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Education:

1977	Ph.D. in Geology, University of South Carolina, Columbia, SC
1972	M.S. in Geological Oceanography, Texas A&M University, College Station, TX
1970	B.A. in Geology, University of New Hampshire, Durham, NH

Academic Positions:

Boston University

Assistant-Associate-Professor of Earth Sciences	1977- Present
Director of Undergraduate Studies of Earth Sciences	1993-1996
Chairman, Department of Geology	1982-1987
Acting Chairman, Department of Earth Sciences	1981(sum), 1995

Adjunct Positions

Graduate Faculty, Department of Geological Sciences,	2001-2007
University of Maine	
Graduate Faculty, Department of Earth and Environmental	2004- Present

Sciences, University of New Orleans

Sabbaticals

Dept. of Geology, Dalhousie University, Halifax, Nova Scotia	1985
Dept. of Earth and Environ. Sciences, University of New Orleans, LA	2010
Dept of Earth and Environ. Sciences, University of New Orleans, LA	2021

Profession

Editor of Journal of Marine Science and Engineering

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sional Societies, Offices, and Appointments:	
Geological Society of America	
Society of Economic Paleontologists and Mineralogists	
President, Coastal Sedimentary Research Group,	1989-1990
Society of Economic Paleontologists and Mineralogists, Eastern	
President	1988/1989
Vice President	1987/1988
International Association of Sedimentologists	
International Geological Correlations Programme (IGCP)	
Project No. 247: Quaternary Shorelines	1989-1995
National Undersea Research Center, Southeast Coordinator	1987-1989
Editorial Board: Journal of Coastal Research	
Associate Editor	1994-Preser
Geological Society of America Grants Committee Member	1997-1999
Geological Society of America, NE Section Council Committee Member	1998-2001
Geological Society of America, Nat. Tech. Sessions Comm. Member	2017-Present

ent Geological Society of America, Nat. Tech. Sessions Comm. Member 2017-Present Louisiana Gulf Shoreline Restoration Science Advisory Board 2002-2006 Chairman, Science Review Committee, Pontchartrain Restoration Program, Louisiana 2005-2008 Science Advisor for Oiling of Sandy Beaches, Macondo Oil Spill 2010-2015 Board of Directors, Coastal Education and Research Foundation 2018-Present

2022-

Honors and Awards

SEPM Shepard Medal for excellence in Marine Geology
 Boston University Templeton Award for Excellence in Student Advising and Mentoring
 Fellow of the Geological Society of America
 College of Arts & Sciences Outstanding Teaching Award in the College Honors Program
 Boston University Undergraduate Research Opportunity Mentor of the Year Award

PUBLICATIONS:

Books and Edited Special Issues

- FitzGerald, D.M. and Hughes, Z., (editors) 2021 *Marshes: Function, Dynamics, and Stresses*, Cambridge University Press, NY, 406 p.
- Davis, R.A. and FitzGerald, D.M., 2020, Beaches and Coasts, 2nd Ed., Wiley Press, Oxford, England. 518 p.
- FitzGerald, D.M., and Reed, D.J., (editors) 2009, Geologic and Environmental dynamics of the Pontchartrain Basin. *Journal of Coastal Research.* SI #54, 263 p.
- FitzGerald, D.M., and Knight, J., (editors), 2005, *High Resolution Morphodynamics and Sedimentary Evolution of Estuaries*, Springer, New York. 365 p.
- Davis, R.A. and FitzGerald, D.M., 2004, Beaches and Coasts, Blackwell Science, Oxford, England. 419 p.
- FitzGerald, D.M., and Rosen, P.S. (editors), 1987, Glaciated Coasts, Acad. Press, London, England. 364 p.

Refereed Journal Articles and Book Chapters (* denotes student advisee)

- Xie, D., Hughes, Z., FitzGerald, D., Tas, S., Asik, T. Z., & Fagherazzi, S. 2024. Impacts of climate change on coastal hydrodynamics around a headland and potential headland sediment bypassing. Geophysical Research Letters, 51, e2023GL105323. https://doi.org/10.1029/2023GL105323
- Georgiou, I.Y., FitzGerald, D.M., and Hanegan, K., 2024, Storm and tidal interactions control sediment exchange at meso-tidal systems. *Proceedings of the National Academy of Sciences: Nexus.*https://doi.org/10.1093/pnasnexus/pgae042
- Hein, C.J., Connell, J.E., FitzGerald, D.M., Hughes, Z., Georgiou, I.E., and King, K. 2024. Vertical accretion trends project doughnut-like fragmentation of saltmarshes. *Nature: Communications Earth & Environment* 5:74. https://doi.org/10.1038/s43247-024-01219-8
- Hughes, Z., Farron, S., and FitzGerald, D.M., 2023, Geographic variability in headward erosion of marsh tidal creeks: ecological and physical causes. *Earth Surface Processes and Landforms* vol. 48: 1-15. https://doi-org.ezproxy.bu.edu/10.1002/esp.5747
- Georgiou, I.Y., FitzGerald, D.M., and Hanegan, K., 2023. Storm induced sediment transport and exchange at coastal inlet systems. *Journal of Coastal of Research*.
- Hanegan, K., FitzGerald, D.M., Georgiou, I.Y., and Hughes, Z.J, 2023, Long-term sea-level rise modeling of a basin and tidal inlet system reveals sediment sink. *Nature Communications*. https://doi.org/10.1038/s41467-023-42895-y
- *Bloemendaal, L.J.H., FitzGerald, D.M., Hughes, Z.J., Novak, A., and Georgiou, I.Y., 2023, Reevaluating the wave power-salt marsh retreat relationship. *Nature Communications: Scientific Reports* 13, 2884. https://doi.org/10.1038/s41598-023-30042-y
- De Souza, P.C.M., Georgiou, I.Y., FitzGerald[,] D.M., Hughes, Z.J., Howes, N.C., and Kulp, M.P., 2022, Hydrodynamic controls on sedimentary facies of tidal point bars: A case study in the Georgia coastal plain, USA: *Sedimentology* doi: 10.1111/sed.13060
- Isla, M., Moyano-Paz, D., and FitzGerald, D.M., 2022, Contrasting beach-ridge systems in different types of coastal barriers. *Earth Surface Processes and Landforms*. 1-25 https://doi.org/10.1002/esp.5429

- FitzGerald, D.M., Hughes, Z.J., Staro, A., Hein, C.J., Sakib, M.M., Georgiou, I.Y., and Novak, A. 2022, Following the Sand Grains. *J. Mar. Sci. Eng.*, 10, 631. https://doi.org/10.3390/jmse10050631
- *Wilson, C.A., Hughes, Z., FitzGerald, D., 2022, Causal Relationships among sea-level rise, marsh crab Activity, and Saltmarsh Geomorphology, *Proceedings of the National Academy of Sciences.* v. 119(9): e2111535119. doi:10.1073/pnas.2111535119
- McBride, R, Anderson, J, Buynevich, I., Cleary, C., Fenster, M, FitzGerald, D, et. al 2022, Morphodynamics of barrier systems: An updated and expanded synthesis. *Treatise on Geomorphology*, v. 26, p. 166-244.
- Lees, D.C., Hein, C.J., and FitzGerald, D.M. 2022, Measuring Organization of Large Surficial Clasts in Heterogeneous Gravel Beach Sediments. *J. Mar. Sci. Eng.* 10: 525. https://doi.org/10.3390/ jmse10040525
- *Bloemendaal, L.J.H., FitzGerald, D.M., Hughes, Z.J., Novak, A., and Phippen, P., 2021, What controls marsh edge erosion. *Geomorphology*. https://doi.org/10.1016/j.geomorph.2021.107745
- FitzGerald, D.M., and Miner, M.D., 2021, Tidal Inlets and Lagoons Along Siliciclastic Barrier Coasts, *Reference Module in Earth Systems and Environmental Sciences*, Elsevier, 231-247.
- Fagherazzi, S., FitzGerald, D.M., Fulweiler, R.W., Hughes, Z., Wiberg, P.L., McGlathery, K.R., Morris, R.T., Tolhurst, T.J., Deegan, L.A., Johnson, D.S., Lesser, J.S., and Nelson, J.A., 2021, Ecogeomorphology of Salt Marshes, *Reference Module in Earth Systems and Environmental Sciences*, Elsevier 23 p.
- FitzGerald, D.M., Hein, C.J., Connell, J.E., Hughes, Z.J., Georgiou, I.Y. Novak, A, 2021, Largest marsh in New England near a precipice. *Geomorphology* https://doi.org/10.1016/ j.geomorph.2021.107625
- *Buynevich, I., and FitzGerald, D.M., 2020, Comparative morphosedimentary framework of small subtropical islands offshore Kuwait. *Marine Geology*. 429: 1-12.
- *Wilson, C.A., Hughes, Z., FitzGerald, D., Kolker, A., Lynch, J., Rosen, P., 2020, Salt marsh sustainability throughout the Holocene in Boston Harbor: a new sea-level curve for the lower Gulf of Maine and implications of recent anthropogenic alteration, *Quaternary Science Reviews*. 240: 1-11.
- Torres, J., Kulp, M., FitzGerald, D.M., Georgiou, I., and Lepper, K., 2020, Geomorphic and temporal evolution of a Mississippi delta flanking barrier island: Grand Isle, LA, *Marine Geology*. 430: 1-13.
- FitzGerald, D. M., Hughes, Z. J., Georgiou, I. Y., Black, S., and Novak, A. 2020. Enhanced, climate driven sedimentation on salt marshes. *Geophysical Research Letters*, 46. https://doi.org/10.1029/2019GL086737
- *Farron, S.J., Hughes, Z., FitzGerald, D.M., and Storm, K.B., 2020, The impacts of bioturbation by common marsh crabs on sediment erodibility: A laboratory flume investigation, *Estuarine, Coastal and Shelf Science* 238: 1-11.
- *Farron, S.J., Hughes, Z., FitzGerald, D.M., 2020. Assessing the response of the Great Marsh to sea-level rise: Migration, submersion or survival, *Marine Geology*, v. 425, 106195
- FitzGerald, D.M., Ryerson, O., Hughes, Z., Black, S., Georgiou, I., Hein, C., and Novak A., 2020. Long-term Variability in Inorganic Sediment Contributions to the Great Marsh, Massachusetts, *Journal of Coastal Research*, v. 95. 11-15.
- FitzGerald, D.M. and Hughes, Z., 2019. Marsh processes and their response to climate change and sea-level rise. Annual Review of Earth and Planetary Sciences. 47:481–517.
- *Hein, C.J., Fallon, A.R., Rosen, P., Hoagland, P., Georgiou, I.P., FitzGerald, D.M., Morris, M., Baker, S., Marino, G.B., Fitzsimons, G., 2019. Shoreline dynamics along a developed river-mouth barrier island: Multi-decadal cycles of erosion and event-driven mitigation, *Frontiers in Earth Science*, v. 7, 103. doi: 10.3389/feart.2019.00103
- Billy, J., Robin, N., Hein, C.J., FitzGerald, D.M., Certain, R., 2018, Impact of relative sea-level changes since the last deglaciation on the formation of a composite paraglacial barrier, *Marine Geology*. v. 399. p. 76-93
- FitzGerald D.M., J. Hein C., Hughes Z., Kulp M., Georgiou I., Miner M., 2018, Runaway Barrier Island Transgression Concept: Global Case Studies. In: Moore L., Murray A. (eds.) Barrier Dynamics and Response to Changing

- Climate. Springer, Cham, p. 3-56.
- Billy, J., Robin, N., Hein, C.J., Certain, R., FitzGerald, D.M., 2018, Primary influence of inherited geologic framework on the development of a coastal barrier system. *Journal of Coastal Research*, v. 80, p. 265-272.
- *Hein, C.J., Fitzsimons, G.G., FitzGerald, D.M., Fallon, A.R., 2016, Records of migration and ebb-delta breaching at historic and ancient tidal inlets along a river-fed paraglacial barrier island, *Journal of Coastal Research*, v. 75. p. 356-361.
- *Hein, C.J., FitzGerald, D.M., de Souza, L.H.P., Georgiou, I.Y., Buynevich, I.V., Klein, A.H., de Menezes, J.T., Cleary W.J., and Scolaro, T.L., 2016, Complex coastal change in response to autogenic basin infilling: An example from a sub-tropical Holocene strandplain. *Sedimentology*, v. 63, p. 1362-1395.
- Billy, J., Robin, N., Hein, C. J., Certain, R., and FitzGerald, D., 2015, Insight into the late Holocene sea-level changes in the NW Atlantic from a paraglacial beach-ridge plain south of Newfoundland, *Geomorphology*. v. 248 134–146
- FitzGerald, D., 2015, Geologic controls on tidal inlets, Journal of Shore and Beach v. 83, p. 59-64.
- *Costas, S., Rebelo, L., Brito, P., Burbridge, C.I, Prudencio, M.I., and FitzGerald, D., 2015, The joint history of Troia Peninisula and Sado ebb delta, In: Randazzo, G., Jackson, D.W.T., and Cooper, J.A.G., (eds.) *Sand and Gravel Spits,* Springer International Publishing, Switzerland, p. 79-102.
- *Hein, C.J., FitzGerald, D.M., Klein, A.H.F., Albernaz, M.B., de Menezes, J.T., Cleary, W.J., 2014. Reply to the Discussion by Dillenburg et al. on "Evidence for a transgressive barrier within a regressive strandplain system: implications for complex response to environmental change" by Hein et al. (2013), *Sedimentology* 60, 469-502: A transgressive barrier at Pinheira, Southern Brazil around 3 ka?", *Sedimentology*, doi: 10.1111/sed.12133.
- Billy, J., Robin, N., Hein, C.J., Certain, R., FitzGerald, D.M., 2014, Internal architecture of mixed sand-and-gravel beach ridges: Miquelon-Langlade Barrier, NW Atlantic, *Marine Geology*, v. 357, p. 53–71
- FitzGerald, D., Georgiou, I., and Miner, M., 2014, Estuaries and Tidal Inlets, in: *Coastal Environments and Global Change* (Masselink, G. and Gehrels, R., eds), Wiley Press, New York, Chapter 12, p. 356-465.
- *Wilson, C., Hughes, Z.J., FitzGerald, D.M., Hopkinson, C.S., Valentine, V.J., Kolker, A.S., 2014, Marsh pool and tidal creek morphodynamics: dynamic equilibrium of northern saltmarshes?, *Geomorphology*, v. 213, p. 99-115.
- *Costas, S., Brito, P., FitzGerald, D., and Goble, R., 2014, Climate-driven alternations of dune mobilization and barrier growth along the central coast of Portugal. In: I. Peter Martini (ed.), Sedimentary Coastal Zones from High to Low Latitudes: Similarities and Differences. *The Geological Society of London Special Publications* 388, 407–427.
- Hein, C.J., FitzGerald, D.M., Buynevich, I.V., van Heteren, S., Kelley, J.T., 2014. Evolution of paraglacial coasts in response to changes in fluvial sediment supply, *Geological Society, London, Special Publication,* 388, p. 247-280, doi: 10.1144/SP388.15.
- *Hein, C.J., FitzGerald, D.M., Cleary, W.J., Klein, A.H.F., de Menezes, J.T., Albernaz, M.B., 2014, Coastal response to late-stage transgression and sea-level highstand, *Geological Society of America Bulletin*. v. 126, no. 3/4, p. 459-480, doi: 10.1130/B30836.1.
- *Hein, C.J., FitzGerald, D.M., Barnhardt, W.A., Stone, B.D., 2013, Onshore-offshore surficial geologic map of the Newburyport East and northern half of the Ipswich Quadrangles, Massachusetts, Massachusetts Geological Survey, Geologic Map GM 13-01, 3 sheets.
- *Hein, C.J., FitzGerald, D.M., Cleary, W.J., Albernaz, M.B.*, de Menezes, J.T., Klein, A.H.F., 2013, Geophysical examination of an embayed Brazilian strandplain system: implications for complex coastal response to environmental change, *Sedimentology*, v. 60, p. 469-502.
- Hayes, M.O., and FitzGerald, D.M., 2013, Origin, Evolution, and Classification of Tidal Inlets, *Journal of Coastal Research*, v. 69, 14–33.

