Travis Swanson
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EDUCATION

Ph.D., Geological Sciences, 2015
The University of Texas at Austin, Jackson School of Geosciences
Dissertation: Bedform interaction and preservation
Advisor: Dr. David Mohrig
Co-Advisor: Dr. Gary Kocurek

M.S., Geological Sciences, 2010
The University of Texas at Austin, Jackson School of Geosciences
Thesis: Heat Transport and Tracing within the Hyporheic Zone of a Pool-Riffle-Pool Sequence
Advisor: Dr. Bayani Cardenas

B.S., Hydrogeology / Environmental Geology, 2007
The University of Texas at Austin, Jackson School of Geosciences

POST TERMINAL DEGREE PROFESSIONAL EXPERIENCE

Georgia Southern University, Department of Geology and Geography — 2019-Present
Assistant Professor — Statesboro, GA

Rice University, Department of Earth, Environmental and Planetary Sciences — 2016-2019
Shell Center for Sustainability Postdoctoral Research Fellow — Houston, TX

Shell Exploration and Production International Inc., Clastics research — 2015-2016
Clastics Research Geologist — Houston, TX

SELECTED GRANTS

American Chemical Society Petroleum Research Fund: "On the Origin of Stratigraphic Indicators of Terminal Sand Transport during Turbidity Currents". Role: PI. Award period: 2020-2022.

NSF RAPID "RAPID: Characterizing the Sedimentary Archive of the Longest Mississippi River Flood on Record, while Implementing a New Model for Inclusive Undergraduate Geoscience Research" Role: Co-PI. Original award period: 2019-2020; supplemental award period 2021-2022.

SCHOLARLY PUBLICATIONS (Google Scholar Profile)

*Undergraduate first author (2)

Preprints (not peer-reviewed)

Abeyta, A., Fernandes, A.M., Mahon, R.C., and Swanson, T., 2021, The True Cost of Field Education is a Barrier to Diversifying Geosciences (EarthArxiv Pre-Print).

Accepted Peer-reviewed Publications

19**.** * Palermo, R.V., Piliouras, A., **Swanson, T.E.**, Ashton, A.D., and Mohrig, D., 2021, The effects of storms and a transient sandy veneer on the interannual planform evolution of a low-relief coastal cliff and shore platform at Sargent Beach, Texas, USA: *Earth Surface Dynamics*, v. 9, p. 1111–1123, doi:10.5194/esurf-9-1111-2021.

18**.** Carlson, B.N., Nittrouer, J.A., **Swanson, T.E.**, Moodie, A.J., Dong, T.Y., Ma, H., Kineke, G.C., Pan, M., and Wang, Y., 2021, Impacts of Engineered Diversions and Natural Avulsions on Delta-Lobe Stability: *Geophysical Research Letters,* v. 48, p. e2021GL092438, doi:10.1029/2021GL092438.

17. Van Stan, J.T., Ponette-González, A.G., **Swanson, T.**, and Weathers, K.C., 2021, Throughfall and stemflow are major hydrologic highways for particulate traffic through tree canopies: *Frontiers in Ecology and the Environment*, v. 19, p. 404–410, doi:10.1002/fee.2360.

