

Robert Clyde Mahon, PhD, PG

Curriculum Vitae

Assistant Professor

University of New Orleans

Departments of Earth and Environmental Sciences & Civil and Environmental Engineering

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1. EDUCATION

2012-2017 *Ph.D., Geology*, University of Wyoming

2010-2012 *M.S., Geology*, Idaho State University

2005-2009 *B.S., Geology*, University of Montana

2. POSITIONS HELD

2018-present *Assistant Professor*, University of New Orleans, Departments of Earth and Environmental Sciences & Civil and Environmental Engineering,

Faculty affiliate: Pontchartrain Institute for Environmental Science

Gulf States Center for Environmental Informatics

2017-2018 *National Center for Earth-Surface Dynamics NCED2 Synthesis Postdoctoral Researcher*, University of Arkansas, Department of Geosciences

2016 *Lab Coordinator*, Physical Geology, University of Wyoming Department of Geology and Geophysics.

2014-2015 *Intern*, ConocoPhillips Geoscience and Reservoir Engineering Technology, Stratigraphy and Sedimentology group

2008-2010 *Well-site Geologic Consultant*, Sunburst Consulting Inc., Billings, MT

2008 *Intern*, Idaho National Laboratory Analytical Chemistry Lab

3. PUBLICATIONS

Peer reviewed:

Ali, H., Sheffield, S.L., Bauer, J.E., Caballero-Gill, R.P., Gasparini, N., Libarkin, J., Gonzales, K.K., Willenbring, J., Amir-Lin, E., Cisneros, J., Desai, D., Erwin, M., Gallant, E., Gomez, K.J., Keisling, B.A., **Mahon, R.C.**, Marín-Spiotta, E., Welcome, L. [2021], An actionable anti-racism plan for geoscience organizations. *Nature Communications*, 12(3794) doi: 10.1038/s41467-021-23936-w

Fernandes, A.M., Abeyta, A., **Mahon, R.C.**, Martindale, R., Bergman, K.D., Jackson, C., Present, T.M., Swanson, T., Reano, D., Butler, K., Brisson, S., Mohrig, D., Johnson, C. [2020], "Enriching Lives within Sedimentary Geology": Evaluating SEPM's Role in Diversity, Equity, and Inclusion: *The Sedimentary Record*, 18(3), 4-12, <https://www.sepm.org/files/183article.ly3dwq3vr5refg6g.pdf>

Ashley, T.C., **Mahon, R.C.**, Naqshband, S., Leary, K.P., McElroy, B. [2020], Probability distributions of particle hop distance and travel time over equilibrium mobile bedforms: *Journal of Geophysical Research: Earth Surface*, v. 125, no. 7, ESSOAR Preprint doi: 10.1002/essoar.10502734.1, article doi: 10.1029/2020JF005647

Ke, W.-T., Shaw, J.B., **Mahon, R.C.**, Cathcart, C.A. [2019], Distributary channel networks as moving boundaries: Causes and morphokinematic effects: *Journal of Geophysical Research: Earth Surface*, 124(7), 1878-1898, doi: 10.1029/2019JF005084.

