ANJALI M. FERNANDES (PH. D.)

ASSISTANT PROFESSOR DENISON UNIVERSITY, DEPARTMENT OF GEOSCIENCES 100 W COLLEGE STREET, GRANVILLE OHIO 43023, U. S. A. Science Twitter: @climbing_ripple ORCID Profile: <u>https://orcid.org/0000-0003-2485-3449</u> Google Scholar Profile: <u>Link</u> Open Science Framework Profile: <u>Link</u>

EDUCATION

Ph. D.	2012	The University of Texas at Austin, The Jackson School of Geosciences, Department of Geological Sciences
M. S.	2005	The Indian Institute of Technology, Bombay, Department of Earth Sciences
B. S.	2003	St. Xavier's College, The University of Bombay, Department of Geological Sciences

ACADEMIC APPOINTMENTS

Assistant Professor

2019 - Present Denison University, Department of Earth and Environmental Sciences

Assistant Professor in Residence

2018 - 2019 The University of Connecticut, Storrs, The Center for Integrative Geosciences

Visiting Assistant Professor

2015 - 2018 The University of Connecticut, Storrs, The Center for Integrative Geosciences

Synthesis Post-doctoral Research Fellow, The National Center of Earth-Surface Dynamics

2013 - 2015 Tulane University

Post-doctoral Researcher

2012-2013

Tulane University

Post-doctoral Researcher

2012

University of Texas, Dept. of Geological Sciences Advisor: Dr. David Mohrig

Ph. D. Candidate, Research Assistant and Teaching Assistant 2006-2012

The University of Texas at Austin, Dept. of Geological Sciences Advisor: Dr. David Mohrig

OTHER PROFESSIONAL APPOINTMENTS

Visiting Researcher

2009

Statoil ASA Research Center, Trondheim, Norway

Intern

2008

Noble Energy, Africa Business Unit, Houston, U. S. A.

Intern

2007-2008

Statoil-Hydro Research Center, Trondheim, Norway

Mudlogger/ Well-site Geologist

2005-2006

Oilfield Instrumentation, India

TEACHING EXPERIENCE

2019 - Present

Assistant Professor, Department of Earth and Environmental Sciences, at Denison University

- 1. EESC 111- Planet Earth (Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021)
- 2. EESC 314- Sedimentology and Stratigraphy (Spring 2020)
- 3. EESC 200- Environmental Geology (Fall 2020, Fall 2021)

2015 - 2019

Visiting Assistant Professor, The University of Connecticut, Storrs, The Center for Integrative Geosciences

- 1. Earth Surface Processes (Fall 2015, 2016, 2017, 2018)
- 2. Sedimentology (Spring 2016, 2017, 2019)
- 3. Advanced Sedimentology and Stratigraphy (Spring 2018, 2019)
- 4. Sediment Transport (Spring 2019)
- 5. Spring Field Trips (Spring 2019)
- 6. Geological Oceanography (Spring 2017, 2018)
- 7. Dinosaurs, Extinctions and Environmental Catastrophes (Fall 2018)

2006 - 2012

Teaching Assistant, The University of Texas at Austin, The Department of Geological Sciences

- 1. Petroleum Geology (Spring 2009)
- 2. Basin Analysis (Spring 2010)
- 3. Sedimentology and Stratigraphy (Fall 2009)
- 4. Introductory Geology (Fall 2007 Spring 2008)

PEER-REVIEWED PUBLICATIONS

(*undergraduate student author, **graduate student author, ***post-doctoral scholar author)

PUBLISHED/ ACCEPTED

- **Brisson, Sarah, **Jaleigh Q. Pier, **Andrew J. Beard, Anjali M. Fernandes, Andrew M. Bush, 2023, *Proceedings* of the Royal Society B, Niche conservatism and ecological change during a Late Devonian mass extinction event. <u>https://doi.org/10.1098/rspb.2022.2524</u>
- *Madeline Kollegger, Jorge Lorenzo-Trueba, Anjali M. Fernandes, Arvind Singh, Antoinette Abeyta, 2022, Geophysical Research Letters, Upstream Propagation of Sea-level Signal: Time Lags and the Dynamics of the Fluvial Surface <u>https://doi.org/10.1029/2022GL097956</u>
- Anjali M. Fernandes, Antoinette Abeyta, Robert Mahon, Rowan Martindale, Kristin D. Bergmann, Christopher Jackson, Theodore M. Present, Darryl Reano, Travis Swanson, Kristina Butler, Sarah Brisson, Cari Johnson, David Mohrig, Michael Blum, 2020, *The Sedimentary Record*, "Enriching Lives within Sedimentary Geology": Actionable Recommendations for Making SEPM a Diverse Equitable and Inclusive society for All Sedimentary Geologists. DOI: 10.2110/sedred.2020.3.4
- 4. **Anjali M. Fernandes**, David Mohrig, James Buttles, Journal of Sedimentary Research, 2020, Flow-Substrate Interactions in Degrading and Aggrading Submarine Channels. <u>DOI:10.2110/jsr.2020.31</u>
- 5. John Martin, **Anjali M. Fernandes**, Jennifer Pickering, Nick Howes, 2018, *Journal of Sedimentary Research*, The Signature of Backwater Hydrodynamics in the Stratigraphic Record of a Triassic Continental-Scale River System, Northwest Shelf of Australia. DOI: 10.2110/jsr.2018.38
- 6. Jaap Neinhuis, Torbjörn E. Törnqvist, *Krista L. Jankowski, **Anjali M. Fernandes**, *Molly Keogh, M., 2017, *GSA Today Groundwork*, A New Subsidence Map for Coastal Louisiana. DOI:10.1130/GSATG337GW.1
- *Krista L. Jankowski, Torbjörn E. Törnqvist, Anjali M. Fernandes, 2017, *Nature Communications*, Assessing the resilience of Louisiana's Coastal Wetlands to Present-day Rates of Sea-Level Rise. DOI: 10.1038/ncomms14792 (2017)
- 8. Anjali M. Fernandes, Torbjörn E. Törnqvist, Kyle M. Straub, David Mohrig, 2016, *Geology*, Connecting the Backwater Hydraulics of Coastal Rivers to Fluvio-deltaic Sedimentology and Stratigraphy. DOI: 10.1130/G37965.1
- Celine Scheidt., Anjali M. Fernandes, Chris Paola, Jef Caers, 2016, Journal of Geophysical Research Earth Surface, Quantifying Natural Delta Variability using a Multi-point Geostatistics Prior Uncertainty Model. DOI: 10.1002/2016JF003922
- *Andrew J. Beard, Andrew Bush, Anjali M. Fernandes, Patrick Getty, Michael T. Hren, 2016, *Palaeogeography, Palaeoclimatology, Palaeoecology*, Stratigraphy and paleoenvironmental analysis of the Frasnian-Famennian (Upper Devonian) boundary interval in Tioga, north-central Pennsylvania. DOI: 10.1016/j.palaeo.2016.12.001
- 11. Celine Scheidt, **Anjali M. Fernandes**, Chris Paola, Jef Caers, 2015, *Petroleum Geostatistics*, Can Geostatistical Models Represent Nature's Variability? An Analysis Using Flume Experiments

