**Kelly M. Dorgan**

Senior Marine Scientist, Dauphin Island Sea Lab

Assistant Professor of Marine Sciences, University of South Alabama

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**Education**

B.S. 2001 University of California, Santa Cruz (Marine Biology), Regents’ Scholar,

 Highest Honors

Ph.D. 2007 University of Maine (Oceanography), Advisor: Pete Jumars

 Dissertation title: “Mechanics of burrowing in muddy sediments”

2007 - 2010 Postdoctoral researcher, University of California, Berkeley, Advisor: Mimi Koehl

2011 - 2013 Postdoctoral researcher, Scripps Institution of Oceanography, Advisor: Greg Rouse

**Professional Appointments**

2019 - current Senior Marine Scientist II, Dauphin Island Sea Lab

2014 - current Assistant Professor of Marine Sciences, University of South Alabama

2013 - 2019 Senior Marine Scientist I, Dauphin Island Sea Lab

**Honors and Awards**

2020 Listed as one of Mobile Bay Magazine’s 40 under 40

2017 Office of Naval Research Young Investigator Program Award

2015 National Academy of Sciences Gulf Research Program Early Career Research Fellowship

2012 The Carl Gans Award “to an outstanding young investigator for distinguished contributions to the

 field of comparative biomechanics” from the Society for Integrative and Comparative Biology

 Division of Comparative Biomechanics

2010 Selected as a participant in the International Antarctic Biology Course, McMurdo Station.

2009 Selected as a participant in the FIRST IV (Faculty Institutes for Reforming Science Teaching)

 Workshop, Charleston, OR.

2008 Selected as a participant in the Eco-DAS VIII (Ecological Dissertations in Aquatic Sciences)

 Symposium, Honolulu, HI.

2007 Association for the Sciences of Limnology and Oceanography Raymond L. Lindeman

 Award for the outstanding paper in aquatic science by a young scientist

2007 International Polychaete Association Student Award for Best Student Presentation

2006 Listed as one of Popular Science’s “Brilliant 10” Young Scientists

**Publications (peer reviewed)**

1. **Dorgan, K.M.**, W. Ballentine\*, G. Lockridge, M. Ballard, K. Lee, P. Wilson. 2020. Impacts of simulated infaunal activities on acoustic wave propagation in sediments. *The Journal of the Acoustical Society of America* 147: 812-823. doi: 10.1121/10.0000558
2. **Dorgan, K.M.**, R. Parker#, R., W. Ballentine\*, S.K. Berke, E. Kiskaddon##, K. Gadeken#, E. Weldin\*, W.C. Clemo#, T. Caffray\*, S. Budai\*, S. Bell. 2020. Sublethal effects of oil exposure on infaunal behavior, bioturbation, and sediment oxygen consumption. *Marine Ecology Progress Series* 635: 9-24. doi: 10.3354/meps13215
3. Jacquot, M.#, **K.M. Dorgan**, B. Mortazavi, A. Kleinhuizen, and W.C. Clemo#. 2018. Macrobenthic community structure and influence on denitrification in soft sediments (Mobile Bay, Alabama). *Marine Ecology Progress Series* 605: 17-35.
4. **Dorgan, K.M.** 2018. Kinematics of burrowing by peristalsis in granular sands. *Journal of Experimental Biology* 221: jeb167759.
5. Clemo, W.C.#, and **K.M. Dorgan**. 2017. Functional morphology of Eunicidan (Polychaeta) Jaws. *Biological Bulletin* 233: 227-241.
6. **Dorgan, K.M**., C. D’Amelio\*, S.M Lindsay. 2016. Strategies of burrowing in soft muds by diverse polychaetes. *Invertebrate Biology* 135(4): 287-301. **\*Top 20 downloaded articles for 2016-2017** (355 downloads)
7. Grill, S.\*, **K. M. Dorgan**. 2015. Burrowing by small polychaetes - mechanics, behavior, and muscle structure of *Capitella* sp. *Journal of Experimental Biology* 218: 1527-1537.
8. **Dorgan, K.M.** 2015. Commentary: The biomechanics of burrowing and boring. *Journal of Experimental Biology* 218: 176-183.
9. Jumars, P.A., **K.M. Dorgan**, S.M. Lindsay. 2015. Diet of worms emended: An update of Polychaete feeding guilds. *Annual Review of Marine Science* 7: 497-520.
10. Francoeur, A.A.\*, **K.M. Dorgan**. 2014. Burrowing behavior in mud and sand of morphologically divergent polychaete species (Annelida: Orbiniidae). *Biological Bulletin* 226: 131-145.
11. Law, C.J.\*, **K.M. Dorgan**, G.W. Rouse. 2014. Relating divergence in polychaete musculature to different burrowing behaviors: a study using Opheliidae (Annelida). *Journal of Morphology.* DOI: 10.1002/jmor.20237.
12. **Dorgan, K.M.**, C.J. Law\*, and G.W. Rouse. 2013. Meandering worms: Mechanics of undulatory burrowing in muds. *Proceedings of the Royal Society B* 280: 20122948*.*
13. Law, C.J.\*, **K.M. Dorgan**, and G.W. Rouse. 2013. Validation of three sympatric *Thoracophelia* species (Annelida: Opheliidae) from Dillon Beach, CA using mitochondrial and nuclear DNA sequence data. *Zootaxa* 3608(1): 067-074.
14. Johnson, B.D., M. Barry, B.P. Boudreau, P.A. Jumars, **K.M. Dorgan**. 2012. In Situ Tensile Fracture Toughness of Surficial Cohesive Marine Sediments. *Geo-Marine Letters.* DOI: 10.1007/s00367-011-0243-1.
15. **Dorgan, K.M.**, S. Lefebvre, J.H. Stillman, M.A.R. Koehl. 2011. Energetics of burrowing by the cirratulid polychaete, *Cirriformia moorei*. *Journal of Experimental Biology* 214: 2202-2214.
16. Denny, M., **K.M. Dorgan**, D. Evangelista, A. Hettinger, J. Leichter, W. Ruder, I. Tuval. 2011. Anchor ice and benthic disturbance in shallow Antarctic waters: Interspecific variation in initiation and propagation of ice crystals. *Biological Bulletin* 221(2)*.* **\*\*Editor’s pick and cover image**
17. Murphy, E.A.K.\*, **K.M. Dorgan**. 2011. Burrow extension with a proboscis: Mechanics of burrowing by the glycerid, *Hemipodus simplex*. *Journal of Experimental Biology* 214: 1017-1027.
18. Che, J.\*, **K.M. Dorgan**. 2010. Mechanics and kinematics of backward burrowing by the polychaete, *Cirriformia moorei. Journal of Experimental Biology* 213: 4272-4277.
19. **Dorgan, K.M.** 2010. Environmental constraints on the mechanics of crawling and burrowing using hydrostatic skeletons. *Journal of Experimental Mechanics* 50(9): 1373-1381. DOI: 10.1007/s11340-010-9399-2
20. Che, J.\* and **K.M. Dorgan**. 2010. It’s tough to be small: Dependence of burrowing kinematics on body size. *Journal of Experimental Biology* 213: 1241-1250.

