# JULIA S. REECE

Assistant Professor

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#### RESEARCH STATEMENT

My research interests include the mechanics and transport properties of mudrocks, subsurface pressures/ stresses, submarine slope failures, physical and chemical diagenesis as well as unconventional shale gas reservoirs. I use field samples and data and employ a suite of laboratory techniques including sedimentological and geotechnical experimentation (grain size, Atterberg Limits, uniaxial consolidation) and micro-scale imaging techniques (petrographic and scanning electron microscopy). I am currently conducting research in the Midland Basin (Spraberry and Wolfcamp Formations), Gulf of Mexico, and Nankai Trough offshore Japan.

# ACADEMIC APPOINTMENTS

2014 – present	Assistant Professor, Dept. of Geology and Geophysics, Texas A&M University
2013 - 2014	Postdoctoral Scholar, Dept. of Geophysics, Stanford University
2012 <b>–</b> 2013	Postdoctoral Fellow, Bureau of Economic Geology, The University of Texas at Austin
2006 <b>–</b> 2011	Graduate Research and Teaching Assistant, Jackson School of Geosciences, The
	University of Texas at Austin
2007	Summer Intern, Shell International Exploration and Production, Inc., Houston, TX
2004 - 2006	Graduate Student Assistant, Department of Geosciences, University of Bremen
2001 - 2004	Undergraduate Student Assistant, Department of Geosciences, University of Bremen

# **EDUCATION**

2011	Ph.D. Geosciences	The University of Texas at Austin
2006	Diplom (M.S.) Geosciences	University of Bremen, Bremen, Germany
2004	B.S. Geosciences	University of Bremen, Bremen, Germany

# **FUNDED RESEARCH**

# Current

#### Texas A&M Triads for Transformation Grant, 2020 - 2022

Geomaterial characterization of lunar simulants with agglutinate particles

Principal Lead proponent: Julia Reece; Co-proponents: Bjorn Birgisson, Youjun Deng

**Total award: \$30,000** 

# American Chemical Society, Petroleum Research Fund Doctoral New Investigator, 2015 - 2019

Effects of microbial activity on mechanical and transport properties of mudstones Principal Investigator: **Julia Reece** (TAMU); Collaborator: Michael Tice (TAMU)

**Total award: \$110,000** 

# National Science Foundation, International Ocean Discovery Program (IODP)

Full proposal for multidisciplinary IODP investigations along a crustal flow-line across the western flank of the southern Mid-Atlantic Ridge: The South Atlantic Transect (853-Full2) → <u>IODP Expeditions 390 and 393</u> scheduled for October-December 2020 and April-June 2021, respectively

Principal Lead Proponent: Rosalind Coggon (Southampton); Data Lead Proponent: Robert Reece (TAMU) Proponents: Gail Christeson, Damon Teagle, Brandi Kiel Reese, Jason Sylvan, Mark Leckie, Nicholas Hayman, James Zachos, Brandon Briggs, Matthew Huber, **Julia Reece**, Svenja Rausch, John Kirkpatrick, Michelle Harris, Debbie Thomas, Miriam Katz, Christopher Lowery, Clifford Heil, and William Gilhooly **No funding requested.** 

# **Pending**

#### **National Science Foundation**

CAREER: Microfossils as Drivers for Submarine Landslides?

Principal Investigator: Julia Reece (TAMU)

Total award: \$ 526,054 (5 yrs)

# **Consortium of petroleum industry members**

Immature (Neogene) mudrocks: Analogs for unconventional shale gas/oil plays – A comprehensive evaluation of stratigraphic, sedimentary, lithologic, organic matter kinetics, and diagenetic controls on rock property evolution of organic-rich mudrocks

Principal Lead Proponent: Ursula Hammes; Co-proponents: Julia Reece Total Award: \$1,300,296.31; TAMU portion: \$903,991.60 (3 yrs)

# CoreLab, Berg-Hughes Center (BHC) – Crisman Institute Initiative (JIP to be developed)

Influence of soaking process on clay microstructure using dehydrated resedimented mudstones as analogues and Clay morphology and its impact on desiccation in oil/gas shales

Principal Lead Proponent: Julia Reece

Total Award: \$238,000 (2 yrs)

# CoreLab, Berg-Hughes Center (BHC) – Crisman Institute Initiative (JIP to be developed)

Reservoirs properties, geological modeling and their impact on desiccation in oil/gas shales
Principal Lead Proponent: BHC Petrophysicist (being hired), Geomodeler (being hired), and **Julia Reece** (TAMU)

Total Award: \$224,000 (2 yrs)

Comment: Drs. Mukul Bathia and Julia Reece wrote the proposal.