SUBMITTED/ IN REVIEW

IN PREP

- 12. **Anjali M. Fernandes,** Kyle M. Straub, Arvind Singh, Environmental Signal Propagation in Non-stationary Systems: Evaluating the Impact of Delta Progradation on the Dynamics of Linked Terrestrial and Deep Marine Transport Systems, *Frontiers in Earth Sciences*
- 13. Anjali M. Fernandes, Michael T. Hren, ***Queenie Chang, Virginia B. Smith, Dennis O. Terry, Jr., River Floodplains, Organic Carbon, and Climate: The Impact of River Dynamics on the Biogeochemical Climate Record, *Frontiers in Earth Sciences*
- 14. ***Queenie Chang, **Anjali M. Fernandes**, Michael T. Hren, Virginia B. Smith, Dennis O. Terry, Jr., David B. Luffman, Mia M. Rhodes, River Response the Eocene Oligocene Climate Transition in Central North America, *Journal of Geophysical Research- Earth Surface*.

- 15. **Anjali M. Fernandes,** ***Queenie Chang, Michael T. Hren, Virginia B. Smith, Dennis O. Terry, Jr., *Mia M. Rhodes, *David B. Luffman, River Response to the Oligocene Intensification of the North American Monsoon, *Journal of Geophysical Research- Earth Surface*
- 16. Anjali M. Fernandes, *Madelyn Kurtz, Spatio-temporal variability in surface elevation change across coastal Louisiana, *Estuaries and Coasts*

WHITE PAPERS AND PRE-PRINTS

17. Abeyta, A., **Fernandes, A. M.**, Mahon, R. C., Swanson, T., The True Cost of Field Education is a Barrier to Diversifying Geosciences <u>https://doi.org/10.31223/X5BG70</u>

GRANT FUNDING

CURRENT

1. Constraining the Response of North American River Landscapes to Climate Change during the Eocene-Oligocene Transition

Denison University Research Fund (2023)

- Collaborative Research: RAPID: Characterizing the Sedimentary Archive of the Longest Mississippi River Flood on Record, while Implementing a New Model for Inclusive Undergraduate Geoscience Research \$300,857.00 to PI Fernandes at Denison University (Initial Award: \$199,947; Supplemental Award: \$100,910; Subawards to University of New Mexico-Gallup, Georgia Southern University, University of New Orleans) National Science Foundation Division of Earth Sciences. Program: Sedimentary Geology and Paleobiology Grant #2005439 (Link)
- 2. Collaborative Research: An Inter-disciplinary Approach to Constraining Paleo-geomorphic Responses to the Eocene-Oligocene Hothouse to Icehouse Transition.

Co-PI with Drs. Virginia Smith, Michael Hren and Dennis Terry \$255,106 to PI Fernandes (transferred to Denison University in 2019) National Science Foundation Division of Earth Sciences. Program: Sedimentary Geology and Paleobiology Grant #1844176 (Link)

3. Collaborative Research: From Surface Dynamics to Strata: Quantifying the Signals of Surface Processes in Time and Space.

Co-PI with Drs. Arvind Singh, Jorge Lorenzo Trueba and Antoinette Abeyta \$133,000 to PI Fernandes at Denison University National Science Foundation Division of Earth Sciences. Program: Geomorphology and Land-Use Dynamics Grant #1854490 (Link)

4. Projecting 50 years of relative sea-level rise in coastal Louisiana

Role: Co-PI Funding period: August 2021 – August 2023 Funding Agency: The RESTORE Act Center of Excellence in Louisiana (LA-COE) \$99,910 directed primarily towards funding one graduate student at Tulane University, under the supervision of lead-PI Dr. Torbjorn Tornqvist.

PAST

5. Drivers of Selective Mass Extinction: Insight from Integrated Paleontological and Geochemical Records Co-PI with Drs. Andrew Bush, Michael Hren, Patrick Getty at the University of Connecticut \$277,000 to PIs at The University of Connecticut National Science Foundation Division of Earth Sciences. Program: Sedimentary Geology and Paleobiology Grant Grant #1738121. (Link) July 2017 – July 2020

6. **Teaching Innovation Grant from UConn's Center for Excellence in Teaching and Learning** (\$5000) For innovation in interactive laboratory design for sedimentology.

7. The National Institute of Earth-surface Dynamics-2 Synthesis Post-doctoral Fellowship.

AWARDS

- 1. Student Organization Advisor of the Year (student nominated) for advising the C. L. Herrick Student Society in the Department of Earth and Environmental Sciences at Denison University
- 2. Recognition of Teaching Excellence for GSCI 3020 Earth Surface Processes at The University of Connecticut

GRANTS AND AWARDS PRIOR TO 2012 (AS A STUDENT)

- 1. Best Technical Presentation, the American Association of Petroleum Geologists annual meeting, 2011
- 2. Best Student Presentation, the American Association of Petroleum Geologists annual meeting, 2011
- 3. American Association of Petroleum Geologists Ike Crumbly named Grant-in-Aid, 2011. (\$3000)
- 4. Society of Sedimentary Geology Weimer Research Grant, 2011. (\$2000)
- 5. West Texas Geological Society Lloyd Emery Adams Permian Basin Research Scholarship, 2011. (\$2500)
- 6. The Jackson School of Geosciences DeFord Field Geology Scholarship, 2010. (\$2000)
- 7. The Jackson School of Geosciences William R. Muehlberger Field Geology Scholarship, 2010) (\$2000)
- 8. Indian Institute of Technology Bombay M. S. Scholarship (2003)

AWARDS / FUNDING ACQUIRED BY MENTORED STUDENTS / POST-DOCS

- Madelyn Kurtz, undergraduate researcher. Battelle Research Award, Denison University, travel funding to study carbon sequestration in coastal wetlands in Louisiana.
- Thea Pederson, undergraduate research assistant. Battelle Research Award, Denison University, stipend to conduct research on alluvial fan morphology and watershed changes during post-European settlement of the White River Valley at University of Minnesota
- Dr. Queenie Chang, Post-doctoral Scholar. Landlab Modeling Summer Institute and Conference (Summer 2023), University of Colorado, Boulder. Award covered travel and participation support.
- 4. Best Poster Presentation, Geoscience Day (2017) at the University of Connecticut. Award won by students of the Sedimentology class for their class research project.

SYNERGISTIC ACTIVITIES

SERVICE TO THE EARTH SCIENCE COMMUNITY

COMMITTEES

- 1. SEPM Society for Sedimentary Geology's Twenhofel Medal Review Committee (2020 2023)
- 2. SEPM Society for Sedimentary Geology's ad hoc committee for diversity, equity and inclusion (2020 present).

REVIEWER

Geology; Journal of Marine and Petroleum Geology; Journal of Sedimentary Research; Sedimentology; Journal of Geophysical Research- Earth Surface; National Science Foundation (Geomorphology and Land-use Dynamics; Sedimentary Geology and Paleobiology); American Chemical Society Petroleum Research Fund; Geophysical Research Letters.