**\*\*featured article in “Inside JEB”**

1. **Dorgan, K.M.**, S.R. Arwade, and P.A. Jumars. 2008. Worms as wedges: Effects of the mechanical properties of the medium on burrowing behavior. *Journal of Marine Research* 66(2): 219-254*.*
2. **Dorgan, K.M.**, S.R. Arwade, and P.A. Jumars. 2007. Burrowing in muddy sediments by crack propagation: forces and kinematics. *Journal of Experimental Biology* 210: 4198-4212*.*

**\*\*F-1000recommended** (Summers A: 2008. F1000.com/1116373)

1. Jumars, P.A., **K.M. Dorgan**, L.M. Mayer, B.P. Boudreau and B.D. Johnson. 2007. Physical constraints on infaunal lifestyles: May the persistent and strong forces be with you. In: W. Miller, III, Ed. *Trace Fossils: Concepts, Problems, Prospects.* Elsevier, pp. 442-457.
2. **Dorgan, K.M.**, P.A. Jumars, B.P. Boudreau and B.D. Johnson. 2006. Macrofaunal burrowing: The medium is the message. *Oceanography and Marine Biology: An Annual Review* 44: 85-121.
3. Boudreau, B.P., Algar, C., Johnson, B., Croudace, I., Reed, A., **Dorgan, K.M.**, Jumars, P.A., Grader, A.S., Gardiner, B.S., and Y. Furukawa. 2005. Bubble growth and rise in soft sediments. *Geology* 33 (6): 517-520.
4. **Dorgan, K.M.**, P.A. Jumars, B. Johnson, B.P. Boudreau, and E. Landis. 2005. Burrow extension by crack propagation. *Nature* 433: 475.

**\*\*ASLO Lindeman award recipient**

1. **Dorgan, K.M.**, A. Valdes, and T.M. Gosliner. 2002. Phylogenetic systematics of the genus *Platydoris* (Mollusca, Nudibranchia, Doridoidea) with descriptions of six new species. *Zoologica Scripta* 31: 271-319.

\*undergraduate student or post-B.S. intern

# graduate student

**Publications (not peer reviewed)**

1. Lee, K.M., G.R. Venegas, M.S. Ballard, P.S. Wilson, **K.M. Dorgan**. 2018. Acoustics of biologically active marine sediments. *Proceedings of Meetings on Acoustics* 33: 005003*.*
2. Lee, K.M., M.S. Ballard, A.R. McNeese, **K.M. Dorgan**, W. Ballentine\*, G.R. Venegas, P.S. Wilson. 2017. Comparison between infauna abundance and seabed geoacoustic properties. *Proceedings of Meetings on Acoustics* 31: 005002*.*
3. Venegas, G.R., P.S. Wilson, K.M. Lee, M.S. Ballard, A.R. McNeese, **K.M. Dorgan.** 2017. Core and resonance logger (CARL) measurements of fine-grained sediments containing infauna. *Proceedings of Meetings on Acoustics* 31: 005001.
4. Lee, K.M., M.S. Ballard, G.R. Venegas, P.S. Wilson, **K.M. Dorgan**, A.H. Reed, and E. Roosen. 2016. Preliminary characterization of surficial sediment acoustic properties and infauna in the New England Mud Patch. *Proceedings of Meetings on Acoustics* 26: 070003. doi: 10.1121/2.0000486

**Manuscripts submitted**

1. Cole, S.M.#, **K.M. Dorgan**, W. Walton, B. Dzwonkowski, J. Coogan#. In review (Feb. 2020). Infestation of Farmed Oysters (*Crassostrea virginica*) by Mudblister Worms (*Polydora websteri*). *Aquaculture Environment Interactions*.
2. **Dorgan, K.M.**, R.D. Moseley\*, E. Titus\*, H. Watson\*, S.M. Cole#, W. Walton. In review (Feb. 2020). Mud blister worm infestation and blister recovery in oysters. *Biological Bulletin*.

**Manuscripts in preparation**

1. Gadeken, K. J. #, W.C. Clemo#, S. Dykstra#, M. Fung#, W. Ballentine#, A. Hagemeyer#, **K.M. Dorgan**, B. Dzwonkowski. In prep. Transport and sediment footprint of oyster aquaculture biodeposits. **\*MAS583 class project**
2. **Dorgan, K.M.**, G. Lockridge. In prep. Measurement of the fracture toughness of cohesive marine sediments. Limnology and Oceanography Methods.
3. Berke, S.K.,**K.M. Dorgan**, E. Kiskaddon, S. Bell. In prep. Long-term changes in infaunal communities following the Deepwater Horizon event.
4. Kiskaddon, E., **K.M. Dorgan**, K.J. Gadeken, S.K. Berke, S. Bell. In prep. Oil disturbance reduces species richness but does not affect phylogenetic diversity.

**Published Abstracts**

1. **Dorgan, K.M.**, W.M. Ballentine\*, G. Lockridge, M.S. Ballard, K.M. Lee, P.S. Wilson. 2018. Effects of burrow and tube construction by infauna on sound propagation through marine sediments. *The Journal of the Acoustical Society of America* 144: 1842.
2. Lee, K.M., M.S. Ballard, A.R. McNeese, **K.M. Dorgan**, G.R. Venegas, P.S. Wilson. 2018. Effects of benthic biology on geoacoustic properties of marine sediments. *The Journal of the Acoustical Society of America* 144: 1843.
3. Ballard, M.S., K.M. Lee, A.R. McNeese, J.D. Chaytor, A.H. Reed, **K.M. Dorgan**, G.R. Venegas, P.S. Wilson. 2018. Observations of the effects of benthic biology in measurements from the Acoustic Coring System collected in the New England Mud Patch. *The Journal of the Acoustical Society of America* 144: 1843.
4. Clemo, W.C.#, **K.M. Dorgan**. 2017. Relating functional diversity of infauna and sediment geoacoustic properties. *The Journal of the Acoustical Society of America* 142: 2665.
5. Ballentine, W.\*, **K.M. Dorgan**, K.M. Lee, M.S. Ballard, A.R. McNeese, P.S. Wilson, G.R. Venegas. 2017. Effects of marine infauna on the acoustic properties of sediment. *The Journal of the Acoustical Society of America* 142: 2693.
6. Zeh, M.C., P.S. Wilson, K.M. Lee, M.S. Ballard, **K.M. Dorgan**. 2016, Acoustic scattering by tube-building worms (Polychaeta: Maldanidae) of the New England Mud Patch. *The Journal of the Acoustical Society of America* 140: 3305.

