## Curriculum Vitae Kory M. Konsoer Department of Geography and Anthropology

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# **Academic Training**

B.S. – Grand Valley State University, Allendale, Michigan, 2006, Geology, Minor – Mathematics M.S. – West Virginia University, Morgantown, West Virginia, 2008, Geology Ph.D. – University of Illinois, Urbana-Champaign, IL, 2014, Geography

## **Academic Appointments**

Aug 2020 – present	Associate Professor, Department of Geography and Anthropology,
	Louisiana State University
Aug 2014 – present	Assistant Professor, Department of Geography and Anthropology,
	Louisiana State University

## **Licenses and Certifications**

2017 – present FAA Remote Pilot Certification, Federal Aviation Administration

# **Fellowships and Affiliations**

2018 – present	Affiliate, South Central Climate Adaptation Science Center
2015 - present	Fellow, Coastal Studies Institute, Louisiana State University

### **Other Teaching Experience**

2009-2011	Teaching Assistant, Department of Geography and Geographic Information Sciences,
	University of Illinois, Urbana-Champaign
2006-2008	Teaching Assistant, Department of Geology
	West Virginia University

# **Research Assistantships**

2010-2014	Research Assistant, Department of Geography and Geographic Information Sciences,
	University of Illinois, Urbana-Champaign
2008	Research Assistant, Department of Geology
	West Virginia University
2007-2008	Field Assistant, Canaan Valley Institute, West Virginia

# **Professional Experience**

2008-2009 Geologic Technician, Dominion Exploration and Production, Inc. Jane Lew, West Virginia

# Awards

- 2019 Early Career Alumni Achievement Award, University of Illinois, Urbana-Champaign, Department of Geography and Geographic Information Science
- 2019 LSU Alumni Association Rising Faculty Research Award, Louisiana State University
- 2017 Undergraduate Teaching Award, Tiger Athletic Foundation, Louisiana State University
- 2015 Undergraduate Research Conference Second Place Award (Humanities and Social Sciences): Michael Vingiello (undergraduate student – Geography) "Influence of anthropogenic floodplain

modifications on rates of bank erosion and channel migration: Comparative study of the Amite and Comite Rivers, Louisiana"

- 2014 Doctoral Student Paper Award, Association of American Geographers, Geomorphology Specialty Group.
- 2013 First Place Presentation Award, School of Earth, Society, and Environment (SESE) Research Review, University of Illinois
- 2012 Second Place Presentation Award, School of Earth, Society, and Environment (SESE) Research Review, University of Illinois
- 2011 Russell Graduate Fellowship, Department of Geography, University of Illinois
- 2009 Foster Graduate Fellowship, Department of Geography, University of Illinois
- 2006 Tremba Scholarship Award, Department of Geology, Grand Valley State University

# Funded Grants (total: \$2,029,269)

- 2023 Relationships between vegetation and discharge on distributary channels in the Bird Foot Delta: bifurcations and sediment flux. US Department of Agriculture, \$121,734
- 2023 Analyses of USDA Flood Control Reservoir Sedimentation, US Department of Agriculture, \$175,000
- 2023 Collaborative Research: Unraveling the controls on origin and formation of oxbow lakes. NSF Geomorphology and Land Use Dynamics, \$650,000
- 2022 Roseau cane die-back: Multidisciplinary approaches to address plant decline and opportunities for restoration, US Department of Agriculture, co-PI (\$180,000)
- 2022 Mitigating climate change and sea-level rise impacts to Native American archaeological sites within coastal Louisiana through cultural resource management, submitted to US Geological Survey, Climate Adaptation Science Center, PI (\$293,297)
- 2022 Teaching Technology for the Humanities, Social-, Natural-, Environmental-, and Engineering Sciences in the Digital Age and the Era of Big Data, funded by LSU Student Technology Fee, co-PI (\$118,939)
- 2021 Analyses and Tools for Sonar-Derived Data, US Department of Agriculture, PI (\$52,500)
- 2020 Quantifying and visualizing interactions between flow and vegetation in river channels using small unoccupied aerial systems (sUAS), Manship Summer Research Fellowship, Louisiana State University, College of Humanities and Social Sciences (\$5,000)
- 2019 *Mississippi River Delta Archaeological Mitigation*, funded by National Park Service, National Center for Preservation Technology and Training, PI (\$10,000)
- 2018 Internal structure and formational processes of modern point bars on the Pearl River, funded by LSU Office of Research and Economic Development, Council on Research Summer Stipend, PI (\$5,000)
- 2017 Bringing Global Data into the Classroom: Magic Planet, funded by LSU Humanities and Social Sciences, Instructional Impact Grant, Co-PI (\$34,227)
- 2016 Geospatial Data Collection Technology for the Social-, Natural-, Environmental-, and Engineering Sciences, funded by LSU Student Technology Fee, Co-PI (\$69,077)
- 2016 Morphodynamic adjustments between channel migration and point bar development on complex meandering rivers, submitted to Louisiana Board of Regents, Research Competitiveness Subprogram (RCS) 2015, PI (\$138,907)
- 2015 Physical Geography Laboratory: Connecting Students with the Earth, funded by Louisiana Board of Regents, Traditional Enhancement Program, Co-PI (\$76,288)
- 2015 Hydro-geomorphic assessment of Catahoula Lake, LA: implications for management strategies, funded by Louisiana Department of Wildlife and Fisheries, PI (\$74,889)
- 2014 *Morphodynamics of neck cutoffs on a highly sinuous meandering river*, funded by LSU Council on Research, Faculty Research Grant Program, PI (\$9,987.10)
- 2011 Doctoral Dissertation Research Influence of riparian vegetation on near-bank flow structure and erosion rates on a large alluvial river. Funded by National Science Foundation, Behavioral and

Cognitive Sciences (BCS) Division, Geography and Spatial Sciences – Doctoral Dissertation Research Improvement Program, February 2016, Co-PI (\$11,624)