PANELIST

- 1. National Science Foundation, Division of Earth Sciences, Sedimentary Geology and Paleobiology (1)
- 2. National Science Foundation, Division of Earth Sciences, Geomorphology and Land-use Dynamics (1)

SESSION CONVENER/CHAIR

- 1. International Conference on Fluvial Sedimentology 2021 (postponed to 2023), River processes, planforms and stratigraphic products
- 2. American Geophysical Union Fall Meeting, 2018, Forensic Earth: Novel Approaches to Quantifying Surface Processes and Environmental Signals in the Geologic Record
- 3. International Conference on Fluvial Sedimentology, 2017, Rivers on the Edge- Transitions in Flow, Morphology and Stratigraphy along River-fed Margins
- 4. Meeting of the American Association of Petroleum Geologists, 2017, Theme 1: Siliciclastics: Continental to Shallow Marine II: Tidal to Shelf (SEPM)
- 5. Meeting of the American Association of Petroleum Geologists, 2017, Theme 1: Siliciclastics: Continental to Shallow Marine II: Fluvial, Deltaic and Aeolian (SEPM)
- 6. Meeting of the American Association of Petroleum Geologists, 2017, Theme 1: Siliciclastics: Modelling Deep-marine Sediment Transport Systems
- 7. American Geophysical Union Fall Meeting, 2016, Extracting Landscape Dynamics from the Sedimentary Record
- 8. American Geophysical Union Fall Meeting, 2016, Deltas and Sea-level Rise: Geological and Social-ecological Perspectives
- 9. Meeting of the Geological Society of America, 2016, Sediment Transport Systems in the Stratigraphic Record
- 10. American Geophysical Union Fall Meeting, 2015, Surface Processes in the Stratigraphic Record
- 11. American Geophysical Union Fall Meeting, 2015, Mass Extraction and Grain-size Fractionation in Sediment Routing Systems: Tracking Sediment from Upland Catchments to the Deep-sea
- 12. Meeting of the Geological Society of America, 2011, A Multi-disciplinary Approach to Understanding the Dynamics of Sinuous Channel Evolution in Different Environments

WORKSHOPS AND FIELD-TRIPS

- 1. Lead-organizer/Instructor/Field Trip Leader: The Summer Institute in Earth Surface Dynamics, 2015. (Link)
- Field-trip leader for the AAPG Hedberg Research Conference, 2012. Theme: Digital Geospatial Context for 3-D Source-to-Sink Models: New Insights into the Classic Shelf to Basin System of the Guadalupe and Delaware Mountains

OUTREACH AND MENTORING ACTIVITIES

- 1. Faculty mentor for the Earth and Environmental Science Department booth at the Black Latinx Asian Science Students annual science fair outreach event at Denison University (Spring 2021, 2022)
- 2. Faculty Advisor for Denison's Earth and Environmental Science Department C. L. Herrick Students' Society
- 3. Panelist for EPSP Connects 2020: Productive work habits in grad school and beyond (Link)
- 4. The UConn Earth Sciences Fair (2016, 2017): Constructed an interactive flume experiment in which students and children could play with a small delta by changing sediment supply and sea-level (Link)

- 5. Mentor and Workshop Instructor for middle school girls in the Greater New Orleans area through the Girls in STEM (GiST) initiative at Tulane University. In our workshop "What Lies Beneath" we introduced students to the relevance of sediment supply to combat sea-level rise on Louisiana's coastline, using a small interactive flume experiment (Link)
- 6. Panelist for the Girls in STEM Newcomb Scholars Program at Tulane University.
- 7. Graduate student mentor for incoming geoscience graduate students at the University of Texas at Austin

UNDERGRADUATE RESEARCH ADVISING

WHILE AT DENISON

- 1. Herlinda Contreras (Spring 2023 Present; B. A. Earth Sciences, Denison University)
- 2. Thea Pederson (Spring 2023 Present; B. S. Earth Sciences, Denison University)
- 3. le'Jana (Nay) Woodley (Spring 2023 Present; B. S. Environmental Sciences, Denison University)
- 4. George Fox (Spring 2023 Present; B. S. Environmental Sciences, Denison University)
- 5. Anna Grendys (Spring 2023; B. S. Environmental Sciences, Denison University)
- 6. Tricia Klosterman (Summer Research Scholar 2022, B. S. Environmental Sciences, Denison University)
- 7. Sarah Heithaus (Spring 2022, Summer Field Research 2022, Summer Research Scholar 2022, B. S. Earth Sciences, Denison University)
- 8. Maddie Kurtz (Spring 2022 Present, Summer Field Research 2022, Summer Research Scholar 2022, B. S. Environmental Sciences, Denison University)
- 9. Mia Rhodes (Spring 2022 Present, Summer Field Research 2022, B. S. Earth Sciences, Denison University)
- 10. David Luffman (Spring 2021 Present, Summer Field Research 2022, Summer Research Scholar 2022, B. S. Earth Sciences, Denison University)
- 11. Jack Silverman (Spring 2021 Spring 2022, Chemistry, Denison University)
- 12. Andrea Scroggs (Spring 2021 Spring 2022, Summer Field Research 2021, Geosciences, Denison University; Currently employed at the American Geophysical Institute)
- 13. Laura Lapham (Spring and Summer 2020, Summer 2021, Geosciences, Denison University; Currently pursuing M. S. at University of Connecticut, Department of Earth Sciences)
- 14. Ariel Russel (Spring and Summer 2020, Geosciences, Denison University)
- 15. Rachel Jankowski (Directed study, Spring 2020, Geosciences, Denison University)
- 16. Keira Redhouse (Univ. New Mexico-Gallup, co-mentored with Dr. Antoinette Abeyta)
- 17. Martina Smiley (Univ. New Mexico-Gallup, co-mentored with Dr. Antoinette Abeyta)
- 18. Astrid Gonzaga (Univ. New Mexico-Gallup, co-mentored with Dr. Antoinette Abeyta)
- 19. Douglas J. Benally Jr. (Univ. New Mexico-Gallup, co-mentored with Dr. Antoinette Abeyta)
- 20. Elliot Redhouse (Univ. New Mexico-Gallup, co-mentored with Dr. Antoinette Abeyta)
- 21. Bobbi Padilla (Univ. New Mexico-Gallup, co-mentored with Dr. Antoinette Abeyta)
- 22. Meredith Duncan (Georgia Southern University, co-mentored with Dr. Travis Swanson)
- 23. Miles Beech (University of New Orleans, co-mentored with Dr. Robert Mahon)

WHILE AT UNIVERSITY OF CONNECTICUT

- 24. Zachary Klang (Geology, UConn), Fall 2018 Spring 2019.
- 25. Madeline Kollegger (Environmental Sciences, UConn). Went on to M. S. in delta modelling at Montclair State University. Currently pursuing a Ph. D. at Univ. Connecticut.
- 26. Zoe Esponda (Environmental Sciences, UConn), Spring 2016, Independent Research Advisor. Went on to an M. S. in Plant Science at UConn. Currently staff scientist at Calyxt, MN.
- 27. Tamara de Nobriga (Geology, UConn), Spring 2016, Independent Research Advisor. Currently a Biostratigrapher at Biostrat JV Ltd. Trinidad and Tobago.
- 28. Kezhen (Jenny) Wang (Environmental Sciences, UConn), Fall 2015, Spring 2016, Independent Research Advisor. Went on to complete an M. S. in Environmental Engineering at U. C. Davis and a Ph. D. in civil and environmental Engineering at Cornell University. Currently a Post-doctoral Researcher at The City University of New York.