**Patents**

US 8561475 B2. Johnson, B.D., B.P. Boudreau, M.A. Barry, K.M. Dorgan, P.A. Jumars. Method and apparatus for investigating mechanical properties of soft materials. Filed on Mar. 18, 2011.

**Grants and Fellowships**

2019-2024 National Science Foundation CAREER Grant, Biological Oceanography (co-funded by

 IOS and Marine Geology), “CAREER: Mechanisms of bioturbation and

 ecosystem engineering by benthic infauna” (PI: K. Dorgan)

2019-2020 University of South Alabama Center for Environmental Resiliency “Effects of diel

 oxygen cycling and macrofaunal communities on sediment oxygen demand in

 shallow seagrass beds” (PI: K. Gadeken#, K. Dorgan)

2018 Office of Naval Research, Instrumentation grant, “Field instruments for in situ

 measurement of geotechnical properties of sediments” #N00014-18-1-2806 (PI:

 K. Dorgan, G. Lockridge)

2017 - 2020 Office of Naval Research, Young Investigator Program “Impacts of infauna on acoustic

 and geotechnical properties of sediments” #N00014-17-1-2625 (PI: K. Dorgan)

2016 Volkswagon Stiftung “The Ocean’s Seafloor - One Bio-Geo-System Symposium (PI: A.

 Kopf, T. Wever, C. Jenkins, K. Dorgan)

2016-2018 Mississippi-Alabama Sea Grant “Maximizing the return on investment of oyster

 aquaculture by managing mud blister worm infestations” (PI: K. Dorgan and W.

 Walton)

2015-2016 University of South Alabama Center for Environmental Resiliency “Characterization of

 hypoxia vulnerabilities in the Mobile Bay Estuary” (PI: B. Dzwonkowski and K.

 Dorgan)

2015-2017 Office of Naval Research, Code 32, Division 322, Ocean Acoustics, Award #N00014-15-

 1-2602 “Impacts of infaunal organisms on acoustic wave propagation through

 sediments” (PI: K. Dorgan)

2015-2017 National Academy of Sciences Gulf Research Program Early Career Research Fellowship

2015-2017 Gulf of Mexico Research Initiative; Alabama Center for Ecological Resilience (ACER)

 Consortium (co-PI and project lead investigator; Director: J. Valentine)

2010-2013 NSF Biological Oceanography Award #1029160 “Functional diversity of infaunal

 burrowers: Towards a mechanistic understanding of animal-sediment

 interactions” (with PI: G. Rouse)

2007-2010 NSF Integrative Organismal Systems Award #0642249 “QEIB: Energetic cost of

 burrowing” (with PI: M.A.R. Koehl)

2002-2007 NSF Graduate Fellowship

2002-2004 National Defense Science and Engineering Graduate (NDSEG) Fellowship

**Awards to my students**

2018 Graduate student, Kara Gadeken#, won Best Student Poster award at Bays and Bayous meeting

2014 Undergraduate student, Susann Grill\*, won Division of Invertebrate Zoology Best Student Poster

 at the Society for Integrative and Comparative Biology meeting

2010 Manuscript by undergraduate student, James Che\*, featured in “Inside JEB”

**Other Professional Appointments**

Sept.-Oct. 2007 Research Assistant, University of Maine

2002-2007 NSF Graduate Research Fellow

 Darling Marine Center, University of Maine

2002-2004 National Defense Science and Engineering Graduate Fellow,

 Darling Marine Center, University of Maine

2000 (Fall) NSF REU Intern, Bermuda Biological Station

2000 (Summer) NSF REU Intern, Darling Marine Center, University of Maine

1999 (Summer) NSF REU Intern, Summer Systematics Institute, California Academy of Sciences

1995-1998 Intern, Virginia Institute of Marine Sciences

**Invited Lectures**

2020 “Worms in Jell-O: Using photoelastic stress analysis to measure burrowing forces” in Session

R30: Visualizing Forces in Soft Materials via Photoelastic and Other Optical Techniques,

American Physical Society, March 2-6, 2020, Denver, CO.

2020 Panel member, “Lessons Learned from DoD Grantees” at (DEPSCoR) DoD Day Southern

Regional Meeting, February 20, 2020, Louisiana State University, Baton Rouge, LA.

2019 Bio-Inspired Geotechnics Workshop, May 19-22, 2019, Pacific Grove, CA.

2016 The Ocean’s Seafloor - One Bio-Geo-System, October 12-14, 2016, Hannover, Germany

2016 Puget Sound Icarus Workshop on Species Traits, March 2-4, 2016, Lacey, WA.

2014 SoftComp Topical Workshop: Fracture of Soft Materials: from soft solid to complex fluids,

 October 15-18, 2014, Palavas-les-Flots, France.

2011 Aspen Ocean Symposium: Microenvironments modulating biological interactions in the ocean,

 Aspen Center for Physics, January 17-21, 2011, Aspen, CO.

2008 Nereis Park Bioturbation Meeting, August 23-27, 2008, Renesse, Netherlands.

2007 Raymond Lindeman Award Plenary Talk, ASLO 2007 Aquatic Sciences Meeting, February 4-9,

 2007, Santa Fe, NM.

**Invited Departmental Seminars**

2019 Naval Postgraduate School, Oceanography Department, May 23, 2019, Monterey, CA.

2017 University of Alabama, Birmingham, Biology Department, October 30, 2017, Birmingham, AL.

2015 University of Alabama, Marine Science Club, October 6, 2015 (via skype).

2015 Valdosta University, Biology Department, October 1, 2015, Valdosta, GA.

2015 University of West Florida, Biology Department, March 20, 2015, Pensacola, FL.

2014 University of Virginia, Department of Environmental Sciences, December 4, 2014,

 Charlottesville, VA.

2014 Environmental Protection Agency Gulf Ecology Division, March 19, 2014, Gulf Breeze, FL.

2014 Whitney Lab, University of Florida, February 21, 2014, St. Augustine, FL.

2014 Gulf Coast Research Laboratory, University of Southern Mississippi, February 13, 2014, Ocean

 Springs, MS.

