, Environmental Change, and Sustainability. Zeitschrift für Geomorphologie 59/2 https://doi.org/10.1127/zfg\_suppl/2015/S-59201 (refereed special issue).

**Hudson**, P.F. and <u>LaFevor</u>, M. (Eds.), 2014. Management and Monitoring Human Impacts on Landscapes for Environmental Change and Sustainability. Journal of Environmental Management 138. https://doi.org/10.1016/j.jenvman.2014.04.014 (refereed special issue).

**Hudson**, P.F. and Inbar, M. (Eds.) 2012. Geodiversity and Land Degradation: Anthropogenic and Natural Drivers of Environmental Change. Land Degradation & Development 23 (4), 307-426 (refereed special issue).

**Hudson**, P.F. and Alcántara-Ayala, I. (Eds.) 2006. Geomorphology and Land Degradation. Catena 65, 2, 101-199 (refereed special issue).

**Hudson**, P.F. (Ed.) 2003. Floodplains: Environment and Process. Geomorphology 56, 3-4, 225-352 (refereed special issue).

# **Refereed Journal Articles, Book Chapters**

Heitmuller, F.T., Costello, J., **Hudson**, P.F., et al. Floodplain inundation mechanisms and overbank water quality along the embanked lower Mississippi River during the 2018, 2019, and 2020 floods. Journal of Hydrology (under revision).

<u>Van der Breggen, N.N.</u> and **Hudson**, P.F. 2023. Influence of atmospheric rivers on extreme rainfall and high streamflow events in Northwestern Europe, Rur (Roer) River basin. Journal of Hydrology: Regional Studies 51, 101644.

**Hudson**, P.F. and Park, E. 2023. Lowland rivers: Geomorphology, human impacts, and management (Introduction to special issue). Earth Surface Processes and Landforms 48, 7-13.

<u>Boucher</u>, Z. and **Hudson**, P.F. 2023. Troubled waters: Riparian ecosystem services and community opposition to the largest dam removal project in Europe, Vezins Dam, France. Geoforum 147, 103906.

<u>Van Tilburg</u>, A.J. and **Hudson**, P.F. 2022. Extreme weather events and farmer adaptation in Zeeland, the Netherlands: A European climate change case study from the Rhine delta. *Science of the Total Environment* 844, 157212.

**Hudson**, P.F. 2020. Water: how does agriculture impact freshwater resources? Ch. 4, in Food and Sustainability (textbook). Behrens, P., Bosker, T., and Ehrhardt, D. (Eds). Oxford University Press.

**Hudson**, P.F. Houben, P., and Bosker, T. 2020. Soils: what are the impacts of agriculture on soils? Ch. 5, in Food and Sustainability (textbook). Behrens, P., Bosker, T., and Ehrhardt, D. (Eds). Oxford University Press.

**Hudson**, P.F. and Zorn, M. 2020. The role of historic human impacts on modern environmental processes and management: Introduction to special issue. Land Degradation & Development 31 (17), 1-4, https://doi.org/10.1002/ldr.3328.

**Hudson**, P.F., <u>Van der Hout</u>, E. and <u>Verdaasdonk</u>, M. 2019. (Re)Development of fluvial islands along the lower Mississippi River over five decades, 1965–2015. Geomorphology 331, 78-91. doi: doi.org/10.1016/j.geomorph.2018.11.005 (invited submission in honor of Prof. Karl Butzer)

**Hudson**, P.F. 2018. Towards integrated flood management along the lower Rhine and Mississippi Rivers and the international legacy of the 2005 New Orleans Hurricanes Katrina–Rita flood disaster. International Journal of River Basin Management 16 (3), 273-285.

<u>Van der Most</u>, M. and **Hudson**, P.F. 2018. The influence of floodplain geomorphology and hydrologic connectivity on alligator gar (*Atractosteus spatula*) habitat along the embanked floodplain of the Lower Mississippi River. Geomorphology 302, 62-75.

**Hudson**, P.F. and Hinman, S.E. 2017. The integration of geography in a curriculum focused to internationalization: an interdisciplinary liberal arts perspective from the Netherlands. Journal of Geography in Higher Education 41 (4), 549-561.

Heitmuller, FT, **Hudson**, PF, Kesel, RH. 2017. Overbank sedimentation from the extreme AD 2011 flood along the Lower Mississippi River. Geology 47 (2), 107-110. doi:10.1130/G38546.1

**Hudson**, P.F. and Middelkoop, H. 2105. Introduction: Integrated Floodplain Management, Environmental Change, and Geomorphology: Problems and Prospects. In, P.F. Hudson and H. Middelkoop (Eds.), Geomorphic Approaches to Integrated Floodplain Management of Lowland Fluvial Systems in Europe and North America. Springer.