- FitzGerald, D.M., and Miner, D.D., 2013, Tidal Inlets and Lagoons along Siliciclastic Barrier Coasts, *Barrier Systems,* In: Sherman, D., (ed), *Treatise in Geomorphology*, San Diego, CA: Academic Press, v. 10, p. 149–165.
- FitzGerald, D.M. and Hein, C.J., 2013, Barriers of the Gulf of Alaska, In: Mcbride, R.A., et al., *Barrier Systems,* Morphodynamics of Barrier Systems: a synthesis, *Treatise on Geomorphology,* San Diego, CA: Academic Press, V. 10, *Coastal and Submarine Geomorphology,* p. 196-208.
- Fagherazzi S., FitzGerald D.M., Fulweiler R.W., Hughes Z., Wiberg P.L., McGlathery K.J., Morris J.T., Tolhurst T.J., Deegan L.A., and Johnson D.S. 2013, Ecogeomorphology of Tidal Flats. In: John F. Shroder (ed.) *Treatise on Geomorphology*, San Diego: Academic Press. v. 12, p. 201-220
- Fagherazzi S., FitzGerald D.M., Fulweiler R.W., Hughes Z., Wiberg P.L., McGlathery K.J., Morris J.T., Tolhurst T.J., Deegan L.A., and Johnson D.S. 2013, Ecogeomorphology of Salt Marshes. In: John F. Shroder (ed.) *Treatise on Geomorphology*, San Diego: Academic Press. v. 12, p. 182-200.
- Priestas, A.M., Fagherazzi, S., Wilson, C.A., and FitzGerald, D.M., 2012. Rapid wetland expansion during European settlement and implication for marsh survival under modern sediment delivery rates, Comment. *Geology* v. 40, p. 284-285.
- *Hein, C.J., FitzGerald, D.M., Carruthers, E.A.*, Stone, B.D., Gontz, A.M., Barnhardt, W.A., 2012, Refining the model of barrier island formation along a paraglacial coast in the Gulf of Maine, *Marine Geology*, v. 307-310, p. 40-57.
- FitzGerald, D.M., Buynevich, I.V., and Hein, C.J., 2012, Morphodynamics and facies architecture of tidal inlets and tidal deltas, In: Davis, R.A., and Dalrymple, R.W. (eds.), Principles of tidal sedimentology, Springer, New York. Chapter 12, p. 301-333.
- Wilson, C.A., Hughes, Z.J., FitzGerald, D.M., 2012, The effects of crab bioturbation on mid-Atlantic saltmarsh tidal creek extension: Geotechnical and geochemical changes, *Estuarine, Coastal and Shelf Science*, doi: 10.1016/j.ecss.2012.04.019.
- Klein, A.H.F., and Hein, **C.J.**, FitzGerald, D.M., Cleary, WJ., and de Menezes, J.T., 2012, The barrier systems of the Santa Catarina Coast, southeastern Brazil: A short review In: Mcbride, R.A., et al., *Barrier Systems*, Morphodynamics of Barrier Systems: a synthesis, *Treatise on Geomorphology*, San Diego, CA: Academic Press, V. 10, *Coastal and Submarine Geomorphology*, p. 178-183.
- *Costas S. and FitzGerald, D.M., 2011, Sedimentary architecture of a spit-end of Salisbury Beach, Massachusetts: the imprints of sea-level rise and inlet dynamics, *Marine Geology*, v. 284, p. 203-216.
- *Hein, C.J., FitzGerald, D.M., Milne, G.A., Bard, K.A., and Fattovich, R., 2011, The road to Punt: Mid- to Late-Holocene sea level and climate changes along the African Red Sea coast and their impacts on an ancient Egyptian trade port, *Geology*, v. 39, p. 687-690.
- *Argow, B.A., Hughes, Z.J., and FitzGerald, D.M., 2011, Ice raft formation, sediment load, and theoretical potential for northern coastal wetlands, Continental Shelf Research, v. 31, p. 1294-1305.
- *Buynevich, I.V., Klein, A. H. F., FitzGerald, D.M., Cleary, W.J., Hein, C.J., Veiga, F.A., Angulo, R.J., Asp, N.E., Petermann, R., 2011, Geological legacy of storm erosion along a high-energy indented coastline: northern Santa Catarina, Brazil, *Journal of Coastal Research*, v. 64, p. 1840-1844.
- *Howes, N.C., FitzGerald, D.M., Hughes, Z.J., Georgioub, I.J., Kulp, M.A., Miner, M.D., Smith, J.M., and Barras, J.M., 2010, Hurricane-induced failure of low salinity wetlands, *Proceedings of the National Academy of Sciences.* v. 107 no. 32, p.14014-14019. doi: 10.1073/pnas.0914582107.
- *Miner, M.D., Kulp, M.A., FitzGerald, D.M., Flocks, J.G., and Weathers, H.D., 2009, Delta lobe degradation and hurricane impacts governing large-scale coastal behavior; South Central Louisiana, USA *Geo-Marine Letters*, DOI 10.1007/s00367-009-0156-4.
- *Miner, M.D., Kulp, M.A., FitzGerald, D.M., and Georgiou, I.Y., 2009, Hurricane-associated ebb-tidal delta sediment dynamics: *Geology*, v. 37, no. 9, p. 851-854, doi: 10.1130/G25466A.1.
- *Hughes, Z.J., FitzGerald, D.M., Wilson, C.A., Pennings, S.C., Więski, K., and Mahadevan, A., 2009, Rapid headward erosion of marsh creeks in response to relative sea level rise, *Geophysical Research Letters*, doi:10.1029/2008GL036000.
- Heerden, I.L., Kemp, P., Bea, R., Shaffer, G., Day, J., Morris, C., FitzGerald, D., and Milanes, A., 2009, How a

- Navigation Channel Contributed to Most of the Flooding of New Orleans During Hurricane Katrina, *Public Organization Review*, v. 9, p. 291-308. DOI 10.1007/s11115-009-0093-8.
- Shaffer, G.P.; Day, J.W. Jr.; Mack, S.; Kemp, G.P.; Van Heerden, I.; Poirrier, M.A.; Westphal, K.A.; FitzGerald, D.; Milanes, A.; Morris, C.A., Bea, R., and Penland, P.S., 2009. The MRGO navigation project: a massive human-induced environmental, economic, and storm disaster. *Journal of Coastal Research*, v. 54, p. 206–224.
- Williams, S.J., Gutierrez, B.T., Titus, J.G., Gill, S.K., Cahoon, D.R., Thieler, E.R., Anderson, K.E., FitzGerald, D., Burkett, V. and Samenow, J., 2009. Sea-level rise and its effects on the coast. *Coastal elevations and sensitivity to sea-level rise: a focus on the mid-Atlantic region.*Synthesis and Assessment Product, 4, p.11-24.
- Georgiou, I.Y., McCorquodale, J. A., Schindler, J.*, Retana A.G.*, FitzGerald, D.M., Hughes, Z., Howes, N., 2009, Impact of Multiple Freshwater Diversions on the Salinity Distribution in the Pontchartrain Estuary under Tidal Forcing, *Journal of Coastal Research*, Vol. 54, pp. 59 70.
- Rosen, P.S., FitzGerald, D.M., and Buynevich, I.V., 2009, Balancing natural processes and competing uses on a transgressive barrier, Duxbury Beach, Massachusetts, in: Kelley, J.T., Pilkey, O.H., and Cooper, A. Identifying America's most vulnerable oceanfront communities: A geological perspective, *Geological Society of America Special Paper* 460, p. 21-32.
- *Buynevich, I.V., Jol, H.M., and FitzGerald, D.M., 2009, Coastal Environments. in: Jol, H.M. (ed.), *GPR: Radar Theory and Applications*. Elsevier, 299-322.
- FitzGerald, D.M., Fenster, M.S., Argow, B., and Buynevich, I.V., 2008, Coastal impacts due to sea-level rise. *Annual Review of Earth & Planetary Sciences*, v. 36, p. 601- 667. doi/pdf/10.1146/annurev.earth.35.031306.140139
- *Whitmeyer, S.J., and FitzGerald, 2008, Episodic dynamics of a sand wave field, *Marine Geology*, v. 252, p.24-37.
- *Buonaiuto, F.S., Bokuniewicz, H., FitzGerald, D.M., 2008, Principal Component Analysis of Morphology Change at a Tidal Inlet: Shinnecock Inlet, NY, *Journal of Coastal Research*, v. 25, p. 867-875.
- *Buynevich, I.V., FitzGerald, D.M., and Ronald J. Goble, 2007, An increase in North Atlantic storm activity over the past 500 years: Evidence from optically dated relict beach scarps, *Geology*, v. 35, p. 543-546.
- *Tary, A.K., FitzGerald, D.M., and Weddle, T.K., 2007, A ground penetrating radar investigation of a glacial-marine ice-contact delta, Pineo ridge, eastern coastal Maine, in: Jol, H.M. and Baker, G.R. (eds.) Advances in Stratigraphic Analyses using GPR, *Geological Society of America Special Paper* #432, p. 79-93.
- FitzGerald, D.M., Cleary, W.J., Buynevich, I.V., Hein, C.J., Klein, A.H.F., Asp, N., and Angulo, R., 2007, Strandplain evolution along the southern coast of Santa Catarina, Brazil, *Journal of Coastal Research*, v. 50, p. 152-156.
- *Argow, B., and FitzGerald, D.M., 2006, Winter processes on northern salt marshes: evaluating the impact of in-situ peat compaction due to ice loading, Wells, ME, *Estuarine, Coastal and Shelf Science*, v. 69, p. 360-369.
- Flocks, J., Ferina, N. Dreher, C., Kindinger, J., and FitzGerald, D.M., Kulp, M., 2006, High resolution stratigraphy of a recent delta lobe Progradation: north-central Gulf of Mexico. *Journal of Sedimentary Research*, v. 76, p. 429-443.
- *Fenster, M.S., FitzGerald, D.M., and Moore, M.S., 2006, Assessing Decadal Scale Changes to a Giant Sand Wave Field in Eastern Long Island Sound, *Geology*, v. 34, p. 89-92.
- *Himmelstoss, E.A., FitzGerald, D.M., Rosen, P.S., and Allen, J.R., 2006, Bluff evolution along coastal drumlins: Boston Harbor Islands, Massachusetts, *Journal of Coastal Research* v. 22, p. 1230-1240.
- FitzGerald, D.M., Buynevich, I.V., and Argow, B., 2006, Model of tidal inlet and barrier island dynamics in a regime of accelerated sea-level rise. *Journal of Coastal Research*, v. 39, 789-795.
- Georgiou, I., FitzGerald, D.M., and Stone, G.W., 2005, Impact of physical processes along the Louisiana coast, *Journal of Coastal Research*, v. 44, p. 57-72.
- *Buynevich, I.V., and FitzGerald, D.M., 2005, Sedimentological signatures of riverine-dominated phases in estuarine and barrier evolution along an embayed coastline, *in*. FitzGerald, D.M., and Knight, J. (eds.) *High Resolution Morphodynamics and Sedimentary Evolution of Estuaries*,