2013 Bigelow Laboratory for Ocean Sciences, East Boothbay, ME. October 3, 2013.

2011 University of California, Los Angeles, Department of Ecology and Evolutionary Biology

 Seminar, November 30, 2011, Los Angeles, CA.

2011 Scripps Institution of Oceanography, Marine Biology Seminar, April 1, 2011, La Jolla, CA.

2010 Bodega Marine Laboratory, October 20, 2010, Bodega Bay, CA.

2010 Romberg Tiburon Center for Environmental Studies, October 6, 2010, Tiburon, CA.

2010 University of Southern Mississippi, Department of Marine Science Seminar, April 29, 2010,

 Stennis, MS.

2009 Friday Harbor Laboratories, October 6, 2009, Friday Harbor, WA.

2009 Hopkins Marine Station, July 29, 2009, Monterey, CA.

2007 Unity College Women’s Environmental Leadership Group, March 6, 2007, Unity, ME.

2006 Bowdoin College, Biology Department Seminar, November 2, 2006, Bowdoin, ME.

**Contributed Presentations**

1. **Dorgan, K.M.**, S. K. Berke, E. Kiskaddon##, K. Gadeken#, S. Bell. 2019. Linking infauna to sediment oxygen demand. Coastal and Estuarine Research Federation 2019 Conference, Mobile, AL, Nov. 3-7, 2019 (oral).
2. **Dorgan, K.M.**, G. Lockridge, W. Ballentine#, E. Kiskaddon##, W.C. Clemo#. 2019. Mechanical properties of muds: A worm’s perspective. Society for Integrative and Comparative Biology Meeting, January 3-7, 2019, Tampa, FL (oral).
3. **Dorgan, K.M.**, W. Ballentine#, G. Lockridge, E. Kiskaddon##. Effects of burrow and tube construction by infauna on sound propagation through marine sediments. Bays and Bayous, Mobile, AL, November 29-30, 2018 (oral).
4. **Dorgan, K.M.**, W. Ballentine#, G. Lockridge, M.S. Ballard, K.M. Lee, P.S. Wilson. 2018. Effects of burrow and tube construction by infauna on sound propagation through marine sediments. Acoustical Society of America Meeting, Nov. 5-9, 2018, Victoria, BC, Canada (oral, invited symposium).
5. **Dorgan, K.M.**, G. Lockridge, W. Ballentine\*, P. Wilson, M. Ballard, K. Lee. 2017. Acoustics as a tool for studying infaunal impacts on sediments. Nereis Park Conference. August 8-11, 2017, Southampton, NY (oral).
6. **Dorgan, K.M.** 2017. Worms in gelatin. Nereis Park Film Festival. August 8-11, 2017, Southampton, NY (film).
7. **Dorgan, K.M.**, G. Lockridge, W. Ballentine\*, P. Wilson, M. Ballard, K. Lee. 2017. Acoustics as a tool for studying infaunal impacts on sediments. Benthic Ecology Meeting. April 12-16, 2017, Myrtle Beach, SC (oral).
8. **Dorgan, K.M.**, S. Berke, W.C. Clemo#, K. Gadeken#, E. Keller\*, T. Caffray\*, A. Robinson, S. Bell. 2017. Sediment oxygen demand in shallow seagrass beds in the Chandeleur Islands. Gulf of Mexico Oil Spill and Ecosystem Science Conference. Feb. 6-9, 2017, New Orleans, LA (poster).
9. **Dorgan, K.M.**, W. Walton, S. Cole#. 2016. Maximizing the Return on Investment of Oyster Aquaculture by Managing Mud Blister Worm Infestation. Bays and Bayous. Nov. 30-Dec. 1, 2016, Biloxi, MS (oral).
10. **Dorgan, K.M.** 2016. Biological-physical interactions at organismal scales from sediments to the water column: a celebration of the career of Pete Jumars. Ocean Sciences Meeting. February 21-26, 2016, New Orleans, LA (oral).
11. **Dorgan, K.M.**, C. D’Amelio\*, S.M. Lindsay. 2016. Strategies of burrowing in soft muds by diverse polychaetes. Society for Integrative and Comparative Biology Meeting. January 3-7, 2016, Portland, OR (oral).
12. **Dorgan, K.M.**, P.A. Jumars, S.M. Lindsay. 2015. Polychaete Feeding - Synthesized and updated - New diet of worms. Coastal and Estuarine Research Federation Meeting, November 8-13, 2015, Portland, OR (oral).
13. **Dorgan, K.M.**, C. D’Amelio\*, S.M. Lindsay. 2015. Strategies of burrowing in soft muds by diverse polychaetes. Southeastern Regional Society for Integrative and Comparative Biology Meeting. October 12, 2015, Atlanta, GA (short oral).
14. **Dorgan, K.M.** 2015. Food webs in marine sediments: A a case study using inquiry-based learning. Conference on Teaching and Learning, University of South Alabama. May 11-12, 2015, Mobile, AL (poster).
15. **Dorgan, K.M.**, P.A. Jumars, S.M. Lindsay. 2014. Revisiting the Diet of Worms. Society for Integrative and Comparative Biology Meeting. January 3-7, 2014. Austin, TX (poster).
16. **Dorgan, K.M.** 2013. Peristaltic burrowing in beach sands. ASLO 2013 Aquatic Sciences Meeting, February 17-22, 2013, New Orleans, LA (oral).
17. **Dorgan, K.M.**, C.J. Law\*, G.W. Rouse. 2013. Meandering through marine muds: kinematics of burrowing and swimming by the polychaete *Armandia brevis*. Society for Integrative and Comparative Biology 2013 Annual Meeting, January 3-7, 2013, San Francisco, CA (oral).
18. **Dorgan, K.M.**, G. Rouse. 2012. Peristaltic burrowing in beach sands by the polychaete, *Thoracophelia mucronata*. Society for Integrative and Comparative Biology 2012 Annual Meeting, January 3-7, 2012, Charleston, SC (oral).
19. **Dorgan, K.M.**, S. Lefebvre, J.H. Stillman, M.A.R. Koehl. 2011. Energetics of burrowing by the cirratulid polychaete, *Cirriformia moorei*. Society for Integrative and Comparative Biology 2011 Annual Meeting, January 3-7, 2011, Salt Lake City, UT (oral).
20. **Dorgan, K.M.** 2010. The role of anaerobic metabolism in burrowing energetics. Ocean Sciences Meeting, February 22-26, 2010, Portland, OR (oral).
21. **Dorgan, K.M.**, S. Arwade, P.A. Jumars. 2009. Worms as wedges: Effects of sediment mechanics on burrowing behavior. Society for Integrative and Comparative Biology 2009 Annual Meeting, January 3-7, 2009, Boston, MA (oral).
22. **Dorgan, K.M.**, P.A. Jumars. 2007. Burrowing by crack propagation: Why worms are wedges. 9th International Polychaete Conference, August 13-17, 2007, Portland, ME (oral).
23. **Dorgan, K.M.**, P.A. Jumars, S. Arwade. 2007. Burrowing in muddy sediments by crack propagation. Society for Integrative and Comparative Biology 2007 Annual Meeting, January 3-7, 2007, Phoenix, AZ (oral).
24. **Dorgan, K.M.**, P.A. Jumars, S. Arwade. 2006. Burrowing by fracture: Application of fracture models to bioturbation. Ocean Sciences Meeting, February 20-24, 2006, Honolulu, HI (poster).
25. **Dorgan, K.M.**, and P.A. Jumars. 2005. Mechanical constraints on marine burrowers. Estuarine Research Federation 2005, October 16-20, 2005, Norfolk, VA (oral).
26. **Dorgan, K.M.**, P.A. Jumars, S. Arwade. 2005. Mechanical constraints on burrowing in marine sediments. Jacques Monod Conference on Physico-Chemical Ecology of Organisms, September 24-28, 2005, Roscoff (Brittany), France (poster).
27. **Dorgan, K.M.**, P.A. Jumars, B.P. Boudreau, B.D. Johnson, & E. Landis. 2005. Mechanics of burrowing: Implications for benthic studies. ASLO Summer Meeting 2005, June 19-24, 2005, Santiago de Compostela, Spain (poster).
28. **Dorgan, K.M.**, and P.A. Jumars. 2005. Burrowing in mud and sand: Different mechanisms in different media. 34th Annual Benthic Ecology Meeting, April 6-10, 2005, Williamsburg, VA (poster).
29. **Dorgan, K.M.**, and P.A. Jumars. 2004. Unsteady burrowing by crack propagation. ASLO/TOS Ocean Sciences Meeting, February 15-20, 2004, Honolulu, HI (oral).