- 2011 Influences of near-bank large woody debris on near-bank flow structure and meander evolution of a large alluvial river. Funded by Geological Society of America, Graduate Student Research Grant – PhD, PI (\$1,650)
- 2010 *Riverbank characterization of the Wabash River*. Funded by Department of Geography, University of Illinois, Summer Research Grant, PI (\$500)
- 2007 Using LiDAR and GIS to model landslide susceptibility in Horseshoe Run watershed, West Virginia. Funded by Geological Society of America, Graduate Student Research Grant – MS, PI (\$650)

# **Pending Funding**

2023 Serendip Lion Rock: Preserving a UNESCO World Heritage Site, National Endowment for Humanities, \$99,501

## **Funded Travel**

- 2017 Junior Faculty Travel Grant, Louisiana State University
- 2015 Junior Faculty Travel Grant, Louisiana State University
- 2014 Junior Faculty Travel Grant, Louisiana State University
- 2014 South-Central Climate Science Center, Workshop Travel Grant
- 2013 Conference Travel Grant awarded by University of Illinois, Graduate College
- 2012 Schlesinger Travel Grant, University of Illinois School of Earth, Society, and Environment
- 2011 Conference Travel Grant awarded by University of Illinois, Graduate College
- 2011 Conference Travel Grant awarded by the Geological Society of America, North-Central Division

## Thesis and Dissertation

- 2008 LiDAR, GIS, and Multivariate Statistical Analysis to Assess Landslide Risk, Horseshoe Run Watershed, West Virginia. (M.S. – West Virginia University) 129 p.
- 2014 Influence of riparian vegetation on near-bank flow structure and rates of erosion on a large meandering river. (Ph.D. University of Illinois, Urbana-Champaign) 218 p.

# **Publications**

\*Articles in refereed journals (in reverse chronological order)

- 20. Konsoer, K.M., Rowley, T., and Rhoads, B., 2023. The role of bed morphology and channel curvature on the redistribution of momentum in a series of meander bends, Pearl River, USA. *Water Resources Research*, 59(10), e2023WR034804.
- 19. Yin, L., Wang, L., Keim, B., **Konsoer, K.M.**, Yin, Z., Liu, M., Zheng, W., 2023. Spatial and wavelet analysis of precipitation and river discharge during operation of the Three Gorges Dam, China. *Ecological Indicatiors*, 154, 110837.
- Chowdhury, M.K., Konsoer, K.M., Hiatt, M., 2022. Effect of lateral outflow on three-dimensional flow structure in a river delta. *Water Resources Research*, 58(10), doi:org/10.1029/2021WR031346.
- 17. Stein, M., Leitner, M., Trepanier, J., and **Konsoer, K.**, 2022. A dataset of dropout rates and other school-level variables in Louisiana Public High Schools. *Data*, 7, 48, doi:10.3390/data7040048.
- Yin, L., Wang, L., Keim, B., Konsoer, K., Zheng, W., 2022. Wavelet analysis of dam injection and discharge in Three Gorges Dam and Reservoir with precipitation and river discharge. *Water*, 14(4), 567.
- 15. Richards, D., **Konsoer, K.**, Langendoen, E., Ursic, M., and Constantine, J., 2021. Depositional patterns of slowly plugging neck cutoffs from core analysis and estimates of bedload transport, *Sedimentology*, 69(2), 568-591.

- 14. Rowley, T., **Konsoer, K.**, Langendoen, E., Li, Z., Ursic, M., and Garcia, M., 2021. Relationship of point bar morphology to channel curvature and planform evolution. *Geomorphology*, 375, 107541.
- Turnipseed, C., Konsoer, K.M., Richards, D., and Willson, C., 2021. Numerical modeling of twodimensional hydrodynamics in a highly curving and actively evolving neck cutoff under different hydrologic conditions. *Water Resources Research*, 57, e2020WR027329.
- 12. Watt, D.J., Rees, M.A., Britt, T., **Konsoer, K.**, and Huey, S.M., 2020. Mitigating engineered disaster on Louisiana's Gulf Coast. *The SSA Archaeological Record*, 20(5), 16-21.
- 11. Britt, T., Watt, D., Rees, M., **Konsoer, K.**, Huey, S., 2020. A perfect storm: An archaeological management crisis in the Mississippi River Delta. *Park Stewardship Forum*, 36(1), 70-76.
- Rowley, T., Ursic, M., Konsoer, K.M., Langendoen, E., Mutschler, M., Sampey, J., and Pocwiardowski, P., 2020, Comparison of terrestrial LiDAR, SfM, and MBES resolution and accuracy for geomorphic analyses in physical systems that experience subaerial and subaqueous conditions. Geomorphology, 355, 107056.
- 9. Richards, D., and **Konsoer, K.M.**, 2020, Morphologic adjustments of actively evolving highly curved neck cutoffs. Earth Surface Processes and Landforms, 45(4), 1067-1081. doi: 10.1002/esp.4763.
- 8. Konsoer. K.M., and Rhoads, B.L., 2018, Analysis of shallow turbulent flows using the Hilbert-Huang transform, Hungarian Geographical Bulletin, Hungarian Geographical Bulletin, 67(4), 343-359.
- 7. Konsoer, K.M., LeRoy, J.Z., Burr, D.M., Parker, G., Jacobsen, R., and Turmel, D., 2018. Channel slope adjustment in reduced-gravity environments. Geology, 46(2), 183-186.
- 6. Konsoer, K.M., Rhoads, B.L., Best, J.L., Langendoen, E.J., Ursic, M.E., Abad, J.D., and Garcia, M.H., 2017. Length scales and statistical characteristics of outer bank roughness for large elongate meander bends: The influence of bank material properties, floodplain vegetation and flow inundation. Earth Surface Processes and Landforms, 42, 2024-2037.
- Konsoer. K.M., Rhoads, B.L., Best, J.L., Langendoen, E.J., Abad, J.D., Parsons, D.R., and Garcia, M.H., 2016. Three-dimensional flow structure and bed morphology in large elongate meander loops with different outer bank characteristics. Water Resources Research, 52, doi:10.1002/2016WR019040.
- Konsoer, K.M., Rhoads, B.L., Langendoen, E.J., Best, J.L., Ursic, M.E., Abad, J.D., and Garcia, M.H., 2016. Spatial variability in bank resistance to erosion on a large meandering, mixed bedrock-alluvial river. Geomorphology, 252, 80-97.
- Konsoer, K.M., and Rhoads, B.L., 2014. Spatial-temporal structure of mixing interface turbulence at two large river confluences. Environmental Fluid Mechanics, 14(5), 1043-1070. doi: 10.1007/s10652-013-9304-5
- 2. Konsoer, K.M., Kite, J.S., 2014. Application of LiDAR and discriminant analysis to determine landscape characteristics for different types of slope failures in heavily vegetated, steep terrain: Horseshoe Run watershed, West Virginia. Geomorphology, 224, 192-202.
- Konsoer, K.M., Zinger, J.A., and Parker, G., 2013. Bankfull hydraulic geometry of submarine channels created by turbidity currents: Relations between bankfull channel characteristics and formative flow discharge. Journal of Geophysical Research – Earth Surface, 118, 1-13 doi: 10.1029/2012JF002422