- Mahon, R.C.** and McElroy, B. [2018], Indirect estimation of bedload flux from modern sand-bed rivers and ancient fluvial strata: *Geology*, 46, 579-582, doi:10.1130/G40161.1.
- Naqshband, S., McElroy, B., **Mahon, R.C.** [2017], Validating a universal model of particle transport lengths with laboratory measurements of suspended grain motions: *Water Resources Research*, v. 53, no. 5, p. 4106-4123, doi:10.1002/2016WR020024.
- Mahon, R.C.**, Shaw, J.B., Barnhart, K.R., Hobley, D.E.J., McElroy, B. [2015], Quantifying the stratigraphic completeness of delta shoreline trajectories: *Journal of Geophysical Research: Earth Surface*, v. 120, doi:10.1002/2014JF003298.
- Link, P.K., **Mahon, R.C.**, Beranek, L.P., Campbell-Stone, E.A., Lynds, R.S. [2014], Detrital zircon provenance of Pennsylvanian and Permian sandstones: Wyoming Craton, Uinta Mountains and Wood River Basin: *Rocky Mountain Geology*, v. 49, no. 2, p. 115-136, doi:10.2113/gsrocky.49.2.137.
- Mahon, R.C.**, Dehler, C.M., Link, P.K., Karlstrom, K.E., Gehrels, G.E. [2014], Geochronologic and stratigraphic constraints on the Mesoproterozoic and Neoproterozoic Pahrump Group, Death Valley, California: A record of the assembly, stability and breakup of Rodinia: *Geological Society of America Bulletin*, v. 126, no. 5-6, p. 652-664, doi:10.1130/B30956.1.
- Mahon, R.C.**, Dehler, C.M., Karlstrom, K.E., Link, P.K., Gehrels, G.E. [2014], Detrital zircon provenance and paleogeography of the Pahrump Group and overlying strata, Death Valley, California: *Precambrian Research*, v. 251, p. 102-117, doi: 10.1016/j.precamres.2014.06.005.
- In review, revision, or in preparation and nearly submitted:**
- Draft manuscripts available upon request*
- Abeyta, A., Fernandes, A.M., **Mahon, R.C.**, Swanson, T. [*in revision*], The true cost of field education is a barrier to diversifying geosciences, EarthArXiv Preprint doi:10.31223/X5BG70
- Mahon, R.C.**, Ganti, V., Ashley, T.C., McElroy, B. [*in preparation*], Stochastic model for the development of fluvial bedform cross set bounding surfaces.
- Mahon, R.C.** and Shaw, J.B. [*in revision*], A faithful record of channel mouth bifurcation angles in river delta stratigraphy on Earth and Mars: *In revision for resubmission to Geology*. EarthArXiv Preprint doi: 10.17605/OSF.IO/9R64A
- Mahon, R.C.**, Ganti, V., Naqshband, S., Ashley, T.C., Shaw, J.B., McElroy, B. [*in revision*], Semi-empirical model for curvature of fluvial bed form cross set bounding surfaces.

Refereed theses:

- Mahon, R.C.** [2017], Quantitative controls on stratal geometries in clastic sedimentary systems: University of Wyoming Dissertation, 148 p.
- Mahon, R.C.** [2012], Detrital zircon provenance, age constraints and revised stratigraphy of the Mesoproterozoic and Neoproterozoic Pahrump Group, Death Valley region, California and Geology of the Saddle Peak Hills 7.5' quadrangle, San Bernardino County, California: Idaho State University Thesis, 194 p., 1 color plate.

4. INVITED LECTURES

- LSU Department of Geology and Geophysics Colloquium, May 6, 2022
- University of Missouri Department of Geological Sciences Colloquium, April 22, 2022
- Kent State University Department of Geology Palmer Colloquium Series, March 18, 2022
- AGU EPSP Connects Seminar, September 20, 2021 (YouTube recording <https://youtu.be/fDVmE14npZY>).
- Simon Fraser University, Department of Earth Sciences, ARISE Group Seminar, February 10, 2021.
- New Orleans Geological Society, December 7, 2020.
- Utah State University, Department of Geology, Logan, UT, April 8, 2020.
- University of New Orleans, Department of Computer Sciences, October 25, 2019.
- Tulane University, Department of Earth and Environmental Sciences Seminar Series, April 28, 2018.
- U.S. Naval Research Laboratory, Sediment Transport Group, Stennis Space Center, MS, October 31, 2018.
- University of New Orleans, Department of Earth and Environmental Science Colloquium, New Orleans, LA, May 15, 2018.
- California State University, Bakersfield, Department of Geological Science Colloquium, Bakersfield, CA, February 23, 2018.

University of Arkansas, Department of Geoscience Colloquium, Fayetteville, AR, October 20, 2017.
Utah State University, Department of Geology Distinguished Lecture Series, Logan, UT, October 7, 2016.
Idaho State University, Department of Geosciences Colloquium, Pocatello, ID, October 19, 2016.