**Hudson**, P.F. and Middelkoop, H. 2015. The Palimpsest of River-Floodplain Management and the Role of Geomorphology. In, P.F. Hudson and H. Middelkoop (Eds.), Geomorphic Approaches to Integrated Floodplain Management of Lowland Fluvial Systems in Europe and North America. Springer.

- <u>Heitmuller</u>, F.T., **Hudson**, P.F., and Asquith, W. 2015. Mutual adjustment of pattern and shape of bankfull- and macro-channels in the Llano River Watershed, Central Texas, USA: The combined roles of high-magnitude flooding and abrupt transitions in lithology. Geomorphology 232, 1-19.
- **Hudson**, P.F., Goudie, A. and Asrat, A. 2015. Introduction: Human impacts on landscapes: Sustainability and the role of geomorphology. Zeitschrift für Geomorphologie 59/2, 1-5.
- **Hudson**, P.F. and <u>LaFevor</u>, M., 2014 Introduction: Management and monitoring human impacts on landscapes for environmental change and sustainability. Journal of Environmental Management 138, 1-3.
- <u>Avwunudiogba</u>, A. and **Hudson**, P.F. 2014. A review of soil erosion models with special reference to the needs of humid tropical mountainous environments. European Journal of Sustainable Development 3 (4), 299-310.
- **Hudson**, P.F., <u>Slittine-Soune</u>, A., <u>LaFevor</u>, M. 2013. A new longitudinal approach to assess hydrologic connectivity: Embanked floodplain inundation along the lower Mississippi River. Hydrological Processes 27, 2187-2196.
- **Hudson**, P.F. and Inbar, M. 2012. Geodiversity and Land Degradation: Anthropogenic and Natural Drivers of Environmental Change: Introduction. Land Degradation and Development 23 (4), 307-309.
- **Hudson**, P.F, <u>Heitmuller</u>, F.T., and <u>Leitch</u>, M.B. 2012. Hydrologic connectivity of oxbow lakes along the lower Guadalupe River, Texas: Geomorphic and climatic controls on the flood pulse concept. Journal of Hydrology 414/415, 174-183.
- 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.
- <u>Heitmuller</u>, 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.
- 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), 1-6.
- **Hudson**, P. F. and <u>Heitmuller</u>, F.T. 2008. Rivers and landscapes of the Texas Gulf Coastal Plain. The Southwestern Geographer 12, 90-123.
- **Hudson** P.F., <u>Colditz</u>, 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 Alcántara-Ayala, I. 2006. Ancient and modern perspectives on land degradation. Catena 65, 102-106.
- 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, 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 <u>Colditz</u>, 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. Floodplains: Environment and process. Geomorphology 56, 223-224.

**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 <u>Heitmuller</u>, 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 <u>Colditz</u>, 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. 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, LSU, 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. Suspended sediment transport effectiveness of three large impounded rivers, U.S. Gulf Coastal Plain. Environmental Geology, 32, no. 4, 263-273.

- Other published scholarly materials (encyclopedia entries, newsletters, reports, etc...)
- **Hudson**, P.F. 2024. Three ways to reduce Europe's flood risk. The Conversation, Dec. 2024. https://theconversation.com/three-ways-to-reduce-europes-flood-risk-244196
- **Hudson**, P.F. 2018. Flood Control Infrastructure and 'Political Hydrology' along the LA-TX Gulf Coast. Newsletter of the American Association of Geographers, April 4 2018. doi: 10.14433/2017.0032.
- **Hudson, P.F**. 2017. Fluvial Depositional Processes and Landforms. In, D. Richardson, N. Castree, M.F. Goodchild, A. Kobayashi, W. Liu, and R.A. Marston (Eds.). *International Encyclopedia of Geography: People, the Earth, Environment, and Technology*. Association of American Geographers, Wiley-Blackwell.
- **Hudson**, P.F. 2017. Water Engineering. In, D. Richardson, N. Castree, M.F. Goodchild, A. Kobayashi, W. Liu, and R.A. Marston (Eds.). *International Encyclopedia of Geography: People, the Earth, Environment, and Technology*. Association of American Geographers, Wiley-Blackwell.
- **Hudson**, P.F. and Graham, O. 2016. Report of Activities 2012 2016 of the Commission on Land Degradation and Desertification (COMLAND), International Geographical Union / Union Géographique Internationale (IGU / UGI): Executive Committee of the IGU / UGI (Beijing Congress).
- **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)
- <u>Heitmuller</u>, FT, **Hudson**, PF, Kesel, RH. 2012. Overbank Sedimentation from the Extreme 2011 Flood Event along the Lower Mississippi River, Final Report submitted to the U.S. National Science Foundation.
- **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): Executive Committee of the IGU / UGI.
- **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)
- **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)
- **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., 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.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.

**Hudson**, P.F. 2002. Texas Alcalde (UT alumni journal) September – October 2002, pp. 15-16, write up of NSF funded 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)

**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.

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.