\*Peer-Reviewed Book Chapters

- 3. Lewis, Q.L., **Konsoer, K.M.**, and Leitner, M., 2022. How sUAS has pushed forward on-demand low altitude remote sensing in Geography. In: *sUAS Applications in Geography*, Konsoer, K. et al., eds., Geotechnologies and the Environment, 24, 1-12.
- 2. Konsoer, K.M., Watt, D., Rees, M., Linton, M., Britt, T., and Huey, S., 2022. Using sUAS to map and quantify changes to Native American archaeological sites along coastal Louisiana due to climate change and erosion. In: *sUAS Applications in Geography*, Konsoer, K. et al., eds., Geotechnologies and the Environment, 24, 71-93.
- 1. Richards, D., Konsoer, K.M., Turnipseed, C., and Willson, C., 2018. Characterizing the threedimensional flos through neck cutoffs with complex planform geometry. Sedimentology, *IAS*

Special Publication 48 – Fluvial Meanders and their sedimentary products in the rock record, 273-295.

# \*Edited Books

1. *sUAS Applications in Geography*, 2022. Geotechnologies and the Environments, vol. 24, eds: Konsoer, K.M., Leitner, M., and Lewis, Q., Springer Nature, 331 p.

# \*Articles in Peer-Reviewed Conference Volumes

- Konsoer, K.M., Richards, D., and Edwards, B., 2016. Planform evolution of neck cutoffs on elongate meander loops, White River, Arkansas, USA. River Flow 2016, International Association for Hydro-Environment Engineering and Research (IAHR), Taylor and Francis Group, London, UK, 1730-1735.
- Abad, J.D., Frias, C., Konsoer, K.M., Best, J.L., Rhoads, B.L., Langendoen, E.J., and Garcia, M.H., 2014. Modulation of the flow structure by progressive bed forms in the meandering Wabash River. *River Flow 2014*, International Association for Hydro-Environmental Engineering and Research (IAHR), Taylor and Francis Group, London, UK, 1113-1117.

# \*Articles in Conference Proceedings

- 2. Parker, G., Fu, X., Zhang, Y., Zinger, J. and **Konsoer, K.M.**, 2013. *Bedform regime diagram for rivers and turbidity currents: Conditions for the formation and obliteration of dunes*. Proceedings of 2013 IAHR Congress, Tsinghua University Press, Beijing.
- Zinger, J.A., Konsoer, K.M., and Rhoads, B.L., 2012. *Hilbert-Huang analysis of shallow flow velocity data*. Conference Proceedings from the 3<sup>rd</sup> International Symposium on Shallow Flows, June 4-6 2012, Iowa City, Iowa.

# \*Field Reports and Guides

 Shaney, M., Kite, J.S., Purtill, M., Reed, M., Konsoer, K.M., and Schaney, C., 2016. *Peat Wetlands, Periglacial Features, and Giant Rockslides; Late Quaternary Landscape Evolution of the Blackwater and Cheat River Basins near the Eastern Continental Divide*. Southeastern Friends of the Pleistocene, SEFOP 2016 Field Trip and Guide, October 21-23, 2016, pp. 1-43.

# Conferences/Workshops/Lectures

\*Professional Meetings (1 – graduate student advised; 2 – undergraduate student advised; *in reverse chronological order*)

- 64 Langendoen, EJ., Shoemaker, D., Ursic, M., and **Konsoer, K.M.**, 2023. Resolving river planform and width effects on flow in meandering river for optimal placing of ADCP cross sections. European Geophysical Union, 2023 General Assembly, Vienna, Austria, April 23-28, 2023.
- 63 <sup>1</sup>Haque, DME, Wang, G., Dassanayake, M., Karunatillake, S., and **Konsoer, K.M.**, 2022. The global decadal-scale impacts on cropland from anthropogenic climate change. American Geophysical Union, Fall Meeting, Dec. 12-16, 2022.
- 62. <sup>1</sup>Shoemaker, D., Langendoen, EJ, Ursic, M., and **Konsoer, K.M**, 2022. Planning ADCP cross section measurement-locations for meandering rivers. American Geophysical Union, Fall Meeting, Chicago, IL, Dec. 12-16, 2022.
- 61. <sup>1</sup>Bates, A., Karunatillake, S., Lorenzo, J., **Konsoer, K.M.**, and Hughes, E., 2022. Water-limited provenance of the Vastitas Borealis Formation within Isidis Basin, Mars. 53<sup>rd</sup> Lunar and Planetary Science Conference, The Woodlands, Texas, March 7-11, 2022.
- 60. Russell, C., Forte, A., **Konsoer, K.M.**, and Rivera-Hernandez, F., 2021. Paleohydrology and fluvial dynamics of Martian channels. American Geophysical Union, Fall Meeting, New Orleans, Louisiana, Dec. 13-17, 2021.
- 59. <sup>1</sup>Santiago-Collazo, F., Bilskie, M., Bacopoulos, P., Konsoer, K.M., and Hagen, S., 2021. A physicsbased classification of coastal land-margins based on surface flow. American Geophysical Union, Fall Meeting, New Orleans, Louisiana, Dec. 13-17, 2021.