5. HONORS and AWARDS

- 2020 *Presidential Citation, American Geophysical Union.* Awarded to diverse team for creation of the [Call for a Robust Anti-Racism Plan for The Geosciences](#), a petition that has garnered over 25,000 signatures. [Citation Announcement](#)
- 2014 *SEPM Student Poster Award*, GSA Annual Meeting, Vancouver, BC, Canada
- 2013 *First Place USGS/GSA Best Student Geologic Map Competition*, GSA Annual Meeting, Denver, CO
- 2007 *Second Place Poster Presentation*, Rocky Mountain Geodays Conference, Missoula, MT

6. GRANTS and CONTRACTS

Funded (\$1.2M total, \$915k to UNO, \$614k to RCM as PI/co-PI share, 62% success rate at UNO):

- 2021-2024: *3-Dimensional flow and sediment transport dynamics over river dunes*, Louisiana Board of Regents Support Fund, Research Competitiveness Subprogram, contract # LEQSF(2021-24)-RD-A-25 (\$105k). PI R. Mahon
- 2021-2024: *RII Track-4: 3-Dimensional flow and sediment transport dynamics over river dunes*, National Science Foundation EPSCoR Research Fellows program, NSF proposal # 2032910 (\$224k). PI R. Mahon
- 2020-2021: *MRI: Acquisition of an inductively coupled plasma triple quadrupole mass spectrometer instrument for southeast Louisiana*, NSF proposal # 2018417 (\$351k, \$139k institutional cost-share). PI P. Zito, Co-PIs R. Mahon, V. Poltavets, D. Podgorski, M. Tarr.
- 2021-2022: *Covid Supplemental, RAPID: Characterizing the Sedimentary Archive of the Longest Mississippi River Flood on Record, while Implementing a New Model for Inclusive Undergraduate Geoscience Research*, (\$101k total, \$26k to UNO), NSF Award # 2005439. PI A. Fernandes, co-PIs A. Abeyta, R. Mahon, T. Swanson.
- 2019-2020: *RAPID: Characterizing the Sedimentary Archive of the Longest Mississippi River Flood on Record, while Implementing a New Model for Inclusive Undergraduate Geoscience Research*, (\$200k total, \$23k to UNO), NSF Award # 2005439. PI A. Fernandes, co-PIs A. Abeyta, R. Mahon, T. Swanson.
- 2019-2023: *Controls on grain-size fining and sediment deposition across delta fronts*, American Chemical Society Petroleum Research Fund, Doctoral New Investigator program PRF# 60151-DNI8 (\$110k). PI R. Mahon.
- 2019-2021: *Bridging scales in sediment resuspension modeling*. US Naval Research Lab subcontract (\$76k).
- 2017-2018: *Geometry and dynamics of delta channel bifurcations and their stratigraphic records*, National Center for Earth Surface Dynamics NCED2 Synthesis post-doctoral research fellowship (\$50k). PI. R. Mahon.

Submitted and pending:

- 2022: *Reimagining the Pontchartrain Institute for Environmental Sciences to meet evolving environmental challenges facing Louisiana, the Gulf Coast region, and beyond* (\$568k), Louisiana Board of Regents Support Fund, Departmental Enhancement, Comprehensive Enhancement subprogram, PI R. Mahon, co-PIs M. Kulp, M. Foster-Martinez, M. O'Connell, K. Boyle, T.E. Cox, D. Podgorski, S. Bastola, G. Cothren

Unfunded submissions:

- 2022: *Collaborative Research: Disciplinary Improvements: Community experimentation - building an open, accessible future in hydraulics, geomorphology, ecohydraulics, and sedimentology*, National Science Foundation Findable Accessible Interoperable Reusable Open Science Research Coordination Networks program. PI R. Mahon, co-PIs B. Johnson, R. Tinoco, E. Yager, co-I J. Cisneros (\$1.45M total, \$338k to UNO), submitted April 2022.
- 2019: *RII Track-4: 3-Dimensional flow and sediment transport dynamics over river dunes*, National Science Foundation EPSCoR Research Fellows program. Resubmitted 2020, funded.
- 2018, 2019: *3-Dimensional flow and sediment transport dynamics over river dunes*, Louisiana Board of Regents Support Fund, Research Competitiveness Subprogram. Resubmitted 2019, declined. Resubmitted 2020, funded.