- Springer, New York, p. 315-334.
- FitzGerald, D.M., *Buynevich, I.V., *Fenster, M.S., Kelley, J.T., and Belknap D.F., 2005, Coarse-grained sediment transport in northern New England Estuaries: A synthesis, *in*. FitzGerald, D.M., and Knight, J. (eds.) *High Resolution Morphodynamics and Sedimentary Evolution of Estuaries*, Springer, New York, p. 195-214.
- *Fenster, M.S., FitzGerald[,] D.M., Belknap, D.F., Knisley, B.A., Gontz[,] A, and Buynevich[,] I.V., 2005, Controls on estuarine sediment dynamics in Merrymeeting Bay, Kennebec River estuary, Maine, U.S.A., , *in*. FitzGerald, D.M., and Knight, J. (eds.) *High Resolution Morphodynamics and Sedimentary Evolution of Estuaries*, Springer, New York, p. 173-194.
- *Pendleton, E.A, and FitzGerald, D.M., 2005, Comparison of the hydrodynamic character of three tidal inlet systems, in: FitzGerald, D.M., and Knight, J. (eds.) *High Resolution Morphodynamics and Sedimentary Evolution of Estuaries*, Springer, New York, p. 83-100.
- Kelley, J.T., Barber, D.C., Belknap, D.F., FitzGerald, D.F., *van Heteren, S., and Dickson, S.M., 2005, Sand budgets at geological historical, and contemporary time scales for a developed beach system, Saco Bay, Maine, USA, *Marine Geology*, v. 214, p. 117-142.
- Kulp, M., FitzGerald, D.M., and Penland, S., 2005, Sand-Rich Lithosomes of the Holocene Mississippi River Delta Plain. *in*: Bhattacharya, J., and Giosan, L. (eds.) River Deltas–Concepts, Models, and Examples, *SEPM Special Publication, Spec, Pub.* 83, p. 321-353.
- FitzGerald, D.M., Kulp, M., Penland, P., Flocks, J., and Kindinger, J., 2004, Morphologic and Stratigraphic Evolution of Ebb-Tidal Deltas along a Subsiding Coast: Barataria Bay, Mississippi River Delta, *Sedimentology*, v. 15, p. 1125-1148.
- *Buynevich, I.V., and FitzGerald, D.M., 2004, Sedimentological signatures of intense storms in barrier sequences, Maine, USA. in: Stone, G. and Orford, J. (eds.) Storms and their Significance in Coastal Morpho-Sedimentary Dynamics, *Marine Geology* v. 210, p. 135-148.
- Kulp, M., FitzGerald, D.M., Penland, S., Motti, J., Brown, M., Flocks, J., Miner, M., and Mobley, C., 2004, Facies architecture of a flood-tidal delta along a highly transgressive coast: Raccoon Pass, Timbalier Islands Louisiana. *Journal of Coastal Research*. v. 39, p. 346-358.
- *Dougherty, A.J., FitzGerald, D.M., and *Buynevich, I.V., 2004, Evidence for storm-dominated early progradation of Castle Neck barrier, Massachusetts, USA. *in*. Stone, G. and Orford, J. (eds.) Storms and their Significance in Coastal Morpho-Sedimentary Dynamics, Special Issue, *Marine Geology*, v. 210, p. 123-134.
- FitzGerald, D.M., Zarillo, G.A., and *Johnston, S., 2003, Recent developments in the geomorphic investigation of engineered tidal inlets, *Coastal Engineering Journal*, v. 45, p. 565-600.
- Cleary, W.J. and FitzGerald, D.M., 2003, Tidal inlet response to natural sedimentation processes and dredging-induced tidal prism changes: Mason Inlet, North Carolina, *Journal of Coastal Research*, v. 19, p. 1018-1015.
- *Buynevich, I.V. and FitzGerald, D.M., 2003, High-resolution subsurface (GPR) imaging and sedimentology of coastal ponds, Maine, U.S.A.: Implications for Holocene backbarrier evolution, *Journal of Sedimentary Research*, v. 73, p. 559-571.
- *Buynevich, I.V., and FitzGerald, D.M., 2003, Textural and compositional characterization of recent sediments along a paraglacial estuarine coastline, Maine, U.S.A. *Estuarine, Coastal, and Shelf Science*, v.56, p. 139-153.
- FitzGerald, D.M., and *Pendleton, E., 2002, Inlet Formation and Evolution of the Sediment Bypassing System: New Inlet, Cape Cod, Massachusetts. *Journal of Coastal Research*, v. 36. p. 290-299.
- *Buynevich, I.V. and FitzGerald, D.M., 2002, Organic-Rich Facies in Paraglacial Barrier Lithosomes of Northern New England: Preservation and Paleoenvironmental Significance. *Journal of Coastal Research*, v. 36., p. 109-117.

- FitzGerald, D.M., *Buynevich, I.V., Davis, R.A., Jr. and *Fenster, M.S., 2002, New England Tidal Inlets with Special Reference to Riverine Associated Inlet Systems. *Geomorphology*, v. 48 p. 179-208.
- *Fenster, M.S., FitzGerald, D.M., Kelley, J.T., Belknap, D.F., *Buynevich, I.V., Dickson, S.M., 2001, Net ebb sediment transport in a rock-bound, mesotidal estuary during spring freshet conditions: Kennebec River Estuary, Maine, USA, *Geological Society of America Bulletin*, v 113, p. 1522-1531.
- *Tary, A.K., FitzGerald, D.M., and *Buynevich, I.V., 2001, Late Quaternary evolution of a marine-limit delta plain, southwest Maine, *in*: Weddle, T.K. and Retelle, M.J., (eds.) Deglacial History and Relative Sea Level Changes, Northern New England and Adjacent Canada, Geological Society of America Special Publication 351, p. 125-149.
- *Buynevich, I.V. and FitzGerald, D.M., 2001, Styles of coastal progradation revealed in subsurface records of paraglacial barriers, New England, USA., *Journal of Coastal Research*, Special Issue, Special Issue # 34, Healy, T., (ed.), p. 194-208.
- FitzGerald, D.M, *Buynevich, I.V. and Rosen, P.S., 2001, Historical and geological evidence of former tidal inlets along a retrograding barrier: Duxbury Beach, Massachusetts, USA, *Journal of Coastal Research*, Special Issue # 34, Healy, T., (ed.), p. 437-448.
- *Buynevich, I.V., FitzGerald, D.M., Smith. L.B., Jr. and *Dougherty, A.J., 2001, Stratigraphic evidence for the historical position of the East Cambridge shoreline, Boston Harbor, Massachusetts. *Journal of Coastal Research*, v. 17, p.620-624.
- FitzGerald, D.M., *Buynevich, I.V., *Fenster, M.S., and *McKinlay, P.A., 2000, Sand dynamics at the mouth of a rock-bound, tide-dominated estuary, *Sedimentary Geology*, v. 131, p. 25-9.
- FitzGerald, D., and *van Heteren, S., 1999, Classification of paraglacial barrier systems: coastal New England, U.S.A., *Sedimentology*, v. 46, p. 1083-1108.
- *van Heteren, FitzGerald, D.M., *McKinlay, P.A., and *Buynevich, I.V., 1998, Radar facies of paraglacial barrier systems: Coastal New England, U.S.A., *Sedimentology*, v. 45, p. 181-200.
- FitzGerald, D.M., 1996, Geomorphic variability and morphologic and sedimentologic controls on tidal inlets, *Journal of Coastal Research*, Spec Issue #23, p. 47-71.
- *van Heteren, S., FitzGerald, D.M., Barber, D.C., Kelley, J.T., and Belknap, D.F., 1996, Volumetric analysis of a New England barrier system using ground-penetrating radar and coring techniques, *Journal of Geology*, v. 104, p. 471-483.
- *Fenster, M.S., and FitzGerald, D.M., 1996, Morphodynamics, stratigraphy, and sediment transport patterns of the Kennebec River estuary, Maine, USA, *Sedimentary Geology*, v. 100, p. 123-145.
- Caldwell, D.W., and FitzGerald, D.M., 1995, Origin of lake outlet deltas in Maine, *Sedimentary Geology*, v. 99, p. 95-110.
- FitzGerald, D.M., Rosen, P.S., and *van Heteren, S., 1994, New England Barriers, *in*. Davis, R.A. (ed.), *Geology of Holocene Barrier Island Systems*, Springer-Verlag, Berlin, Chap. 8, p. 305-394.
- FitzGerald, D.M., *van Heteren, S., and *Montello, T, 1994, Shoreline processes and damage resulting from the Halloween Eve Storm along the North and South Shores of Massachusetts Bay, U.S.A., *Journal of Coastal Research*, v. 10, p. 113-132.
- FitzGerald, D.M., *van Heteren, S., *McKinlay, P., and Manthorp, P.A., Humphrey, S., 1994, Investigation of former tidelands in Lynn, MA. *Coastal Management*, v. 22, p. 353-367.
- *Smith, J.B., and FitzGerald, D.M., 1994, Sediment transport patterns at the Essex River Inlet ebb tidal delta, Massachusetts, U.S.A., *Journal of Coastal Research*, v. 10, p. 752-774.
- FitzGerald, D.M., 1993, Origin and stability if tidal inlets in Massachusetts, *in*. Aubrey, D.G., and Giese, G.S., (eds.), *Formation and Evolution of Multiple Tidal Inlet Systems*, AGI, p. 1-61.
- FitzGerald, D.M., and *Montello, T.M., 1993, Backbarrier and inlet sediment response to the breaching of Nauset Spit and formation of New Inlet, Cape Cod, MA, *in*: Aubrey, D.G., and Giese, G.S., (eds.), *Formation and Evolution of Multiple Tidal Inlet Systems*, AGI, p. 158-185.
- FitzGerald, D.M., Baldwin, C.T., *Ibrahim, N.A., and Humphries, S.M., 1992, Sedimentologic and Morphologic Evolution of a Beach Ridge Barrier Along an Indented Coast: Buzzards Bay, MA, in: Fletcher, C. and Wehmiller, J. (eds.), *U.S. Quaternary Coastal Systems*, SEPM Spec. Pub, p. 65-75.

- *Hill, M.C., and FitzGerald, D.M., 1992, Evolution and Holocene Stratigraphy of Plymouth, Kingston, and Duxbury Bays, MA, in: Fletcher, C.H. and Wehmiller, J.F. (eds.), *U.S. Quaternary Coastal Systems*, SEPM Spec. Pub. p. 45-56.
- *Fenster, M.S., FitzGerald, D.M., Bohlen, W.F., Lewis, R.S., and Baldwin, C.T., 1990. Stability of giant sand waves in Eastern Long Island Sound. *Marine Geology*, v.91, p. 207-225.
- *Lincoln, J. M, and FitzGerald, D. M., 1988, Tidal distortions and flood dominance at five small tidal inlets in southern Maine, *Marine Geology*, v. 82, p. 133-148.
- FitzGerald, D.M., 1988, Shoreline erosional-depositional processes associated with tidal inlets, *in*: Aubrey, D.G., and Weishar, L. (eds.), *Hydrodynamics and Sediment Dynamics of Tidal Inlets*, Springer-Verlag, New York, 269-283.
- FitzGerald, D.M., Baldwin, C.T., *Ibrahim, N.A., and *Sands, D.R., 1987, Development of the Northwestern Buzzards Bay Shoreline, Massachusetts, *in*: FitzGerald D.M., and Rosen, P.S., (eds.), *Glaciated Coasts*, Academic Press, San Diego, CA, p. 327-357.
- FitzGerald, D. M., and Penland, S., 1987, Backbarrier dynamics of the East Friesian Islands, *Journal of Sedimentary Petrology*, v. 57, p. 746-754.
- FitzGerald, D. M., Penland, S., and Nummedal, D., 1984, Control of barrier island shape by inlet sediment bypassing: East Friesian Islands, West Germany, *Marine Geology*, v. 60, p. 355-376.
- FitzGerald, D. M., 1984, Interactions between the ebb-tidal delta and landward shoreline, Price Inlet, South Carolina: *Journal of Sedimentary Petrology*, v. 54, p. 1301-1316.
- FitzGerald, D. M., Zarillo, G. A., and Johnston, S., 1983, Recent developments in the geomorphic investigation of engineered tidal inlets: *Coastal Engineering Journal*. v. 45. p. 565-600.
- FitzGerald, D. M., and Nummedal, D., 1983, Response characteristics of an ebb-dominated tidal inlet channel: *Journal of Sedimentary Petrology*, v. 53, p. 833-845.
- FitzGerald, D. M., Fink, L. K., and *Lincoln, J., 1983/1984, A flood-dominated mesotidal inlet: Geo-*Marine Letters*, v. 3, p. 17-22.
- FitzGerald, D.M., 1976, Ebb-tidal delta of Price Inlet, SC: geomorphology, physical processes, and associated inlet shoreline changes, in: Hayes, M.O., and Kana, T.W. (eds.) *Terrigenous Clastic Depositional* p. 143-157.
- Hayes, M. O., FitzGerald, D.M., Hulmes, L.J., and Wilson, S.J.,1976. Geomorphology of Kiawah Island, in: Hayes, M.O., and Kana, T.W. (eds.) *Terrigenous Clastic Depositional*, p. 80-100.

Additional Publications (articles, invited editorials and commentary, reviews, encyclopedia entries)

- Buynevich, I.V., FitzGerald, D.M., Klein, A. H. F., Hein, C.J., Cleary, W.J., 2023. Cyclone-generated geoindicators along Camboriú headland beaches and Navegantes strandplain, Brazil, In: Scientific Research in the Modern World, Proceedings of the 5th International Scientific and Practical Conference. Perfect Publishing, Toronto, Canada, p. 162-167.
- Owens, E., FitzGerald, D., Castle, R. Dubach, H., 2016, Tidal Inlet Protection Strategies, American Petroleum Institute, Washington, DC, 36 p.
- Hein, C.J., Georgiou, I.Y., FitzGerald, D.M., de Souza, L.H.P., Klein, A.H.F., de Menezes, J.T, 2015. Wave energy, sediment supply, and sea-level fall: Late Holocene basin infilling in southern Brazil, In: Coastal Sediments '15, Proceedings of the 11th International Symposium on Coastal Engineering and Science of Coastal Sediment Processes.
- Georgiou, I.Y., Hughes, Z., Weathers, H.D., Kulp, M.A., FitzGerald, D.M., 2012. Barrier Shoreline Morphology Model, in: Louisiana Comprehensive Master Plan 2012 for a sustainable Coast, Coastal Protection and Restoration Authority, 37 pp.
- Hein, C.J., FitzGerald, D., Stone, B.D., Carruthers, E.A., and Gontz, A.M., 2011, The role of backbarrier infilling in the formation of barrier island systems, In: Kraus, N.C., and Rosati, J.D. (Eds), *Coastal Sediments '11*, Proceedings of the 8th International Symposium on Coastal Engineering and Science of Coastal Sediment Processes, Miami, FL..