GRADUATE RESEARCH ADVISING

- 1. Mohamed Said (Ph. D. Candidate, Civil and Environmental Engineering, Villanova University)
- 2. Baylee McGinnis (M. S. Candidate, UConn Geosciences)
- 3. Madeline Kolegger (undergraduate advisee at UConn, completed M.S. in delta dynamics at Montclair State, currently pursuing a Ph. D. at UConn)
- 4. Rebecca VanderLeest (Ph. D. Candidate, UConn Geosciences), 2020, Ph. D. committee member
- 5. Queenie Chang (Ph. D. Aspirant, UConn Geosciences, 2019, candidacy committee member). Currently Post-doctoral Associate at Denison University.
- 6. James Kerr (Ph. D. Aspirant, UConn Geosciences), 2018, committee member
- 7. James Andrew Beard (Ph. D. Aspirant, UConn Geosciences), 2018, candidacy committee member
- 8. Thomas Schenk (M. S., UConn Geosciences), 2016, committee member
- 9. Lindsey Belliveau (M.S. UConn Geosciences), 2016, committee member

POST-DOCTORAL ADVISING

1. Dr. Queenie Chang

INVITED PRESENTATIONS AND SEMINARS

- 1. University of Minnesota, Minneapolis, 2021, The Sedimentary Records of Large Rivers and Deltas
- 2. College of William and Mary, 2021, The Sedimentary Records of Large Rivers and Deltas
- 3. The American Geophysical Union, 2020, Signals in (Ancient) Soils: How do Geomorphic Processes Affect the Mixing of Local and Catchment-Averaged Climate Signals in Sedimentary Basins?
- 4. Kent State University, 2020, Backwater Controls on the Sedimentary Record of Large River Deltas
- 5. Denison University, 2018, Kinematics and Depositional Records of Large River Deltas
- 6. Meeting of the Geological Society of America, 2017, The Expression of Backwater Dynamics on the Lithology and Architecture of Fluvio-deltaic Channel Belts
- 7. Colorado School of Mines, Van Tuyl Lecture Series, 2017, The Role of Sediment Mass Extraction on the Kinematics and Stratigraphy of Fluvio-deltaic Channel Belts
- 8. Workshop of the Sediment Experimentalist Network, Tsukuba University, Japan, 2017, The Kinematics and Sedimentary Record of a Self-evolving Continental Slope Fed by a Prograding Shelf Delta
- 9. Louisiana Universities Marine Consortium, 2017, The Role of Persistent Backwater Dynamics on the Kinematics and Sub-Surface Architecture of Coastal Rivers
- 10. The University of Connecticut, 2017, The Role of Sediment Mass Extraction on the Morphodynamics and Stratigraphy of Rivers and Deltas
- 11. Meeting of the Geological Society of America, 2016, Linking the Dynamics and Stratigraphic Record of Shelf Margin Deltas and Deep Marine Transport Systems
- 12. Joint meeting of the Community Surface Dynamics Modelling System and the Sediment Experimentalist Network, 2016, A Simple Land-building Model for Suspended Sediment in Coastal Diversions
- 13. ONE-Delta Workshop, Vanderbilt University, Nashville, 2016.
- 14. Meeting of the Geological Society of America, South Central Section, 2016, Signature of Backwater Hydraulics in Fluvio-deltaic Stratigraphy
- 15. Meeting of the Ecological Society of America, 2015, Inverting River Dynamics from their Static Residues on Ancient Acoustically Imaged Landscapes.
- 16. University of Connecticut, 2015, Using Quantitative Seismic Geomorphology and Outcrop Mapping to Characterize Depositional Processes in Laterally Migrating Submarine Channels.
- 17. Tulane University, 2015, Depositional Processes in Sinuous Submarine Channels.
- 18. University of Texas at Arlington, 2012, Three-dimensional Barform Geometries and Inferred Formative Processes in Submarine Channels of West Africa and the Brushy Canyon Formation.

19. Meeting of Young Researchers in Earth Sciences (MYRES), 2012, Geometries, Processes and Stratigraphy of Separation Bars in Sinuous Submarine Channels

INVITED PRESENTATIONS FOR NON-ACADEMIC AUDIENCES

- 1. The Environmental Defense Fund (Louisiana), Restoration Research Team, 2017, Modeling Sediment Advection at River Diversions- Implications for Fine Sediment Supplied to Distal Wetlands
- 2. Shell Technology Group, SedNet Series, 2016, Inverting the Dynamics of Coastal Rivers from the Stratigraphic Record.
- 3. Exxon Mobil Upstream Research, Houston, 2014, Signatures of Backwater Hydraulic Conditions in Fluvio-Deltaic Stratigraphy.
- 4. Statoil Research Center, Trondheim, Norway, 2009, Depositional Conditions Associated with Bank-attached Bars in Submarine Channels
- 5. Noble Energy, Houston, 2008, Contrasting the Stratigraphic Architectures of Deposits Filling Deep and Shallow Submarine Channels
- 6. The annual business meeting for the CSM-UT RioMAR consortium of oil companies (2009-2012)

SERVICE TO DENISON UNIVERSITY

- 1. RAISE Steering Committee (Fall 2020 Spring 2023)
- 2. Anderson Scholarship Committee (2020, 2021)

CONFERENCE ABSTRACTS/ PRESENTATIONS

(*undergraduate student author, **graduate student author, ***post-doctoral researcher)