#### **Declined**

#### National Science Foundation, International Ocean Discovery Program (IODP) (Full 2 proposal)

Neogene to Quaternary climate, sedimentation, and ocean productivity along the NW African continental margin (Full2 Proposal submitted March 31<sup>st</sup>, 2019)

Principal Lead Proponent: Torsten Bickert (University of Bremen); Data Lead Proponent: Sebastian Krastel (University of Kiel)

Proponents: Ilham Bouimetarhan, Anya J. Crocker, Peter deMenocal, Lydie Dupont, Aggeliki Georgiopoulou, Timothy D. Herbert, Anna Nele Meckler, Stefan Mulitza, **Julia Reece**, Oscar Romero, Enno Schefuß, Tilmann Schwenk, Peter J. Talling, Morelia Urlaub, Thomas Westerhold, Paul A. Wilson

No funding requested.

# Texas A&M University, X-Grant Round 2 (Full proposal)

Environmental disturbance and ecological response on the Texas coast: Building resilience via lessons from the past (submitted May  $6^{\circ}$ , 2019)

Principal investigator: Christina Belanger; Co-proponents: Pete van Hengstum, Tim Dellapenna, Yige Zhang, Heather Thakar, David Retchless, Anna Armitage, Ron Eytan, Ethan Grossman, Karl Kaiser, Franco Marcantonio, Nicholas Perez, Antonietta Quigg, **Julia Reece**, Daniel Roelke, Ashley Ross, Courtney Thompson

# Total TAMU award: \$1,500,000; Reece portion: \$16,526

# **National Science Foundation, International Ocean Discovery Program (IODP)**

The Role of Pressure and Temperature in Retrogressive Landslides in the Western North Atlantic (Full Proposal)

Principal Lead Proponent: Derek Sawyer (The Ohio State University); Data Lead Proponent: Jenna Hill (USGS) Proponents: Rick Colwell, Ann Cook, Will Fortin, Matthew Hornbach, Scott Klasek, Nathan Miller, Maria Nikolinakou, Alexey Portnov, **Julia Reece**, Jara Schnyder, Niall Slowey, Benjamin Phrampus, James Gibson, Christopher Jackson, Jason Chaytor

No funding requested.

#### Texas A&M University, X-Grant Round 1 (one-pager)

The Future of Texas: Building future resiliency by diagnosing the drivers and recurrence of Hurricanes, Hypoxia, and Hydroclimate (superfloods vs. megadroughts) over the last 3000 years

Principal Investigator: Pete van Hengstum (TAMUG); Co-proponents: Tim Dellapenna (TAMUG), Ron Eytan (TAMUG), Ethan Grossman (TAMU), Christina Belanger (TAMU), Nicholas Perez (TAMU), Julia Reece (TAMU), Franco Marcantonio (TAMU), Yige Zhang (TAMU), Daniel Roelke (TAMU)

**Total award: \$TBD** 

# National Science Foundation, Marine Geology and Geophysics

Collaborative Research: The effect of earthquake energy on consolidation and shear strength of continental slope sediments: Testing the 'seismic strengthening' hypothesis

Principal Investigator: Julia Reece; collaborative with Derek Sawyer (Ohio State University)

Project Duration: 09/01/2017 – 08/31/2020

Total award: \$440,886; TAMU portion: \$245,604

# **Expired**

# TAMU College of Geosciences, High Impact Learning Experiences (HILE) for Undergraduate Research, Fall 2016

Understanding mechanical behavior of mudrock mixtures; funding provided to enhance 491 undergraduate research course for Melissa Altobelli and Travis Shackleton

Principal Investigator: Julia Reece

Total award: \$1200

# TAMU College of Geosciences, High Impact Learning Experiences (HILE) for Undergraduate Research, Fall 2016

Travel grant for Melissa Altobelli to attend and present at the American Geophysical Union (AGU) Fall Meeting in San Francisco in December 2016