- Hein, C.J., FitzGerald, D.M., Barnhardt, W.A., Stone, B.D., 2010, *Onshore-offshore surficial geologic map of the Newburyport East Quadrangle, Massachusetts*, State Map Preliminary Map, 1 sheet.
- Hein, C.J., and FitzGerald, D.M., 2009, Documenting sand and gravel resources on the inner continental shelf: Merrimack Embayment, New England, US Minerals Management Service, 83 p.
- Shaffer, G.P, Day, J.W., Mack, S. Kemp, P.G., Heerden, I.V., Poirrier, M.A., Westphal, K.A., FitzGerald, D.M., Milanes, A., Morris, C.A., Bea, R., and Penland, S., 2009, *Journal of Coastal Research*, SI v. 54, p. 206-224.
- Georgiou, I.Y., Kulp, M.A., Miner, M.D., FitzGerald, D.A., 2009, Louisiana Coastline, in Encyclopedia of World's Coastal Landforms, Eds, Bird, E.C.F., Springer Verlag, Heidelberg, 8 p.
- Rosen, P., and FitzGerald, D.M, 2009, The drowning of Boston Harbor and the development of the shoreline, In: Penna A. N., and Wright, C.E. (eds.), *An Environmental History of the City and Its Surroundings*. p. 19-32.
- Georgiou, I.Y., Retana, A.G., McCorquodale, A.J., Schindler, J., FitzGerald, D.M., Hughes, Z., Howes, H., 2010, Impact of multiple freshwater diversions on the salinity distribution in the Pontchartrain Estuary, *Journal of Coastal Research*, SI v. 54, p. 59-70.
- Hein, C.J., FitzGerald, D., and Barnhardt, W., 2007, Holocene reworking of a sand sheet in the Merrimack Embayment, Western Gulf of Maine, Journal of Coastal Research, SI v. 50, p. 174-180.
- Hughes, Z.J., FitzGerald, D.M. Howes, N.C. and Rosen, P.,2007, The impact of natural waves and ferry wakes on the erosion of bluffs, Boston Harbor, US. *Journal of Coastal Research*, SI v. 50, p. 287-299.
- Miner, M.D., Kulp, M.A., and FitzGerald, D.M., 2007, Tidal Versus Shoreface Ravinement and Tidal Inlet Fill Preservation Potential for Transgressive Tidal Inlets, Mississippi River Delta Plain, USA, International Coastal Symposium Conference: Gold Coast, Australia, SI v. 50, p. 314-327.
- Kulp, M., FitzGerald, D.M., and Penland, S., 2006, The Impact of Hurricanes Katrina and Rita in Louisiana: America's coasts under siege, *GSA Connection*, March 2006.
- *Buynevich, I.V., Asp, N.E., FitzGerald, D.M., Cleary, W.C., Klein, A.H.F., Siegle, E., and Angulo, R., 2005. Mud in the surf: Nature at work in a Brazilian bay. *Eos Transactions*, AGU, v. 86, p. 301, 304.
- FitzGerald, D.M. and *Buynevich, I.V., 2005, Coastal Barriers. In: *Encyclopedia of Life Support Systems*, UNESCO-EOLSS Publishers Co, Ltd.
- FitzGerald, D.M., 2004, Tidal Inlets. In: Schwartz, M. L. (ed.), *Encyclopedia of Coastal Science*, Kluwer Academic Publishers, p. 1185-1194.
- *Buynevich, I.V. and FitzGerald, D.M., 2004, Ground-penetrating radar. In: Schwartz, M. L. (ed.), *Encyclopedia of Coastal Science*, Kluwer Academic Publishers, p. 620-625.
- Rosen, P., FitzGerald, D.M., Himmelstoss, E., and Allen, J., 2003, Morphology and evolution of Boston Harbor Island shorelines, Fifth International Symposium on Coastal Engineering and Science of Coastal Sediment Processes, *American Society of Civil Engineers*, B6 1-18.
- *Dougherty, Amy J., FitzGerald, Duncan M., Johnston, Shelley J., and Ferullo, Brian 2003, Ground-Penetrating Radar Provides a Detailed View of the Complexities of Barrier Progradation, Castle Neck, Massachusetts, USA. ASCE Special Publication v. 5, p.10
- FitzGerald, D.M. and *Buynevich, I.V., Barrier islands. 2003, In: Middleton, G.V. (ed.), *Encyclopedia of Sediments and Sedimentary Rocks* p. 43-47.
- FitzGerald, D.M. and *Buynevich, I.V., Tidal inlets and deltas. 2003, In: Middleton, G.V. (ed.), *Encyclopedia of Sediments and Sedimentary Rocks* p. 737-741.
- FitzGerald, D.M., *Buynevich, I.V., Belknap, D.F., Kelley, J.T., Cleary, W.J., Barnhardt, W.A., Pendleton, E.A., Daly, J.F., Gontz, A.M., Knisel, J. M., and Kelley, A.K., 2002, Picture essay of the Ireland coast. *Journal of Coastal Research*. v. 18. p. 810-832.
- Anderson, J., D. Belknap, B. Douglas, D. FitzGerald, C. Fletcher, R. Holman, R. Land, S. Leatherman, B. Richmond, S. Riggs, A. Rodriguez, S. Tebbens, T. Tornqvist, and O. van de Plassche, 2002, CoForce: Coastal forecasting in rapidly changing environments, *GSA Today*, v. 12, p. 46.

- Anderson, J., Rodriguez, A., Fletcher, C., and FitzGerald, D.M., 2001, Researchers focus attention on coastal response to climate change, *EOS*, v. 82, p. 513-521.
- FitzGerald, D.M., 1996, Review of "Coastal Evolution: Late Quaternary Shoreline Morphodynamics" by Carter, R.W.G., and Woodroffe, C.D. (eds.) in: *GSA Today*, v. 6. p. 25.
- *Smith, J.B., and FitzGerald, D. M., 1994, Sand and gravel resources offshore of Boston Harbor, *in.* Schultz, A.P., and Rader, E.K., (eds.), Studies in Eastern Energy and the Environment, *AAPG Eastern Section Special Volume*, Pub. #132, p. 91-100.
- Dickson, S. Kelley, J.T., Belknap, D.L., Fink, K.L., Barber, D., FitzGerald, D.M., *van Heteren, S., and *Manthorp, PA., 1993, Large Scale Coastal Behavior, *Inter. Sym. on Quant. Approaches to the Understanding and Prediction of Large Scale Coast. Evolution* St. Petersburg, FL, p. 48-51.
- Caldwell, D.W., FitzGerald, D. M., and *Fenster, M.S., 1990, Origin and Sedimentation of Maine lakes with emphasis on the lake-outlet deltas, in: Marvenney, R. (ed.), *Studies in Maine Geology*, Maine Geol. Survey, v. 5, p. 97-108.
- FitzGerald, D.M., *Lincoln, J.M., Fink, L.K., and Caldwell, D.W., 1990, Morphodynamics of tidal inlet systems in Maine, in: Marvenney, R. (ed.), *Studies in Maine Geology*, Maine Geol. Survey, v. 5, p. 67-96.
- FitzGerald, D.M., *Saiz, A., Baldwin, C.T., and *Sands, D.M., 1986, Spit breaching at Slocum River inlet: Buzzards Bay, MA, *Shore and Beach*, v. 56, p. 11-17.
- FitzGerald, D.M., Penland, S., and Nummedal, D., 1984, Changes in tidal inlet geometry due to backbarrier filling: East Friesian Islands, West Germany: *Shore and Beach*, v. 52, p. 3-8.
- FitzGerald, D.M., 1981, Storm generated sediment transport patterns along Winthrop and Yirrell Beaches: Winthrop, MA, *Northeast Geology*, v. 3, p. 202-211.
- FitzGerald, D.M., and *Levin, D.R., 1981, Hydraulics, morphology and sediment transport patterns at Pamet River Inlet: Truro, MA, *Northeast Geology*, v. 3, p.216-224.
- FitzGerald, D.M., *Sullivan, D., and *Magee, A., 1981, Effects of riprap on onshore-offshore sediment transport: *Shore and Beach*. v. 49, p. 19-23.
- FitzGerald, D.M., 1980, Effect of an intense storm along Winthrop, MA. Shore and Beach v. 48, p. 6-19.
- FitzGerald, D.M. and Bouma, A., 1972, Consolidation studies deltaic sediments: *Gulf Coast Assoc. of Geol. Soc. Trans.*, v. 22, p. 165-175.

Proceedings, Field Trip Guides, Open-file Reports

- FitzGerald, D.M., Howes, N., Hughes, Z., Kulp, M.A., Georgiou, I., and Miner, M.D., 2008, Evolving wetlands and field and modeling studies, Annual CIRP Technology-Transfer Workshop Estuarine Design and Research Needs: Navigation Channels, Estuarine Vegetation, Placement of Dredged Sediments, and Long-term Estuary Evolution, vol. 9, 43 p.
- FitzGerald, D., Howes, N., Kulp, M., Hughes, Z., Georgiou, I., and Penland, S., 2007, Impacts of rising sea level to backbarrier wetlands, tidal inlets, and barriers: Barataria Coast, Louisiana, Coastal Sediments 07, Conference Proceedings, CD-ROM13.
- *Argow, B.A., Hughes, Z.J., and FitzGerald, D.M., 2007, Ice raft formation, dispersion and sedimentation on New England marshes, Coastal Sediments 07 Conference Proceedings, CD-ROM13.
- *Hein, C.J., FitzGerald, D.M. and Barnhardt, W., 2007, Holocene evolution of the Merrimack Embayment, northern Massachusetts, interpreted from shallow seismic stratigraphy, Coastal Sediments 07, Conference Proceedings, CD-ROM13.
- Whitmeyer, S. and FitzGerald, D.M., 2007, A relic sand wave field in a tidal channel, Coastal Sediments 07, Conference Proceedings, CD-ROM13.
- Miner, M.D., FitzGerald, D.M., and Kulp, M.A., 2007, 1880 to 2005 Morphological evolution of as transgressive tidal inlet, Little Pass Timbalier, Louisiana, Coastal Sediments 07, Conference Proceedings, CD-ROM13.

- Kulp, M.A., Miner, M.D., FitzGerald, D.M., and Penland, S., 2007, Geology of the Louisiana Coast Zone: Implications for Coastal Management and Restoration, Field Trip Guidebook, Coastal Sediments 2007, 30p.
- Klein, A.H., FitzGerald, D.M., Cleary, W.J., Abreu, J.G.N., Menezes, J.T., Petermann, R., Hein, C., and Buynevich, I.V., 2006, Third IGCP-495 Quaternary Land-Ocean Interactions: Natural and Human Forcings on Coastal Evolution. Field Trip Guidebook of Santa Catarina Coast, Brazil, p. 33.
- *Johnston, S., and FitzGerald, D.M., 2006, Sand waves that impede navigation of coastal navigation channels, ERDC/CHL-CHETN-IV-68, U.S. Army Engineer Research and Development Center, Vicksburg, MS. (http://chl.wes.army.mil/library/publications/cetn. 32 p.
- Miner, M.D., FitzGerald, D. M., and Kulp, M.A., 2005, Morphologic Evolution of a Transgressive Tidal Inlet, Little Pass Timbalier, Louisiana: Gulf Coast Association of Geological Societies Transactions, v. 55, p. 532 542.
- Rosen, P.S, and FitzGerald, D.M., 2004, New England Intercollegiate Geological Conference, Processes and Evolution of Boston Harbor Islands: Peddocks and Lovells Islands, NEIGC Field Trip Guidebook, p. 137-153.
- Belknap, D.F., Kelley, J.T., FitzGerald, D.M., and Buynevich, I.V., 2004, Quaternary Land-Ocean Interactions: Driving Mechanisms and Coastal Responses, IGCP-495 Conference in Bar Harbor, ME, IGCP-495 Field Trip Guidebook, 21 p.
- *Johnston, S., FitzGerald, D.M., and Pratt, T., 2003. Bedform distribution in a tidal inlet, Humboldt, CA,
 Proceedings of the International Conference on Coastal Sediments 2003. CD-ROM Published by World
 Scientific Publishing Corp. and East Meets West Productions, Corpus Christi, Texas, USA. ISBN 981-238-422-7.
- Marden, T., FitzGerald, D.M., *Buynevich, I.V., Johnsen, C., *Pendleton, E., Fields, L., and *Rits, M., 2003. Delineation of historical "New Inlet", Debidue Island, South Carolina, Proceedings of the International Conference on Coastal Sediments 2003. CD-ROM Published by World Scientific Publishing Corp. and East Meets West Productions, Corpus Christi, Texas, USA. ISBN 981-238-422-7.
- *Buynevich, I.V., Evans, R.L., and FitzGerald, D.M., 2003. High-resolution geophysical imaging of buried inlet channels, Proceedings of the International Conference on Coastal Sediments 2003. CD-ROM Published by World Scientific Publishing Corp. and East Meets West Productions, Corpus Christi, Texas, USA. ISBN 981-238-422-7.
- Rosen, P.S., FitzGerald, D.M., *Himmelstoss, E.A. and Allen, J., 2003. Morphology and evolution of Boston Harbor island shorelines, Massachusetts, Proceedings of the International Conference on Coastal Sediments 2003. CD-ROM Published by World Scientific Publishing Corp. and East Meets West Productions, Corpus Christi, Texas, USA. ISBN 981-238-422-7.
- FitzGerald, D.M., *Argow, B.A. and *Buynevich, I.V., 2003. Rising sea level and its effects on backbarrier marshes and tidal flats, tidal inlets, and adjacent barrier shorelines, Proceedings of the International Conference on Coastal Sediments 2003. CD-ROM Published by World Scientific Publishing Corp. and East Meets West Productions, Corpus Christi, Texas, USA. ISBN 981-238-422-7.
- Kulp, M.A., FitzGerald, D.M. and Penland, S., 2003, Shallow stratigraphic framework of the Caillou Bay to Caminada-Moreau headland, Proceedings of the International Conference on Coastal Sediments 2003. CD-ROM Published by World Scientific Publishing Corp. and East Meets West Productions, Corpus Christi, Texas, USA. ISBN 981-238-422-7.
- *Dougherty, A.J., FitzGerald, D.M., and *Buynevich, I.V., 2003. Evidence for storm-dominated early progradation of Castle Neck barrier, Massachusetts, USA, Proceedings of the International Conference on Coastal Sediments 2003. CD-ROM Published by World Scientific Publishing Corp. and East Meets West Productions, Corpus Christi, Texas, USA. ISBN 981-238-422-7.
- Kulp, M.A., FitzGerald, D.M., Penland, S., and Motti, J., 2003. Evolution and stratigraphy of a recent flood tidal delta: Raccoon Pass, Timbalier Islands, Louisiana, The Gulf Coast Association of Geological Societies.
- FitzGerald, D.M., Penland, S., and Kulp, M., 2003. Tidal prism changes within Barataria Bay and its effects on sedimentation patterns and barrier shoreline stability, The Gulf Coast Association of Geological Societies
- Poppe, L.J., Paskevich, V.F., Williams, S.J., Hastings, M.E., Kelley, J.T., Belknap, D.F., Ward, L.G., FitzGerald, D.M., and Larsen, P.F., 2003. Surficial sediment data from the Gulf of Maine, Georges Bank, and vicinity, USGS Open-File Report 03-001, CD ROM.