16. Odezulu, C.I., **Swanson, T**., and Anderson, J.B., 2021, Holocene progradation and retrogradation of the Central Texas Coast regulated by alongshore and cross-shore sediment flux variability: *The Depositional Record*, v. 7, p. 77–92, doi:https://doi.org/10.1002/dep2.130.
15. Fernandes, A.M., Abeyta, A., Mahon, R.C., Martindale, R., Bergmann, K.D., Jackson, C.A., Present, T.M., Reano, D., **Swanson, T.**, Butler, K., Brisson, S., Mohrig, D., and Johnson, C., 2020, Enriching Lives within Sedimentary Geology: Evaluating SEPM's Role in Diversity, Equity, and Inclusion, *The Sedimentary Record*, v. 18, p. 4-12.
14. Wu, C., Nittrouer, J.A., **Swanson, T.**, Ma, H., Barefoot, E., Best, J., and Allison, M., 2020, Dune-scale cross-strata across the fluvial-deltaic backwater regime: Preservation potential of an autogenic stratigraphic signature: *Geology*, v. 48, p. 1144–1148, doi:10.1130/G47601.1.
13. Cardenas, B.T., Mohrig, D., Goudge, T.A., Hughes, C.M., Levy, J.S., **Swanson, T.**, Mason, J., and Zhao, F., 2020, The anatomy of exhumed river-channel belts: Bedform to belt-scale river kinematics of the Ruby Ranch Member, Cretaceous Cedar Mountain Formation, Utah, USA: *Sedimentology*, v. 67, p. 3655–3682, doi:10.1111/sed.12765.
12. Van Stan, J.T., Allen, S.T., **Swanson, T.**, Skinner, M., and Gordon, D.A., 2020, Wrack and ruin: Legacy hydrologic effects of hurricane-deposited wrack on hardwood-hammock coastal islands: *Environmental Research Communications*, v. 2, p. 061001, doi:10.1088/2515-7620/ab9527.
11. Cardenas, B.T., **Swanson, T.**, Goudge, T.A., Wagner, R.W., and Mohrig, D., 2019, The Effect of Remote Sensing Resolution Limits on Aeolian Sandstone Measurements and the Reconstruction of Ancient Dune Fields on Mars: Numerical Experiment Using the Page Sandstone, Earth: *Journal of Geophysical Research: Planets*, v. 124, p. 3244–3256, doi:10.1029/2019JE006191.
10. Cardenas, B.T., Kocurek, G., Mohrig, D., **Swanson, T.**, Hughes, C.M., and Brothers, S.C., 2019, Preservation of Autogenic Processes and Allogenic Forcings in Set-Scale Aeolian Architecture II: The Scour-and-Fill Dominated Jurassic Page Sandstone, Arizona, U.S.A.: *Journal of Sedimentary Research*, v. 89, p. 741–760, doi:10.2110/jsr.2019.41.
9. **Swanson, T.**, Mohrig, D., Kocurek, G., Cardenas, B.T., and Wolinsky, M.A., 2019, Preservation of Autogenic Processes and Allogenic Forcings in Set-Scale Aeolian Architecture I: Numerical Experiments: *Journal of Sedimentary Research*, v. 89, p. 728–740, doi:10.2110/jsr.2019.42.
8. **Swanson, T.**, Mohrig, D., Kocurek, G., Perillo, M., and Venditti, J., 2018, Bedform spurs: a result of a trailing helical vortex wake: *Sedimentology*, v. 65, p. 191–208, doi:10.1111/sed.12383.
7. **Swanson, T.**, Mohrig, D., Kocurek, G., and Liang, M., 2017, A Surface Model for Aeolian Dune Topography: *Mathematical Geosciences*, v. 49, p. 635–655, doi:10.1007/s11004-016-9654-x.
6. **Swanson, T.**, Mohrig, D., and Kocurek, G., 2016, Aeolian dune sediment flux variability over an annual cycle of wind: *Sedimentology*, v. 63, p. 1753–1764, doi:10.1111/sed.12287.
5. Eastwood, E.N., Kocurek, G., Mohrig, D., and **Swanson, T.**, 2012, Methodology for reconstructing wind direction, wind speed and duration of wind events from aeolian cross-strata: *Journal of Geophysical Research: Earth Surface*, v. 117, doi:10.1029/2012JF002368.
4. Nowinski, J.D., Cardenas, M.B., Lightbody, A.F., **Swanson, T.E.**, and Sawyer, A.H., 2012, Hydraulic and thermal response of groundwater–surface water exchange to flooding in an experimental aquifer*: Journal of Hydrology*, v. 472–473, p. 184–192, doi:10.1016/j.jhydrol.2012.09.018.
3. * Gerecht, K.E., Cardenas, M.B., Guswa, A.J., Sawyer, A.H., Nowinski, J.D., and **Swanson, T.E.** Dynamics of hyporheic flow and heat transport across a bed-to-bank continuum in a large regulated river: *Water Resources Research*, v. 47, doi:10.1029/2010WR009794.
2. **Swanson, T.E.**, and Cardenas, M.B., 2011, Ex-Stream: A MATLAB program for calculating fluid flux through sediment–water interfaces based on steady and transient temperature profiles: *Computers & Geosciences*, v. 37, p. 1664–1669, doi:10.1016/j.cageo.2010.12.001.
1. **Swanson, T.E.**, and Cardenas, M.B., 2010, Diel heat transport within the hyporheic zone of a pool-riffle-pool sequence of a losing stream and evaluation of models for fluid flux estimation using heat: *Limnology and Oceanography*, v. 55, p. 1741–1754, doi:10.4319/lo.2010.55.4.1741.

