

John B. Shaw

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Education

- Ph. D. 2013 Geosciences, University of Texas at Austin, Austin, TX
Dissertation: “The Kinematics of Distributary Channels on the Wax Lake Delta,
Coastal Louisiana, USA”
Advised by David Mohrig
- B.A. 2007 Geology and Applied Mathematics, Oberlin College, Oberlin, OH

Professional Experience

- 2014- Assistant Professor, University of Arkansas
2013-2016 NSF post-doctoral fellow, University of Wyoming
2008-2013 Research and Teaching Assistant, University of Texas at Austin
2006-2008 Research Associate, Saint Anthony Falls Laboratory, University of Minnesota
2007 Sediment Laboratory Technician, Minnesota Geological Survey, Minneapolis, MN

Research Interests

The morphodynamics and evolution of modern and ancient constructional landscapes; coastal sustainability; the effects of hurricanes on sandy coastlines; direct measurement and remote sensing of shallow coastal landforms

Awards and Honors

- DOE Early Career Research Award, 2016-2021
NSF Post-doctoral Fellowship, 2013-2016
AGU Best Student Paper Award, 2011
SEPM Research Grant, 2011
Chevron Award, UT-Austin, 2011
DeFord Field Scholarship, UT-Austin 2010, 2011
BP Entrance Fellowship to UT Austin, 2008

Publications

(served as mentor for underlined names)

- Shaw, J. B.**, F. Ayoub, C. E. Jones, M. P. Lamb, B. Holt, R. Wayne Wagner, **T.S. Coffey**, J. Austin Chadwick, and D. Mohrig (2016), Airborne Radar Imaging of Subaqueous Channel Evolution in Wax Lake Delta, Louisiana, USA, *Geophys. Res. Lett.*, 2016GL068770, doi:10.1002/2016GL068770.
- Shaw, J. B.**, D. Mohrig, and R. W. Wagner (2016), Flow patterns and morphology of a prograding river delta, *J. Geophys. Res. Earth Surf.*, 2015JF003570, doi:10.1002/2015JF003570.
- Mahon, R. C., **J. B. Shaw**, K. R. Barnhart, D. E. J. Hobley, and B. McElroy (2015), Quantifying the stratigraphic completeness of delta shoreline trajectories, *J. Geophys. Res. Earth Surf.*, 2014JF003298, doi:10.1002/2014JF003298.
- Shaw, J. B.**, Y. You, D. Mohrig, and G. Kocurek (2015), Tracking hurricane-generated storm surge with washover fan stratigraphy, *Geology*, 43(2), 127–130, doi:10.1130/G36460.1.
- Shaw, J.B.**, D. Mohrig, (2014), The importance of erosion in distributary channel network growth, Wax Lake Delta, Louisiana, USA, *Geology*, 42, 31-34, doi: 10.1130/G34751.1
- Shaw, J. B.**, D. Mohrig, and **S. K. Whitman** (2013), The Morphology and Evolution of Channels on the Wax Lake Delta, *J. Geophys. Res.*, 118, 1–22, doi:10.1002/jgrf.20123.
- Nittrouer, J. A., **J. Shaw**, M. P. Lamb, and D. Mohrig (2012), Spatial and temporal trends for water-flow velocity and bed-material transport in the lower Mississippi River, *Geol Soc Am Bull*, 124, 400–414, doi:10.1130/B30497.1.
- Lamb, M. P., J. A. Nittrouer, D. Mohrig, and **J. Shaw** (2012), Backwater and river plume controls on scour upstream of river mouths: Implications for fluvio-deltaic morphodynamics, *J. Geophys. Res.*, 117(F1), F01002, doi:10.1029/2011JF002079.
- Edmonds, D. A., **J. B. Shaw**, and D. Mohrig (2011), Topset-dominated deltas: A new model for river delta stratigraphy, *Geology*, 39(12), 1175–1178, doi:10.1130/G32358.1.
- Viparelli, E., **J. Shaw**, A. Bevington, E. Meselhe, G. Holm, D. Mohrig, R. Twilley, and G. Parker (2011), Inundation Model As an Aid for Predicting Ecological Succession on Newly-Created Deltaic Land Associated with Mississippi River Diversions: Application to the Wax Lake Delta, in *World Environmental and Water Resources Congress 2011*, pp. 2340–2349, American Society of Civil Engineers.
- Lamb, M. P., B. McElroy, B. Kopriva, **J. Shaw**, and D. Mohrig (2010), Linking river-flood dynamics to hyperpycnal-plume deposits: Experiments, theory, and geological implications, *Geol. Soc. Am. Bull.*, 122(9-10), 1389–1400.
- Shaw, J. B.**, M. A. Wolinsky, C. Paola, and V. R. Voller (2008), An image-based method for shoreline mapping on complex coasts, *Geophys Res Lett*, 35, L12405.

Invited Presentations

- 2016:** Texas A&M Geosciences Seminar; CSDMS-SEN Meeting, Boulder, CO; ONE-Delta Workshop, Vanderbilt University
- 2015:** International Deltas Meeting, Rice University
- 2014:** Tulane University, Earth and Environmental Sciences Seminar; International Deltas Meeting Istomino, Russia; Cal. State-Fullerton Geology Seminar; Utrecht University Geology Seminar; Norwegian Technical University – Trondheim Geology Seminar
- 2013:** Hamline University, Math Department Seminar

2012: Geological Society of America Annual Meeting, Charlotte, NC; UT-Austin Geosciences Seminar
2011: National Center for Earth Surface Dynamics Web Seminar; University of Texas Institute for Geophysics

Courses Taught

GEOS 4223: *Stratigraphy and Sedimentation*, Fall 2014, Fall 2015, Fall 2016

GEOS 3413: *Sedimentary Rocks and Fossils*, Spring 2016

GEOS 560V: *Dynamics of Sediment Transport*, Fall 2015

GEOS 436V: *Spring Break Field Course to the Florida Pan-handle*, Spring 2016 (with M. Covington)

Field Trips to the Wax Lake Delta, coastal Louisiana

April 2010, trip co-leader for U. of Washington Oceanography seminar
(with Charles Nittrouer, David Mohrig, and Jeffrey Nittrouer)

November 2010, trip co-leader for RioMAR industrial consortium
(with David Mohrig)

Selected Professional Service

Review Panelist for Texas Sea Grant (2015)

Reviewer for 7 grant proposals from National Science Foundation and American Chemical Society

Reviewer for 18 scientific manuscripts published in 9 international journals since 2014

Mentor for college freshman through GeoFORCE's Students Raising Students program, UT-Austin
Tech Sessions outstanding speaker committee, UT-Austin, Fall 2008.

Student Research Advised

Undergraduate Students: Spencer Whitman (UT Honors, 2009-2010), Josie Brunick (UA, 2014-2015),
Justin Estep (2014-2015), Thomas Coffey (2015), Kaitlyn Hurlbut (Honors, 2015- present),
Grayson Lamb (2015-present)

Masters Students: Gordon McCain III (2014-2016), Kyle Spencer (2014-2016), Sean Parry (2015-
present), Tyler Gruenbacher (2015-present), Thomas Coffey (2016-present), Amanda Whaling
(2016-present)

Ph.D. Students as primary adviser: Kelly Sanks (2016-present)

Ph.D. student committees: Max Cooper (2015-present)