- Marden, T., FitzGerald, D.M., *Buynevich, I.V., Johnsen, C., Pendleton, E.A., Fields, L., and Tabar, J., 2002. Delineation of historical "New Inlet", Debidue Island, South Carolina. FSBPA/WES Workshop Proceedings, Biloxi, Mississippi, 17 p.
- FitzGerald, D. M., Kraus, N. C., and Hands, E. B. 2001, Natural mechanisms of sediment bypassing at tidal inlets, ERDC/CHL-IV-A, U.S. Army Engineer Research and Development Center, Vicksburg, MS. (http://chl.wes.army.mil/library/publications/cetn. 11 p.
- *Buynevich, I.V. and FitzGerald, D.M., 2000. The coastal geology of Popham and Reid Beaches. In: Yates, M.G., Lux, D.R., and Kelley, J.T. (eds.), Guidebook for field trips in coastal and east-central Maine, Annual Meeting New England Intercollegiate Geological Conference, Guidebook, 92, p. 226-237.
- Rosen, P.S., FitzGerald, D.M., Buynevich, I.V., and Jahoda, J., 2000. Duxbury Beach morphology and processes, with special reference to shorebird habitats and nesting patterns: Part II. Duxbury Beach Reservation Annual Report, 45 p.
- *Buynevich, I.V., and FitzGerald, D.M., 2000, The Coastal Geology of Popham and Reid Beaches, NEIGC Guidebook, University of Maine, Orono, ME. p. 226-237.
- Weddle, T., Tary, A., FitzGerald, D.M., Kelley, J., Neil, C., Lurvey, K., and Borns, H., 2000, Classic Quaternary Deposits in Downeast Maine: New Views with Ground-Penetrating Radar, NEIGC Guidebook, University of Maine, Orono, ME. p. 151-167.
- *Buynevich, I.V. and FitzGerald, D.M., 1999. Structural controls on the development of a coarse sandy barrier, Reid State Park, Maine. American Society of Civil Engineers, Coastal Sediments `99 Proceedings, v. 2, p. 1256-1267.
- *Buynevich, I.V., FitzGerald, D.M., and Parolski, K.F., 1999. Geophysical investigation of the nearshore geologic framework, eastern Casco Bay Reid State Park, Maine: data interpretation and implications for Late Quaternary coastal evolution. USGS Open-File Report 99-0380, 32 p.
- Rosen, P.S., FitzGerald, D.M., *Buynevich, I.V., and Jahoda, J., 1999. Duxbury Beach morphology and processes, with special reference to shorebird habitats and nesting patterns: Part I. Duxbury Beach Reservation Annual Report, 41 p.
- Kelley, J.T., Barber, D., Dickson, S., Belknap, D.F., FitzGerald, D.M., *van Heteren, S., and *Manthorp, P.B., 1997, A sand budget for Saco Bay, Maine, Maine Geological Survey, Open File Report 97-7, Augusta, ME. 186 p.
- *van Heteren, S., FitzGerald, D.M., and *McKinlay, P., 1994, Application of Ground Penetrating Radar in Coastal Stratigraphic Studies, 5th Inter. Conf. of GPR, Proc. Waterloo, Ontario, p. 134-152.
- Kelley, J.T., Belknap, D.L., and FitzGerald, D.M., 1993, Sea-level change, coastal processes, and shoreline development in Northern New England, in: Cheney, J.T., and Hepburn, J.C. (eds.), Field Trip Guidebook for the Northeastern United States, v. 1, Chapter G, p. 1-30.
- *Mariano, C.G., and FitzGerald, D.M., 1991, Wave-current interaction at Wells Inlet, Maine. American Society of Civil Engineers, Coastal Sediments `91 Proceedings, p. 13561374.
- *Hill, M.C., FitzGerald, D.M., and Baldwin, C.T., 1990, Development and assessment of sand resources in Plymouth Bay, MA. In: Hunt, M.C., Doenges, S. and Stubbs, S.G. (eds.) Studies Related to Continental Margins: A Summary of Years Three and Four, Minerals Management Service. Austin, TX, p. 182-193.
- FitzGerald, D. M., and Fink, L. K., 1987, Sediment dynamics along an indented coast: Popham Beach Kennebec River, ME, Coastal Sediments `87, Amer. Soc. of Civil Eng., New York, p. 2047-2061.
- FitzGerald, D. M., 1986, Tidal inlets along the New England coast and the effect of the Bay of Fundy project on tidal inlets in Maine, New England Regional Coastal Engineering Conference Proceedings, p. 57-61, 74-76.
- FitzGerald, D. M., 1984, Massachusetts coastal area, in: Whalin, R. W. (ed.), Proc. of the 40th Meeting of the Coastal Engineering Research Board, Coastal Eng. Research Center, U.S. Army Engineers Waterway Experiment Station, Vicksburg, MI, p. 64-66.
- FitzGerald, D. M., Penland, S., and Nummedal, D., 1984, Sedimentation processes along the East Friesian Islands, West Germany: Proc. of the 19th Coastal Eng. Conference, Amer. Soc. of Civil Engineers, p. 3051-3066.
- FitzGerald, D. M., 1984, Coastal Geology of Winthrop, MA, in: Hanson, L. S. (ed.), Geology of Southeastern New England Guidebook, NEIGC, p. A1-24.

- Fink, L. K., Fisher, N. A., and FitzGerald, D. M., 1984, Coastal Geomorphology of Ogunquit, Landholm, Drakes Island, Wells Inlet and Wells Beach, Southeastern Maine, in: Hanson, L.S. (ed.), Geology of Southeastern New England Guidebook, NEIGC, p. Z1-23.
- FitzGerald, D. M., 1983, Erosion and accretion in tidal inlets, in: Galvin, C. J. (ed.), Shorelines, Waterways and Harbors Short Course Notes, Coastal Engineers, Springfield, MD, Sect. 7, 19 p.
- FitzGerald, D. M., 1982, Sediment bypassing at mixed energy tidal inlets: Proc. of 18th Coastal Eng. Conf., Amer. Soc. of Civil Engineers, p. 1094-1118.
- FitzGerald, D.M., and Miles Hayes, 1980, Tidal inlet effects on barrier island management: Proc. of Coastal Zone1980, Amer. Soc. of Civil Engineers, p. 2255-2379.
- FitzGerald, D.M., Cary Fico and Miles O. Hayes, 1979, Effects of the Charleston, SC jetty construction on local accretion and erosion: Proc. Coastal Structures 1979, Amer. Soc. of Civil Engineers, p. 641-664.
- FitzGerald, D.M., D.K. Hubbard and D. Nummedal, 1978, Shoreline changes associated with tidal inlets along the South Carolina Coast: Proc. Coastal Zone 1978, Amer. Soc. Of Civil Engineers, p. 1973-1994.
- FitzGerald, D.M., 1978, The effect of the 6-7 February 1978 storm on Winthrop Beach, in: Jones, R., (ed.) Proc. Volume, Blizzard of '78 Conference, Boston State College, p. 65-80.
- Hayes, M. O., D.M. FitzGerald and D.K. Hubbard, 1978, Tidal inlet control of beach erosion-deposition cycles: Proc. Amer. Shore and Beach Preservation Assoc., Annual Meeting, p. 121-140.
- FitzGerald, D.M. and S.A. FitzGerald, 1977, Factors influencing tidal inlet throat geometry: Proc. Coastal Sediments `77, Amer. Soc. of Civil Engineers, p. 563-581.
- FitzGerald, D.M. and Dag Nummedal, 1977, Ebb-tidal delta stratification, in: Nummedal, D. (ed.) Beaches and Barriers of the Central South Carolina Coast Fieldtrip Guidebook for Coastal Zone, 1977, Coastal Engineering Conference, p. 39-44.
- FitzGerald, D.M., D. Nummedal and T. W. Kana, 1976, Sand circulation pattern of Price Inlet, SC: Proc. 15th Conf. Coastal Engineering, Amer. Soc. of Civil Engineers, New York, p. 1868-1880.
- Stephens, M., P. S. Brown, D.M. FitzGerald, D. K. Hubbard and M. O. Hayes, 1975, Beach erosion inventory of Charlestown County, SC: South Carolina Sea Grant Technical Report, no. 4, 70 p.

<u>Abstracts</u>

- Owen Ryerson*, Duncan FitzGerald, Zoe Hughes, Sarah Black, Ioannis Georgiou, Chris Hein, Alyssa Novak. 2019. Temporal and Spatial Variability in Inorganic Sediment Contributions to the Great Marsh, Massachusetts. NE/SE-GSA. Charleston, SC. Abstract with Program.
- Billy, J., Robin, N., Hein, C.J., Certain, R., FitzGerald, D.M., 2018, Billy, J., Robin, N., Hein, C.J., Certain, R., FitzGerald, D.M., 2018, Primary influence of inherited geologic framework on the development of a coastal barrier system. International Coastal Symposium, Busan, South Korea.
- Krask, J.L*, Hein, C.J., Galy, V.V., FitzGerald, D.M., and Klein, A.H.F., 2017, Beach-ridge sedimentology as an archive of terrestrial climate change: Insights from a geochemical and stratigraphic study of the Tijucas Strandplain, southern Brazil, AGU Fall Meeting, New Orleans, LA.
- Billy, J., Hein, C.J., Robin, N., Certain, R., FitzGerald, D., 2017, Beach-ridge internal architecture and use for Holocene sea-level reconstruction: A case study from the Miquelon-Langlade Isthmus (NW Atlantic), AGU Fall Meeting, New Orleans, LA.
- FitzGerald, D.M., Hein, C.J., Georgiou, I., Klein, A.H.d.F., 2017, Chenier development within a prograding strandplain complex, AGU Fall Meeting, New Orleans, LA.
- Hughes, Z.J., Georgiou, I., Gaweesh, A., Hannegan, K., FitzGerald, D.M., and Hein, C. 2017 Assessing saltmarsh resilience to sea-level rise by examining sediment transport trends in the Great Marsh, MA. AGU Fall Meeting, New Orleans, LA
- Hughes, Z.J., Wilson, FitzGerald, D.M., and Rosen, P. 2017, Sea Level Rise and Salt Marsh Evolution in Boston Harbor. Boston Harbor Science Symposium, Boston , MA

- Farron, S., FitzGerald, D., and Hughes, Z. 2017, Assessing the Potential for Inland Migration of a Northeastern Salt Marsh. American Geophysical Union Fall Meeting. New Orleans, LA.
- FitzGerald, D., Georgiou, G., Kulp, M. 2016, Long-term Variability in Inorganic Sediment Contributions to the Great Marsh, Massachusetts,
- Hanegan, K., Georgiou, I. Y., & FitzGerald, D. M., 2016. The Interaction among backbarrier marshes, tidal inlets, ebb-deltas, and barrier islands as a function of sea level rise. State of the Coast Conference, New Orleans, LA, Abs. with Programs.
- Hanegan, K., Georgiou, I. Y., & FitzGerald, D. M., 2016. Modeling Interactions between Backbarrier Marshes, Tidal Inlets, Ebb-deltas, and Adjacent Barriers Exposed to Rising Sea Levels. AGU Ocean Sciences 2016. New Orleans: American Geophysical Union. https://agu.confex.com/agu/os16/meetingapp.cgi/Paper/93401
- Hein, C.J., Fallon, A.R., FitzGerald, D.M., Fitzsimons, G., 2016, Records of migration and ebb-delta breaching at historic and ancient tidal inlets along a river-fed paraglacial barrier island, International Coastal Symposium (ICS2016), Sydney, Australia, **Abs. with programs.**
- *Hanegan, K. Georgiou, I, FitzGerald, D., 2015, Modeling interactions between backbarrier marshes, inlets, ebbdeltas, and adjacent barriers exposed to rising sea levels. 23rd Biennial Coastal and Estuarine Research Federation Conference. Portland, Oregon. Abstracts with Programs, p. 45.
- de Souza, P, Georgiou, I., Hughes, Z. Howes, N., FitzGerald, D., 2015 Architecture and evolution of tidal point bars: influence of the hydrodynamic processes on the sedimentary record GSA Annual Meeting, Baltimore, MD) Abs. with Programs, vol. 47, p. 229-30.
- *Hanegan, K. Georgiou, I, FitzGerald, D., 2015, Modeling hydrodynamic and sediment transport interactions among tidal inlets, backbarriers and ebb-tidal deltas in a regime od accerlating sea level rise. 2015

 American Shore and Beach Preservation Association, New Orleans, Abs. with Programs, p. 36.
- *Hein, C.J., Georgiou, I.Y., FitzGerald, D.M., de Souza, L.H.P., 2015, Wave energy, sediment supply and sea-level fall: Late Holocene basin infilling in southern Brazil, Coastal Sediments '15, San Diego, CA, May, 2015.
- *Farron, S.J., Hughes, Z.H., FitzGerald, D.M., 2015. "Assessing the Potential for Inland Migration of a Northeastern Saltmarsh." 2015 Geological Society of America Northeastern Section Meeting. Bretton Woods, New Hampshire. Abstracts with Programs, p. 35.
- *Farron, S.J., Hughes, Z.H., FitzGerald, D.M., Strom, K.B., 2015. "Quantifying the effects of crab bioturbation on salt marsh sediment erodibility." 23rd Biennial Coastal and Estuarine Research Federation Conference. Portland, Oregon. Abstracts with Programs, p. 55.
- *Hein, C.J., FitzGerald, D.M., Georgiou, I.Y., Hein, E.A., 2014, INVITED, Coupled Barrier-Backbarrier Dynamics and the Formation and Stability of Barrier-Island Systems, GSA Abs. with Programs, vol. 46, no. 6, abs. 249075
- *Hein, C.J., FitzGerald, D.M., de Menezes, J.T., Klein, A.H.d.F., Albernaz, M.B., Cleary, W.J., 2014, Coastal response to late-stage transgression and sea-level highstand in Brazil, GSA Annual Meeting, vol. 46, 9 abs. 249092
- *Hein, C.J., FitzGerald, D.M., de Menezes, J.T., Klein, A.H.d.F., Albernaz, M.B., Cleary, W.J., 2014, Depositional signatures associated with late-stage transgression and the mid-Holocene sea-level highstand in Brazil, GSA Abs. with Programs, vol. 46, no 6, abs. 249114
- Robin, N., Barusseau, J.P., Billy, J., Certain, R., Cormier, V., FitzGerald, D., Hein, C., Levoy, F., Monfort, O., 2014, St. Pierre and Miquelon Archipelago: Coastal knowledge statement and field actions, Coastal Zone Canada 2014.
- Billy, J., Robin, N., Certain, R., Hein, C.J., FitzGerald, D., 2014, Geo-chronological pattern of the Miquelon-Langlade beach-ridge plain formation (NW Atlantic), International Coastal Symposium 2014: Durban, South Africa, 13-17 April 2014.
- *Farron, S., Hughes, Z., FitzGerald, D., Strom, K., 2014. "The Impacts of Crab Bioturbation on the Threshold of Erosion for Marsh Sediment." Geological Society of America 2014 Annual Meeting and Exposition. Vancouver, BC, Canada. Abstracts with Programs, p. 302.