SCHOLARLY PRESENTATIONS

*Undergraduate presenter (17), †invited presentation (7)

2021

62. Carlson, B., Pan, M., Nittrouer, J., **Swanson, T.**, Moodie, A., Dong, T. Y., Ma., H., Kineke, Gail, Antecedent channel bed elevation dictates stability of delta lobes after avulsions and diversions, New Orleans, Louisiana, American Geophysical Union Fall Meeting 2021. (abstract link)
61. *Campbell, J., **Swanson, T.**, Mahon, R., Exploring the influence of bed seepage on the formation of ripple cross-lamination during waning flow, Portland, Oregon, Geological Society of America Abstracts with Programs. Vol 53, No. 6, 2021 doi: 10.1130/abs/2021AM-368269 (abstract link)
60. *Lapham, L., Beech, M. C., Fernandes, A., Mahon, R., **Swanson, T.**, Analyzing organic carbon and particle size in sediment deposited by the mississippi river flood of 2019, Portland, Oregon, Geological Society of America Abstracts with Programs. Vol 53, No. 6, 2021 doi: 10.1130/abs/2021AM-368269 (abstract link)
59. *Duncan, M., **Swanson, T.**, Mahon, R., Fernandes, A., Abeyta, A., Directional sensitivity of cross-strata set thickness statistics, GSA CONNECTS 2021, Portland, Oregon, Geological Society of America Abstracts with Programs. Vol 53, No. 6, 2021 doi: 10.1130/abs/2021AM-368269 (abstract link)
58. †**Swanson, T.**, Duncan, M., Mahon, R., Fernandes, A. M., Abeyta, A., Cardenas, B., How "set" is set thickness? Using modern deposits and models to explore the variability of a common sedimentary structure. AAPG IMAGE 2021, Denver, Colorado. (program link)
57. Palermo, R., Ashton, A., Nepf, H. M., **Swanson, T.**, Barrier island stability and characteristic segmentation length scales explored through the competition between overwash and alongshore sediment transport, GSA Northeastern Section - 56th Annual Meeting 2021 (abstract link)

2020

56. Wilson, K., Mohrig, D., **Swanson, T.,** Kerans, C., Exploring Paleo-environmental Controls on Preserved Coastal Dune Morphology using an Aeolian Surface Model: Insights from The Bahamas and Turks and Caicos Islands, 2020 AGU Fall Meeting (abstract link)
55. Van Stan, J., Ponette-González, A., **Swanson, T.**, Weathers, K., Throughfall & Stemflow: Major Hydrologic Highways for Particulate Traffic through Tree Canopies, 2020 AGU Fall Meeting (abstract link)
54. *Beech, M. C., Mahon, R. C., Abeyta, A., Fernandes, A. M., and Swanson, T., ground penetrating radar analysis of sand bar deposits in the bonnet carre spillway from the 2019 flood, GSA 2020 Connects Online (abstract link)
53. *Duncan, M., **Swanson, T.**, Mahon, R. C., Fernandes, A. M., and Abeyta, A., investigating the sensitivity of cross-strata set thickness statistics to section alignment with flow direction, GSA 2020 Connects Online (abstract link)
52. Abeyta, A., Fernandes, A. M., Mahon, R. C., **Swanson, T.**, Lorenzo Trueba, J. and Singh, A., remote research opportunities expand reach and increase diversity - a need to expand and continue after covid 19, GSA 2020 Connects Online (abstract link)
51. *Lapham, L. N., Benally Jr., D. A., Redhouse, K. T., Fernandes, A. M., Mahon, Robert C.4, Abeyta, A. and **Swanson, T.**,Identifying the sources of organic carbon in sediment deposited by the Mississippi river flood of 2019, GSA 2020 Connects Online (abstract link)
50. *Russell, A. C., Fernandes, A. M., Abeyta, A., Sheikholeslami, H., Mahon, R. C. and **Swanson, T**., Tracking the lived experiences of undergraduate geoscientists engaged in research to assess the success of inclusive project design, GSA 2020 Connects Online (abstract link)
49. *Benally Jr., D. A., Lapham, L., Redhouse, K. T., Abeyta, A., Fernandes, A. M., Mahon, R. C., and **Swanson, T**., developing educational modules to quantify microplastic presence in rivers and sedimentary washes, GSA 2020 Connects Online (abstract link)
48. *Redhouse, E., Padilla, B. J., Mahon, R. C., Abeyta, A., Fernandes, A. M. and **Swanson, T**., Analyzing sediment accumulation from floodwater diversion, bonnet carre spillway, LA, GSA 2020 Connects Online (abstract link)
47. *Redhouse, K. T., Abeyta, A., Fernandes, A. M., Mahon, R. C., and **Swanson, T**., Analyzing how geologists interpret stratigraphy using eye tracking software, GSA 2020 Connects Online (abstract link)
46. *Miley, M., Abeyta, A., Fernandes, A. M., **Swanson, T**., and Mahon, R. C., A critique of delta restoration on the Mississippi River Delta - absence of people and community?, GSA 2020 Connects Online (abstract link)