# **REVIEWING SERVICE**

# **Editorial Board Membership**

2018 – present: Geomorphology (Elsevier), among top journals in field

2011 – 2016: Co-editor of "Geomorphology / Hydrology" section, Geography Compass (Wiley)

# **Reviews of Manuscripts for Journals**

American Geophysical Union – Earth Surface; Annals of the Association of American Geographers; 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; Hydrology and Earth Systems Science (European Geoscience Union); Geofizika (Journal of Geophysics - Croatia); Geografiska Annaler – A (Physical Geography); Geomorphology; Geographical Research; Geography Compass; Geology; Global Planetary Change; The Holocene; Journal of Hydrology; Journal of Hydrology-Regional Studies; 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; Nature; Nature – Geoscience; Netherlands Journal of Geosciences, Physical Geography; Progress in Physical Geography; Professional Geographer; Quaternary International; Quaternary Science Reviews; Remote Sensing of Environment; River Research and Applications; Science; Science of the Total Environment; Scientific Reports; Journal of Sedimentary Research; Sedimentology; Singapore Journal of Tropical Geography; The Southeastern Geographer; The Southwestern Geographer; Sustainability Science; University of Texas Undergraduate Research Journal; U.S. Geological Survey - Water Resource Investigations; Water; Water Resources Research

# **Reviewer of Research Proposals**

U.S. National Science Foundation (NSF); NASA; American Association for the Advancement of Science (AAAS - Canon National Parks Science Scholars Program for the Americas); German Research Foundation (DFG); National Geographic Society – Research; Netherlands Organization for Scientific Research (NWO); North Carolina Sea Grant; Slovenian Academy of Sciences; University of Texas at Austin Summer Research Assignments; University of Texas at Austin Environmental Science Institute Graduate Fellowships, Volkswagen Freigeist Fellowship competition (DE).

# FUNDED GRANTS, CONTRACTS, AND FELLOWSHIPS

2020-2022. Consultancy contract work for Wolf Water Resources, \$17,025. (Hudson = PI)

2017. Onderwijsintensiveringsmiddelen, Faculty Governance & Global Affairs, Leiden University (support for LUC's Science Laboratory). (T. Bosker, P.F. Hudson, P. Behrens, P. Houben, J. Kiefte de Jong). €69,643.

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. (Hudson=PI)
- 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. (Hudson=PI)
- 2008. National Science Foundation (NSF). Fluvial Deposits and Environmental History 39<sup>th</sup> Annual Binghamton Geomorphology Symposium (Co-PIs: KW Butzer and TP Beach), March 2008 to August 2009, \$20,648. (Hudson=PI)
- 2007 2008. Fulbright Fellowship. (based in Utrecht University, Netherlands). Flood Management and Environmental Change along the Rhine-Maas Delta, Netherlands, AY 2007-2008, €12,000. (Hudson=PI)
- 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. (Hudson=PI)
- 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. (Hudson=PI)
- 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. (Hudson=PI)
- 2006 2007. National Science Foundation (NSF). Downstream channel adjustment in an extreme hydrologic setting. Llano River, Texas (Doctoral Dissertation Research Improvement Award), \$12,000. (Hudson=PI)
- 2002 2003. National Science Foundation (NSF, #0237050), Spatial Variability in Flood Sedimentation of an Extreme Event, Guadalupe River, TX, \$20,000. (Hudson=PI)
- 2001. UT-Austin Special Research Award, Office of Vice President for Research, Floodplain processes on the Lower Amazon Valley, \$750. (Hudson=PI)
- 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. (Hudson=PI)
- 2000 2002. UT-Austin Interdisciplinary Research Initiative: Paleoflooding in the Pánuco Watershed, Mexico, \$98,775. (Hudson=PI)
- 2000 2001. UT-Austin Faculty Research Internship. Funding to recruit new graduate student to work on the Rio Pánuco, Mexico project, ~\$17,500. (Hudson=PI)
- 2000. Mellon Foundation (UT LLILAS): Establishing the Holocene Flood History of the Rio Pánuco, Mexico, \$5,000. (Hudson=PI)
- 2000. UT Faculty Research Award: Morphologic Adjustment of the Rio Pánuco, Mexico to Holocene Climate Change, \$5,980. (Hudson=PI)
- 2000. UT-Austin Center for Instructional Technologies: Digital Watersheds, Student and professional staff support (50 hours) for development of Internet based teaching resources.