**Presentations by my students**

1. Gadeken, K. # and **K.M. Dorgan**. 2019. Effects of diel oxygen cycling on infaunal behavior and sediment oxygen demand. Coastal and Estuarine Research Federation 2019 Conference, Mobile, AL, Nov. 3-7, 2019 (oral).
2. Kiskaddon, E.# # , **K.M. Dorgan**, and S.K. Berke. 2019. An ode to phylogenetics in disturbance ecology. Coastal and Estuarine Research Federation 2019 Conference, Mobile, AL, Nov. 3-7, 2019 (oral).
3. Ballentine, W. # and K.M. Dorgan. 2019. Meiofaunal behavioral observations and a new approach to their study. Coastal and Estuarine Research Federation 2019 Conference, Mobile, AL, Nov. 3-7, 2019 (poster).
4. Tripp, E.\*, K. Gadeken#, and **K.M. Dorgan**. 2019. Infaunal behavior variance observed in normoxia and hypoxia. DISL REU symposium, Dauphin Island, AL, Aug. 1, 2019.
5. Ballentine, W.# and **K.M. Dorgan**. 2019. Effects of infauna on sound speed and attenuation in marine sediments. Society for Integrative and Comparative Biology, Tampa, FL, January 3-7, 2019 (poster).
6. Kiskaddon, E.# # , **K.M. Dorgan**, and S.K. Berke. 2019. Impacts of the Deepwater Horizon oil spill on phylogenetic diversity of benthic infauna in the Northern Gulf of Mexico. Society for Integrative and Comparative Biology, Tampa, FL, January 3-7, 2019 (oral).
7. Cole, S.#, **K.M. Dorgan**, W. Walton. 2018. Infestation of farmed oysters (Crassostrea virginica) by mudblister worms. Bays and Bayous, Mobile, AL, November 29-30, 2018 (oral).
8. Titus, E.F.\*, **K.M. Dorgan**, S.M. Cole#, W. Walton. 2018. Oyster recovery from Mudblister Worm Infestation. Bays and Bayous, Mobile, AL, November 29-30, 2018 (poster).
9. Gadeken, K.#, **K.M. Dorgan**. 2018. Effects of the diel oxygen cycle on sediment macrofaunal behavior. Bays and Bayous, Mobile, AL, November 29-30, 2018 (poster). \*student award, 1st place poster
10. Cole, S.#, **K.M. Dorgan**, W. Walton. 2018. Oyster infestation: Abundance of mudblister worms (*Polydora websteri*) in Alabama coast oyster farms. National Shellfish Association Meeting, Seattle, WA, March 18-22, 2018 (oral).
11. Pugh, R.D.\*, **K.M. Dorgan**, S. Cole#, and W. Walton. 2018. Mud blisters in oysters: Relating worm infestation to blister strength. National Shellfish Association Meeting, Seattle, WA, March 18-22, 2018 (poster).
12. Clemo, W.C.#, **K.M. Dorgan**. 2017. Relating functional diversity of infauna and sediment geoacoustic properties. Acoustical Society of America, New Orleans, LA, December 8, 2017 (oral).
13. Ballentine, W.\*, **K.M. Dorgan**, K.M. Lee, M.S. Ballard, A.R. McNeese, P.S. Wilson, G.R. Venegas. Effects of Marine Infauna on the Acoustic Properties of Sediment. Acoustical Society of America, New Orleans, LA, December 8, 2017 (oral).
14. Parker, R.#, **K.M. Dorgan**, A. Robertson, S.K. Berke, S. Bell, E. Weldin\*, T. Caffray\*, S. Budai,\* K. Gadeken#, W. Ballentine\*, E. Kiskaddon. Sublethal impacts of oil exposure on bioturbation. Coastal and Estuarine Research Federation 2017, Providence, RI, November 5-9, 2017 (poster).
15. Clemo, W.C.#. 2017. Jaws: Just when you thought it was safe to go back in the mud… Nereis Park Conference Film Festival. Southampton, NY, August 8-11, 2017 (film).
16. Gadeken, K. #, **K.M. Dorgan**. 2017. Rates of benthic metabolism in an intertidal marsh throughout a diurnal oxygen cycle. Nereis Park Conference, Southampton, NY, August 8-11, 2017 (poster).
17. Pugh, R.D.\*, **K.M. Dorgan**, and S. Cole. 2017. *Polydora websteri* blisters in *Crassotrea virginica*: Strength, area, color. DISL REU symposium, Dauphin Island, AL, August 3, 2017 (poster).
18. Clemo, W.C.#, **K.M. Dorgan**. 2017. Functional morphology of Eunicidan (Polychaeta) jaws. Benthic Ecology Meeting, Myrtle Beach, SC, April 12-15, 2017 (oral).
19. Ballentine, W.M.\*, **K.M. Dorgan**, K. Gadeken#, B. Mortazavi, R. Parker#, E. Kiskaddon, S. Berke, S. Bell. 2017. Effects of macrofauna on oxygen consumption and nutrient fluxes in sediments. Benthic Ecology Meeting, Myrtle Beach, SC, April 12-15, 2017 (poster).