Canceled scholarly presentations due to COVID-19 Pandemic

~~*Wilson, K., Mohrig, D., **Swanson, T.**, Kerans, C., Exploring Environmental Controls on Coastal Dune Morphology using an Aeolian Surface Model: Insights from The Bahamas and Turks and Caicos Islands, Unpresented Accepted Abstract, SEPM International Sedimentary Geosciences Congress, April 2020*~~

~~***Swanson, T.**, Mahon, R., Mohrig, D., Modeling sedimentary structures generated during terminal sand transport by turbidity currents. Unpresented Accepted Abstract, SEPM International Sedimentary Geosciences Congress, 2020*~~

2019

45. Carlson, B., Nittrouer, J., Moodie, A., Kineke, G., Ma., H., Minglong, P., **Swanson, T.**, The impacts of channel diversion characteristics on retreat rates of abandoned deltaic lobes, as informed by the Huanghe (Yellow River) delta of China. AGU Fall Meeting 2019 (abstract link)
44. Palermo, R., Ashton, A., **Swanson, T.**, Exploring the competition between runaway overwash and alongshore smoothing: barrier island stability and characteristic segmentation length scales. AGU Fall Meeting 2019 (abstract link)
43. **Swanson, T.,** Palermo, R., Lorenzo-Trueba, J., Ma, H., Nittrouer, J., Anderson, J., Chaotic barrier island behavior driven by steady sea-level rise and variable bay accommodation. AGU Fall Meeting 2019 (abstract link)
42. Wu, C., **Swanson, T.**, Ma., H., Barefoot, E., Best, J., Allison, M., Backwater control on the dimension and architecture of fluvial-deltaic stratigraphy: From cross bed to bar, 34th IAS Meeting of Sedimentology, Rome (conference program)
41. Wilson, K., Mohrig, D., **Swanson, T.**, Moore, P., Kerans, C., Investigating the mid-Holocene wind climate on San Salvador, The Bahamas using an Aeolian Surface Model, 34th IAS Meeting of Sedimentology, Rome (conference program)
40. **Swanson, T.**, Mohrig, D., Kocurek., G., Cardenas, B., Autogenic Processes and Environmental Forcings Recorded in Aeolian Stratigraphy II: Numerical Experiments, AAPG ACE 2019, San Antonio, TX (conference program)
39. Cardenas, B., Kocurek, G., Mohrig, D., **Swanson, T.,** Hughes, C., Brothers, S., Autogenic Processes and Environmental Forcings Recorded in Aeolian Stratigraphy I: the Jurassic Page Sandstone, Arizona, USA, AAPG ACE 2019, San Antonio, TX (conference program)
38. †**Swanson, T.,** Exploring the dynamic behavior of sedimentary systems. January 24 2019, Department of Geology and Geography, Georgia Southern University, Statesboro, GA.
37. †**Swanson, T.**, Lorenzo-Trueba, J., Anderson, J., Nittrouer, J., Exploring the morphodynamic response of coastal barriers to sea-level rise along the Texas Gulf Coast. January 14, 2019, Naval Research Lab, Stennis Space Center, MS