7. STUDENTS ADVISED

Postdoctoral researchers

Catherine Russell, 2022-2023 Fulbright-Lloyds Visiting Scholar

Graduate students as primary advisor

Micheal Amos, M.S., incomplete, US Naval Research Enterprise Internship Program recipient

Sarah Noel, M.S., EES, 2021, PhD student at University of Alaska, Fairbanks

Malcolm Cross, M.S., EES, 2021, US Naval Research Enterprise Internship Program recipient

Graduate students as committee member

Sunni Schoenouer, Ph.D., Physics, 2023 expected

Rahul John, Ph.D., Civil Engineering, 2023 expected

Clay Worley, M.S., Civil Engineering, 2022 expected

Brett Henry, M.S., EES, 2022 expected

Jessica Villers, M.S., EES, 2022

Jazmin Carter, M.S., Civil Engineering, 2022

Joseph Hankerson, M.S., EES, 2022

Riana Grout, M.S., EES, 2021

Graduate students as external committee member

Nageen Farooq, Ph.D., Earth Sciences, Kent State University, 2024 expected

Ryan Brooks, M.S., Geosciences, Auburn University, 2023 expected

Undergraduate Researchers

Mayson Wagner, A.S., EES Delgado University, in progress

Giancarlo Portocarro, B.S., EES, in progress

Jazmina Carey, B.S., EES, now BIO in progress, COSURP/Tolmas scholar, Federal work study

Victoria Sanchez, B.S., EES, in progress

Samantha Becnel, B.S., EES, in progress, PURSUE scholar

Megan Killey, B.S., EES, 2021

Miles Beach, B.S., EES, 2020, now M.S. student, University of Memphis.

Madeline Cross, B.S., EES, 2020.

Leah Tevis, B.S., EES, COSURP/Tolmas scholar, 2020, now M.S. student at NM Tech as NSF GRFP

8. SERVICE

Service to UNO:

11/2-3/2022 New Harmony High School coastal restoration lab visit co-host (~50 grade 11 students)

9/24/2022 Get to Know UNO EES Department Tour Liason

2022-present *Councilor*, UNO Research Council

2021-present *Committee Member*, Minding the GAP: gender issues in STEM committee

2021 *Judge*, InnovateUNO Student Research Symposium

2021 *Mentor* CoSURP/Tolmas Undergraduate Research Scholar Samantha Becnel

2021 *Mentor* CoSURP/Tolmas Undergraduate Research Scholar Jazmina Carey

2020 *Judge*, InnovateUNO Student Research Symposium

2020 Organized campus-wide screening of Picture a Scientist feature film

2019-present *Committee Member*, UNO Data Management Committee

2019-present *Committee Member*, InnovateUNO Advisory Committee

2019 *Judge*, InnovateUNO Student Research Symposium

2019 Organized two field trips for students to visit Tulane Delta Basin experiments in progress

2018 *Reviewer* for ORSP Stimulating Competitive Research proposals

2018-2020 *Mentor* CoSURP/Tolmas Undergraduate Research Scholar Leah Tevis

External service:

2022-present *Committee Member*, AGU EPSP Awards Canvassing Committee
2021-present *Committee Member*, Geomorphica Diamond Open Access Journal steering committee
2021 fall *Panelist*, National Science Foundation
2021 spring *Panelist*, National Science Foundation
2020-present *Committee Member*, LA National Estuarine Research Reserve Site Development Committee
Support Role, Pontchartrain Basin Site Proposal Team
2020-2021 *Committee Member*, AGU EPSP Social Media Committee
2019-2022 *Committee Member*, SEPM Honorary Membership Committee
2019 *Reviewer*, National Science Foundation
2019 *Program Reviewer*, International Sedimentary Geosciences Congress 2020, Flagstaff, AZ
2019, 2020 *Session Liaison*, AGU Outstanding Student Paper Award, San Francisco, CA
2018 *Judge*, AGU Outstanding Student Paper Award, Washington, DC
2018 *Invited Participant*, Coastlines and People NSF Scoping Session, Atlanta, GA
2015 *Member ad hoc*, Geological Society of America Diversity Task Force
2014-2015 *Ex-Officio Councilor*, Geological Society of America Council
2014-2017 *Inaugural Councilor*, Geological Society of America Student Advisory Council
-2015 *Inaugural Chairman*, Geological Society of America Student Advisory Council
2014 *Member at large*, Geological Society of America eGSA Committee
2013-2014 *Graduate Representative*, UW Geology & Geophysics Faculty Committee
2013-2014 *Organizer*, UW Geology & Geophysics weekly Brown Bag Seminar Series
2010-2012 *Founding President*, ISU Student Chapter of the AAPG
2011-2012 *Graduate Committee Member*, ISU Promotion and Tenure Committee
2008-2010 *Founding Board Member*, Rattlesnake Creek Watershed Group, 501(c)3
2007-2009 *President*, UM Geology Club
2008-2009 *Vice President*, UM Student Chapter of the AAPG
2008-2009 *Founding President*, UM Student Clay Society, Ceramics Department
2008 *Chairman*, Rocky Mountain Geodays Research Conference
2008 *Board Member*, UM Conference on Undergraduate Research
2007-2008 *Secretary*, UM chapter of the AAPG
2003-2004 *Junior Ambassador*, Shanghai and Nanjing National Museums, China

Reviewing Service:

NSF MRI grants
American Chemical Society PRF Doctoral New Investigator grants
Earth Surface Dynamics
Geology
Geophysical Research Letters
GSA Bulletin
International Geology Review
Journal of Geophysical Research: Earth Surface
Journal of Sedimentary Research
Journal of the Geological Society
PLOS One
SEPM Special Publications

9. SESSIONS CONVENED

2022 Community experimentation - building an open, accessible future in hydraulics, geomorphology, ecohydraulics, and sedimentology: *AGU Fall Meeting, submitted session proposal*. Co-conveners J. Cisneros, B. Johnson, R. Tinoco.
2020 Advances in Quantifying Fluvial Sediment Transport and Refining Paleohydraulic Reconstruction Models: *AGU Fall Meeting*, Online. Co-conveners: E. Barefoot, K. Leary.
2020 #FlumeFriday: Building a broad and diverse online community to share insights from physical modeling experiments: *AGU Fall Meeting*, Online. Co-conveners: H. Williams, R. Tinoco, B. Johnson.

- 2020 Supercritical-flow processes and fluvial paleohydraulics: *Accepted session, International Sedimentary Geosciences Congress (ISCG2020)*, Flagstaff, AZ. Co-conveners: S. Trampush, B. McElroy (Conference cancelled)
- 2019 #FlumeFriday: Building a broad and diverse online community to share insights from physical modelling experiments: *AGU Fall Meeting*, San Francisco, CA. Co-conveners: H. Williams, R. Tinoco, S. McLelland.
- 2016 Modern and Ancient Sediment Transport on Earth and Planetary Surfaces: *GSA Annual Meeting*, Denver, CO, oral and poster. Co-conveners: T.C. Ashley, S.M. Trampush, A. Fernandes, M. Liang.
- 2016 Source to sink, Precambrian to modern: Erosion, sediment transport, and the stratigraphic record of surface processes: *GSA Rocky Mountain Section meeting*, Moscow, ID, oral and poster. Co-conveners: C.E. Lukens, P.K. Link.