- 58. Russell, C., Konsoer, K.M., Karunatillake, S., Burr, D., and Forte, A., 2021. Interpreting paleohydrology and fluvial dynamics of Martian channels in the Aeolis Dorsa region. 52<sup>nd</sup> Lunar and Planetary Science Conference, 2021.
- 57. <sup>1</sup>Chowdhury, M., Konsoer, K.M., Hiatt., M., 2019. Effects of backwater and lateral outflow on three-dimensional flow structure in a river-dominated delta. American Geophysical Union, Fall Meeting, San Francisco, California, Dec. 9-13, 2019.
- 56. <sup>1</sup>Eubanks, K., Konsoer, K.M., Willson, C., and Twilley, R., 2019. Changes in planform geometry in the Amite River Basin, Louisiana, USA, and the impact on flood routing. American Geophysical Union, Fall Meeting, San Francisco, California, Dec. 9-13, 2019.
- 55. <sup>1</sup>Wang, D., Konsoer, K.M., Garcia, M., Rhoads, B., Langendoen, E., and Best, J., 2019. Quantifying the effects of outer-bank large woody debris (LWD) patches on flow-resistance and bank erosion with porous structure approximation. American Geophysical Union, Fall Meeting, San Francisco, California, Dec. 9-13, 2019.
- 54. <sup>1</sup>Rowley, T., Konsoer, K.M., Ursic, M., and Langendoen, E., 2019. The relationship of channel planform and point bar architecture on a reach of the Wabash River near Grayville, Illinois. SEDHYD 2019 Conference, Reno, Nevada, June 24-28, 2019.
- 53. <sup>2</sup>Parker, B., Trepanier, J., Konsoer, K.M., and Broyles, S., 2019. Park access across income and minority levels in Louisiana. LSU Discover Day, Undergraduate Research and Creativity Symposium, Baton Rouge, Louisiana, April, 9<sup>th</sup>, 2019.
- 52. Konsoer, K.M., Rhoads, B.L., Best, J.L., Langendoen, E., and Garcia, M., 2019. Interactions between near-bank three-dimensional flow structure and large woody debris in an elongate meander bend. American Association of Geographers, Annual Meeting, Washington D.C., April 3-7, 2019.
- 51. Konsoer, K.M., 2019. Comparisons among MBES, LiDAR, and SfM: applications for landscapes that experience subaerial and subaqueous conditions. Multibeam in Rivers Summit (MBIRs), Portland, Oregon, March 4-6, 2019.
- 50. <sup>1</sup>Rowley, T., Konsoer, K.M., Ursic, M., and Langendoen, E., 2018, Evaluating interactions between flow structure and planform evolution on a series of six consecutive meander bends along the Pearl River, Louisiana. American Geophysical Union, Fall Meeting, Washington, D.C., Dec. 10-15, 2018.
- 49. <sup>1</sup>Smith, J., **Konsoer, K.M.**, and Wicks, C.M., 2018, Evaluating sediment transport in an ungauged steep mountain stream during an extreme flood event. American Geophysical Union, Fall Meeting, Washington, D.C., Dec. 10-15, 2018.
- 48. <sup>1</sup>Wang. D., Konsoer., K.M., Garcia, M.H., Rhoads, B.L., Langendoen, E., Best, J., 2018, Quantifying the effects of outer-bank large wood on flow-resistance and bank erosion in an evolving meandering river. American Geophysical Union, Fall Meeting, Washington, D.C., Dec. 10-15, 2018.
- 47. Konsoer, K.M, and Richards, D., 2018. A new conceptual model for neck cutoffs revealed by highresolution bathymetric datasets. Geological Society of America, Annual Meeting, Indianapolis, Indiana, November 4-7, 2018.
- 46. Konsoer, K.M., Rhoads, B.L., Best, J.L., LeRoy, J., Langendoen, E.J., Ursic, M., Garcia, M.H., Riley, J.D., Abad, J.D., Johnson, K.K., Parsons, D., and Rowley, T., 2018. Curves, confluences, and cutoffs: Morphodynamic insights from the Wabash River. Geological Society of America, Annual Meeting, Indianapolis, Indiana, November 4-7, 2018.
- 45. <sup>2</sup>Hinton, D., **Konsoer, K.M.**, Foster, C., 2018. Drone photogrammetry of the LSU Campus Mounds. 10<sup>th</sup> Annual LSU Undergraduate Research Conference, Baton Rouge, Louisiana, October 26, 2018.
- 44. <sup>1</sup>Afrin, T., and Konsoer, K.M., 2018, Investigation of morphological changes in small coastal rivers during flood events. Southwest Division of American Association of Geographers, Annual Meeting, Baton Rouge, Oct. 4-5, 2018.