2018

36. **Swanson, T.**, Palermo, R., Anderson, J., Nittrouer, J., Exploring the influence of bay morphology during coastal barrier retreat. AGU Fall Meeting 2018 (poster PDF and videos link)
35. Cardenas, B. T., Mohrig, D., Goudge, T., Hughes C., Levy, J., **Swanson, T.**, and Mason, J., Anatomy of exhumed river channel-belts. AGU Fall Meeting 2018 (abstract link)
34. Palermo, R., Ashton, A., **Swanson, T.**, Lorenzo-Trueba, J., Exploring alongshore-coupled barrier island evolution: How does overwash affect developed and undeveloped barrier evolution and stability? AGU Fall Meeting 2018 (abstract link)
33. Wu, C., Nittrouer, J., **Swanson, T.**, Dune morphodynamics and forward models of set-scale architecture within the backwater zone of the Mississippi River, USA. AGU Fall Meeting 2018 (abstract link)
32. †**Swanson, T.,** Exploring the dynamic behavior of sedimentary systems. October 9 2018, Department of Geological and Environmental Sciences, Appalachian State University, Boone, NC.
31. †**Swanson, T.**, Lorenzo-Trueba, J., Anderson, J., Nittrouer, J., Exploring the morphodynamic response of coastal barriers to sea-level rise along the Texas Gulf Coast. The Van Tuyl Lecture series at the Colorado School of Mines, September 20 2018, Golden, CO. (seminar schedule, presentation pdf)
30. Odezulu, C. I., **Swanson, T.**, Anderson, J. B., Effects of Highstand Mud Accumulation on the Evolution of the Central Texas Coast. AAPG 2018 Annual Convention and Exhibition. Salt Lake City, UT (abstract link)
29. †**Swanson, T**., Lorenzo-Trueba, J., Anderson, J., Nittrouer, J., Exploring the morphodynamic response of coastal barriers to sea-level rise along the Texas Gulf Coast. John Fest 2018: A Celebration of John Anderson. Rice University, Houston, TX. (program pdf, presentation pdf)
28. Cardenas, B. T., Kocurek, G., Mohrig, D., **Swanson, T.**, Hughes, C. M., Brothers, S. C., Goudge. T. A., Ancient environmental forcings recorded in aeolian stratigraphy: an Earth analog to aeolian strata on Mars. 49th Lunar and Planetary Science Conference 2018 (LPI Contrib. No. 2083) (pdf link)

27. Cardenas, B. T., Goudge, T.A., Hughes, C.M., Mohrig, D., Mason, J., **Swanson, T.**, Levy, J.S., Testing the preservation of river channel properties in Earth analogs to martian fluvial sinuous ridges. 49th Lunar and Planetary Science Conference 2018 (LPI Contrib. No. 2083) (pdf link)
26. **Swanson, T.**, Lorenzo-Trueba, J., Nittrouer, J., Anderson, J., 2018, Exploring the morphodynamic response of coastal barriers to sea-level rise along the Texas Gulf Coast. Industry-Rice Earth Science Symposium (IRESS), Rice University, Houston, Texas (poster pdf link)

2017

25. **Swanson, T.**, Lorenzo-Trueba, J., Anarde, K., Odezulu, C., Anderson, J., Nittrouer, J., 2017, Exploring the morphodynamic response of coastal barriers to sea-level rise along the Texas Gulf Coast. Oral presentation at AGU Fall meeting 2017. New Orleans, LA (abstract link , presentation pdf)
24. Cardenas, B., Kocurek, G., Mohrig, D., **Swanson, T**., 2017, Coupling Aeolian Stratigraphic Architecture to Paleo-Boundary Conditions: The Scour-Fill Dominated Jurassic Page Sandstone. Poster presented at AGU Fall meeting 2017. New Orleans, LA (abstract link)
23. **Swanson, T.**, Katherine, A., Chris, O., John, S., Nittrouer, J., Anderson, J., 2017, Connecting morphodynamic depth of closure to shoreline change along the Texas coast. Industry-Rice Earth Science Symposium (IRESS), Rice University, Houston, Texas, February 23-24, 2017. (poster pdf link)