Principal Investigator: Julia Reece

Total award: \$600

# TAMU College of Geosciences, High Impact Learning Experiences (HILE) for Undergraduate Research, Spring 2016

Heterogeneities in mudstones
Principal Investigator: Julia Reece

Total award: \$600

# TAMU College of Geosciences, High Impact Learning Experiences (HILE) for Undergraduate Research, Spring 2016

Relationship between porosity, sorting, and stress in IODP cores

Principal Investigator: Julia Reece

Total award: \$600

# Consortium for Ocean Leadership, Schlanger Ocean Drilling Fellowship Award 2010 - 2011

Resedimentation of Nankai mudstones to illuminate lithologic control on permeability and compressibility

Principal Investigator: **Julia Schneider** (UT); PhD Supervisor: Peter Flemings (UT)

**Total award: \$28,000** 

# **PUBLICATIONS**

† indicates graduate student advisee ResearcherID: H-8743-2012 Google Scholar H-index: 10; Citations: 313

#### **Published**

- 1. †Mills, N.T., **Reece, J.S.**, Tice, M.M. (in review). Clay minerals modulate early carbonate diagenesis, *Geology*.
- 2. Daigle, H., **Reece, J.S.**, Flemings, P.B. (2020). A modified Swanson method to determine permeability from mercury intrusion data in marine muds, *Marine and Petroleum Geology*, 113, doi:10.1016/j.marpetgeo.2019.104155.
- 3. Daigle, H., **Reece, J.S.**, Flemings, P.B. (2019). Evolution of the percolation threshold in muds and mudrocks during burial, *Geophysical Research Letters*, 46, doi:10.1029/2019GL083723.
- 4. Casey, B., **Reece, J.S.**, Germaine, J.T. (2019). One-Dimensional Normal Compression Laws for Resedimented Mudrocks, *Marine and Petroleum Geology*, *103*, 397-403, doi:10.1016/j.marpetgeo.2019.02.023.
- 5. Wu, W., Reece, J.S., Gensterblum, Y., and Zoback, M.D. (2017). Permeability evolution of slowly slipping faults in shale reservoirs, *Geophysical Research Letters*, 44, doi:10.1002/2017GL075506.
- 6. Flemings, P.B., **Reece, J.S.**, Ditkof, J., Atkins, C.C., Sawyer, D.E. (2015). Data Report: Particle Size Analysis of Sediments in the Nankai Trough, IODP Expedition 319 Hole C009A, *In*: Saffer, D., McNeill, L., Byrne, T., Araki, E., Toczko, S., Eguchi, N., Takahashi, K., and the Expedition 319 Scientists, *Proc. IODP*, 319: Tokyo (Integrated Ocean Drilling Program Management International, Inc.), doi: 10.2204/iodp.proc.319.203.2015.
- 7. Daigle, H. and **Reece, J.S.** (2015). Permeability of two-component granular materials, *Transport in Porous Media*, Vol. 106, p. 523-544, doi:10.1007/s11242-014-0412-6.
- 8. Casey, B., Germaine, J.T., Flemings, P.B., **Reece, J.S.**, Gao, B., and Betts, W. (2013). Liquid limit as a predictor of mudrock permeability, *Marine and Petroleum Geology*, Vol. 44, p. 256-263, doi:10.1016/j.marpetgeo.2013.04.008.
- 9. **Reece, J.S.**, Flemings, P.B., and Germaine, J.T. (2013). Data Report: Permeability, compressibility, and microstructure of resedimented mudstone from IODP Expedition 322, Site C0011, *In*: Saito, S., Underwood, M.B., Kubo, Y., and the Expedition 322 Scientists, *Proc. IODP*, 322: Tokyo (Integrated Ocean Drilling Program Management International, Inc.), doi:10.2204/iodp.proc.322.205.2013.