- Kramer, J., Kulp, M.A., Georgiou, I., FitzGerald, D., Marchal, K., Adams, A., and Brown, M., 2014, Stratigraphic framework and geomorphic evolution of a transgressive tidal inlet-flood tidal delta system: Raccoon Pass, LA, 2014, Geological Society of America Annual Meeting, Vancouver, BC. Abstracts with Programs, p. 303.
- Hanegan, K. C., Georgiou, I.Y., FitzGerald, D.M. (2014) Modeling Backbarrier and Sea Level Controls of Tidal Prism Dynamics in Transgressive Systems, GSA Abs. with Programs, vol. 46, no. 6, abs. 249720
- *Hughes Z.J., I.Y. Georgiou, N.C. Howes, D.H., D.M. FitzGerald, 2014, Patterns of flow and sedimentation in channels with variable tidal and fluvial influence: observations from coastal Georgia. AGU Fall meeting Abstracts with Programs, EP31B-3546, San Francisco, Dec 2014.
- Buynevich, I.V., Seminack, C.T., Savarese, M., FitzGerald, D.M., Curran, H.A., Rosen, P.S. Fenster, M. S., Glumac, B., Beal, I., 2013. Erosional geoindicators in Atlantic beach sequences: implications for coastal adaptation from Maine to the Bahamas. *GSA Abstracts with Programs*, Denver, CO, v. 45, p. 272.
- Mosquera, D.A., Buynevich, I.V., Klein, A. H. F., FitzGerald, D.M., Cleary, W.J., Hein, C., and Angulo, R., 2013. Paleoscarp gradients within the outer Navegantes strandplain, Brazil: subsurface signatures of cyclones over the past 1,000 years. GSA Southeastern Section Abstracts with Programs, San Juan, Puerto Rico, v. 45, p. 15.
- Hein, C.J., Lees, D.C., Carruthers, E.A., FitzGerald, D.M., 2012, Sediment organization in the heterogeneous, coarse-grained beaches of western Prince William Sound: Long-term effects of post-oil spill beach washing, Alaska Marine Sciences Symposium 2012, 16-20 January 2012, Anchorage, Alaska, USA
- Hughes Z.J., N.C. Howes, I.Y. Georgiou, M. Kulp, D.M. FitzGerald, (2012). Development and morphology of point bars in tidal rivers, observations from Sapelo and the Altamaha River, GA. AGU Fall Meeting, San Francisco, Dec 2-7 2012.
- Hughes Z.J., N.C. Howes, I.Y. Georgiou, M. Kulp, D.M. FitzGerald, (2012). Development and morphology of point bars in tidal rivers, observations from Sapelo and the Altamaha River, GA. AGU Chapman Conference (Hydrogeomorphic Feedbacks and Sea Level Rise in Tidal Freshwater River Ecosystems), Reston Virginia, 13-16 November 2012. Poster presentation.
- Georgiou, I.Y., Hughes Z.J., Weathers, H.D., M., Kulp, D.M. FitzGerald, 2012. Short-term modeling of coastal response to wave climate and relative sea level rise, State of the Coast Conference, New Orleans, LA, June 23-25.
- Georgiou, I.Y., Hughes Z.J., Weathers, H.D., M., Kulp, D.M. FitzGerald, 2012. Short-term modeling of coastal response to wave climate and relative sea level rise, International Wetlands conference, Orlando, Florida, June 3-8.
- Hein, C.J., FitzGerald, D.M., Cleary, W.J., de Menezes, J.T., Klein, A.H.F., Albernaz, M.B., 2012, Diverse sedimentological signatures of the mid-Holocene highstand in Brazil, Eos Transactions, AGU, Fall Meeting Suppl., Abstract EP33B-0898.
- FitzGerald, D.M., Hein, C.J., Cleary, W., de Menezes, J.T., Klein, A.H.F., Scolaro, T., Buynevich, I.V. Petsch, S.T., 2011, Climatic and sedimentological forcing of strandplain progradation at Tijucas, Central Santa Catarina, Brazil, International Union for Quaternary Research, XVIII INQUA-Congress, 20-27 July 2011, Bern, Switzerland.
- Hein, C.J., FitzGerald, D., Milne, G., Bard, K.A., Fattovich, R., 2011, Holocene sea-level and climatic variability along the African Red Sea coast: Impacts on an ancient Egyptian civilization and implications for future coastal response to climate change, International Union for Quaternary Research, XVIII INQUA-Congress, 20-27 July 2011, Bern, Switzerland.
- Hein, C.J. and FitzGerald, D., 2011, The role of backbarrier infilling in the formation of barrier island systems, Coastal Sediments '11, 2-6 2011, Miami, Florida, USA.
- Hein, C.J. and FitzGerald, D.M., 2011, Barrier evolution in response to inlet closure: An example from a paraglacial barrier system, GSA Abs. with Programs, vol. 43, no 2, p. 24.
- Wilson, C., Hughes, Z., FitzGerald, D., 2011, The Effects of Crab Bioturbation on Mid-Atlantic Saltmarsh Tidal Creek Extension: Geotechnical and Geochemical Changes. Coastal and Estuarine Research Federation meeting, 6-10 November, Daytona Beach, FL.
- Wilson, C., Rosen, P., FitzGerald, D.M., Hughes, Z., 2011. Drowned drumlins, battered bluffs, and

- saltmarsh sediments: Boston Harbor Islands through time. Harvard University's Boston Harbor Islands Science Symposium, 19 October, Cambridge, MA.
- Hughes Z.J., I.Y. Georgiou, N.C. Howes, C.A. Wilson, M. Kulp, D.M. FitzGerald, 2011, Development mechanics and morphology of point bars in tidal creeks, observations from Sapelo and the Altamaha, GA. South East Tidal Creek Summit, Charleston SC, December 5-6 2011.
- Hughes Z.J., C.A. Wilson, H. Vu, D.M. FitzGerald, S. Pennings., 2011 Recent expansion of tidal creek networks in the South Atlantic Bight: an ecogeomorphological responses to sea level rise? South East Tidal Creek Summit, Charleston SC, December 5-6 2011.
- Howes N.C., I Georgiou, M. Kulp, D.M. FitzGerald, ZJ Hughes. 2011, A novel method linking processes and stratigraphy in a tidal environment: Barataria Basin, Louisiana. Association of American Geoscientists, Milan 23-26 October 2011.
- FitzGerald, D.M., MacDonald, S., Kulp, M., and Owens, E., 2011, Oiling of Louisiana's central sandy beaches, GSA Southeastern Section, Abstracts with Programs, New Orleans, LA
- Kulp, M, MacDonald, S., FitzGerald, D.M., and Georgiou, I., 2011, Oiling inside Barataria Bay, GSA Southeastern Section, Abstracts with Programs, New Orleans, LA
- MacDonald, S., FitzGerald, D.M., Kulp, M., and Owens, E., 2011, Oil Mat Identification and Removal from Low-tide Platforms: MC-252 Oil Spill Response, GSA Southeastern Section, Abstracts with Programs, New Orleans, LA
- Buynevich I.V., A.H.F. Klein D.M. FitzGerald W.J. Cleary C. Hein, F.A. Veiga, R.J. Angulo, N.E. Asp, R.M. Peterman, 2011, Geological legacy of storm erosion along a high-energy indented coastline: northern Santa Catarina, Brazil. Abs with Programs, ICS, Szczecin, Poland.
- Hein, C.J., FitzGerald, D.M., Albernaz, M.B., Cleary, W. de Menezes, J.T., and Klein, A.H.F., 2010, Geophysical examination of a Brazilian strandplain-barrier system: implications for mid- to late- Holocene sea-level fall in the southern hemisphere, GSA Abs. with Programs, vol. 42, no 5, p. 523.
- Hein, C.J., FitzGerald, D., Bard, K.A., Fattovich, R., and Milne, G., 2010, The Role of Falling Sea Level and Bay Infilling in the Closur an Ancient Egyptian Harbor, GSA Abs. with Programs, vol. 42, no 1, p. 130.
- Cohn, N., FitzGerald, D., Buynevich, I.B., Georgiou, I., and Hein, C.J., 2010, Resolving storm intensity from overwash deposits: a castudy at Bald Head Cove, Maine, GSA Abs. with Programs, vol. 42, no 1, p. 118.
- Keegan, K.M., Raub, K.B., Tuck, C.E., Hughes, Z.J., FitzGerald, D., and Hein, C.J., 2010, Hydraulics and morpho-dynamics of More River Inlet, Maine, GSA Abs. with Programs, vol. 42, no 1, p. 1.
- Hughes, Z.J., Howes, N.C., FitzGerald, D.M., Georgiou, I.Y., Kulp, M.A., Miner, M.D., Smith, J.M., and Barras, J.A., 2010. Wetland los during hurricanes: failure of low salinity marshes in Breton Sound. Louisiana State of the Coast Conference, Baton Rou LA. Abs. with Programs.
- Wilson, C., Hughes, Z., FitzGerald, D.M., Mahadevan, A., Pennings, S., 2010. Ecophysically driven tidal creek expansion in the San Delta, SC. Geological Society of America NE/SE Section meeting, Baltimore, MD. Abs. with Programs.
- Hughes, Z., Wilson, C., FitzGerald, D., Rosen, P., 2010. Backbarrier dynamics in a glaciated environment: the evolution of a small saltmarsh system in Boston Harbor. Geological Society of America NE/SE Section meeting, Baltimore, MD. Abs. with Programs.
- C. Wilson, D. FitzGerald, Z. Hughes, S. Pennings, M. Allison, 2010. Saltmarsh Evolution as a Function of Relative Sea-level Rise, Sediment Supply, and Marsh Productivity: Case Studies in Louisiana, South Carolina, and Massachusetts. Louisiana Sta of the Coast Conference, Baton Rouge, LA. Abs. with Programs.
- Miner, M.D., Georgiou, I.Y., Kulp, M.A., FitzGerald, D.M., Twichell, D., Flocks, J., and Lavoie, D., 2009, Geomorphic-Based Barrier Island Transgression Management, Chandeleur Islands, Louisiana: Geological Society of America Annual Meeting, Oct 14-19, 2009, Portland, Oregon.

- Hughes, Z.J., Wilson, C., FitzGerald, D., Pennings, S., Wieski, K., and Mahadevan, A., 2009. Expansion of marsh tidal creek network in response to sea-level rise. Coastal and Estuarine Research Federation Annual Meeting, November 1-5, Portland, Oregon.
- Hein, C.J., FitzGerald, D.M., Stone, B.D., Carruthers, E.A., and Gontz, A.M., 2009, /The Role of Backbarrier Filling in the Evolution of a Barrier Island System/, American Geophysical Union Annual Fall Meeting, San Francisco, CA, 17 December 2009.
- Hein, C.J., FitzGerald, D.M., Carruthers, E.A., and Stone, B.D., 2009, /Tidal Prism Reduction, Backbarrier Infilling, and Inlet Closure: The Formation of the Plum Island, MA Barrier System in Response to Slow Sea-Level Rise, /Northeast Shore and Beach Preservation Association Annual Meeting, Woods Hole, MA, 22 September 2009.
- Hein, C.J., Carruthers, E.A., FitzGerald, D.M., Barnhardt, W., and Stone, B.D., 2009, /Evolution of a Barrier System in Response to Slow Sea Level Rise and Backbarrier Infilling: Plum Island, Massachusetts, /American Association of Petroleum Geologists Annual Convention and Exhibition, Denver, CO, 9 June 2009.
- Bolbrock, A., FitzGerald, D., Rosen, P., and Hughes, Z., 2009. Boston Harbor salients: morphology, formation, and evolution. Geological Society of America Northeast Section Annual Meeting, March 22-24, Portland, Maine.
- Costas, S., and FitzGerald, D., 2009. Holocene evolution of the southern end of Salisbury Beach, MA: sea-level rise and tidal inlet forcings. Geological Society of America Northeast Section Annual Meeting, March 22-24, Portland, Maine.
- Kandrot, S., Curtis, C., Cudney, S., Buynevich, I., FitzGerald, D., Hein, C., and Hughes, Z., 2009. Massive overwash at Seal Cove, Maine: evidence for the Great Colonial Hurricane of 1635. Geological Society of America Northeast Section Annual Meeting, March 22-24, Portland, Maine.
- Hein, C., Carruthers, E., FitzGerald, D., Barnhardt, W., and Stone, B., 2009. Development of the Plum Island, MA barrier system in response to slow sea-level rise. Geological Society of America Northeast Section Annual Meeting, March 22-24, Portland, Maine.
- Hughes, Z.J., FitzGerald, D., Wilson, C., Mahadevan, A., and Pennings, S., 2009. Rapid evolution of marsh tidal creek network in response to sea-level rise. Geological Society of America Northeast Section Annual Meeting, March 22-24, Portland, Maine.
- Wilson, C., FitzGerald, D., and Hughes, Z., 2009. Microchannel and creek development in a New England saltmarsh, Rowley, MA. Geological Society of America Northeast Section Annual Meeting, March 22-24, Portland, Maine.
- Hein, C.J. and FitzGerald, D.M., 2008, The Search for a Middle Kingdom Harbor: Geological Investigations at Mersa/Wadi Gawasis, Egypt, Institut Français d'Archéologie Orientale Annual Conference: Cairo, Egypt, Abstracts with Programs, v. 6.
- Howes N., D.M. FitzGerald, Georgiou, I., Hughes, Z., Kulp, M., and Miner, M., 2008. Hydrodynamics of Barataria Bay, Louisiana, American Environmental and Engineering Geologists, New Orleans. v. 51.
- Hughes, Z. J., FitzGerald, D.M., and Rosen, P.S., 2008, Geophysical Processes of Boston Harbor: past and future evolution of the Islands. Boston Harbor Islands Science Symposium, University of Massachusetts, Boston.
- Hein, C.J., FitzGerald, D., Bard, K.A., Fattovich, R., and Zazzaro, C., 2008, Geological Investigations of a Middle Kingdom Harbor: Wadi Gawasis, Egypt, Geological Society of America Annual Conference: Houston, TX, Abstracts with Programs, v. 40, p. 384.
- Carruthers, E.A., Hein, C.J., FitzGerald, D., Stone, B.D., and Ellison, M.S., 2008, Redefining the Model of Barrier Island Formation Along a Paraglacial Coast: Plum Island, MA, Geological Society of America Annual Conference: Houston, TX, Abstract with Programs, v. 40, p. 158.
- Hein, C.J., FitzGerald, D., Stone, B.D., Ellison, M.S., and Carruthers, E.A., 2008, Formation and Evolution of a Paraglacial Barrier System: Plum Island, MA, Association of American Geographers Annual Meeting: Boston, MA, 24 April 2008.