2016

22. *Palermo, R., Mohrig, D., Piliouras, A., and **Swanson, T.**, 2016, Spatial and Temporal Variability in Erosion Generating a Sea Cliff and Wave-Cut Platform that make up the Holocene Transgressive Ravinement Surface at Sargent Beach, Texas, USA: 32th IAS Meeting of Sedimentology, Marrakech, Morocco, May 23 – 25, 2016. (abstract link)
21. *Palermo, R., Mohrig, D., Piliouras, A., and **Swanson, T.**, 2016, Variability in retreat rates and roughness of a sea-cliff at Sargent Beach, Texas: Abstract EP23A-0954, presented at AGU Fall Meeting. San Francisco, CA (abstract link)

2015

20. *Palermo, R., Mohrig, D., Piliouras, A., and **Swanson, T.**, 2015, Rates and Mechanisms of Erosion Generating a Wave-Cut Platform at Sargent Beach, Texas, USA, Abstract EP21D-07 presented at AGU 2015 Fall Meeting, San Francisco, CA (abstract link)

2014

19. †**Swanson, T.**, D. Mohrig, G. Kocurek, M. Wolinsky, and C. Hern, Surface-based aeolian stratigraphy, Invited oral presentation at AGU 2014 Fall Meeting. San Francisco, CA (abstract link)

2013

18. Zamora, P. B., M. B. Cardenas, **T. Swanson**, D. Tait, I. R. Santos, and D. Erler, 2013, Thermal dynamics of intertidal sediment affected by diffuse groundwater discharge, ASLO Aquatic Sciences Meeting, New Orleans, Louisiana (abstract link)
17. Cardenas, M. B., K. E. Gerecht*, M. S. Markowski*, J. D. Nowinski, A. H. Sawyer, **T. E. Swanson**, and A. J. Guswa, 2013, How the pulse of a river affects its liver, ASLO Aquatic Sciences Meeting, New Orleans, Louisiana. (abstract link)

2012

16. **Swanson, T.**, Mohrig, D., Kocurek, G., Pedersen, A., 2012, Geometric Aeolian dune crest migration model. Poster presented at 2012 AGU Fall Meeting. San Francisco, CA. (abstract link)
15. Cardenas, M. B., A. H. Sawyer, K. E. Gerecht, M. S. Markowski*, B. A. Francis, L. K. Francis***, T. E. Swanson**, J. D. Nowinski, and A. J. Guswa, 2012, Groundwater-surface water interactions in a regulated river, ASLO Summer Meeting, Lake Biwa, Japan. (abstract link)

2011

14. **Swanson T.** and D. Mohrig, 2011, Incidence angle dependent sediment routing: A proposed mechanism for fluvial bedform interactions. Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 374 (abstract link)
13. Befus, K. M., M. B. Cardenas, **T. Swanson**, D. V. Erler, I. R. Santos, D. R. Tait, 2011, Groundwater flow and heat transport dynamics across an intertidal zone, AGU Fall Meeting, San Francisco, California. (abstract link)
12. Befus, K. M., M. B. Cardenas, **T. Swanson**, D. V. Erler, I. R. Santos, and D. Tait, Fluid and heatfluxes across the intertidal zone, Water Resource Sustainability Issues on Tropical Islands, Honolulu, Hawaii, November, 2011. (conference program pdf)
11. Befus, K.M., M.B. Cardenas, **T. Swanson**, D. Erler, I. Santos; D. Tait. Fluid and heat fluxes across the intertidal zone. Water Resource Sustainability Issues on Tropical Islands Conference, 2011. (conference program pdf)

2010

10. *Gerecht, K., M. B. Cardenas, A. J. Guswa, A. H. Sawyer, **T. Swanson**, J. D. Nowinski, Hyporheic flow and heat transport within a bed-to-bank transect of a large regulated river: Colorado River, Austin, TX, AGU Fall Meeting, San Francisco, California, December, 2010. (abstract link)
9. Cardenas, M. B., P. L. Cook, K. E. Gerecht*, H. S. Jiang, M. S. Markowski*, J. D. Nowinski, A. H. Sawyer, **T. E. Swanson**, J. L. Wilson, Fluid dynamic interactions near sediment-water interfaces in aquatic and coastal environments, ASLO Aquatic Sciences Meeting, June 2010. (abstract link)