- 43. <sup>1</sup>Richards, D., and Konsoer, K.M., 2018, Bedload sediment transport and depositional patterns of neck cutoffs. Southwest Division of American Association of Geographers, Annual Meeting, Baton Rouge, Oct. 4-5, 2018.
- 42. <sup>1</sup>Rowley, T., **Konsoer, K.M.**, Ursic, M., and Langendoen, E., 2018, Using high-resolution sUAS datasets to evaluate point bar morphology along a series of bends on the Pearl River, Louisiana. Southwest Division of American Association of Geographers, Annual Meeting, Baton Rouge, Oct. 4-5, 2018.
- 41. <sup>1</sup>Smith, J., Konsoer, K.M., and Wicks, C., 2018, An evaluation of modified bed load sediment transport equations for enhanced sediment transport quantification in steep mountain streams: Case study of Little Fountain Creek, Colorado Springs, Co. Southwest Division of American Association of Geographers, Annual Meeting, Baton Rouge, Oct. 4-5, 2018.
- 40. Konsoer, K.M., Rhoads, B., Best, J., Langendoen, E., Abad, J., Parsons, D., and Garcia, M., 2018. Interactions between three-dimensional flow structure and bed morphology in large elongate meander bends. European Geophysical Union (EGU) General Assembly, April 9-13, 2018, Vienna, Austria.
- 39. Konsoer, K.M., Rhoads, B.L., Best, J.L., Langendoen, E.J., Ursic, M., Garcia, M.H., Abad, J.D., and Wang, D., 2018. Influence of vegetation and outer bank roughness on rates of bank erosion along a large meandering river. European Geophysical Union, 2018 General Assembly, Vienna, Austria, April 9-13, 2018.
- Konsoer, K.M., and Richards, D., 2018. Channel bed adjustments during active neck cutoffs of a meandering river. European Geophysical Union, 2018 General Assembly, Vienna, Austria, April 9-13, 2018.
- 37. <sup>1</sup>Richards, D., and Konsoer, K.M., 2018. Spatial variations in sediment transport through neck cutoffs. Association of American Geographers, Annual Meeting, New Orleans, Louisiana, April 9-13, 2018.
- 36. <sup>1</sup>Rowley, T., and Konsoer, K.M., 2018. Visualizing the internal architecture of point bars with GPR on a section of the Wabash River near Grayville, IL. Association of American Geographers, Annual Meeting, New Orleans, Louisiana, April 9-13, 2018.
- 35. <sup>1</sup>Wang, D., **Konsoer, K.M.**, Rhoads, B.L., Garcia, M.H., and Best, J., 2017. Numerical estimation of the outer bank resistance characteristics in an evolving meandering river. American Geophysical Union, Fall Meeting, New Orleans, LA, December, 10-15, 2017.
- 34. <sup>1</sup>Richards, D., **Konsoer, K.M.**, Turnipseed, C., and Willson, C., 2017. Characteristics of helical flow through neck cutoffs. American Geophysical Union, Fall Meeting, New Orleans, LA, December, 10-15, 2017.
- 33. <sup>1</sup>Rowley, T., Ursic, M., Konsoer, K.M., Langendoen, E.J., Mutschler, M., Sampey, J., and Pocwiardowski, P., 2017. What do high-resolution point clouds actually see? A comparison of LiDAR, MBES, and SfM point clouds. American Geophysical Union, Fall Meeting, New Orleans, LA, December, 10-15, 2017.
- 32. <sup>2</sup>Adams, C., **Konsoer, K.M.**, and Rowley, T., 2017. Investigation of the spatial distributions of grain size for point bars along the Pearl River, Louisiana, 9<sup>th</sup> Annual LSU Undergraduate Research Conference, Baton Rouge, Louisiana, November 17, 2017.
- Konsoer, K.M., Richards, D., Turnispseed, C., and Willson, C., 2017. Dynamics of neck cutoff processes on meander bends with complex planform geometries. Association of American Geographers, Annual Meeting, Boston, Massachusetts, April 5-9, 2017.
- 30. <sup>1</sup>Tucker, C., **Konsoer, K.M.**, and Trepanier, J., 2017. Communicating return periods of extreme flood events: Insights form the 2016 Louisiana Flood. Association of American Geographers, Annual Meeting, Boston, Massachusetts, April 5-9, 2017.
- 29. <sup>1</sup>Rowley. T., Ursic, M., Konsoer, K.M., Langendoen, E., Mutschler, M., 2017. Experimental comparison of LiDAR, MBES, and SfM for describing channel roughness. Multibeam in Rivers Summit (MBIRs), Baton Rouge, Louisiana, March 15-17, 2017.

- Konsoer, K.M., 2017. Using LiDAR and MBES to characterize outer bank roughness along meandering rivers. Multibeam in Rivers Summit (MBIRs), Baton Rouge, Louisiana, March 15-17, 2017.
- 27. <sup>1</sup>Turnipseed, C., Willson, C.S., Richards, D., and **Konsoer, K.M.**, 2016. Three-dimensional hydrodynamic modeling of a neck cutoff on an elongate meander loop. American Geophysical Union, Fall Meeting, San Francisco, CA, December, 12-16, 2016.
- 26. <sup>1</sup>Richards, D., **Konsoer, K.M.**, Turnipseed, C, and Willson, C., 2016. Investigation of the spatial patterns of velocity and bed morphology within actively evolving neck cutoffs on a highly sinuous river. American Geophysical Union, Fall Meeting, San Francisco, CA, December, 12-16, 2016.
- 25. <sup>1</sup>Afrin, T., **Konsoer, K.M.**, and Odzemir, C.E., 2016. Morphodynamic modeling of a small coastal river during an extreme flood event. American Geophysical Union, Fall Meeting, San Francisco, CA, December, 12-16, 2016.
- 24. <sup>1</sup>Morrison, M., Lorenzo, J.M., Clift, P.D., and Konsoer, K.M., 2016. Shallow seismic reflection study of point bar deposits of False River, Louisiana. 2016 Annual Convention, Gulf Coast Association of Geological Societies, Corpus Christi, TX, Sept., 18-20, 2016.
- 23. <sup>1</sup>Grondin, M., and Konsoer, K.M., 2016. Hydraulic width variability in meandering river channels: Amite River. 32<sup>nd</sup> Annual Louisiana Remote Sensing and GIS Workshop, Lafayette, LA, April, 27, 2016.
- 22. <sup>1</sup>Richards, D., and Konsoer, K.M., 2016. Hydro-geomorphic analysis of neck cutoffs on elongated meander bends, White River, Arkansas. 32<sup>nd</sup> Annual Louisiana Remote Sensing and GIS Workshop, Lafayette, LA, April, 27, 2016.
- Konsoer, K.M., 2015. Morphodynamics of neck cutoffs on elongate meander loops, White River, Arkansas, USA. American Geophysical Union, Fall Meeting, San Francisco, California, December 14-18, 2015.
- 20. <sup>2</sup>Vingiello, M., and Konsoer, K.M., 2015. Influence of anthropogenic floodplain modifications on rates of bank erosion and channel migration: Comparative study of the Amite and Comite Rivers, Louisiana. 7<sup>th</sup> Annual LSU Undergraduate Research Conference, Baton Rouge, Louisiana, November 6, 2015.
- Konsoer, K.M., Mendoza, A., Abad, J.D., Best, J.L., Rhoads, B.L., and Langendoen, E.J., 2015. Modeling dune migration and sediment transport in a large elongated meander loop, Wabash River, USA. River, Coastal, and Estuarine Morphodynamics (RCEM) 2015, Iquitos, Peru.
- Konsoer, K.M., 2015. Pushing the limits on acquisition of high-resolution bathymetric data in shallow riverine environments. Multibeam in Rivers Summit (MBIRs), Flagstaff, Arizona, March 25-27, 2015.
- Konsoer, K.M., Frias, C.E., Abad, J.D., Best, J.L., Rhoads, B.L., Langendoen, E., 2014. Using highresolution field measurements to model dune kinematics in a large elongate meander bend. American Geophysical Union, Fall Meeting, San Francisco, California, December 15-19, 2014.
- 16. Konsoer, K.M., Best, J.L., Rhoads, B.L., Abad, J.D., Fazio, D., Frias, C.E., Garcia, M.H., and Langendoen, E.J., 2014. Dune kinematics in a large elongate meander bend. Geological Society of America, North-Central Section 48<sup>th</sup> Annual Meeting, April 24-25, 2014, Lincoln, Nebraska.
- 15. Konsoer, K.M., Rhoads, B.L., Best, J.L., Langendoen, E., Abad, J., Ursic, M., Garcia, M., 2014. Influence of bedrock control, bank materials, riparian vegetation, and planform geometry on the morphodynamics of a large meandering river. Association of American Geographers, Annual Meeting, Tampa, Florida, April 8-12, 2014.
- 14. Rhoads, B.L., **Konsoer, K.M.**, Best, J., Garcia, M.H., and Abad, J.D., 2013. Planform dynamics of a mixed bedrock-alluvial meandering river. American Geophysical Union, Fall Meeting.
- Konsoer, K.M., Rhoads, B.L., Best, J., Langendoen, E., Ursic, M., Abad, J.D., and Garcia, M.H., 2013. Scales of form roughness on riverbanks with different riparian vegetation. American Geophysical Union, Fall Meeting.