(Hudson=PI)

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. (Hudson=PI)

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. (Hudson=PI)

# ORGANIZED SYMPOSIA AND CONFERENCE SESSIONS

- 2023. Progress in Fluvial and Estuarine Geomorphology: Process Dynamics, Big Data, and Data Driven Modelling. European Geoscience Union GM5.1, April 2023 (co-organizer with six others).
- 2019. Key Challenges and Opportunities to Sustainable Water Management. Sustainable Development Goal 6, U.N. World Water Day, LUC The Hague, Leiden University, March 2019; keynote talks and panel sessions (lead organizer).
- 2014. Environmental Change and Land Degradation: co-organizer of paper sessions for the Commission on Land Degradation and Desertification (COMLAND), International Geographical Union (IGU) Regional Congress in Krakow, Poland. August, 2014.
- 2013. Human Impacts on Landscapes. Paper sessions for the International Association of Geomorphology (IAG), Paris, France, August 2013 (co-organizer with A. Goudie and A. Asrat)
- 2013. Rethinking Liberal Education: Contemporary Challenges and Opportunities. First Dutch Symposium of University Colleges, Amsterdam University College (14-15 June, 2013) (coorganizer with five others)
- 2012. 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
- 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).
- 2011. 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
- 2008. 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).
- 2007. 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 M. Slattery.
- 2003. Integrated Watershed Sciences Symposium, Environmental Science Institute. University of Texas at Austin, November, 2003.

- 2003. Geomorphic Features of Land Degradation, International Association of Geomorphologists (IAG), International Geographical Union Commission (IGU) on Land Degradation and Desertification (COMLAND), Mexico City, November 2003.
- 2002. Floodplain Processes. Association of American Geographers Annual Meeting, Los Angeles, CA, March 2002 (sponsored by the AAG Geomorphology Specialty Group).
- 1998. 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)

- 2023. Flooding and Geomorphic Adjustment along the Lower Mississippi. Earth Observatory of Singapore and Asian School of the Environment, Nanyang Technological University, Singapore (1 week visit).
- 2023. North American Rivers in the Anthropocene focus on lower Mississippi. Global Rivers series. Univ. Federal University of Goiás-UFG-Brazil (online presentation)
- 2022. Sustainable dredging, sediment recycling, and wetland construction along the Mississippi Delta. 150 jaar Vooruit Nieuwe Waterweg Symposium. Invited oral presentation in LDE Port City Future sessions, Rotterdam (October 2022)
- 2022. Sediment management and deltas: Geospatial Conceptualization. Water and Culture in Cities and Landscapes. LDE Port City Futures, Lorentz Center Workshop, Leiden University (online).
- 2022. Sedimentation from an extreme event, Maas River flooding of 2021, the Netherlands. Dept. Geography and the Environment, University of Texas at Austin, colloquium series (in person)
- 2021. Panelist for webinar entitled, "Hydropolitics' in the Hindu-Kush-Himalaya' region." South Asia Democratic Forum (Brussels-based think tank, online).
- 2019. Geomorphic dynamics of Roer River, NL. At, Environmental Impacts to Roer/Rur Basin Research Workshop, RWTH Aachen University (Nov. 2019).
- 2019. "The Future of Water How to Manage the Global Water Crisis," Green Office of the University of Amsterdam.
- 2019. Dutch experiences with river rewilding, Roer River, Limburg (NL). At, Key Challenges and Opportunities to Sustainable Water Management. Sustainable Development Goal 6, U.N. World Water Day, LUC The Hague, Leiden University, March 2019.
- 2019. Invited panelist: Water & Heritage panel, Port City Futures and International LDE Conference on Water Heritage, Delft (Dec. 2019).
- 2019. 'Environmental Impacts of Dam Construction in the Balkans', Invited panelist, Sponsored by Patagonia and University of Leiden Green Club, FGGA (Dec. 2019).
- 2019. Research themes in environmental fluvial geomorphology. Environmental Science Institute (CML) weekly meeting, Leiden University.

- \* 2017. Formation and adjustment of islands along the Lower Mississippi River. American Association of Geographers Annual Meeting, Boston, MA, April 2017. Invited speaker for K.W. Butzer memorial session.
- 2013: Environmental Change and Management along the Lower Mississippi River. Department of Geographical Sciences Colloquia Series, Exeter University UK (Feb., 2013).
- 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.
- 2009. Marsico Visiting Scholar (public research presentation and classroom lecture), Department of Geography, University of Denver (April 2009).
- 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 (Nov., 2008).
- \*2008. Binghamton Geomorphology Symposium, Austin, Texas. Flood Management Along the Lower Mississippi and Rhine Rivers (The Netherlands) and the Continuum of Geomorphic Adjustment (Oct., 2008).
- \*2008. 16th Annual Netherlands American Studies Conference, Nijmegen, The Netherlands. Flooding of New Orleans from Hurricane Katrina: Causes and consequences. Keynote address (March, 2008).
- 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 (Jan., 08).
- \*2006. Texas Water Development Board, Austin, TX. Floodplain connectivity and riparian sediment delivery along the Guadalupe River, Texas. Texas Rivers Symposium.
- 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.
- \* 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" (May 2005).
- 2005. Lozano Long Institute of Latin American Studies (LLILAS), Floodplain Landscapes of the Lower Pánuco Basin, Mexico.
- 2003. University of Texas, Lozano Long Institute of Latin American Studies (LLILAS): panelist for Landscape Change in the Brazilian Amazon (Brazil Week)
- 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)
- 2002, Department of Geography, Michigan State University, Adjustment of the Lower Mississippi River to human modifications.