2009

8. **Swanson, T.**, M. B. Cardenas, A. H. Sawyer, and J. D. Nowinski, 2009, Evaluation of models for heat tracing in streambeds (hyporheic zones) along a pool-riffle-pool sequence: Jaramillo Creek, Valles Caldera National Preserve, NM, GSA Abstracts with Programs, Portland, Oregon. (abstract link, poster pdf)
7. Cardenas, M. B., K. E. Gerecht, M. Markowski, J. D. Nowinski. A. H. Sawyer, B. A. Stanley, and **T. E. Swanson**, 2009, The familiar as a frontier: persistent transient stream-groundwater interactions, GSA Abstracts with Programs, Portland, Oregon. (abstract link)
6. Nowinski, J., Cardenas, M., **Swanson, T.**, Lightbody, A., 2009, Response of intra-meander hyporheic exchange to flooding and permeability change in a losing artificial stream. GSA Abstracts with Programs, Portland, Oregon. (abstract link)
5. *Gerecht, K., Markowski, M., Nowinski, J., Sawyer, A., **Swanson, T.**, Cardenas, M., 2009, Fluid flow and heat transport within the hyporheic and riparian zones of a regulated river: Colorado River, Austin, TX. GSA Abstracts with Programs, Portland, Oregon. (abstract link)
4. Chaudhary, K., Sharp, J M., Holt, J.2, Al-Johar, M., **Swanson, T.**, Greenbaum, J., Nowinski, J., Smith, V., Brothers, T., 2009, Multiple geophysical methods for identifying and mapping caves in the recharge zone of the Edwards aquifer, Texas. Poster presented at GSA South-Central Section - 43rd Annual Meeting. Geological Society of America Abstracts with Programs, Vol. 41, No. 2, p. 8 (abstract link)

2008

3**. Swanson, T.**, Nowinski J., Sawyer A., Marr J., Lightbody, A., Cardenas B, 2008, 3D Surface Water – Groundwater interactions in a large experimental channel. GSA Abstracts with Programs, Houston, Texas. (abstract link)
2. Stanley, B., **Swanson T.,** Cardenas, B. Effects of Dam-Induced Daily River Stage Fluctuations and Sedimentary Architecture of a Large Gravel Bar on Groundwater Flow Paths, 2008, GSA Abstracts with Programs, Houston, Texas. (abstract link)
1. *Harlow, J., Stanley, B., Cox, S., Vyas, R., Linhoff, B., Sawyer, A., **Swanson, T.**, Groffman, A., Rearick, M., Cardenas, B, 2008, Groundwater - Surface water interactions and geochemistry along a high-sinuosity meander in a mountain meadow. GSA Abstracts with Programs, Houston, Texas. (abstract link)

PEER REVIEWS (Link: Publons Profile)

Geophysical Research Letters
Water Resources Research
Aeolian Research
Journal of Geophysical Research - Earth Surface
Journal of Sedimentary Research
Earth Surface Processes and Landforms
Sedimentology
Island Arc

STUDENT MENTEES

Georgia Southern University

Meredith Duncan – Anisotropy of cross-stratification statistics
Sean Calhoun – Ripple to lower stage plane bed phase transition (Withdrew from university)
Jalen Campbell – Ripple to lower stage plane bed phase transition
Marcus Sanders – Program control of a micro annular flume
Danielle Perkins – Dune height variability across the fluvial to tidal transition in the Ogeechee River, GA – Institute of Coastal Plain Science 2021 Summer REU program

External Advising

Kathleen Wilson, PhD Candidate (Expected 2022), UT Austin (External committee member)

POST TERMINAL DEGREE COURSE INSTRUCTION EXPERIENCE

Georgia Southern University

Stratigraphy and Sedimentology
Stratigraphy and Sedimentology Lab
Introduction to Research (co-instructor)
Environmental Geology
Environmental Geology Lab

Rice University

Siliciclastic Depositional Systems (co-instructor)