- 10. **Reece, J.S.,** Flemings, P.B., Dugan, B., Long, H., and Germaine, J.T. (2012). Permeability-porosity relationships of shallow mudstones in the Ursa Basin, northern deepwater Gulf of Mexico, *Journal of Geophysical Research*, 117, B12102, doi:10.1029/2012JB009438.
- 11. Day-Stirrat, R.J., Schleicher, A.M., **Schneider, J.**, Flemings, P.B., Germaine, J.T., van der Pluijm, B.A. (2011). Preferred orientation of phyllosilicates: Effects of composition and stress on resedimented mudstone microfabrics, *Journal of Structural Geology*, Vol. 33, No. 9, p. 1347-1358, doi:10.1016/j.jsg.2011.06.007.
- 12. **Schneider, J.,** Flemings, P.B., Day-Stirrat, R.J., Germaine, J.T. (2011). Insights into pore-scale controls on mudstone permeability through resedimentation experiments, *Geology*, Vol. 39, No. 11, p. 1011-1014, doi:10.1130/G32475.1.
- 13. **Schneider, J.**, Flemings, P.B., Dugan, B., Long, H., and Germaine, J.T. (2009). Overpressure and consolidation near the seafloor of Brazos-Trinity Basin IV, Northwest Deepwater Gulf of Mexico, *Journal of Geophysical Research*, 114, B05102, doi:10.1029/2008JB005922.
- 14. Winkelmann, D., Geissler, W., **Schneider, J.**, Stein, R. (2008). Dynamics and timing of the Hinlopen/Yermak Megaslide north of Spitsbergen, Arctic Ocean, Marine Geology, 250, 34-50, doi:10.1016/j.margeo.2007.11.013.
- 15. Dugan, B., Flemings, P.B., Urgeles, R., Sawyer, D., Iturrino, G.J., Moore, J.C., **Schneider, J.** (2007). Physical Properties of Mass Transport Complexes in the Ursa Region, Northern Gulf of Mexico (IODP Expedition 308) Determined from Log, Core, and Seismic Data, *Proceedings 2007 Offshore Technology Conference*: Paper OTC 18704.

# In preparation

- 16. **Reece, J.S.** (in prep.). Deformation and transport processes of resedimented mudstones from offshore Japan, *Geochemistry, Geophysics, Geosystems*.
- 17. <sup>†</sup>Eakin, A.L., **Reece, J.S.**, Milliken, K.L., Locklair, R., Montgomery, P. (in prep.). Chemostratigraphy and petrologic characterization of Permian Spraberry and Wolfcamp Formations, Midland Basin, Texas, *AAPG Bulletin*.

#### **COLLABORATORS**

Christina Belanger (TAMU); Torsten Bickert (Marum, University of Bremen, Germany); Brendan Casey (Exponent, Inc.); Hugh Daigle (UT Austin); Ruarri Day-Stirrat (Shell Oil Company, USA); Brandon Dugan (Colorado School of Mines); Yves Gensterblum (Academy RWTH Aachen, Germany); John Germaine (Tufts University); Ursula Hammes (Hammes Energy & Consultants); Ronny Hofmann (Shell Oil Company, USA); Derek Sawyer (Ohio State University); Jason Sylvan (TAMU); Michael Tice (TAMU); Morelia Urlaub (GEOMAR, Germany); Wei Wu (Nanyang Technological University, Singapore); Mark Zoback (Stanford University)

# **TEACHING**

**Texas A&M University** 

GEOL 689: Geofluids

graduate, 5 students graduate, 8 students (co-taught with Dr. Ursula Hammes)	Spring 2019 Spring 2017	
GEOL 689: Shale Reservoir Workshop: Analyzing Organic-Rich Mudrocks From Basin to Na	noscale	
Lead Instructor: Dr. Ursula Hammes graduate, 15 students	Fall 2016	
GEOL 306: Introduction to Sedimentology and Stratigraphy		
undergraduate, 64 students	Fall 2019	
undergraduate, 25 students	Spring 2019	
undergraduate, 64 students	Fall 2018	
undergraduate, 59 students	Fall 2017	
undergraduate, 90 students	Fall 2016	
undergraduate, 63 students	Fall 2015	
GEOL 311: Principles of Geological Writing		
undergraduate, 23 students	Spring 2017	
undergraduate, 18 students	Spring 2015	
undergraduate, 20 students	Fall 2014	
GEOL 210: Geological Communication		
undergraduate, 26 students	Fall 2019	
GEOL 491: Undergraduate Geology Research Course		
undergraduate, 4 students	Summer 2019	
undergraduate, 5 students	Summer 2018	
Guest lectures:		
GEOL 180: Introduction to Geology & Geophysics	Fall 2019	
GEOL 180: Introduction to Geology & Geophysics	Spring 2019	
GEOL 306: Introduction to Sedimentology and Stratigraphy (2x guest lectures)	Spring 2016	
GEOS 101: Introduction to the Geosciences	Fall 2015	
GEOS 101: Seminar for Transfer Students Fall 2014, Fall 2015, Fall 201	16, Spring 2017	
The University of Texas at Austin		
Crustal Fluids, helping advisor out with permeability laboratory		
graduate, Professor: Peter Flemings	Spring 2011	
Petroleum Geology, TA		
undergraduate, Professors: Peter Flemings, Xavier Janson, Ron Steel	Spring 2010	