10. TEACHING

UNO Courses Taught:

all syllabi available at www.bedform.org/teaching.

- 2022 Spring EES 4750/5750 Principles of Stratigraphy
- 2022 Spring ENCE 3327 Environmental Engineering
- 2021 Fall EES 2051 Geomorphology (hybrid flexible)
- 2021 Fall EES 6096 Special Topics: Graduate Seminar (online)
- 2021 Spring EES 4750/5750 Principles of Stratigraphy (online)
- 2021 Spring ENCE 6334 Sediment Transport and Dredging (online)
- 2020 Fall EES 2051 Geomorphology (online)
- 2020 Fall EES 6096 Special Topics: Graduate Seminar (online)
- 2020 Spring EES 4750/5750 Principles of Stratigraphy (transitioned to online instruction)
- 2020 Spring ENCE 2350 Statics (transitioned to online instruction)
- 2019 Fall EES 6096 Special Topics: Writing Science
- 2019 Fall EES 6096 Special Topics: Colloquium
- 2019 Fall EES 4700/5700 Advanced Stratigraphy (replacing EES 6770)
- 2019 Spring ENCE 6334 Sediment Transport and Dredging (hybrid flexible)
- 2018 Fall EES 6770 Basin Analysis

11. WORKSHOPS and SHORT COURSES

- 2020 Fluvial Paleohydraulics: International Sedimentary Geosciences Congress, Flagstaff, AZ (Conference cancelled due to COVID-19 pandemic), *Co-organizer/instructor*
- 2018 Fluvial Stratigraphic Inversion Workshop, U. Wyoming, *Co-organizer/instructor*
- 2018 NCED Summer Institute – “Earth Surface Math”, Minneapolis, MN, *Co-organizer/Presenter*
- 2018 CSDMS Annual Workshop, CU Boulder, *SEN Invited Participant*
- 2017 CSDMS Annual Workshop, CU Boulder; *SEN Invited Participant*
- 2016 Sediment Experimentalist Network Workshop, UC Berkeley, *Invited Participant*
- 2014 Sediment Experimentalist Network Workshop, Utrecht University, *Invited Participant*
- 2013 NCED Summer Institute – “Subsurface to Surface: recovering surface dynamics from stratigraphic records,” University of Minnesota, *Participant*

12. OUTREACH and PRESS

“Digging into one of Mobile Bay’s oldest industries” Alabama Public Radio story

<https://www.apr.org/news/2022-04-21/digging-into-one-of-mobile-bays-oldest-industries>

Providing youtube sediment transport and sedimentology videos, lectures, and experiment timelapses with 83 subscribers and over 11,900 views (as of 3/9/2022).

Sedimentology and geomorphology focused twitter account (@robertcmahon) with over 10k followers.

Co-organizer, presenter: Planetary Problems – “Deltas that we know about” public science lecture series, Second Line Brewing, New Orleans, LA, 3/10/2020. >75 attendees.
“Exploring the Mississippi Delta” Denison University Geosciences press release about Bonnet Carre NSF RAPID fieldwork, 2/17/2020 <https://denison.edu/academics/geosciences/feature/134867>
“NSF awards \$200K grant to Denison geoscientist Anjali Fernandes” Denison University Featured News about Bonnet Carre NSF RAPID fieldwork, 1/23/2020, <https://denison.edu/news-events/featured/134628>
Science... Sort of podcast, Episode 302 “AGU 2018 Part II, Dune or dune not, there is no dry (ice)” <https://sciencesortof.com/show-notes/2019/2/302-agu-2019-part-ii-dune-or-dune-not-there-is-no-dry-ice>
“Universality of Delta Bifurcations,” Planetary Geomorphology Image of the Month blog, <https://planetarygeomorphology.wordpress.com/2018/10/16/universality-of-delta-bifurcations/#more-1697>