- 1. **Anjali M. Fernandes,** Michael T. Hren, ***Queenie Chang, *David B. Luffman, *Sarah E. Heithaus, *Mia Rhodes, *Madelyn A. Kurtz, Virginia B. Smith, Dennis O. Terry, Jr., Rivers in Time: An Integrated Framework for Reconstructing Terrestrial Climate Variability in Deep Time, *Meeting of the Geological Society of America, Denver*
- 2. *Sarah E. Heithaus, *David B. Luffman, *Mia Rhodes, ***Queenie Chang, **Anjali M. Fernandes**, *Madelyn A. Kurtz, Virginia B. Smith, Dennis O. Terry, Jr., Michael T. Hren, Paleohydraulic Reconstructions of Ephemeral Oligocene Rivers at the During the North American Monsoon, *Meeting of the Geological Society of America*, *Denver*
- 3. ***Queenie Chang, **Anjali M. Fernandes**, Michael T. Hren, *David B. Luffman, *Sarah E. Heithaus, *Mia Rhodes, *Madelyn A. Kurtz, Virginia B. Smith, Dennis O. Terry, Jr., Rivers, Climate and Tectonic Uplift: Rapid River Response to Eocene-Oligocene Climate Change in Central North America, *Meeting of the Geological Society of America, Denver*
- 4. *David B. Luffman, *Sarah E. Heithaus, *Mia Rhodes, ***Queenie Chang, **Anjali M Fernandes**, *Maddie Kurtz, Virginia B. Smith, **Theodore Bobik, Dennis O. Terry, Jr., Michael T. Hren, Fluvial Response to the Eocene Oligocene Transition in North America, *Meeting of the Geological Society of America, Denver*
- 5. *Madelyn A. Kurtz, **Anjali M. Fernandes**, Pinpointing the sources of variability in surface elevation change in rapidly degrading wetlands of coastal Louisiana, *Meeting of the Geological Society of America, Denver*
- 6. Michael T. Hren, **Anjali M. Fernandes**, **Baylee McGinnis, Virginia B. Smith, Dennis O. Terry, Climate and hydrology across the Eocene-Oligocene transition in North America: Rivers, biomarkers and geochemical biases, *Meeting of the Geological Society of America, Denver*
- **Theodore Bobik, Dennis O. Terry, Jr., **Baylee McGinnis, Michael T. Hren, Anjali M. Fernandes, Virginia B. Smith, Differentiating in situ versus catchment-derived biomarker signals of paleoclimatic change across the terrestrial Eocene-Oligocene Transition of northwest Nebraska, *Meeting of the Geological Society of America*, *Denver*

- 8. Anjali M. Fernandes, Michael T. Hren, ***Queenie Chang, Virginia B. Smith, Dennis O. Terry, *David B. Luffman, *Sarah E. Heithaus, *Mia Rhodes, River Dynamics, Carbon Residence Times, and Earth's Climate, *The American Geophysical Union, Fall Meeting, Chicago*
- 9. *David B. Luffman, **Anjali M. Fernandes**, ***Queenie Chang, *Sarah E. Heithaus, *Mia Rhodes, *Madelyn A. Kurtz, Michael T. Hren, Virginia B. Smith, Dennis O. Terry, Jr., Reconstructing River Dynamics across the Eocene-Oligocene Greenhouse to Icehouse Transition in North America, *The American Geophysical Union, Fall Meeting, Chicago*
- 10. *Madelyn A. Kurtz, **Anjali M. Fernandes**, Sources of Variability in Surface Elevation Change in Rapidly Degrading Wetlands of Coastal Louisiana, *The American Geophysical Union, Fall Meeting, Chicago*
- 11. Michael T. Hren, **Anjali M. Fernandes**, **Baylee McGinnis, Virginia B. Smith, Dennis O. Terry, Jr., Climate and hydrology across the Eocene-Oligocene transition in North America: Rivers, biomarkers and geochemical biases
- 12. ******Mohamed M. Fathi, Virginia B. Smith, Ayman G Awadallah, **Anjali M. Fernandes**, Michael T. Hren, Dennis O. Terry, A New Framework for Generating Stochastic and Representative River Hydrographs for Long-term Simulations, *The American Geophysical Union, Fall Meeting, Chicago*

- 1. Virginia B. Smith, **Anjali M. Fernandes**, Michael T. Hren, Dennis O. Terry, A Framework for Constraining Paleohydrological Changes in North America across the Eocene-Oligocene Greenhouse to Icehouse Transition: Integrating Geomorphic, Sedimentological and Geochemical Tools, *The American Geophysical Union, Fall Meeting*
- 2. **Madeline Kollegger, Jorge Lorenzo-Trueba, **Anjali M. Fernandes**, Arvind Singh, Antoinette Abeyta, Time-lags in the upstream response of fluvio-deltaic environments under sea-level cycles: the role of changes in the curvature and relief, *The American Geophysical Union, Fall Meeting*
- 3. **Guandong Li, Torbjörn E. Törnqvist, **Anjali M. Fernandes**, Spatiotemporal analysis of shallow subsidence rates in coastal Louisiana based on 300 point observations covering the past 10+ years, *The American Geophysical Union*, *Fall Meeting*
- 4. *Laura N. Lapham, *Miles C. Beech, Anjali M. Fernandes, Robert C. Mahon, Travis E. Swanson, Analyzing Organic Carbon and Particle Size in Sediment Deposited by the Mississippi River Flood of 2019, , *Geological Society of America Connects (Online)*
- 5. *Meredith Duncan, Travis Swanson, Robert Mahon, Anjali M. Fernandes, Antoinette Abeyta, Directional sensitivity of cross-strata set thickness statistics, *Geological Society of America Connects (Online)*
- 6. Antoinette Abeyta, **Anjali M. Fernandes**, Robert C Mahon, Travis Swanson, The Hidden Cost of Field Education is a Barrier to Diversifying Geosciences, *Goldschmidt 2021* [invited]

- 1. **Anjali M. Fernandes,** Michael T. Hren, Dennis O. Terry, ***Hossein Hosseiny, Virginia B. Smith, Signals in (Ancient) Soils: Geomorphic Processes Control the Mixing of Local and Catchment-Averaged Climate Signals in Sedimentary Basins, *The American Geophysical Union, Fall Meeting* [invited]
- 2. Antoinette Abeyta, **Anjali M. Fernandes**, Robert C Mahon, Travis Swanson, The Hidden Cost of Field Education is a Barrier to Diversifying Geosciences, *The American Geophysical Union, Fall Meeting*
- 3. Antoinette Abeyta, **Anjali M. Fernandes**, Robert C Mahon, Travis Swanson, Remote research opportunities expand reach and increase diversity a need to continue after COVID 19, *The American Geophysical Union, Fall Meeting*
- 4. **Hossein Hosseiny, Virginia B. Smith, **Anjali M. Fernandes**, Dennis O. Terry, Michael T. Hren, A framework to quantify paleogeomorphologic responses to ancient climate change, *The American Geophysical Union, Fall Meeting*
- 5. **Madeline Kollegger, Jorge Lorenzo-Trueba, **Anjali M. Fernandes**, Arvind Singh, Antoinette Abeyta, Upstream propagation of sea-level signals in fluvio-deltaic environments: Time lags, dampening, and the dynamics of the fluvial surface, *The American Geophysical Union, Fall Meeting*
- 6. *Martina Smiley, Antoinette Abeyta, **Anjali M. Fernandes**, Travis Swanson, Robert Mahon, A critique of delta restoration on the Mississippi River Delta absence of people and community?
- 7. *Douglas A. Benally Jr., *Laura Lapham, *Keira T. Redhouse, Antoinette Abeyta, **Anjali M. Fernandes**, Robert Mahon, Travis Swanson, Developing educational modules to quantify microplastic presence in rivers and sedimentary washes, *Geological Society of America Connects Online Meeting*