- Abad, J.D., Frias, C.E., Langendoen, E., Best, J., Rhoads, B.L., Konsoer, K.M., Garcia, M.H., 2013. Bedforms modulating temporal peaks on near-bank shear stresses, the Wabash River Case. American Geophysical Union, Fall Meeting.
- Konsoer, K.M., Rhoads, B.L., Langendoen, E., Johnson, K., and Ursic, M., 2012. Influence of riparian vegetation on near-bank flow structure and erosion rates on a large meandering river. American Geophysical Union, Fall Meeting.
- Konsoer, K.M., Rhoads, B.L., Langendoen, E., and Ursic, M., 2012. Influence of riparian vegetation and floodplain heterogeneity on the planform evolution of a large meandering river. Abstracts with Programs, 2012 GSA Annual Meeting, vol. 44, p. 421.
- 9. Konsoer, K.M., Zinger, J.A., and Parker, G., 2012. Comparing the hydraulic geometry of rivers, subaqueous channels, and extraterrestrial fluvial features. Abstracts with Programs, 2012GSA Annual Meeting, vol. 44, p. 464.
- Konsoer, K.M., Zinger, J.A., Hernandez, J., Viparelli, E., and Parker, G., 2012, Relations for bankfull hydraulic geometry of sinuous channels in submarine and subaerial settings. AAPG Search and Discovery Article #90142, 2012 AAPG Annual Convention and Exhibition, April 22-25, 2012, Long Beach, California.
- Konsoer, K.M., Rhoads, B.L., and Johnson, K.K., 2011. Spatial-temporal structure of mixinginterface turbulence at two large river confluences. American Geophysical Union, Fall Meeting, abstract #EP31E-0857.
- Konsoer, K.M., Zinger, J.A., and Parker, G., 2011. Hydraulic geometry of sinuous channels: A comparison between submarine and subaerial environments. Abstracts with Programs, 2011 GSA Annual Meeting, vol. 43, No. 5, pp. 454.
- Konsoer, K.M., Rhoads, B.L., and Johnson, K.K., 2011. Large-scale turbulence at confluences of large alluvial rivers. The Association of American Geographers, 2011 Annual Meeting, Seattle, WA, Apr. 15<sup>th</sup>, 2011.
- Zinger, J.A., Rhoads, B.L., Best, J., Engel, F., and <u>Konsoer, K.M.</u>, 2010. Mobilization of floodplain sediments by chute cutoffs on a large river: Lower Wabash River, Illinois-Indiana. American Geophysical Union, Fall Meeting, abstract #EP31C-0753.
- 3. Konsoer, K.M., 2008. LiDAR, GIS, and multivariate statistical analysis to assess landslide risk, Horseshoe Run watershed, West Virginia.8<sup>th</sup> Annual Geohazards in Transportation in the Appalachian Region, Technical Program. Aug. 5-7, 2008.
- Downing, J.B., <u>Konsoer, K.M.</u>, Kite, J.S., 2007, LiDAR based surficial geology mapping in comparison to more traditional methods in the heavily vegetated Appalachian Mountains. Abstracts with Programs, 2007 GSA Annual Meeting, vol. 39, no. 6, pp. 161.
- Konsoer, K.M., 2005, Comparison of suspended sediment loads between the Rogue River and Thornapple River, Grand Rapids, Michigan. Grand Valley State University, Student Scholarship Day.

# \*Invited National Conference Presentations

- Konsoer, K.M, and Richards, D., 2018. A new conceptual model for neck cutoffs revealed by highresolution bathymetric datasets. Geological Society of America, Annual Meeting, Indianapolis, Indiana, November 4-7, 2018.
- Konsoer, K.M., 2015. Morphodynamics of neck cutoffs on elongate meander loops, White River, Arkansas, USA. American Geophysical Union, Fall Meeting, San Francisco, California, December 14-18, 2015.