13. SKILLS and METHODS

Experimental sedimentology facility design/construction – fluvial/delta flumes for research and teaching
Matlab, ArcGIS/QGIS, Adobe Product Suite, Microsoft Office Suite, SolidWorks CAD, Petrel, WellCAD, Stereonet3D/Stereonet9, OSBackstrip, OpendTect
3D photogrammetry and structure-from-motion techniques (in Agisoft Photoscan Pro)
Nortek Vectrino II ADV, Aquadopp ADCP, Teledyne Riverpro ADCP profilers- both laboratory and field deployment
Ultrasonic depth profilers and processing/interpretation of ultrasonic data
3D Laser topographic measurement and instrumentation development
Particle tracking velocimetry/particle image velocimetry
Knudsen Pinger sub-bottom profiler and processing/interpretation of Pinger seismic data
Geologic mapping, field stratigraphy, and surveying
Sediment sampling (bedload, suspended load, grab, core) in field settings and laboratory flumes
Optical, laser, and sieve grain size analysis, and heavy mineral separation

14. CONFERENCE PROCEEDINGS

*Student presenter

Mahon, R.C., Cisneros, J., Baar, A.W., 2021 Discussing open data practices with real-time community bedform experiments, AGU Fall Meeting.
Noel, S.K.*, **Mahon, R.C.**, Shaw, J.B., 2021, Sediment Re-entrainment in Fine-Grained Delta Front Systems, AGU Fall Meeting.
Cross, M.*, Penko, A., **Mahon, R.C.**, 2021, Biological cohesion and bedform dynamics, AGU Fall Meeting.
Campbell, J.*, Swanson, T., **Mahon, R.C.**, 2021, Exploring the influence of bed seepage on the formation of ripple lamination under waning flow, GSA Annual Meeting.
Duncan, M.*, Swanson, T., **Mahon, R.C.**, Fernandes, A., Abeyta, A., 2021, Directional sensitivity of cross-strata set thickness statistics, GSA Annual Meeting.
Lapham, L.*, Beech, M., Fernandes, A., **Mahon, R.C.**, Swanson, T., 2021, Analyzing organic carbon and particle size in sediment deposited by the Mississippi River flood of 2019, GSA Annual Meeting.
Cross, M.*, Penko, A., **Mahon, R.C.**, 2021, Biological cohesion and bedform dynamics, GSA Annual Meeting.
Mahon, R.C., Ganti, V., Ashley, T.C., Leary, K.P., 2020 (invited), Stochastic model for the development of fluvial bedform cross set bounding surfaces: GSA Annual Meeting. Withdrawn.
Abeyta, A., Fernandes, A., **Mahon, R.C.**, Swanson, T., 2020, Remote research opportunities expand reach and increase diversity - a need to expand and continue after COVID 19: GSA Annual Meeting.
Benally, D.A. Jr.*, Lapham, L., Redhouse, K.T., Abeyta, A., Fernandes, A.M., **Mahon, R.C.**, Swanson T., 2020, Developing educational modules to quantify microplastic presence in rivers and sedimentary washes: GSA Annual Meeting.