# STUDENT ADVISING (\* graduated)

# **Graduate Students**

Name	Date of supervision	Institution	Degree	Role
Alexander Ferrell	8/19 – present	TAMU G&G	M.S.	Committee Co-Chair
Clyde Findlay	1/18 – present	TAMU G&G	Ph.D.	Committee Member

Krishna M. Pradeep	3/17 – present	TAMU Civil Eng.	M.S.	Committee Member
C. Ryan Elmore	1/16 – present	TAMU G&G	Ph.D.	Committee Chair
N. Tanner Mills	8/15 – present	TAMU G&G	Ph.D.	Committee Chair
Autumn Eakin	8/14 – present	TAMU G&G	Ph.D.	Committee Chair
Adnan Ashraf*	3/17 - 6/18	TAMU Civil Eng.	M.S.	Committee Member
Nfn Ricardo*	9/17 - 5/18	TAMU PETE	M.S.	Committee Member
Noah Miller*	6/17 - 10/17	TAMU G&G	M.S.	Committee Member
Dong Wang*	12/14 - 12/16	TAMU Civil. Eng.	Ph.D.	Committee Member
Joshua DeVore*	8/15 - 5/16	Ohio State Univ.	M.S.	Unofficial Com. Member
William Betts*	3/13 - 5/14	UT Austin	M.S.	Committee Member

# **Undergraduate Students**

Name	Date of supervision	<b>Project/Current Position</b>
Schuyler Hoff	10/18 – 12/19	Student technician helping in the laboratory
Michael Martinez	01/19 - 12/19	Compression of microfossil-rich sediments
Wyatt Scott	01/19 - 12/19	Sediment properties related to submarine slope failures
Dennis Mmasa*	01/17 - 12/17	University of Arkansas (M.S. student)
Melanie Bowen*	08/16 - 12/17	ExxonMobil
Travis Shackleton*	01/16 - 08/16	
Melissa Altobelli*	01/16 - 12/16	ExxonMobil
J. Clayton Goodspeed*	08/15 - 05/16	Halliburton

# AWARDS AND HONORS TO SUPERVISED STUDENTS

2018	1 <sup>st</sup> place, PhD Research Poster, TAMU Geol. & Geophys. Research Symposium	Autumn Eakin
2018	GSA Travel Grant (\$125)	Tanner Mills
2017	GSA Travel Grant (\$125)	Tanner Mills
2017	1 <sup>st</sup> place, PhD Completed Research, TAMU Geol. & Geophys. Research Symp.	Autumn Eakin
2017	AAPG Grants-in-Aid Award (\$3000)	Tanner Mills
2017	TAMU Diversity Graduate Fellowship (not accepted though)	Melissa Altobelli
2016 - 2017	Berg-Hughes Center Fellowship (BP)	Ryan Elmore
2016	2 <sup>nd</sup> place, PhD Anticipated Research, TAMU Geol. & Geophys. Research Symp.	Tanner Mills
2016	3 <sup>rd</sup> place, Undergraduate Research, TAMU Geol. & Geophys. Research Symp.	Melissa Altobelli
2015 - 2016	Berg-Hughes Center Fellowship (Saudi ARAMCO)	Tanner Mills
2015	1 <sup>st</sup> place, PhD Anticipated Research, TAMU Geol. & Geophys. Research Symp.	Autumn Eakin