# \*Invited International Conference Presentations

Konsoer, K.M., 2021. Neck cutoff on meandering rivers and the importance of channel curvature. International Association of Geomorphologists, 2021 Geomorphology Week Webinars, March 4<sup>th</sup>, 2021. Konsoer, K.M., Rhoads, B., Best, J., Langendoen, E., Abad, J., Parsons, D., and Garcia, M., 2018. Interactions between three-dimensional flow structure and bed morphology in large elongate meander bends. European Geophysical Union (EGU) General Assembly, April 9-13, 2018, Vienna, Austria.

\* Chaired Sessions at Professional Meetings

- 2019 "Fluvial Forms and Processes". American Association of Geographers, Annual Meeting, Washington D.C., April 3-7, 2019.
- 2018 "Fluvial Morphodynamics and Channel Patterns and Beyond". American Geophysical Union Fall Meeting, Washington, D.C., December, 10-15, 2018.
- 2018 "Fluvial Forms and Processes". Association of American Geographers, Annual Meeting, New Orleans, Louisiana, April 10-14, 2018.
- 2017 "Fluvial Morphodynamics and Channel Patterns and Beyond". American Geophysical Union Fall Meeting, New Orleans, Louisiana, December, 11-15, 2017.
- 2017 "Cross-border community engagement using geoscience research, education, and outreach", Geological Society of America Annual Meeting, Seattle, Washington, October 22-25, 2017.
- 2017 "Fluvial Forms and Processes", Association of American Geographers, Annual Meeting, Boston, Massachusetts, April 5-9, 2017.
- 2016 "Fluvial Morphodynamics and Channel Patterns and Beyond". American Geophysical Union Fall Meeting, San Francisco, CA, December, 12-16, 2016.
- 2016 "Morphodynamics and Stratigraphy of Meandering Rivers". Geological Society of America Annual Meeting, Denver, CO, September, 25-28, 2016.
- 2016 "Dynamics of Meander Cutoffs". River Flow 2016, International Association for Hydro-Environment Engineering Research, St. Louis, MO, July, 12-15, 2016.
- 2016 "Fluvial Forms and Processes, Gulf Coast Rivers and Groundwater". Geological Society of America, South-Central Section, Annual Meeting, Baton Rouge, Louisiana, March, 20-22, 2016.
- 2015 "Fluvial Forms and Processes". Association of American Geographers, Annual Meeting, Chicago, Illinois, April 21-25, 2015.
- 2012 "Channel morphology and hydraulic geometry of channelized flows: Linking observations from a variety of environments and scales". 2012 Geological Society of America Annual Meeting, Charlotte, NC, November 4-7.

\*Invited Lectures

- 2022 The role of bed morphology and channel curvature in the redistribution of flow momentum in a series of meander bends, Pearl River, USA. US Geological Survey, Community for Data Integration Geomorphology Focus Group, June, 28<sup>th</sup>, 2022.
- 2020 New conceptual models for neck cutoff dynamics: Capturing the variability in natural meandering rivers. Lecture given at University of Illinois, Urbana-Champaign, November, 6, 2020.
- 2016 Morphodynamics of neck cutoffs on the White River, Arkansas, Lecture given at The Water Institute of the Gulf, Baton Rouge, LA, October, 18, 2016.
- 2016 *Morphodynamics of meandering rivers: from bedforms to channel cutoff.* Seminar given at Department of Earth and Environmental Sciences, Tulane University, February 12, 2016.
- 2016 Universal hydraulic geometry relationships for channelized flows: new insights from reduced gravity environments. Seminar given at Department of Geology and Geophysics, Louisiana State University, January 22, 2016.
- 2015 Morphodynamic processes and planform evolution of a large, mixed bedrock-alluvial river: insights from the Wabash River. Seminar given at Department of Earth and Planetary Sciences, University of Tennessee – Knoxville, November 19, 2015.
- 2015 Universal hydraulic geometry relationships for channelized flows: new insights from reduced gravity environments. Seminar given at Department of Earth and Planetary Sciences, University of Tennessee Knoxville, November 19, 2015.

2015 Using high-resolution field measurements and coupled numerical models to investigate the morphodynamics of large meandering rivers. Seminar given at School of Renewable Natural Resources, Louisiana State University, April 1, 2015.

\*Workshops

- 2019 Multibeam in Rivers Summit, Portland, Oregon, March 4-7, 2019.
- 2017 Multibeam in Rivers Summit, Baton Rouge, Louisiana, March 15-17, 2017.
- 2015 Multibeam in Rivers Summit, Flagstaff, Arizona, March 25-27, 2015.
- 2014 South-Central Climate Science Center, Research Workshop, Dallas, Texas, November 20-21, 2014.
- 2014 US-China Wetland Workshop, Baton Rouge, Louisiana, November 10-14, 2014.

## Teaching

## \*LSU Courses Regularly Taught

GEOG-2051: Introduction to Physical Geography

GEOG-2080: Humans and the Environment

GEOG-4022: Geomorphology

GEOG-4025: Fluvial Geomorphology

GEOG-4041: Field Methods in Physical Geography

GEOG-7917: Advanced Fluvial Hydraulics

## \*Volunteer Teaching Activities

- 2018 present, Lead Researcher, American Geophysical Union-Thriving Earth Exchange, Performing hydrologic and hydraulic modeling work for the parish and town of Natchitoches, LA in coordination with the EPA and AGU to assess flood risk.
- 2017 Participant in Documentary about "Water Issues Around the Globe", Documentary led by University of California, Los Angeles. Assisted filmmakers and producers locate areas within southern Louisiana that were impacted by the August 2016 flood. Accompanied in the field and answered questions during an interview.
- 2016 Guest Lecture, "When it rains, it pours: Living with the aftermath of flooding", Louisiana State University, College of Humanities and Social Sciences, Residential College.
- 2016 present, Instructor, Louisiana Master Naturalist Association Program, River Dynamics Workshop, 1-2 days of Lecture and Fieldwork, offering citizens an opportunity to expand or sharpen their skills in natural history, with special focus on the diverse habitats of Louisiana
- 2016 present, Judge and Volunteer, Louisiana State Geography Bee, 1-day competition in Baton Rouge, Louisiana, winners advance to National Geographic – National Geography Bee.