- 8. *Elliot Redhouse, *Bobbi Padilla, Robert Mahon, Antoinette Abeyta, **Anjali. M. Fernandes**, Travis Swanson, Analyzing Sediment Accumulation from Floodwater Diversion, Bonnet Carre Spillway, LA, *Geological Society of America Connects Online Meeting*
- 9. *Keira T. Redhouse, Antoinette Abeyta, **Anjali. M. Fernandes**, Robert Mahon, Travis Swanson, Analyzing How Geologists Interpret Stratigraphy Using Eye Tracking Software, *Geological Society of America Connects Online Meeting*
- 10. *Miles Beech, Robert Mahon, Antoinette Abeyta, **Anjali. M. Fernandes**, Travis Swanson, Ground Penetrating Radar Analysis of Sand Bar Deposits in the Bonnet Carre Spillway from the 2019 Flood, *Geological Society of America Connects Online Meeting*
- 11. *Meredith Duncan, Travis Swanson, Robert Mahon, **Anjali. M. Fernandes**, Antoinette Abeyta, Investigating the sensitivity of cross-strata set thickness statistics to section alignment with flow direction, *Geological Society of America Connects Online Meeting*
- 12. *Ariel Russell, **Anjali. M. Fernandes**, Antoinette Abeyta, Hosna Sheikholeslami, Robert Mahon, Travis Swanson, Tracking the lived experiences of undergraduate geoscientists engaged in research to assess the success of inclusive project design, *Geological Society of America Connects Online Meeting*
- 13. *Laura Lapham, *Douglas A. Benally Jr., *Keira T. Redhouse, **Anjali. M. Fernandes**, Robert Mahon, Antoinette Abeyta, Travis Swanson, Identifying the Sources of Organic Carbon in Sediment Deposited by the Mississippi River Flood of 2019, *Geological Society of America Connects Online Meeting*
- 14. **Sarah K. Brisson, **Jaleigh Q. Pier, Anjali M. Fernandes, **James P. Kerr, **J. Andrew Beard, Andrew M. Bush, Mapping paleoenvironmental preference changes of brachiopods during the Late Devonian extinction, *Geological Society of America Connects Online Meeting*
- 15. **Madeline Kollegger, Jorge Lorenzo-Trueba, **Anjali M. Fernandes**, Arvind Singh, Antoinette Abeyta, Upstream propagation of sea-level signal under high and low amplitude sea level oscillations in fluvio-deltaic transport systems: The dynamics of the fluvio-deltaic surface, *Geological Society of America Connects Online Meeting*
- 16. Antoinette Abeyta, **Anjali M. Fernandes**, Robert C Mahon, Travis Swanson, The True Cost of Participation Addressing Financial Barriers to Field Education, *Earth Educators Rendezvous*
- 17. **Madeline Kollegger, Jorge Lorenzo-Trueba, **Anjali M. Fernandes**, Arvind Singh, Antoinette Abeyta, Propagation of sea-level variations in fluvio-deltaic environments: Insights from a moving boundary framework, *Geological Society of America Northeastern Section Annual Meeting*.

- 1. *Jose Alfonso Apura, Antoinette Abeyta, **Anjali M. Fernandes**, Jorge Lorenzo-Trueba, Arvind Singh, Relating and comparing the stratigraphic record of experimental deltas to artificial stratigraphy generated by image analysis of surface conditions over time, *American Geophysical Union, Fall Meeting*
- 2. *Douglas A. Benally Jr, Antoinette Abeyta, **Anjali M. Fernandes**, Jorge Lorenzo-Trueba, Arvind Singh, Indigenous concepts and oral history integrated with western science in order to promote the interest in STEM fields in Indigenous communities through stratigraphy, *American Geophysical Union, Fall Meeting*
- 3. *Bobbi Padilla, Antoinette Abeyta, **Anjali M. Fernandes**, Jorge Lorenzo-Trueba, Arvind Singh, Statistical Analysis of Delta Morphology and Stratigraphic Preservation Using Field, Experimental, and Numerical Data, *American Geophysical Union, Fall Meeting*
- 4. Antoinette Abeyta, **Anjali M. Fernandes**, Jorge Lorenzo-Trueba, Arvind Singh, Removing geographic barriers in research experiences for undergraduate (REU) programs: a remote participation model with minority serving institutions, *American Geophysical Union, Fall Meeting*

- 5. Fernandes, A. M., Singh, A., Martin, J., Parameterizing controls on the three-dimensional arrangement of channel deposits in the subsurface depositional record of deltas, *American Geophysical Union, Fall Meeting*
- 6. **Brisson, S., **Pier, J., **Fernandes, A. M.**, Bush, A. M., Changes in paleoecological gradients resulting from the Frasnian-Famennian extinction event (Late Devonian) in the Appalachian Foreland Basin, *The Geological Society of America*
- 7. Bush, A., **Beard, J. A., **Brisson, S., **Kerr, J., **Pier, J., **Fernandes, A. M.,** Hren, M., Getty, P., The Frasnian-Fammenian (Late Devonian) extinction event in shallow marine, siliciclastic paleoenvironments of the northern Appalachian Basin, USA, *5th International Palaeontological Congress* [talk]

8. Neinhuis, J., Tornqvist, T. E., **Jankowski K. L., Fernandes A. M., **Keogh, M., A New Subsidence Map for Coastal Louisiana, *State of the Coast.* [talk]

2017

- 1. **Fernandes, A. M.,** Smith, V. B., The Expression of Backwater Dynamics in the Morphology, Kinematics and Deposit Architecture of Fluvio-deltaic Channels, *American Geophysical Union, Fall Meeting, New Orleans* **[talk]**
- Tornqvist, T. E., **Keogh, M., **Jankowski, K., Fernandes A. M, Nienhuis, J., Monitoring Rates of Subsidence and Relative Sea-Level Rise in Low-Elevation Coastal Zones: A New Approach American Geophysical Union, Fall Meeting, New Orleans [invited talk]
- 3. **Jankowski, K., Tornqvist, T. E., **Fernandes A. M.**, Relative Sea-Level Rise and Coastal Wetland Response on Annual to Millennial Timescales in Louisiana, USA, *American Geophysical Union, Fall Meeting, New Orleans*.
- 4. **Fernandes, A. M.,** Martin, J., Pickering, J., Howes, N., The Expression of Backwater Dynamics on the Lithology and Architecture of Fluvio-deltaic Channel Belts, Meeting of the Geological Society of America **[invited talk]**
- **Beard, J. A., Bush, A., Hren, M., **Brisson, S., Fernandes, A. M., Carbon Cycle Perturbations Along an Onshore-Offshore Gradient during The Kellwasser Mass Extinction Events, Upper Devonian, Northern Appalachian Basin. [talk]
- 6. **Fernandes, A. M.,** Straub, K. M., The Kinematics and Sedimentary Record of a Self-evolving Continental Slope Fed by a Prograding Shelf Delta, The Japanese Geophysical Union **[talk]**
- 7. Fernandes, A. M., Straub, K. M The Kinematic Evolution of Stacked Strata on Experimental Shelf Margins, *The Meeting of the American Association of Petroleum Geologists, Houston, Texas* [talk]
- 8. **Fernandes, A. M.,** Scheidt, C., Paola, C., Caers, J., Quantifying Natural Delta Variability Using a Multiple-Point Geostatistics Prior Uncertainty Model: Bridging the Gap Between Quantitative Surface Dynamics and Machine Learning, *The Meeting of the American Association of Petroleum Geologists, Houston, Texas* **[talk]**
- 9. Fernandes, A. M., Martin, J., Connecting the Backwater Dynamics of Large Rivers to the Composition and Shapes of Channel Belts in the Coastal Zone, *The Meeting of the American Association of Petroleum Geologists, Houston, Texas* [talk]