- Miner, M., Kulp, M., Georgiou, I., Flocks, J., Twichell, D., Sallenger, A., and FitzGerald, D. 2008, The role of hurricanes in long-term morphologic evolution of the Chandeleur islands, Louisiana, Association of Environmental and Engineering Geologists, Abstracts with Programs, v. 51, p., 76.
- Miner, M., Kulp, M., Flocks, J., and FitzGerald, D. 2008, Regional coastal evolution in response to rapid relative sea-level rise and interior wetlands loss, south-central Louisiana, Association of Environmental and Engineering Geologists, Abstracts with Programs, v. 51, p., 76.
- Wilson, C.A., FitzGerald, D., Hughes, Z.J., Mahadevan, A., Pennings, S., 2008, Drivers of headward creek erosion in Santee River delta saltmarshes. Association of American Geographers Annual Meeting, Boston, Massachusetts.
- Wilson, C.A., Hughes, Z.J., FitzGerald, D., Mahadevan, A., Pennings, S., 2008, Physical and ecological interactions, in creek headward erosion. American Geophysical Union Ocean Sciences Annual Meeting, Orlando, Florida.
- FitzGerald, D.M., Cleary, W.J., Buynevich, I.V., Hein, C., Klein, A.H.F., Asp, N., and Angulo, R., 2008, Diverse styles of coastal evolution along Santa Catarina, Brazil, XX AMQUA Biennial Meeting 2008, Quaternary Ice Sheet-Ocean Interactions and Landscape Responses, Pennsylvania State University, PA, p. 15-16.
- Kulp, M.A., FitzGerald, D., Georgiou, I., Miner, M., and Penland, S., 2007, The demise of the Chandeleur Islands in southern Louisiana: Not yet!: Geological Society of America, Abstracts with Programs, v. 39, no. 6, p. 69.
- Buynevich, I.V., FitzGerald, D.M., Al-Zamel, A., Al-Sarawi, M., 2007. Geomorphology and sedimentary framework of small subtropical islands, offshore Kuwait. GSA Abstracts with Programs, Denver, Colorado, v. 39, no. 6, p. 15.
- FitzGerald, D.M., Howes, N., Kulp, M., Hughes, Z., Georgiou, I., and Penland, P., 2007, Hurricane impacts to the Caernarvon wetlands, Saint Bernard Parish, Louisiana, Abstracts with Programs, Estuarine Research Federation, Providence, RI, p. 63.
- Argow, B., Hughes, Z. and FitzGerald, 2007, Comparative importance of winter processes on New England backbarrier marsh sediment budget, Abstracts with Programs, Estuarine Research Federation, Providence, RI, p. 6.
- FitzGerald, D., Howes, N., Kulp, M., Hughes, Z., Georgiou, I., and Penland, S., 2007, Impacts of rising sea level to backbarrier wetlands, tidal inlets, and barriers: Barataria Coast, Louisiana, Coastal Sediments 07, New Orleans, LA.
- *Argow, B.A., Hughes, Z.J., and FitzGerald, D.M., 2007, Ice raft formation, dispersion and sedimenntation on New England marshes, Coastal Sediments 07, New Orleans, LA.
- *Hein, C.J., FitzGerald, D.M. and Barnhardt, W., 2007, Holocene evolution of the Merrimack Embayment, northern Massachusetts, interpreted from shallow seismic stratigraphy, Coastal Sediments 07, New Orleans, LA.
- Whitmeyer, S. and FitzGerald, D.M., 2007, A relic sand wave field in a tidal channel, Coastal Sediments 07, New Orleans, LA.
- Miner, M.D., FitzGerald, D.M., and Kulp, M.A., 2007, 1880 to 2005 Morphological evolution of as transgressive tidal inlet, Little Pass Timbalier, Louisiana, Coastal Sediments 07, New Orleans, LA.
- FitzGerald, D.M., Cleary, W.J., Buynevich, I.V., Hein, C., Klein, A.H.F., Asp, N., and Angulo, R., 2007, Strand Plain Evolution along the Southern Coast of Santa Catarina, Brazil. International Coastal Symposium, Gold Coast, Australia.
- *Hein, C.J., FitzGerald, D.M. and Barnhardt, W., 2007, Holocene reworking of a sand sheet in the Merrimack Embayment, Western Gulf of Maine, International Coastal Symposium Conference: Gold Coast, Australia.
- *Hughes, Z.J., FitzGerald, D.M., and Rosen, P.S., 2007, The Impact Of Natural Waves And Ferry Wakes On Bluff Erosion And Beach Morphology in Boston Harbor, USA, International Coastal Symposium Conference: Gold Coast, Australia.

- Miner, M.D., Kulp, M.A., and FitzGerald, D.M., 2007, Tidal Versus Shoreface Ravinement and Tidal Inlet Fill Preservation Potential for Transgressive Tidal Inlets, Mississippi River Delta Plain, USA, International Coastal Symposium Conference: Gold Coast, Australia.
- FitzGerald, D.M., Cleary, W.J., Buynevich, I.V., Hein, C., Klein, A.H.F., Asp, N., and Angulo, 2006, Variability of strandplain development in Santa Catarina, Brazil, Abstracts with Programs, IGCP-495 Quaternary Land-Ocean Interactions: Driving Mechanisms and Coastal Responses. Balneario Camboriu, Brazil, p. 28-31.
- *Buynevich, I.V., Cleary, W.J., FitzGerald, D.M., Hein, C., Klein, A.H.F., Asp, N., and Angulo, R., 2006 Modern and ancient erosion indicators on a high energy coast: Camboriu Peninsula and Navegantes Plain, SC, Brazil. IGCP-495 Quaternary Land-Ocean Interactions: Driving Mechanisms and Coastal Responses. Balneario Camboriu, Brazil, p. 26-27.
- *Hein, C.J., D. FitzGerald, and W. Barnhardt. 2007, Patterns and Mechanisms in Sediment Transport Processes Inferred from Geophysical and Sedimentological Surveys Offshore of the Merrimack River, Northern Massachusetts, Coastal Sediments 07, New Orleans, LA.
- *Hein, C.J., D. FitzGerald, and W. Barnhardt. 2006, Holocene Sedimentological Evolution of the Merrimack River Paleo-Delta; And Speculation for Future Sediment Contributions to the Onshore Barrier System, Abstracts with Programs, Association of Engineering Geologists: Annual Conference, Boston, MA., p. 8.
- *Hein, C.J., D. FitzGerald, and W. Barnhardt. 2006, Reworking of a Submerged Fluviodeltaic sequence in the Merrimack Embayment, Western Gulf of Maine, Abstracts with Programs, Geological Society of America Annual Conference Philadelphia, PA.
- *Hughes, Z.J. and D.M. FitzGerald, 2006. Tidal and Wave induced sedimentation transport pathways at Wells Inlet Maine. Proceedings of Association of Environmental and Engineering Geologists, 49th Annual Meeting, Boston MA, p. 7.
- *Hughes, Z., FitzGerald, D.M., and Rosen, P.S., 2006, Assessing the impact of ferry boat wakes on shoreline erosion in Boston Harbor, Massachusetts. Abstracts with Programs, International Conference on Coastal Engineering, San Diego, CA, p. 348.
- *Hein, C.J., FitzGerald, D.M., and Barhardt, W., 2006, Holocene sedimentological evolution of the Merrimack Embayment, western Gulf of Maine. GSA Northeastern Section, Abstracts with Programs, Harrisburg, PA, v. 38.
- *Howes, N.C., *Hughes, Z.J., FitzGerald, D.M., and *Hatten, T., 2006, Investigations of bluff erosion and sediment transport in Boston Harbor, MA. GSA Northeastern Section, Abstracts with Programs, Harrisburg, PA, v. 38.
- *Hatten, T.V., FitzGerald, D.M., *Hughes, Z.J., and *Howes, N., 2006, Sedimentation processes and morphological behavior of Lovells Island, Boston Harbor, MA. GSA Northeastern Section, Abstracts with Programs, Harrisburg, PA, v. 38.
- Fleming, H.M., *Fenster, M.S., FitzGerald, D.M., 2005. Potomac River estuary: Bedload sediment source or sink?

 18th Biennial Conference of the Estuarine Research Federation, Oct. 16-20, 2005, Norfolk, VA, Conference Abstracts, p. 63.
- Asp, N. E.; Klein, A. H. F.; Siegle, E.; *Buynevich, I. V.; FitzGerald, D. M.; Cleary, W. J.; Angulo, R. J.; Dillenburg, S. R.; Vintem, G.; Menezes, J. T., 2005 A Planície Costeira de Tijucas, Santa Catarina, Brasil: Estudo da Evolução Holocênica e a Experiência de Colaboração Multi-Institucional. In: 57A. Reunião Da SBPC, 2005. Fortaleza.
- FitzGerald, D.M., Cleary, W.C., *Buynevich, I.V., Asp, N.E., Siegle, E., Klein, A.H.F., and Angulo, R., 2005. Tectonic inheritance and the evolution of the central Santa Catarina coast, Brazil. GSA Northeastern Section Abstracts with Programs, Saratoga Springs, New York, v. 37, p. 19.
- *Buynevich, I.V., FitzGerald, D.M., Cleary, W.C., Asp, N.E., Siegle, E., Klein, A.H.F., and Angulo, R., 2005. Contrasting depositional trends on a recently emergent coastline of southern Brazil: insights from subsurface imaging. GSA Northeastern Section Abstracts with Programs, Saratoga Springs, New York, v. 37, p. 19.

- Cleary, W. J., Smith, M.S., FitzGerald, D. M., Doughty, S. D., Silva, G. M. da, and Klein, A. H. da F., 2005, Provenance of beach sands along southern Brazilian strandplains: Santa Catarina, Brazil, GSA Abstracts with Programs Vol. 37, p. 35.
- Smith, L.B., Vaurtinot, A., Rosen, P.S., FitzGerald, D.M., and O'Connell, 2005, Sacrificial dune role in coastal barrier protection, Solutions to Coastal Disaster 2005, ASCE, Charleston, SC.
- Silva, G.S.M., Klein, A.H.F., Cleary, W.J., FitzGerald, D., Almeida, L.E.S.B., 2004, Heavy mineral occurrences along the coast of Santa Catarina State: Preliminary results In: Congresso Brasileiro de Oceanografia, Itajaí. Livro de Resumos-Congresso Brasileiro de Oceanografia. p.312 312
- FitzGerald, D.M., *Buynevich, I.V., and *Argow, B., 2004, Runaway transgression in a regime of accelerated sea level rise, Abstracts with Programs, IGCP-495 Quaternary Land-Ocean Interactions: Driving Mechanisms and Coastal Responses, Bar Harbor, Maine.
- *Buynevich, IV., FitzGerald, D.M., and Goble, R.J., 2004, Geological archives of Holocene storms in mid-coastal Maine: radiocarbon and optical dating of event horizons. Abs with Prog., IGCP-495 Quaternary Land-Ocean Interactions: Driving Mechanisms and Coastal Responses, Bar Harbor, Maine.
- *Argow, B.A. and FitzGerald, D.M., 2004. Impact of Winter Processes on Salt Marsh Accretion: Variations in Winter Tidal Deposition and Ice-rafted Sediment. Geological Society of America Abstracts with Programs, Vol. 36, No. 5, p. 291
- *Argow, B.A. and FitzGerald, D.M., 2004. Winter Processes on New England Salt Marshes: Ice Rafting, Ice Loading and Latitudinal Variation. Program with Abstracts, American Geophysical Union Chapman Conference on Salt Marsh Geomorphology: Physical and Ecological Effects on Landform.
- Cleary, W. J., FitzGerald, D.M., *Buynevich, I.V., Marden, T., Knierim, A., and Doughty, S.D., 2004, Inlet-associated marsh islands: North Inlet, South Carolina, GSA Abs. with Programs Vol. 36, No. 2.
- Marden, T., FitzGerald, D.M., and *Buynevich, I.V., 2004, State-of-the-art animation depicts the evolution of a historical inlet, Georgetown County, South Carolina, GSA Abstracts with Programs Vol. 36, No. 2
- *Argow and FitzGerald. 2004. Winter processes on a New England marsh: Implications for wetlands survival in a regime of rising sea level GSA Abstracts with Programs Vol. 36, No. 2.
- *Fenster, M.S., and FitzGerald, D.M., 2004, Assessing long-term changes to giant sand waves in eastern Long Island Sound, U.S.A, GSA Abstracts with Programs Vol. 36, No. 2.
- *Dougherty, A. J., FitzGerald, D.M., *Pendleton, E.A., and *Buynevich, I.V., 2002. Detailed stratigraphy and evolution of a paraglacial barrier, Castle Neck, northern Massachusetts. GSA Northeastern Section Abstracts with Programs, v. 34.
- Rosen, P.S., FitzGerald, D.M., and Jahoda, J., 2002, Multiple use management of a transgressive barrier beach,
- Duxbury Beach, Massachusetts, Northeast Shore and Beach Preservation Association 5th Annual Conference Proceedings.
- *Himmelstoss, E., FitzGerald, D.M., Rosen, P.S., and Allen, J., 2002, Bluff evolution of the Boston Harbor Islands.

 Northeast Shore and Beach Preservation Association 5th Annual Conference Proceedings.
- *Rits, M., and FitzGerald, D. M., 2002, Changes in the Sediment Distribution of a Jettied Channel and Backbarrier System as a Result of Dredging, Wells Harbor, ME., GSA Abstracts with Programs v. 34, p. 67.
- FitzGerald, D.M., and *Buynevich, I.V., 2001, Coarse-grained sediment contribution to the nearshore and inner shelf by large fluvial estuarine systems, New England, USA, Chapman Conference, Ponce, Puerto Rico, p. 15.
- Marden, T.P., FitzGerald, D.M., *Buynevich, I.V., Johnsen, C.D., Pendleton, E., and Fields, M.L., 2001, Identification of a paleo-tidal utilizing ground-penetrating radar and sediment cores Debidue Island, South Carolina. GSA Abstracts with Programs, v.33.
- *Tary, A.K. and FitzGerald, D.M., 2001, The blueberry barrens of Downeast Maine laid bare with ground-penetrating radar. GSA Abstracts with Programs, v. 33.
- *Buynevich, I.V., FitzGerald, D.M., Belknap, D.F., Kelley, J.T. and Barnhardt, W.A., 2001, Sedimentological signatures of riverine-dominated phases in estuarine and barrier evolution, mid-coastal Maine. GSA Abstracts with Programs, v. 33.