20. Parker, R.#, **K.M. Dorgan**, A. Robertson, S.K. Berke, S. Bell, E. Weldin\*, T. Caffray\*, S. Budai,\* K. Gadeken#, W. Ballentine\*, E. Kiskaddon. Sublethal impacts of oil exposure on bioturbation. Benthic Ecology Meeting, Myrtle Beach, SC, April 12-15, 2017 (poster).
21. Cole, S.#, **K.M. Dorgan**, W. Walton. 2017. Oyster infestation: abundance of mudblister worms (*Polydora websteri*) in Mobile Bay, AL, oyster farms. Benthic Ecology Meeting, Myrtle Beach, SC, April 12-15, 2017 (poster).
22. Gadeken, K.#, **K.M. Dorgan**. 2017. Rates of benthic metabolism in an intertidal marsh throughout a diurnal oxygen cycle. Benthic Ecology Meeting, Myrtle Beach, SC, April 12-15, 2017 (poster).
23. Cole, S.#, **K.M. Dorgan**, W. Walton. 2016. Oyster infestation: abundance of mudblister worms (*Polydora websteri*) in Mobile Bay oyster farms. Bays and Bayous. Nov. 30-Dec. 1, 2016, Biloxi, MS (poster).
24. Lescinsky, H.\*, **K.M. Dorgan**. 2016. Sediment response to diurnal changes. DISL REU Symposium, Dauphin Island, AL, Aug. 2016 (poster).
25. Gadeken, K.#, **K.M. Dorgan**, J. Moore, S.K. Berke. 2016. Application of ecophylogenetics to benthic communities in the Northern Gulf of Mexico. Do functional traits follow phylogeny? Ocean Sciences Meeting. February 21-26, 2016, New Orleans, LA (poster).
26. Clemo, W.C.\*, **K.M. Dorgan**. 2016. Functional morphology of Eunicidan (Polychaeta) jaws. Ocean Sciences Meeting. February 21-26, 2016, New Orleans, LA (poster).
27. Gadeken, K.#, **K.M. Dorgan**, J. Moore, S.K. Berke. 2016. Application of ecophylogenetics to benthic communities in the Northern Gulf of Mexico. Do functional traits follow phylogeny? Society for Integrative and Comparative Biology Meeting. January 3-7, 2016, Portland, OR (poster).
28. Clemo, W.C.\*, **K.M. Dorgan**. 2015. Functional morphology of Eunicidan (Polychaeta) jaws. Southeastern Regional Society for Integrative and Comparative Biology Meeting. October 12, 2015, Atlanta, GA (oral).
29. Cole, S.\*, **K.M. Dorgan**. 2015. Mud blister worm infestation in oysters, Mobile Bay, AL. DISL REU symposium, Dauphin Island, AL, Aug. 2015 (poster).
30. Grill, S.\*, **K. M. Dorgan**. 2014. Burrowing by small polychaetes - mechanics, behavior, and muscle structure of *Capitella* sp. Society for Integrative and Comparative Biology 2014 Annual Meeting, January 3-7, 2014. Austin, TX (poster). \*\* awarded Division of Invertebrate Zoology Student Poster Award
31. Law, C.J.\*, **K.M. Dorgan**, G.W. Rouse. 2013. Differences in polychaete musculature lead to distinct burrowing behaviors. Society for Integrative and Comparative Biology 2013 Annual Meeting, January 3-7, 2013, San Francisco, CA (poster).
32. Francoeur, A.A.\*, **K.M. Dorgan**. 2013. Mud versus sand: Morphological and behavioral comparison of two species of burrowing orbiniid polychaetes. Society for Integrative and Comparative Biology 2013 Annual Meeting, January 3-7, 2013, San Francisco, CA (poster).
33. Law, C\*, **K.M. Dorgan**, G. Rouse. 2012. The kinematics and anatomical features of undulatory burrowing in *Armandia brevis*. Society for Integrative and Comparative Biology 2012 Meeting, Charleston, SC (poster).
34. Che, J\*, **K.M. Dorgan**. 2010. Do the ends justify the means? Mechanics and kinematics of forward and backward burrowing. Ocean Sciences Meeting, February 22-26, 2010, Portland, OR (poster).
35. Murphy, E.A.K.\*, **K.M. Dorgan**. 2010. Long thin slimy ones, short fat juicy ones: Exploring how worms with varying body morphologies burrow. Ocean Sciences Meeting, February 22-26, 2010, Portland, OR (poster).
36. Zeman, S.M.\*, **K.M. Dorgan**. 2010. A two-way street: Burrow bioirrigation behavior and boundary layer flow. Ocean Sciences Meeting, February 22-26, 2010, Portland, OR (poster).
37. Che, J.\*, **K.M. Dorgan**. 2009. It’s tough to be small: Dependence of burrowing kinematics on body size. Society for Integrative and Comparative Biology 2009 Annual Meeting, January 3-7, 2009, Boston, MA (poster).
* undergraduate student or post-B.S. intern or technician