# OTHER ACCOMPLISHMENTS TO SUPERVISED STUDENTS

2018	Summer Internship with ConocoPhillips	Tanner Mills
2018	Full-time position with ExxonMobil	Melanie Bowen
2018	Spring Internship with ExxonMobil	Melanie Bowen
2017	Full-time position with ExxonMobil	Melissa Altobelli
2017	Internship with ExxonMobil	Melissa Altobelli

# PROFESSIONAL SERVICE

**Internal Service (TAMU)** 

**Department of Geology and Geophysics** 

Department Awards Committee	01/20 – present
Berg Hughes Scholarship Committee	08/19 – present
Graduate Student Awards Committee	01/18 – present
Instructional Assistant Professor Search Committee	09/18 - 08/19
Executive Committee	01/18 - 05/18
Graduate Admissions Task Force for "Making the Graduate Program Better"	03/17 - 12/17
Unconventional Resources Search Committee	02/17 - 04/17
Berg-Hughes Center Fellowship Committee	03/16 - 05/17
Graduate Admissions Committee	09/15 - 12/17
Hosting Halbouty Visiting Chair Dr. Ursula Hammes (Hammes Energy & Consultants)	09/16 - 05/17
Callege of Cassaigness	
College of Geosciences	12/10 progent
College Awards Committee	12/19 – present
Strategic Planning Steering Committee	01/19 – present
Onboarding & Mentoring Taskforce	10/14 - 02/15
New Geosciences Building – Scanning and Optical Microscopy Working Group	10/15 - 01/16

#### **External Service**

# Ocean Discovery Lecture Series, International Ocean Discovery Program (IODP)

09/18 - 05/19

The Ocean Discovery Lecture Series (formerly the Distinguished Lecturer Series) is a renowned lecture series, in which about six distinguished lecturers per academic year speak at many institutions (~6-9) about their scientific results and discoveries related to IODP. The lecturer also acts as an advocate for IODP and teaches community colleges, museums, etc. about IODP.

# Science Evaluation Panel (SEP), International Ocean Discovery Program (IODP)

10/14 - 09/17

SEP is an advisory body of the *JOIDES Resolution* Facility Board (JRFB) and primarily reviews proposals to use the IODP drilling platforms.

#### **Session Convener**

Co-Convener (AGU Fall Meeting 2017)	
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12/17

#### Judge

3/18
3/17
2/16
2/14
2/12
2/12

#### Organize

Co-organizer of School of Earth Sciences Postdoc Seminar Series, Stanford University

01/13 - 07/13

# Referee

# Peer reviewed journals

Advances in Water Resources, American Rock Mechanics Association (ARMA), Earth and Planetary Science Letters (EPSL), Geology, Geophysical Research Letters (GRL), Journal of Geophysical Research – Solid Earth (JGR), Marine and Petroleum Geology (MPG), NSF International Ocean Discovery Program (IODP), Geochemistry, Geophysics, Geosystems (G-cubed), Transport in Porous Media

# Funding agencies

American Chemical Society (ACS)

# **HONORS & AWARDS**

TAMU Montague - Center for Teaching Excellence Scholar IODP Ocean Discovery Lecturer	2019 - 2020 2018 - 2019
Author Achievement Award, Bureau of Economic Geology, UT Austin	2012
Best JSG Student Paper Award, UT Austin, Dept. of Geological Science	2011
Best Ph.D. technical talk, UT Austin, Dept. of Geological Science	2011
Ewing/Worzel Fellowship, UT Institute for Geophysics	2011
AGU Outstanding Student Paper Award (AGU Fall Meeting)	2010
Schlanger Ocean Drilling Fellowship Award, Consortium for Ocean Leadership (\$28,000)	2010 - 2011
Outstanding Teaching Assistant Award, UT Austin, Dept. of Geological Science	2010
Hess Fellowship	2009
Ewing/Worzel Fellowship, The University of Texas at Austin Institute for Geophysics	2008
Chevron Excellence Award	2008
Ewing/Worzel Fellowship, The University of Texas at Austin Institute for Geophysics	2008
Chevron Excellence Award	2007
ConocoPhillips Distinguished GeoFluids Fellowship	2007