- 2002. Center for Latin American and Caribbean Studies, Michigan State University: Floodplain landscapes in eastern Mexico, the Lower Pánuco Basin.
- 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.
- 2002. Baylor University Department of Geology Colloquium series, Floodplain Morphology of the Lower Pánuco Basin, Mexico.
- 2002. University of Memphis, Department of Geography and Geology Colloquium series, Response and Recovery of the Lower Mississippi to Human Modification.
- 2002. Texas A&M University Department of Geography Colloquium Series, Floodplain Morphology of the Lower Pánuco Basin, Mexico.
- 2000. Engineering modifications to the Lower Mississippi River. Southwest Texas State University Colloquium Series, San Marcos, TX.
- 1999. University of Texas at Austin Department of Geological Sciences Hydrogeology Brown Bag Series, Historic erosion rates in the Lower Mississippi River.
- 1998. Meandering Processes in the Lower Mississippi River (colloquium series), Department of Geography, University of Missouri Columbia (job interview).
- 1998. Human impacts to alluvial river systems (class lecture), Department of Geography, University of Missouri Columbia (job interview).
- 1998. Meandering Processes in the Lower Mississippi River (colloquium series), Department of Geography, University of Alabama Tuscaloosa (job interview).
- 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, lead or sole presenter unless indicated)

- \*2023. Hudson, P.F., Martinez, X., Reniers, Y., Jones, D. Sedimentary characteristics of channel bars and banks along the Roer River, Netherlands: linkages with meander dynamics of a 'rewilded' river. NCR Days 2023, Netherlands Center for River Studies, Nijmegen, NL.
- \*2023. Hudson, P.F., Heitmuller, F.T. Repeat sedimentation measurements for large floods along the lower Mississippi River and comparison with older events. NCR Days 2023, Netherlands Center for River Studies, Nijmegen, NL.
- \*2023. Hudson, P.F. Local and regional controls on summer 2021 flood sedimentation along the Maas River, Netherlands. Netherlands Earth Science Conference (NAC), Utrecht, NL.
- \*2023. Hudson, P.F., Heitmuller, F.T., Costello, J., and Kelk, R.: Flood duration vs. flood magnitude: Repeat sedimentation measurements for large floods along the lower Mississippi River over hydrologic years 2020, 2018-2019, 2011, European Geoscience Union, General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-15953, https://doi.org/10.5194/egusphere-egu23-

- \*2022. Hudson, P.F. Sedimentation from an extreme event along an intensively managed fluvial system: Summer 2021 flooding along the Maas River, Netherlands (oral presentation), European Geoscience Union, General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-8326, https://doi.org/10.5194/egusphere-egu22-8326, 2022.
- \*2022. Hudson, P.F., Martinez, X., Reniers, Y. Sedimentation from the extreme summer 2021 flood along the Maas River, Netherlands. In, Anthropogenic Rivers, Blom, A., Stancanelli, L.M., Dercksen, J.A. et al. (Eds.), NCR Days 2022, Netherlands Center for River Studies Annual Conference, Delft, NL.
- \*2021. Hudson, P.F., Heitmuller, F.T., Muñoz, S., Costello, J. Contextualized sedimentation rates for large floods along the lower Mississippi River: the importance of flood duration. Abstract #: EGU21-15498, Session GM5.1 Fluvial systems: Dynamics and interactions across scalesvirtual European Geoscience Union (Vienna), May 6-10, 2021.
- \* Hudson, P.F. 2020. Biogeomorphic evolution of lower Mississippi islands: 1965-2015. In, Boersema, M.P., Schielen, R.M.J., Eijsbergen, E. van, and Rinsema, J.G., Managing Changing Rivers: NCR Days 2020 Proceedings (peer reviewed). Netherlands Centre for River Studies Annual Conference, publication 44-2020.
- \*2019. Dynamics of islands along the lower Mississippi River. Transformation of Traditional Cultural Landscapes, International Geographical Union COMLAND, Koper, Slovenia (September 2019)
- \* April 2019. Dynamics of islands along the Lower Mississippi River. Poster presentation, American Association of Geographers Annual Meeting, Washington DC.
- \*April 2018. Continued geomorphic adjustment of the Lower Mississippi. Poster presentation, American Association of Geographers Annual Meeting, New Orleans.
- June 2017. The Application of Geographic Information Systems (GIS) to Interdisciplinary Research. Faculty of Governance & Global Affairs Research Symposium Research Pitch.
- \*June 2016. Floodplain embankment of large U.S. Rivers, Commission on Land Degradation, International Geographical Union, Ljubljana, Slovenia.
- \*August 2015. Hydrologic Connectivity of Floodplain Lakes along the Embanked Lower Mississippi River, Iquitos, Peru (lead presenter, with D.Boot, A. Sounny-Slittine)
- \*April 2015. Geomorphic Analysis of Floodplain Lakes along the Embanked Lower Mississippi River for Management, European Geoscience Union (EGU), Vienna, Austria (lead presenter, with D.Boot, K. Christiaanson, A. Sounny-Slittine)
- April 2015. Muddy Boots and Muddy Water: Synergies between research and teaching, Leiden University College Brown Bag lunch series.
- \* August 2014. Characterization of Floodplain Lakes along the Lower Mississippi River, International Geographical Union (IGU), Krakow, Poland. (lead presenter, with D.Boot)
- \* August 2013. Sedimentation from the 2011 Extreme Flood along the Lower Mississippi River. International Association of Geomorphologists (IAG) Main Congress, Paris, France. (with FT Heitmuller and RH Kesel)