# graduate student

# # M.S. technician

**Co-authored Presentations**

1. Lee, K.M., M.S. Ballard, A.R. McNeese, **K.M. Dorgan**, G.R. Venegas, P.S. Wilson. 2019. Impacts of infauna on geoacoustic properties of marine sediments. Coastal and Estuarine Research Federation 2019 Meeting, Mobile, AL, Nov. 3-7, 2019 (oral).
2. Lee, K.M., M.S. Ballard, A.R. McNeese, **K.M. Dorgan**, G.R. Venegas, P.S. Wilson. 2018. Effects of benthic biology on geoacoustic properties of marine sediments. Acoustical Society of America Meeting, Nov. 5-9, 2018, Victoria, BC, Canada (oral, invited symposium)
3. Ballard, M.S., K.M. Lee, A.R. McNeese, J.D. Chaytor, A.H. Reed, **K.M. Dorgan**, G.R. Venegas, P.S. Wilson. 2018. Observations of the effects of benthic biology in measurements from the Acoustic Coring System collected in the New England Mud Patch. Acoustical Society of America Meeting, Nov. 5-9, 2018, Victoria, BC, Canada (oral, invited symposium)
4. Berke, S. K., **K.M. Dorgan**, A. Robertson, S. Bell, T. Caffray\*, E. Weldin\*, S. Budai\*, R. Parker#, K. Gadeken#, W.C. Clemo#, and E.L. Keller\*. 2018. Long-term changes to benthic community structure following the Deepwater Horizon Event. Society for Integrative and Comparative Biology Meeting. January 3-7, 2018, San Francisco, CA (oral).
5. Lee, K.M., M.S. Ballard, A.R. McNeese, W.M. Ballentine, **K.M. Dorgan**, G.R. Venegas, and P.S. Wilson. 2017. Comparison between infauna abundance and seabed geoacoustic properties. Acoustical Society of America Meeting. New Orleans, LA, December 4-8, 2017.
6. Venegas, G.R., P.S. Wilson, **K.M. Dorgan**, K.M. Lee, M.S. Ballard, and A.R. McNeese. Resonant core-logger measurements of fine-grained sediments containing infauna. Acoustical Society of America Meeting. New Orleans, LA, December 4-8, 2017.
7. Berke, S. K., **K.M. Dorgan**, A. Robertson, S. Bell, T. Caffray\*, E. Weldin\*, S. Budai\*, R. Parker#, K. Gadeken#, W.C. Clemo#, and E.L. Keller\*. 2017. Long-term changes to benthic community structure following the Deepwater Horizon Event. Benthic Ecology Meeting, Myrtle Beach, SC, April 12-15, 2017 (oral).
8. Rawson, P., W.C. Walton, D. Morse, **K.M. Dorgan**. 2017. Gauging the current impact of blister worm on the Atlantic and Gulf Coast oyster culture industries. National Shellfisheries Association, March 26-30, 2017, Knoxville, TN.
9. Zeh, M.#, Wilson, P.S., Lee, K.M., Ballard, M., **Dorgan, K.M**. 2016. Acoustic scattering by tube-building worms (Polychaeta: Maldanidae) of the New England Mud Patch. 5th Joint Meeting of the Acoustical Society of America and Acoustical Society of Japan, December 1, 2016, Honolulu, HI.
10. Lee, K.M., Ballard, M.S., Wilson, P.S., **Dorgan, K.M**., Reed, A.H., Roosen, E. Preliminary characterization of surficial sediment acoustic properties and infauna in the New England Mud Patch. Acoustical Society of America Spring 2016 Meeting, May 23-27, 2016, Salt Lake City, UT.
11. Keller, E.L.\*, T.E. Caffray\*, S.K. Berke, **K.M. Dorgan**, S. Bell, A. Robertson, K. Baltzer, W.C. Clemo\*, K. Gadeken#. Oxygen fluxes in Gulf of Mexico sediments. 2016 Oil Spill and Ecosystem Science Conference. February 1-4, 2016, Tampa, FL.
12. Keller, E.L.\*, T.E. Caffray\*, S.K. Berke, **K.M. Dorgan**, S. Bell, A. Robertson, K. Baltzer, W.C. Clemo\*, K. Gadeken#. Oxygen fluxes in Gulf of Mexico sediments. Society for Integrative and Comparative Biology Meeting. January 3-7, 2016, Portland, OR.

**Teaching experience**

1. Marine Ecology (4 credit, upper-division undergrad), Dauphin Island Sea Lab Summer Programs, 2014-current.
2. Biological-physical Interactions (3 credit, graduate), University of South Alabama, Spring 2015, 2017.
3. Marine Sediment Ecology (3 credit, graduate), University of South Alabama, Spring 2016, 2019.
4. Field Marine Science - Maine (2 credit, graduate), University of South Alabama, Fall 2018.
5. Marine Sciences Seminar (1 credit, graduate), University of South Alabama, Fall 2015.
6. The future of marine ecosystems (1 credit, UC Berkeley freshman seminar), Fall 2009.
7. Invertebrate zoology (3 weeks), taught classes on invertebrate locomotion, feeding, and digestion, Fall 2006 (UMaine, course taught by Kevin Eckelbarger).
8. Design of Marine Organisms (2 weeks), taught classes on burrowing mechanics and suspension feeding, Fall 2006 (UMaine, course taught by Pete Jumars).
9. Marine Sediment Ecology, taught one lecture on burrowing, Spring 2004 (UMaine, course taught by Pete Jumars, Les Watling, and Larry Mayer).
10. Teaching assistant (volunteer) for Physical Oceanography, Fall 2004 (UMaine, course taught by Neal Pettigrew).

**Graduate students mentored (at DISL)**

1. Ryan Parker, M.S., Spring 2019. Thesis: “Sublethal effects of the Water Accommodated Fraction (WAF) of oil on infaunal bioturbation rates in the northern Gulf of Mexico.” Next: educator at Gulf Coast Research Laboratory, USM
2. Sarah Cole, M.S., Fall 2018. Thesis: “Mudblister worm (Polydora websteri) infestation on farmed oysters along the Alabama coast.” Next: Naturalist for Jean-Michel Cousteau's Ambassadors of the Environment at Dorado Beach a Ritz-Carlton Reserve
3. Maite Jacquot, visiting M.S. student conducting thesis research, European Institute for Marine Studies (IUEM), Plouzane, France, Spring 2016. Thesis: “Macrobenthic community structure and influence on denitrification in soft sediments (Mobile Bay, Alabama).” Next: PhD student, Abo Akademie, Finland

**Current graduate students (at DISL)**

Kara Gadeken, PhD candidate, 2015 -

W. Cyrus Clemo, PhD student, 2016 -

Will Ballentine, PhD student, 2018 -

Steve Dykstra, PhD candidate (co-advised with B. Dzwonkowski), 2015 -

**Graduate student committees**

Israel “Alex” Marquez, PhD candidate, U South Alabama, 2017 – (Committee chair: Jeff Krause)

Viktoria Bogantes, PhD candidate, Auburn University, 2016 – (Committee chair: Ken Halanych)

Haley Nicholson, PhD candidate, U South Alabama, 2015 – (Committee chair: Ruth Carmichael)

Alyssa Bennett, MS, U Southern Mississippi, 2014 – Sept. 2017 (Committee Chair: Chet Rakocinski)