\*Students Advising

<u>Chair</u>

<u>Ph.D.</u>

- Derek Richards, Geography, Fall 2015 Fall 2018, Dissertation: *Three-dimensional flow, morphologic change, and sediment deposition and distribution of actively evolving neck cutoffs location on the White River, Arkansas.*
- Taylor Rowley, Geography, Fall 2016 Fall 2020, Dissertation: *Field investigation of point bar dynamics and planform evolution in meandering rivers*.

Hampton Peele, Geography, Summer 2019 – present

Sumaiya Siddique, Geography, Fall 2019 – present

Dylan Shoemaker, Geography, Fall 2021 – present

Leo Guerrero, Geography, Fall 2022 - present

Tanzina Afrin, Geography, Summer 2018 – 2021

# <u>M.S.</u>

Tanzina Afrin, Civil Engineering, Spring 2016 – Spring 2018, Thesis: Investigation of morphologic changes in small coastal rivers during flood.
Kate Staebell, Geography, Fall 2021 – present
Marena Grondin, Geography, Fall 2015 – Spring 2018

### <u>Undergraduate</u>

Michael Vingiello, Geography, Spring 2015 – Fall 2015 Christal Adams, Geography, Spring 2017 – Fall 2017 Dwayne Hinton, Anthropology, Fall 2018 – Spring 2019 Isabel Rountree, Landscape Architecture, Fall 2018 – Spring 2019 Brady Parker, Geography, Spring 2019 – Fall 2019 Macy Linton, Geography, Fall 2019 – Spring 2020 Trung Tran, Geography, Spring 2020 – Spring 2021

### Committee Member:

### <u>Ph.D.</u>

Marie Thomas, Geology, Fall 2014 – Spring 2015 Ali Heidarizhaleh, Civil Engineering, Fall 2015 – present Mauricio Hooper, Civil Engineering, Fall 2015 – present Ron Rodi, Civil Engineering, Fall 2017 – present Leslie Valentine, Geology, Spring 2018 – present Sara Ates, Oceanography and Coastal Science, Spring 2018 – present Tate McAlpin, Civil Engineering, Spring 2018 – present Ian Floyd, Civil Engineering, Spring 2019 – present Felix Santiago-Collazo, Civil Engineering, Summer 2019 – present Cher Foster, Anthropology, Fall 2019 – present

### <u>M.S.</u>

Martial Morrison, Geology, Fall 2015 – Spring 2017 Christopher Turnipseed, Civil Engineering, Fall 2015 – Spring 2017 Ron Rodi, Civil Engineering, Fall 2015 – Spring 2017 Sara Ates, Geography, Fall 2016 – Fall 2017 Madison Newman, Anthropology, Spring 2016 – Spring 2017 Blake Odom, Geology, Fall 2016 – Fall 2018 David May, Civil Engineering, Spring 2017 – present Kobi Weaver, Anthropology, Spring 2017 – Spring 2018 Marissa Vara, Geography, Spring 2017 – Summer 2018 Rahian Jamil, Geography, Spring 2017 – Summer 2018 James Smith, Geology, Spring 2018 – Fall 2018 Kifavath Chowdhury, Oceanography and Coastal Science, Fall 2018 – present Kathleen Eubanks, Coastal and Ecological Engineering, Fall 2018 – present Maggie Furtner, Anthropology, Spring 2019 - present Josh Wolpert, Geology, Spring 2019 – present Matt Kratchovil, Geology, Spring 2020 – present

#### **Undergraduate**

Cameron Gernant, Geology, Fall 2017 – Spring 2018 Heather Rayneri, Geology, Spring 2019 – present

#### **Professional Service**

\*Manuscript reviewer Advances in Water Resources Catena Earth-Science Reviews Earth Surface Processes and Landforms Geology Geomorphology Journal of Geophysical Research – Earth Surface Journal of Hydraulic Research Journal of Hydrology Marine and Petroleum Geology Physical Geography **Remote Sensing** SoftwareX Water Water Resources Research

### \*Proposal Reviewer

National Science Foundation, Division of Earth Sciences Louisiana Sea Grant Louisiana State University, Office of Research and Economic Development

### \*Guest Editor

River Flow 2016 - Dynamics of Meander Cutoffs

### \*Academic Service

2019 – present	LSU Geography and Anthropology, Social Media Committee, Chair
2018 – present	LSU Geography and Anthropology, Student Awards Committee
2015 - 2017	LSU Proposal Reviewer, Office of Research and Economic Development, Faculty
	Research Grant Program
2015 – present	LSU Geography and Anthropology, Committee on Academic Planning and Program
	Evaluation (CAPPE), College of Humanities and Social Sciences (HSS)
2014 - 2015	LSU Geography and Anthropology, Speakers Committee – Friday Forum

### \*Professional Consulting

- 2018 current Project Participant, Evaluation of Flood Risk for the Parish and Town of Natchitoches, Louisiana. American Geophysical Union Thriving Earth Exchange, in coordination with US EPA. Tasks include performing hydraulic and hydrologic modeling.
- 2016 Consultant for US Army Corps of Engineers, St. Louis District. Panel participant in an Expert Opinion Elicitation (EOE) to determine the likelihood of channel cutoffs forming at critical locations along the Mississippi River between St. Louis and the Ohio River confluence. November, 13-18, 2016.

#### \*Professional Memberships and Service

Association of American Geographers (2010-Current)

-AAG Geomorphology Specialty Group: Chair (2022-current)

-AAG Geomorphology Specialty Group: Treasurer/Secretary (2021-2022)

-AAG Geomorphology Specialty Group: Awards Committee (2018-2021)

-AAG Geomorphology Specialty Group: Webmaster (2018-current)

American Geophysical Union (2010-Current)

European Geophysical Union (2017-Current) Geological Society of America (2005-Current) International Association for Hydro-Environmental Engineering and Research (2014-current) Society for American Archaeology (2018-current)

# **Graduate Advisors**

- M.S. J. Steven Kite (West Virginia University) Committee – Steve Kite, Bob Behling, Mike Strager
- Ph.D. Bruce Rhoads (University of Illinois) Committee – Bruce Rhoads, Jim Best, Marcelo Garcia, Gary Parker