- \* November 2012. A comparison of overbank sedimentation thickness and texture during the 2011 and 1973 floods in non-embanked floodplains along the Lower Mississippi River, USA. Geological Society of America Abstracts with Programs. Vol. 44, No. 7, p.424 (co-presenter not in attendance, with FT Heitmuller and RH Kesel)
- \*August 2012. Human impacts to the floodplain geomorphology of the Lek-Nederrijn Rivers (Rhine), The Netherlands.. Commission on Land Degradation and Desertification (COMLAND), International Geographical Union (IGU) Congress in Cologne, Germany: August 26-30, 2012.
- \* July 2012. Overbank sedimentation from the 2011 flood along the Lower Mississippi River, USA. UNESCO-sponsored IGCP 582–Tropical Rivers Annual Symposium in Iquitos, Peru. (copresenter not in attendance, with FT Heitmuller and RH Kesel)
- \* April 2012. Overbank Sedimentation from the 2011 Flood along the Lower Mississippi River: Characterization and Comparison of Two Extreme Events. Geophysical Research Abstracts Vol. 14, EGU2012-13624, 2012 EGU General Assembly 2012. (lead presenter, with FT Heitmuller and RH Kesel)
- \* November 2011. Flooding and land degradation along the Lower Mississippi River. 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 A. Myers)

- \*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. (copresented 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 Pánuco 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 Pánuco, 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, Hydrogeology of Paynes Prairie.

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

# Invited class lectures, other miscellaneous presentations

2024. Deltas, dams, and food production: Critical Water Systems in Crisis. International High School, Haarlem, NL.

2019. Geoarchaeological themes in fluvial geomorphology. Research overview to Geoarchaeology Working Group, Institute of Archaeology, Leiden University, hosted at LUC (w/P. Houben).

April 2018. Muddy boots and muddy water: Field research along lowland rivers. Brown bag talk, Leiden University College.

November 2015. Fluvial processes along large lowland rivers. Prof. E. Latrubesse, Dept. of Geography, University of Texas at Austin.

2014. Environmental fluvial geomorphology and global challenges. Brown bag talk, Leiden University College.

November 2013, 2014. Soil erosion and sediment transport. Guest lecture for "Environmental Processes" (300-level), Institute of Biology, Universiteit Leiden.

October 2014. Rivers and environmental change. Guest lecture for Global Challenges – Earth, LUC.

April 2012. Soils and environmental change. Guest lecture for "Ecosystems: From Soils to Society", Amsterdam University College.

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, organized discussant 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, Frontiers in Geography (Prof. P. K. English and P. Wagoner).

# **TEACHING** (courses designed, full responsibility)

Leiden University College The Hague (Universiteit Leiden)

- Water Resources and River Management (300 level)
- Energy, Environment, and Sustainability (300 level)
- Earth Systems Science (100 level)
- Field Methods for Sustainability (200 level)
- Global Challenges System Earth (100 level)

- Geographic Information Systems (200 level)
- Advanced Geographic Information Systems (300 level)
- Water, Policy and the Environment LU Honors Academy (300 level)
- Climate Change and Water Resource Management for Sustainable Food Production (100-level)
- Hydropower and Rivers (300-level)

# Amsterdam University College (University of Amsterdam)

- System Earth (process geomorphology)
- Hydrology and Watershed Management
- Big Questions in Science (1/3 of course)
- Energy, Climate, and Sustainability (1/2 of course)

# University of Texas at Austin (1998 – 2010)

- Fluvial Geomorphology and Environmental Change
- Process Geomorphology
- 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 (Jesus College, Oxford University)
- History and Research Traditions in Geography (graduate seminar)

## Utrecht University (Physical Geography), The Netherlands (2008)

 Coastal and River Management (graduate, with H. Middelkoop, P. Hoekstra, J. van Alphen, A. Oost)

## Louisiana State University (as PhD candidate)

- Photogrammetry and Air Photo Interpretation
- 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 (UNAM), Mexico City. One week, including three day fieldtrip to lower Rio Tecolutla (Veracruz coastal plain).
- January 1999. Introduction to Geographic Information Systems, technical seminar for participants of the Annual Texas GIS Symposium, University of Texas, Austin, TX.