**Interns mentored** (at DISL; 13 additional prior to 2013)

1. Chesna Cox (post-BS technician), Jan. 2020 – current.
2. Katelyn Giles (U South Alabama undergrad), summer 2019 – current.
3. Elijah Tripp (REU intern), summer 2019, 1 presentation.
4. Eleanor McDonough (HS intern), Feb.-March 2019. Next: undergraduate
5. Jane McKee (M.S. intern), spring 2019. Next: lab technician at LSU
6. Linda Wyatt (HS intern), summer 2018. Next: undergraduate at U. South Alabama
7. Ellen Titus (post-BS), spring-summer 2018, 1 manuscript in prep., 1 presentation. Next: MS in biology at East Carolina Univ.
8. Rachel Pugh (REU intern), summer 2017, 1 manuscript in prep., 2 presentations. Next: MS in marine science at U So. Miss.
9. Will Ballentine (post-BS), fall 2016 - summer 2017; 2 manuscripts in prep., 2 presentations. Next: PhD in marine science in my lab
10. Haley Lescinsky (REU intern), summer 2016, 1 presentation. Next: MS in public health, U Washington
11. Alessandra Jimenez (post-BS), spring 2016.
12. Sarah Frankenberg (post-BS), fall 2015 - spring 2016. Next: Intern, Yellowstone National Park
13. Sarah Cole (REU intern), summer 2015, 1 presentation. Next: MS in marine science in my lab
14. Alison Yee (post-BS), fall 2015. Next: MS in biology, Cal State Long Beach
15. Katie D’Amelio (post-BS), fall 2014 - winter 2015, 1 manuscript. Next: PhD in biology, Drexel U
16. W. Cyrus Clemo (post-BS technician), fall 2014 - summer 2016, 1 manuscript, 2 presentations. Next: PhD in marine science in my lab
17. Casper Hui (NGI-NOAA intern), summer 2014, 1 presentation
18. Susann Grill (post-BS technician), spring-summer 2014, 1 manuscript, 1 presentation, awarded the best student poster for the 2014 SICB DIZ division (as an undergraduate competing with graduate students). Next: MS in Medical Biometry/Biostatistics at Bremen University, Germany

**Public Outreach**

1. DISL Discovery Day, annual public open house, including interactive posters, flume demonstrations, and worms under microscopes, 2014 – current
2. Guest lecture, Odyssey USA’s lecture series on aquatic life of Alabama (to ~50 retirees); Feb. 15, 2019
3. Featured scientist in the popular science book, “[How to Walk on Water and Climb up Walls: Animal Movement and the Robots of the Future](https://www.amazon.com/How-Walk-Water-Climb-Walls/dp/0691169861/ref%3Dsr_1_1?crid=WOI2GIUTZSHF&keywords=david+hu&qid=1553811480&s=gateway&sprefix=david+hu%2Caps%2C168&sr=8-1)" by David Hu (2018).
4. Boardwalk Talk, DISL Estuarium, ~30-45 min. talks to general public about research, Fall 2014 (additional talks have been given by my students)
5. Lecture, Science Cafe, Moe’s BBQ, Mobile, AL, March 14, 2017
6. Wrote a letter to a politician explaining that she mis-represented my research as supporting intelligent design. My letter was reproduced and discussed in the blog “The Panda’s Thumb” and other science blogs (Fall 2006).
7. Public media coverage of my research, including *Popular Science* (October 2006), the *Maine Sunday Telegram* (Oct. 1, 2006), “Maine Things Considered” on Maine Public Radio (Feb. 16, 2005), *The New York Times* (Feb. 15, 2005), and *New Scientist* (Feb. 5-11, 2005).

**K-12 Educational Activities**

* + - 1. My students and I have participated in 2 episodes of *Gulf Detectives,* a virtual field trip reaching >10,000 middle school students produced by Alabama Public Television (2016).
			2. Graduate students in my biological-physical interactions course (Spring 2017) developed K-12 educational modules and taught visiting middle- and high-school students about topics they learned in the course.
			3. DISL high school summer course guest lecture (2015, 2017, 2019) and career night panelist (2018).
			4. Talks and flume demonstrations to visiting classes to DISL as well as to DISL’s Discovery Hall Program educators, also hosted an “open flume” party for the DISL community with student demonstrations of fluid dynamics.
			5. Presented workshops at the Expanding Your Horizons conference for 7th and 8th grade girls to encourage them to pursue careers in science and technology at the University of Maine, March 15, 2007 and at University of San Diego, March 5, 2011.

**Professional Service**

1. Co-chair for session “Ode to the Benthos III” at CERF 2019.
2. Co-organizer of the symposium “The Ocean’s Seafloor - One Bio-Geo System” funded by Volkswagen Stiftung and held at Herrenhausen Palace, Hannover, Germany, Oct. 12-14, 2016.
3. Co-organizer of the Young Coastal Scientists and Engineers Conference - Americas, held at Dauphin Island Sea Lab, Aug. 21-23, 2017.
4. Co-chair for session “3aUWa, Biological Effects on Seabed Geoacoustic Properties” at the Acoustical Society of America Fall 2018 meeting, “4aAO, Biological Effects on Seabed Geoacoustic Properties” at the Acoustical Society of America Fall 2017 meeting.
5. Co-chair for session “Biological-physical interactions at organismal scales from sediments to the water column” at Ocean Sciences 2016 (an unofficial tribute session for Pete Jumars).
6. Co-chair for session BO17: Linking Ecology and Biogeochemistry in Coastal Sediments: New Approaches for the 21st Century at ASLO 2010.
7. Reviewer for *Limnology and Oceanography, L&O Methods, Science, Ecology, Journal of Experimental Biology, Marine Ecology, Marine Ecology Progress Series, Biological Bulletin, Invertebrate Biology, Aquatic Biology, Journal of the Royal Society: Interface, Integrative and Comparative Biology, Journal of Theoretical Biology,* *Journal of Comparative Physiology B*, *Aquatic Biology,* *Estuarine, Coastal and Shelf Science*, *Physical Biology*, *Journal of the Marine Biological Association of the UK*, *Geochemical Transactions,* and Wiley-Blackwell Publishers, as well as for the NSF Biological Oceanography Program, Chemical Oceanography Program, and Division of Environmental Sciences.
8. Proposal Review Panelist for NSF BIO IOS (2017), National Academy of Sciences Gulf Research Program Early Career Fellowship (2019), Louisiana Sea Grant (2019).
9. Departmental service: Department of Marine Sciences Representative for University of South Alabama Library Committee (2014-current), Vessel committee chair (DISL, 2018-current), Faculty search committee chair (DISL, 2019-current), several hiring committees (USA)

**Membership in Professional Societies**

American Association for the Advancement of Science

American Geophysical Union

Association for the Sciences of Limnology and Oceanography

Coastal and Estuarine Research Federation

Society for Integrative and Comparative Biology

**Other skills and training**

AAUS diver (since 1999)

MOCC Boat operations

NOAA Planning and Facilitating Collaborative Meetings Workshop (April 26-27, 2018)

NSF Reintegrating Biology Jumpstart Workshop (Dec. 4-6, 2019)