- 1. **Fernandes, A. M.,** Connecting the Backwater Dynamics of Coastal Rivers to the Heterogeneity of Preserved Channel Deposits, *American Geophysical Union, Fall Meeting, San Francisco.*
- 2. **Jankowski, K., Tornqvist, T. E., **Fernandes A. M.**, Relative Sea-Level Rise and Coastal Wetland Response on Annual to Millennial Timescales in Louisiana, USA, *American Geophysical Union, Fall Meeting, San Francisco*.
- 3. Tornqvist, T. E., **Keogh, M., **Jankowski, K., Fernandes A. M., Are Tide Gauges Useful Recorders of Relative Sea-Level Rise in Large Deltaic Settings? *American Geophysical Union, Fall Meeting, San Francisco.* [invited talk]
- 4. Fernandes, A. M., Straub, K. M., Stratal Stacking on Experimental Shelf Margins, *The Meeting of the Geological Society of America, Denver, CO* [invited talk]
- 5. Fernandes, A. M., Straub, K. M., Buttles, J., Mohrig, D., How do Submarine Channels Form? -An Experimental Perspective, *The Meeting of the Geological Society of America, Denver, CO* [talk]
- 6. Straub, K. M., **Fernandes, A. M.**, Bishnoi, T., Autogenic Processes in Submarine Transport Systems and their Linkage to Terrestrial Boundary Conditions, *The Meeting of the Geological Society of America, Denver, CO* [invited talk]
- 7. **Beard, J. A., Bush, **Fernandes, A. M.,** Getty, P., Hren, M., 2016, Stratigraphic revision and facies analyses of the Frasnian-Famennian boundary interval (Upper Devonian) in New York and Pennsylvania, The *Meeting of the Geological Society of America, Denver, CO.*
- 8. Fernandes, A. M., *Wang, K., Esposito, C., Kolker, A. S., A Simple Advection-Settling Model for Land-building in Coastal Diversions, *Community Surface Dynamics Modelling System Sediment Experimentalist Network Joint Meeting*, Boulder, CO.
- 9. Tornqvist, T. E., **Jankowski, K. L., Fernandes, A. M., *Keogh, M., Present-day shallow subsidence rates and rates of relative sea-level rise in coastal Louisiana, *2nd International Workshop on Coastal Subsidence*. [talk]
- 10. Fernandes, A. M., Tornqvist, T. E., Straub, K. M., Mohrig, D., The stratal signatures of backwater dynamics of lowland rivers, *Meeting of the Geological Society of America, South-Central Section*, Baton Rouge, La. [invited talk]
- 11. *Wang, K., **Fernandes, A. M.,** Esposito. C., Kolker, A. S., A 2-D Land-building Model for Suspended Sediment in Coastal Diversions, *Meeting of the Geological Society of America, South-Central Section, Baton Rouge, La.*

- 12. **Schenck, T., Ouimet, W., Fernandes A. M., Quantifying Paleo-floods in New England Rivers, *Meeting of the Geological Society of America, North-East Section.*
- 13. Fernandes, A. M., **Esposito, C., Kolker, A. S., **Ameen, A., State of the Coast, Time-scales of land construction associated with sediment diversions in fine-grained systems, *State of the Coast, New Orleans, La.* [talk]
- **Esposito, C., Tornqvist, T. E., Fernandes, A. M, Shen, Z., Chamberlain, E., Efficient retention of mud for land building on the Mississippi Delta Plain, *State of the Coast, New Orleans, La.* [talk]
- 15. **Jankowski, K., Tornqvist, T. E., **Fernandes A. M.,** Quantifying Mississippi Delta wetland resilience using largescale regional monitoring data, *AGU Ocean Sciences*.

- 1. Fernandes, A. M., Straub, K. M., Statistics of Stacked Shelf Margin Strata, *American Geophysical Union, Fall Meeting, San Francisco.* [talk]
- 2. Perillo, M. M., Mohrig, D., **Fernandes, A. M.,** MacQuaker, J. H., Buttles, J., Mud-laden Gravity Flows- The Fun of Mixing Clays, *American Geophysical Union, Fall Meeting, San Francisco*. **[talk]**
- 3. Scheidt, C., Fernandes A. M., Paola, C., Caers, J., Quantifying Natural Delta Variability using a Multi-point Geostatistics Prior Uncertainty Model, *American Geophysical Union, Fall Meeting, San Francisco*.
- 4. **Fernandes, A. M.,** Straub, K. M., Mohrig, D., Tornqvist, T. E., Inverting River Dynamics from their Static Residues on Ancient Acoustically-Imaged Landscapes. *Meeting of the Ecological Society of America*. **[invited talk]**
- 5. Fernandes, A. M., Straub, K. M., Tornqvist, T. E., Mohrig, D., The stratal signatures of backwater dynamics of lowland rivers, *Meeting of the American Association of Petroleum Geoscientists, Denver.*
- 6. **Fernandes, A. M.,** Mohrig, D., Paleo-hydraulic reconstructions from channel deposits in the Brushy Canyon Formation, west Texas, *Meeting of the American Association of Petroleum Geoscientists, Denver.* **[talk]**
- **Schenck, T., Ouimet, W., Fernandes, A. M., Characterizing Late Pleistocene And Holocene Flood Deposits in Eastern Connecticut; Characterizing Late Pleistocene And Holocene Flood Deposits in Eastern Connecticut, Geological Society of America Northeastern Section Annual Meeting

2014

- 1. **Fernandes, A. M.,** Straub, K. M., Mohrig, D., Tornqvist, T. E., The signature of fluvial backwater hydraulics reflected in the stratigraphy of lowland rivers, *American Geophysical Union, Fall Meeting, San Francisco*.
- 2. Fernandes, A. M., Straub, K. M., Mohrig, D., Tornqvist, T. E., Back-water hydraulic controls reflected in the stratigraphy of lowland rivers, *SEPM Research Conference on Autogenics, Grand Junction, Colorado.*
- 3. Fernandes, A. M., Straub, K. M., Sedimentation patterns on the continental slope linked to the dynamics of shelfedge deltas, meeting of the *American Association of Petroleum Geologists, Houston*. [talk]

2013

1. Fernandes, A. M., Straub, K. M., 2014, Linking the dynamics of sub-aerial and submarine channels across the shelfedge, *American Geophysical Union, Fall Meeting, San Francisco* [talk]