# STUDENT THESES COMMITTEE SERVICE

# Chaired Committees (as "promoter")

### PhD (doctoral)

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

Franklin T. Heitmuller (May 2009): Dissertation title: Hydrologic and lithologic controls on geomorphic adjustment of the Llano River, Texas. Associate Professor of Geology at University of Southern Mississippi

#### **Masters**

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

Jillian Aldrin (May, 2005): Thesis: Downstream Spatial Variability of Recent Flood Deposits, Lower Guadalupe River, Texas.

Rene Coldiz (December, 2003): Thesis: 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.

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

# Other Graduate Student Committees Serve(d)

Anwar M. Sounny-Slitine, PhD, Geography (E. Latrubesse, advisor), UT-Austin J. Costello, MSc (F.T. Heitmuller, advisor), University of Southern Mississippi R.M. Malitha Rathnayake, MSc (F.T. Heitmuller, advisor), University of Southern Mississippi Matthew LaFevor, Geography, PhD (W.E. Doolittle, advisor), UT-Austin Richard Knox, Geography, masters, (E. Latrubesse, advisor), UT-Austin Anwar M. Sounny-Slitine, masters, Geography (E. Latrubesse, advisor), UT-Austin Sara W. Cottingham, masters, LBJ School of Public Policy (S. Dooling, advisor), UT-Austin Matthew Fry, Geography, PhD. (W.E. Doolittle, advisor), UT-Austin Cyrus Reed, Ph.D., Geography (G.W. Knapp, advisor), UT-Austin Marla K.Knebl, PhD., Geology (Zong-Liang Yang, advisor), UT-Austin Donald Hubener, Ph.D., Geography (S. Hall, advisor), UT-Austin Rachel Rebecca, masters, Geography (S. Hall, advisor), UT-Austin Oscar Robayo, PhD, Hydrology and Civil Engineering (D. Maidment, advisor), UT-Austin William Asquith, PhD, Geology (J. Sharpe, advisor), UT-Austin Kristin Miller, masters, Geology (J. Sharpe, advisor), UT-Austin David Bezanson, masters, Geography (I. Manners, advisor), UT-Austin

## **External Examiner of PhD dissertation:**

2021. Dept. Marine Sciences (S. Muñoz, advisor), Northeastern University, U.S.

2014. Dept. Earth and Environmental Sciences (G. Nanson, advisor), Univ. Wollongon, AU.

# **FIELD WORK (in support of research)**

2021 – Geul River basin, Limburg (Netherlands), river channel dynamics and flood processes

2018 – Rur/Roer River basin, Limburg (Netherlands and Germany), floodplain geomorphology

and water management

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

2002 – 2012; Texas Gulf Coastal Plain, Guadalupe River; floodplain processes (> 30 trips)

2004 – 2010; Walhain-Saint-Paul, Belgium; geoarchaeology of floodplain deposits and cultural materials (with Univ. Leuven, Archaeology field school)

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

2002 - 2004; eastern Sierra Madre Orientals, Mexico; soil erosion, with doctoral student

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

2005 – 2011; San Marcos River, TX; geomorphic investigation for river restoration (~40 trips)

2001; Brazilian Amazon; floodplain geomorphic research (12 days)

1999 – 2004; Rio Pánuco, Mexican Gulf Coastal Plain; floodplain processes (10 trips)

1994 – present; Lower Mississippi River, human impacts on channel and floodplain geomorphology, hydrology and flooding, archival and field research (Louisiana/Mississippi)

# External Reviewer of Tenure and Promotion (candidate/years withheld)

- Ben-Gurion University of the Negev, Israel
- University of Alabama, U.S.

# RESEARCH SERVICE, HONORS

2021-2022. Reviewer, Netherlands Organization for Scientific Research (NWO) XS Open Competition Domain Science.

2019 – 2022: review panel for Volkswagen Freigeist Fellowship competition (Germany).

April 2015: member of expert scientific advisory panel on "impact of fracking in the Netherlands." Dutch Parliament (*tweede kamer*).

August 2012 – 2016, Chair (elected): Commission on Land Degradation and Desertification (COMLAND), International Geographical Union.

July 2006 – 2012, Secretary (elected): Commission on Land Degradation and Desertification (COMLAND), International Geographical Union.

2010: Elected to Guadalupe – San Antonio River Expert Science Team (for advice to state).