- Duncan, M.*, Swanson, T., **Mahon, R.C.**, Fernandes, A.M., Abeyta, A., 2020, Investigating the sensitivity of cross-strata set thickness statistics to section alignment with flow direction: GSA Annual Meeting.
- Lapham, L.N.*, Benally, D.A. Jr., Redhouse, K.T., Fernandes, A.M., **Mahon, R.C.**, Abeyta, A., Swanson, T., 2020, Identifying the sources of organic carbon in sediment deposited by the Mississippi River flood of 2019: GSA Annual Meeting.
- Russell, A.C.*, Fernandes, A.M., Abeyta, A., Sheikholeslami, H., **Mahon, R.C.**, Swanson, T., 2020, Tracking the lived experiences of undergraduate geoscientists engaged in research to assess the success of inclusive project design: GSA Annual Meeting.
- Redhouse, E.*, Padilla, B.J., **Mahon, R.C.**, Abeyta, A., Fernandes, A.M., Swanson, T. 2020, Analyzing sediment accumulation from floodwater diversion, Bonnet Carre Spillway, LA: GSA Annual Meeting.
- Redhouse, K.T.*, Abeyta, A., Fernandes, A.M., **Mahon, R.C.**, Swanson, T., 2020, Analyzing how geologists interpret stratigraphy using eye tracking software: GSA Annual Meeting.
- Smiley, M.*, Abeyta, A., Fernandes, A.M., Swanson, T., **Mahon R.C.**, 2020, A critique of delta restoration on the Mississippi River Delta – Absence of people and community? GSA Annual Meeting.
- Abeyta, A., Fernandes, A., **Mahon, R.C.**, Swanson, T., 2020, The Hidden Cost of Field Education is a Barrier to Diversifying Geosciences: AGU Fall Meeting.
- Abeyta, A., Fernandes, A., **Mahon, R.C.**, Swanson, T., 2020, Remote research opportunities expand reach and increase diversity - a need to expand and continue after COVID 19: AGU Fall Meeting.
- Mahon, R.C.**, Ganti, V., Ashley, T.C., McElroy, B., 2020, Stochastic model for the development of fluvial bedform cross set bounding surfaces: SEPM International Sedimentary Geosciences Congress, Flagstaff, Arizona (Conference cancelled).
- Swanson, T., Mohrig, D., **Mahon, R.C.**, 2020, Modeling sedimentary structures generated during terminal sand transport by turbidity currents: SEPM International Sedimentary Geosciences Congress, Flagstaff, Arizona (Conference cancelled).
- Shaw, J.B., **Mahon, R.C.**, Gilchrist, S., 2020, Sedimentology of a Prograding Distributary Channel Network: SEPM International Sedimentary Geosciences Congress, Flagstaff, Arizona, (Conference cancelled).
- Tevis, L.* **Mahon, R.C.**, Esposito, C.R., 2019, Flow and sediment dynamics through complex emergent vegetation: AGU Fall Meeting, San Francisco, CA, EP53F-2231.
- Amos, M.*, **Mahon, R.C.**, Shaw, J.B., Cathcart, C.A., 2019, Sediment transport dynamics and the evolution of subaqueous delta channel levees: AGU Fall Meeting, San Francisco, CA, EP23E-2254.
- Shaw, J.B., Ke, W.-T., **Mahon, R.C.**, 2018 (Invited), Comparing and contrasting tributary and distributary channel networks: GSA Abstracts with Programs, vol. 50, no. 6, doi: 10.1130/abs/2018AM-321310
- Mahon, R.C.** and Shaw, J.B., 2018, A faithful record of channel mouth bifurcation angles in river delta stratigraphy on Earth and Mars: AGU Fall Meeting, Washington, D.C., EP31D-2379
- Ashley, T.C.*, **Mahon, R.C.**, Naqshband, S., Leary, K., McElroy, B., 2018, Ensemble distributions of particle hop distance and travel time over equilibrium Dunes: AGU Fall Meeting, Washington, D.C., EP33A-10
- Cathcart, C.*, Shaw, J.B., **Mahon, R.C.**, Ke, W.-T., 2018, Nourishment area asymmetry relates a distributary channel network's structure and dynamics: AGU Fall Meeting, Washington, D.C., EP31D-2380
- Shaw, J.B., Ke, W.-T., **Mahon, R.C.**, 2018, Distributary Channel Networks modeled using Non-linear Viscous Fingering: AGU Fall Meeting, Washington, D.C., EP32A-06
- Mahon, R.C.** and McElroy, B., 2017, Indirect estimation of bedload flux from modern rivers and ancient fluvial strata: International Conference on Fluvial Sedimentology, Calgary, AB.
- Mahon, R.C.**, Ganti, V., Naqshband, S., Shaw, J.B., McElroy, B., 2017, Reconstructing paleo-shear velocity from the geometries of preserved bedform cross set bounding surfaces in the stratigraphic record: International Conference on Fluvial Sedimentology, Calgary, AB.
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