2012

- 1. Fernandes, A. M., Petter, A., Mohrig, D., Steel, R. J., Depositional Conditions Associated with Bank-Attached Bars in Submarine Channels, *American Geophysical Union, Fall Meeting, San Francisco*.
- 2. Fernandes, A. M., Petter, A., Mohrig, D., Steel, R. J., Reconstructing the Depositional Conditions Associated with Bank-Attached Bars in Submarine Channels of the Upper Brushy Canyon Formation, West Texas, *AAPG Annual Conference, Long Beach, California.* [talk]
- 3. **Fernandes, A. M.,** Buttles, J., Mohrig, D., Markowski, M., Rinehart, E., Attributes of Preserved Stratigraphy Associated with Erosional Sinuous Submarine Channels: An Experimental Perspective, meeting of the *American Association of Petroleum Geologists, Long Beach, California.*
- 4. Fernandes, A. M., Mohrig, D., Petter, A., Steel, R. J., Geometries, Processes and Stratigraphy of Separation Bars in Sinuous Submarine Channels, *Meeting of Young Researchers in Earth Sciences*. [invited talk]

- 1. **Fernandes, A. M.,** Mohrig, D., Buttles, J., Markowski, M., Rinehart, E., Experimental Observations of Turbidity Currents Interacting with an Erodible Sinuous Channel, *American Geophysical Union, Fall Meeting, San Francisco.* **[talk]**
- 2. *Markowski, M., Fernandes, A. M., Mohrig, D., Buttles, J., Rinehart, E., Designing an Erosional Turbidity-Current Channel: A Balancing Act, *American Geophysical Union, Fall Meeting, San Francisco*.
- 3. **Fernandes, A. M.,** Mohrig, D., Steel, R., Buttles, J., Henriksen, S., Three-dimensional Bar-form Geometries and Inferred Formative Processes in Sinuous Submarine Channels, *Meeting of the Geological Society of America, Minneapolis, Minnesota.* **[talk]**
- 4. **Fernandes, A. M.,** Petter A. L., Mohrig, D., Steel, R., Depositional Conditions Associated with Bank-Attached Bars and Channel-Filling Deposits in Submarine Channels of the Upper Brushy Canyon Formation, west Texas *Meeting of the Geological Society of America, Minneapolis, Minnesota*.
- 5. Fernandes, A. M., Petter A. L., Mohrig, D., Steel, R., Depositional Conditions Associated with Bank-Attached Bars and Channel-Filling Deposits in Submarine Channels of the Upper Brushy Canyon Formation, west Texas, *Internal architecture, bedforms and geometry of turbidite channels, Geological Society of London, London.* [talk]
- 6. Henriksen, S., Duffaut, K., **Fernandes, A.,** Janocko, M., Jiang, S., Pontén, A., A multidisciplinary approach towards understanding the formation of sinuous deep-water channels, *Internal architecture, bedforms and geometry of turbidite channels, Geological Society of London, London.*
- 7. Fernandes, A. M., Mohrig, D., Steel, R., Buttles, J., Henriksen, S., A Three-Dimensional Geometric Analysis of Bank-attached Bar-forms in Sinuous Submarine Channels: A Tool for Inferring the Relative Importance of Bedload and Suspended Load Sedimentation, meeting of the *American Association of Petroleum Geologists, Houston.* [talk]
- 8. **Fernandes, A. M.,** Petter A. L., Mohrig, D., Steel, R., Sediment fractionation within bypass and channel-filling turbidites of upper slope channels, Brushy Canyon Formation, west Texas, *AGU Chapman Source to Sink Conference, Oxnard, California.*

- 1. Fernandes, A. M., Mohrig, D., Steel, R., Buttles, J., Henriksen, S., Geometries and Inferred Depositional Processes of Bank-attached Bar-forms in Sinuous Submarine Channels, *American Geophysical Union Fall Meeting, San Francisco*.
- 2. Fernandes, A. M., Mohrig, D., Steel, R., Buttles, J., Henriksen, S., Three-Dimensional Geometries and Inferred Depositional Processes of Bank-attached Bar-forms in Sinuous Submarine Channels, *The International Sedimentological Congress, Mendoza, Argentina.* [talk]
- 3. Henriksen, S., Duffaut, K., **Fernandes, A. M.,** Janocko, M., Jiang, S., Pontén, A., A multidisciplinary approach towards understanding the formation of sinuous deep-water channels, *The International Sedimentological Congress, Mendoza, Argentina.*
- 4. Fernandes, A. M., Buttles, J., Mohrig, D., Steel, R., Henriksen, S., Laboratory-scale Channelization by Sheet-like Density Underflows, meeting of the *American Association of Petroleum Geologists, New Orleans.* [talk]

2009

- 1. **Fernandes, A. M.,** Buttles, J., Mohrig, D., Steel, R., Laboratory-scale Channelization by Sheet-like Density Underflows, *Meeting of The International Association of Sedimentologists, Alghero, Italy.* **[talk]**
- 2. Fernandes, A. M., Mohrig, D., Buttles, J., Peyret, A., Steel, R., Laboratory Experimentation in Self-channelization by Turbidity Currents, meeting of the *American Association of Petroleum Geologists, Denver*.
- 3. **Fernandes, A. M.,** Steel, R., Henriksen, S., Mohrig, D., Comparing Stratal Architectures in Confined and Weakly Confined Turbidite Channel Systems, meeting of the *American Association of Petroleum Geologists, Denver.*
- 4. Buttles, J., Fernandes, A. M., Mohrig, D., A Physical Model of Submarine Knickpoint Evolution and Erosion Style in a Cohesive Sediment Bed, *Second Workshop on the Modeling of Turbidity Currents and Related Gravity Currents*, *UCSB, Santa Barbara*.

SELECT MEDIA MENTIONS OF SCIENTIFIC CONTRIBUTIONS

In reference to publication Jankowski et al. 2017 (DOI: 10.1038/ncomms14792 (2017))

- March, 2017, Discoveries (nsf.gov): Link
- March, 2017, Science Daily: Link

In reference to publication Neinhuis et al., 2017 (DOI:10.1130/GSATG337GW.1)

- June 15, 2017, The Washington Post: Link
- June 15, 2017, NOLA Times-Picayune: Link

In reference to NSF-RAPID work in 2019-2020 (NSF EAR grant #2005439)

- U. S. House of Representative Women's History Month celebration of outstanding women educators, featuring Co-PI Antoinette Abeyta (<u>https://www.youtube.com/watch?v=znG915xSbgg</u>; 29:15 31:17)
- Denison feature: https://denison.edu/news-events/featured/134628
- Denison Feature: <u>https://denison.edu/academics/geosciences/feature/134867</u>
- Student perspectives: https://denisonian.com/2020/02/features/geoscience-students-conduct-research-in-louisiana/

MEDIA APPEARANCES

Undersampled Radio (Episode 69): A podcast about machine learning in the geosciences (2017)