# FIELD ACTIVITIES

Project (platform)	location	dates	role
GEOL 609 (Field Geology)	Andros Island, Bahamas	04/16 - 04/16	assisting faculty
IODP Exp. 308 (JOIDES Resolution)	Gulf of Mexico	05/05 - 07/05	sedimentologist
ARK XX/3 (R/V Polarstern)	Svalbard, Arctic Ocean	08/04 - 10/04	research assistant
M54/2 ( <i>R/V Meteor</i> )	Costa Rica, Nicaragua	08/02 - 09/02	research assistant
Undergraduate research field projects	various locations in Germany	2001-2004	research assistant
led by University of Bremen	Ž		

# PROFESSIONAL AFFILIATIONS

American Geophysical Union (AGU)
Deformation Experimentalists at the Frontier Of Rock and Mineral research (DEFORM)
Geological Society of America (GSA)

# **INVITED TALKS**

Mud and Bugs Under Stress: Compression of Marine Sediments Beneath the Seafloor, Central Washington University, Ellensburg, Washington, May 3, 2019 (as part of IODP Distinguished Lecture Series)

Mud and Bugs Under Stress: Compression of Marine Sediments Beneath the Seafloor, Southwest Oregon Community College, Coos Bay, Oregon, April 13, 2019 (as part of IODP Distinguished Lecture Series)

Mud and Bugs Under Stress: Compression of Marine Sediments Beneath the Seafloor, Montana State University, Billings, Montana, March 28, 2019 (as part of IODP Distinguished Lecture Series)

Mud and Bugs Under Stress: Compression of Marine Sediments Beneath the Seafloor, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, February 21, 2019 (as part of IODP Distinguished Lecture Series)

Mud and Bugs Under Stress: Compression of Marine Sediments Beneath the Seafloor, Rowan University, Glassboro, New Jersey, November 15, 2018 (as part of IODP Distinguished Lecture Series)

Mud and Bugs Under Stress: Compression of Marine Sediments Beneath the Seafloor, Museum of Arts and Sciences, Macon, Georgia, October 2, 2018 (as part of IODP Distinguished Lecture Series)

Mud and Bugs Under Stress: Compression of Marine Sediments Beneath the Seafloor, University of Miami – Rosenstiel School of Marine and Atmospheric Science, Miami, Florida, October 1, 2018 (as part of IODP Distinguished Lecture Series)

Mud and Bugs Under Stress: Compression of Marine Sediments Beneath the Seafloor, Mississippi State University, Starkville, Mississippi, September 6, 2018 (as part of IODP Distinguished Lecture Series)

Mud and Bugs Under Stress: Compression of Marine Sediments Beneath the Seafloor, University of Louisiana at Lafayette, Lafayette, Louisiana, September 4, 2018 (as part of IODP Distinguished Lecture Series)

Controls on hydromechanical properties of mudstones through scientific ocean drilling, University of Texas San Antonio, Department of Geological Sciences Seminar, Fall 2017

Compressing natural mudstones: Controls on mechanical and fluid-flow properties, University of Georgia, Department of Geology Seminar, Fall 2015

Multi-scale flow behavior in mudrocks, The Ohio State University, School of Earth Sciences seminar, Spring 2013

Multi-scale flow behavior in mudrocks, Texas A&M University, Department of Geology and Geophysics, Spring 2013

Impact of silt fraction on compressibility, permeability, and microstructure of natural mudstones, Stanford University, Department of Geophysics seminar, Fall 2012

#### PARTICIPATION IN WORKSHOPS

Leadership Development Program with Dr. Natemeyer, TAMU	Summer 2018
IODP proposal development workshop on Submarine Landslides, SMU, Dallas, TX	
NSF Career and Other Young Investigator Programs Seminar, TEES, TAMU	
eCampus Assignments and Assessments, TAMU Instructional Technology Services	Fall 2016
Writing Good Exam Questions, TAMU Center for Teaching Excellence	Spring 2016
Teaching Methods, TAMU Center for Teaching Excellence	
Lecturing Well, TAMU Center for Teaching Excellence	
ADVANCE Roadmap for a Successful Academic Career Workshop, TAMU	Spring 2014
IODP Workshop on Multidisciplinary Transect Drilling During Transits, TAMU	Fall 2013
Building U.S. Strategies for 2013-2023 Scientific Ocean Drilling, Denver, Colorado	
Seabed Sediment Pore Pressure: Genesis, Measurement and Implications for Design/Analysis,	
Oslo, Norway	
Marie Curie Summer School on Aqueous and Porous Materials, Trèst, Czech Republic	Fall 2008