2009 - 2011. National Science Foundation Review Panel, Washington DC.

2007 – 2012: Web master for the Commission on Land Degradation and Desertification. (COMLAND) of the International Geographical Union / Union Géographique Internationale (IGU / UGI)

2006 – 2010. Binghamton Geomorphology Symposium, Steering Committee.

Spring 2009. Chair, Search Committee for professor, Dept. Geography, UT-Austin.

1998 –2010, Co-director and Director of Geomorphology and Geoarchaeology Laboratory (with K.W. Butzer), UT-Austin.

Fall 2003, Chair of Search Committee for Quaternary environmental science faculty position, UT-Austin.

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, UT-Austin.

1999 – 2001: Founder and former director: Digital Landscape Laboratory, Department of Geography, UT-Austin.

2000 – 2010, Fellow Environmental Science Institute, UT-Austin.

1999, Chair of Search Committee for remote sensing faculty position, UT-Austin.

1998 – 2010, attended University commencement every year, UT-Austin.

1998. William C. Haag Award, Department of Geography & Anthropology (annual award for the best paper presented by a graduate student at major conference), Louisiana State University.

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, FL.

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.

# **Appointments and Service in Support of Education:**

# Leiden University College

2023 – present: Major Team Lead, Earth, Energy and Sustainability (BSc), Leiden University College.

2022 autumn: Educational Director (interim), Leiden University College.

2022 – 2023: LUC Ethics Board (member).

2022 – 2023: LUC Board of Examiners (member).

2019 – 2022: Coordinator of First Year Program, Leiden University College.

2019. Senior Onderwijskwalificatie (SKO) Award, Leiden University.

2017 – 2021. LUC representative to the FGGA (faculty) Library Committee.

2019-2021: Chair (voorzitter), Basis Kwalificatie Onderwijs (BKO) Committee (basic teaching qualification), Faculty of Governance and Global Affairs, Leiden University.

2015 – 2017: Co-director of LUC Research Center, Leiden University College.

2012 – 2015: Director of Studies (for the BSc program), Leiden University College (Univ. of

Leiden), includes Chair of numerous academic search committees, Leiden University College.

2015: Outstanding Student Poster Research Award contest, European Geoscience Union General Assembly, Vienna.

2012 – 2016: Senior Tutor (*studieadvisor*), Leiden University College.

2013 – 2015: Chair (voorzitter) of Programme Board (*Opleidingsbestuur*), LUC The Hague, Leiden University.

2013-2019: Basis Kwalificatie Onderwijs (BKO) Committee (basic teaching qualification), Faculty of Governance and Global Affairs, Leiden University.

2015. Co-founder. LUC Science Lab (laboratory techniques in sustainability science).

2014. Founder of LUC Digital lab (GIS and computer oriented education and research).

2013, 2014, 2015, 2016 Reviewer, Undergraduate Research Conference, The Netherlands.

2013 – 2015: Chair, Capstone Thesis of Merit Committee, LUC, Leiden University.

2012 – 2015: Tutor, Leiden University College.

2012 – 2015: Capstone Coordinator, LUC, Leiden University.

2013: Co-organizer of educational conference: Rethinking Liberal Education: Contemporary Challenges and Opportunities (June 15, Amsterdam University College).

2013: Chair of panel session 'Challenges of teaching natural sciences in the Dutch Liberal Arts and Sciences context,' Rethinking Liberal Education: Contemporary Challenges and Opportunities (June 15, Amsterdam University College).

2012: Basis Kwalificatie Onderwijs (BKO) award (basic teaching qualification), Faculty of Governance and Global Affairs, Leiden University.

# **Amsterdam University College (UvA):**

2012: Chair, Capstone (bachelor thesis) Distinction Committee.

2011 – 2012: Capstone Coordinator.

2010 – 2012: Internship co-coordinator.

# **University of Texas at Austin:**

2009 – 2010: Chair of Bachelor Studies Committee, Department of Geography and Environment, University of Texas at Austin.

2010. King-Rappaport College of Liberal Arts Fellowship for support of undergraduate student research, University of Texas at Austin.

2010. Chair of "Water and Environment" paper session for Undergraduate Student Research Conference, College of Liberal Arts, University of Texas at Austin.

2009: Recipient of Services for Students with Disabilities Award, University of Texas at Austin.

2008. Fulbright Foundation Graduate Student Review Panel, Amsterdam, The Netherlands.

2004 – 2007: Director of Graduate Studies and Awards Committee, Dept. Geography and Environment, University of Texas at Austin.

2001- 2002. Chair, Graduate Studies Committee, Dept. Geography and Environment, University of Texas at Austin.

1999 – 2001: Founder and former director: Digital Landscape Laboratory, Department of Geography and Environment, University of Texas at Austin.

1998 –2010, Member of Graduate Student Admissions Committee, University of Texas at Austin.