TEMIS 2D/3D (Basin Modeling), Beicip-Franlab, Houston, TX Soil Mechanics, Shell E&P, Houston, TX

Spring 2008 Spring 2007

# **OUTREACH ACTIVITIES**

"Beer can" activity at College's GeoX event	June 14th, 2018
"Beer can" activity as outreach activity with Bryan High School students	April 27 <sup>th</sup> , 2018
Outreach activity at the Brazos Valley Children's Museum	Oct. 7 <sup>th</sup> , 2017
Outreach activity at College's GeoX event	June. 9th, 2017
Outreach activity along with College event hosting Coram Deo Academy	Feb. 3 <sup>rd</sup> , 2017

# **CONFERENCE ABSTRACTS/ PRESENTATIONS**

† indicates graduate student advisee, § indicates undergraduate student advisee

# 2019

Coggon, R.M., Reece, R.S., Christeson, G.L., Teagle, D.A.H., Sylvan, J.B., Reese, B.K., Leckie, R.M., Lowery, C., Hayman, N.W., **Reece, J.S.**, Jöns, S., Zachos, J.C., Briggs, B.R., Kirkpatrick, J.B., and Huber, M. (2019), The South Atlantic Transect – A Multidisciplinary Scientific Ocean Drilling Investigation, Abstract presented at 2019 Fall Meeting, AGU, San Francisco, California, December 12-16.

<sup>†</sup>Mills, N.T., **Reece, J.S.**, and Tice, M.M. (2019), The acid-base properties of clay minerals as a potential buffer for sediment pore water pH and carbonate saturation during microbial iron reduction (Talk), Texas A&M University Department of Geology and Geophysics Student Research Symposium, College Station, Texas, March 21.

# 2018

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<sup>†</sup>Eakin, A.L., **Reece, J.S.**, and Milliken, K. (2018), Cement paragenesis as revealed by SEM cathodoluminescence imaging in the Permian Spraberry and Wolfcamp Formations (Poster), Texas A&M University Department of Geology and Geophysics Student Research Symposium, College Station, Texas, March 22.

<sup>†</sup>Mills, N.T., **Reece, J.S.**, and Tice, M.M. (2018), The influence of clay minerals on the evolution of mudstone pore fluids during microbial iron reduction (Poster), Texas A&M University Department of Geology and Geophysics Student Research Symposium, College Station, Texas, March 22.

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#### 2017

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- <sup>†</sup>Eakin, A.L. and **Reece, J.S.** (2017), Investigation of quartz and carbonate diagenesis in mudstones of the Permian Spraberry and Wolfcamp Formations, west Texas (Poster), Texas A&M University Department of Geology and Geophysics Student Research Symposium, College Station, Texas, March 30.
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- §Altobelli, M.A. and **Reece, J.S.** (2016), Effect of organic material on mechanical, hydrological, and microstructural properties of mudstones (Poster), Abstract MR51C-2722 presented at 2016 Fall Meeting, AGU, San Francisco, California, December 12-16.
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<sup>†</sup>Eakin, A. and **Reece, J.S.** (2015), Effect of Diagenesis on Rock Consolidation Behavior (Poster), Texas A&M University Department of Geology and Geophysics Graduate Research Symposium, College Station, Texas, April 10.

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# **BOOK CHAPTERS**

1. Agarwal, A., Aird, T., Benson, S., Cameron, D., Druhan, J., Harris, J., Maher, K., **Reece, J.**, Vialle, S., Zahasky, C., Zaranonello, S., Zoback, M. (2015). Chapter 42: Overview of assessment of leakage detection and intervention scenarios for CO<sub>2</sub> sequestration, *In:* Gerdes, K.F. (editor), Carbon Dioxide Capture for Storage in Deep Geological Formations, Volume 4, CPL Press and BPCNAI, 964 pp.

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