- FitzGerald, D.M., *Buynevich, I.V., Fenster, M.S., Kelley, J.T., and Belknap, D.F., 2001, Contribution of coarse-grained sediment to the nearshore and inner shelf by large estuaries: New England, USA. GSA Abstracts with Programs, v. 33.
- Knisley, B.A., *Fenster, M.S., FitzGerald, D.M., Belknap, D.F., Buynevich, I.V., Gontz, A.M., and Kelley, J.T., 2001, Controls on estuarine morphodynamics: a case study on Merrymeeting Bay, Kennebec River Estuary, Maine. GSA Abstracts with Programs, v. 33.
- *Dougherty, A.J., FitzGerald, D.M., Krol, M.A., and Idleman, B., 2001, Provenance study of barrier sands using 40AR/39AR laser-probe dating of single crystals detrital muscovites, Merrimack Embayment barriers, New England. GSA Abstracts with Programs, v. 33.
- *Pendleton, E.A., FitzGerald, D.M., and *Rits, M., 2001, Backbarrier control on tidal inlet morphology. GSA Abstracts with Programs, v. 33.
- *Himmelstoss, E.A., and FitzGerald, D.M., 2001, Shoreline evolution at jettied tidal inlets toward an equilibrium configuration: Wells Inlet, ME and Merrimack River Inlet, MA. GSA Abstracts with Programs, v. 33.
- *Dougherty, A.J., FitzGerald, D.M., *Pendleton, E.A., and *Buynevich, I.V., 2001, Styles of barrier evolution as a function of proximity to the updrift tidal inlet, Castle Neck, Northern Massachusetts. AGU, Boston, MA, p. 99.
- *Buynevich, I.V., and FitzGerald, D.M., 2001, Sedimentary records of intense storms in paraglacial barrier sequences, Maine, USA. AGU, Boston, MA, p. 116.
- *Tary, A.K., FitzGerald, D.M., 2001, Deciphering Deblois' deglacial depositional development. GSA Northeastern Section Abstracts with Programs, v. 33, p. 65.
- *Rits, M., and FitzGerald, D.M., 2001, Wave and current interaction at a jettied inlet, Wells Harbor, ME. GSA Northeastern Section Abstracts with Programs, v. 33, p. 2.
- *Pendleton, E.A., and FitzGerald, D.M., 2001, Results of inlet formation at New Inlet, outer Cape Cod, MA. GSA Northeastern Section Abstracts with Programs, v. 33, p. 3.
- FitzGerald, D.M., *Buynevich, I.V., and Rosen, P.S., 2000, Historical and geological evidence of former tidal inlets along a retrograding barrier: Duxbury Beach, Massachusetts, U.S.A., International Coastal Symposium, Rotorua, NZ, p. 52-53.
- *Buynevich, I.V. and FitzGerald, D.M., 2000, Styles of coastal progradation revealed in subsurface records of paraglacial barriers, New England, USA., International Coastal Symposium, Rotorua, NZ, p. 42-43.
- *Buynevich, I.V. and FitzGerald, D.M., 2000. Inside the beach: stratigraphic classification of barrier progradation styles along the New England coast. Abstracts of the 8th Annual J. Louis Agassiz Research Symposium, Institute for Quaternary Studies, Univ. of Maine, Orono, Maine, p. 5.
- *Buynevich, I.V. and FitzGerald, D.M., 2000. Infilling history of coastal ponds, Phippsburg Peninsula, Maine: Insights from high-resolution subsurface profiling. GSA Northeastern Section Abstracts with Programs, v. 32, p. 9.
- *Dougherty, Amy J., FitzGerald, D.M., and Buynevich, I.V., 2000. Complex Holocene origin and evolution of Castle Neck barrier, northern Massachusetts. GSA Northeastern Section Abstracts with Programs, v. 32, p. 14.
- *Tary, A.K., FitzGerald, D.M., *Buynevich, I.V., Neil, C.D., and Weddle, T.K., 2000. Lifting the lid on Pineo Ridge using ground-penetrating radar. GSA Northeastern Section Abstracts with Programs, v. 32, p. 77.
- *Fenster, M.S., and FitzGerald, D.M., 1999, The grand finale: sand sheet development from the reworking a large marine delta at the mouth of the Connecticut River. GSA Northeastern Section Abstracts with Programs, v. 31, p. 15.
- *Buynevich, I.V., and FitzGerald, D.M.,1999. Chronostratigraphy and paleoenvironmental significance of organicrich facies in paraglacial barrier sequences, peninsular coast of Maine. AAPG Bulletin, v. 83, p. 1883.
- *Buynevich, I.V., FitzGerald, D.M., *Kniskern, T.A., and Parolski, K.F., 1999. Sediment dispersal along the central peninsular coast of Maine: New constraints from nearshore geophysical and sedimentological data. GSA Northeastern Section Abstracts with Programs, v. 31, p. 8.
- Caldwell, D.W., *Buynevich, I.V., FitzGerald, D.M., and Lorrey, A.M., 1998, Erosion and deposition of glacial deposits during glacial-marine submergence in southwestern Maine and in Boston Harbor, Massachusetts. GSA Northeastern Section Abstracts with Programs, v. 30, p. 9.

- *Tary, A.K., FitzGerald, D.M., and Marchant, D.M., 1998 The Sanford Sand Plain, York County, Maine: the stratigraphic nature and evolution of a glacial marine-limit sand plain. GSA Northeastern Section Abstracts with Programs, v. 30, p. 77.
- *Buynevich, I.V. and FitzGerald, D.M., 1998. Styles of evolutionary development and morpho-stratigraphic variability of sandy barriers at Small Point Harbor, Maine. GSA Northeastern Section Abstracts with Programs, v. 30, p. 9.
- *Kniskern, T.A., *Buynevich, I.V., FitzGerald, D.M., and Peters, J., L., 1998. Sedimentological characteristics of fluvialestuarine deposits in the Merrymeeting Bay, Maine: Implications for sediment transport. GSA Northeastern Section Abstracts with Programs, v. 30, p. 30.
- *Buynevich, I.V. and FitzGerald, D.M., 1997. Textural and compositional characteristics of sediments in the lower Kennebec River estuary, Maine: potential for paleoenvironmental interpretation of coastal sequences. GSA Northeastern Section Abstracts with Programs, v. 29, p. 34.
- Caldwell, D.W., *Buynevich, I.V., and FitzGerald, D.M., 1997. Daily sediment accumulation on the foreset beds in a small delta formed in Glacial-Pond Abol, West Branch Penobscot River, T2 R10, Maine. GSA Northeastern Section Abstracts with Programs, v. 29, p. 34.
- Caldwell, D.W., *Buynevich, I.V., FitzGerald, D.M., and Lorrey, A.M., 1997. Erosion and redeposition of glacial deposits during glacial-marine submergence in southwestern Maine and in Boston Harbor, Massachusetts. GSA Northeastern Section Abstracts with Programs, v. 29, p. 9.
- *Crider, H.B., FitzGerald, D.M., *Buynevich, I.V., and Weddle, T.K., 1997. Evidence for Late Pleistocene drainage of Androscoggin River through Thomas Bay, Maine. GSA Northeastern Section Abstracts with Programs, v. 29, p. 38.
- *Hunt, D. P., Lorrey, A. M., *Buynevich, I.V., and Caldwell, D. W., 1997. Effects of wave action on glacial deposits during marine submergence: a ground-penetrating radar survey of Thompson Island, Dorchester Bay, Massachusetts. GSA Northeastern Sect. Abstracts with Programs, v. 29, p.54.
- Lorrey, A.M. and *Buynevich, I.V., 1997. A preliminary sedimentological and geophysical (GPR) investigation of a glaciolacustrine delta, Plymouth, New Hampshire. GSA Northeastern Section Abstracts with Programs, v. 29, p. 62.
- Miller, G., Belknap, D.F., Kelley, J.T., and FitzGerald, D.M., 1997, Ground-penetrating radar of a coastal moraine compared to seismic reflection profiles preserved on the inner shelf off southwestern Maine, GSA Northeastern Section Abstracts with Programs, v. 29, p. 67.
- *Mills, S.T., FitzGerald, D.M., Buynevich, I.V., and Hunt, D. 1997, The stratigraphy and evolution of two barrier systems in the northern Wells Embayment, GSA Northeastern Section Abstracts with Programs, v. 29, p. 67.
- Tary, A.K., FitzGerald, D.M., Marchant, D.R., and Buynevich, I.V., 1997. Geomorphic evolution of and process variability in the Great Sanford Outwash Plain, York County, Maine. GSA Northeastern Section Abstracts with Programs, v. 29, p. 84.
- Wenner, J.M., *Hunt, D.P., Wilshire, A.C., *Tary, A.K., *Mills, S.T., *Buynevich, I.V., and FitzGerald, D.M., 1997. Sources of heavy mineral deposits on Crescent Beach, Block Island, Rhode Island. GSA Northeastern Section Abstracts with Programs, v. 29, p. 88.
- *Buynevich, I.V., FitzGerald, D.M., *McKinley, P.A., and *van Heteren, S.,1996, Role of sea-level rise and riverine processes in the late Holocene development of the Popham Beach barrier, Maine., GSA Northeastern Section Abstracts with Programs, v. 28, p. 43.
- *Mills, S.T., FitzGerald, D.M., *Buynevich, I.V., and *Hunt, D., 1996, Stratigraphy and evolution of the northern Wells Embayment. GSA Northeastern Section Abstracts with Programs, v. 28, p. 82.
- Kelley, J.T., and FitzGerald, D.M., 1995, Season variation in the direction of sediment and water movement, Saco Bay, ME. National Meeting Geol. Soc. of America, v. 27, p. 32.
- *Buynevich, I.V., FitzGerald, D.M., and *McKinlay, P.A., 1995. Stratigraphy and evolution of Popham Beach, central Maine. GSA Northeastern Section Abstracts with Programs, v. 27, p. 23.
- *McKinlay, P.A., FitzGerald, D.M., *Buynevich, I.V., and *van Heteren, S., 1995. The influence of bedrock on the morphology and evolution of Coffins Beach, Gloucester, Massachusetts. GSA Northeastern Section Abstracts with Programs, v. 27, p.21.

- *van Heteren, S. FitzGerald, D.M., Barber, D.C., Kelley, J.T., and Belknap, D.F., 1994, Bedrock control of the development of barriers in Saco Bay, Maine., GSA Northeastern Section Abstracts with Programs, v. 26, p. 77.
- Kuo, C., Holden, W.F., Caldwell, D.W., and FitzGerald, D.M., 1994, Hydrology of a portion of the Great Sanford Outwash Plain, Maine., GSA Northeastern Section Abstracts with Programs, v. 26, p. 30.
- *McKinlay, P.A, FitzGerald, D.M., and Van Heteren, S., 1994, Bedrock controls on the evolution and morphology of Coffins Beach, Gloucester, MA., GSA Northeastern Section Abstracts with Programs, v. 26, p. 62.
- *van Heteren, S. FitzGerald, D.M., and Fink, L.K., 1993, Development of a barrier system at Ferry Beach, ME: evidence of transgressive and regressive phases. , GSA Northeastern Section Abstracts with Programs, v. 25, p. 86.
- FitzGerald, D.M., *Manthorp, P. A., Kuo, C.H., *van Heteren, S., Kink, L.K., and Kelley, J.T., 1993, Estuarine circulation and sediment transport trends in the lower Saco River, , GSA Northeastern Section Abstracts with Programs, v. 25, p. 14.
- *van Heteren, S., FitzGerald, D.M., *Montello, T.M., and Fink, L.K., 1992, Stratigraphy and inferred development of the Scarborough barrier, Maine., GSA Northeastern Section Abstracts with Programs, v. 24, p. 82.
- *Montello, T.M., FitzGerald, D.M., *van Heteren, S. and Caldwell, D.W., 1992, The stratigraphy and evolution of the Wells barrier system, Maine, , GSA Northeastern Section Abstracts with Programs, v. 24, p. 64.
- *Mariano, C.G., and FitzGerald, 1991, Wave-current interaction at Wells Inlet, Maine, A.C.S.E. Coastal Sediments `91, Abstracts with Programs p. 8.
- *Smith, J.B., and FitzGerald, D.M., 1991, Hydrodynamics, sedimentology, and stratigraphy of a mixed energy, tidedominated ebb-tidal delta: Essex Inlet, MA., GSA Northeastern Section Abstracts with Programs, v. 23, p. 130.
- Fink, L.K., and FitzGerald, D.M., 1990, Origin and Holocene evolution of swash aligned barriers in midcoast Maine, , GSA Northeastern Section Abstracts with Programs, v. 22, p. 15.
- *Fenster, M.S., FitzGerald, D.M., and Lewis, R.S., 1990, Seismic facies of Holocene sediments in Eastern Long Island Sound, , GSA Northeastern Section Abstracts with Programs, v. 22, p. 15.
- FitzGerald, D.M., 1989, Tidal range control of barrier island length and coastal features along the coasts of New Jersey and the Delmarva Peninsula, , GSA Northeastern Section Abstracts with Programs, v. 21, p. 14.
- *Hill, M.C., FitzGerald, D.M., and Baldwin, C.T., 1988, Plymouth, Kingston, and Duxbury Bays, MA: a long-term sediment sink, , GSA Northeastern Section Abstracts with Programs, v. 20, p. 27.
- *Fenster, M.S., FitzGerald, D.M., Lewis, R.S., Freile, D., and Baldwin, C.T., 1988, Sandwave morphology and migration in Eastern Long Island Sound, GSA Northeastern Section Abstracts with Programs, v. 20, p. 18.
- *Goldschmidt, P.M., FitzGerald, D.M., and Fink, L.K., 1988, Inlet channel migrations and associated sediment dynamics: Popham Beach, Maine, GSA Northeastern Section Abstracts with Programs, v. 20, p. 22-23.
- Weiskel, P.K., Caldwell, D.W., FitzGerald, D.M., and Baldwin, C.T., 1988, Impact of septic system effluent on groundwater quality, Buttermilk Bay drainage basin, MA, GSA Northeastern Section Abstracts with Programs, v. 20, p. 78.
- *Coffin, C. A., FitzGerald, D. M., Baldwin, C. T., and Lewis, R. S., 1987, Origin, reworking and morphology of Holocene deposits and Long Sand Shoal, Long Island Sound, GSA Northeastern Section Abstracts with Programs, v. 19, p. 9.
- *Fenster, M. S., FitzGerald, D. M., and Baldwin, C. T., 1987, Bedform hierarchy of the Lower Kennebec River Estuary, Maine, GSA Northeastern Section Abstracts with Programs, v. 19, p. 13.
- *Fish, C. B., FitzGerald, D. M., Caldwell, D. W., and Baldwin, C. T., 1987, Colliforms in Marine embayments: concentration related to a circulation model, Buttermilk Bay, Massachusetts, GSA Northeastern Section Abstracts with Programs, v. 19, p. 15.
- *Muhammad-Som, Mohd R., FitzGerald, D. M., and Baldwin, C. T., 1987, Backbarrier stratigraphy along a glaciated coast: Castle Neck, MA, GSA Northeastern Section Abs. with Programs, v. 19, p. 31.
- FitzGerald, D. M., *Ibrahim, N. A., Baldwin, C. T., and Humphries, S., 1986, Sedimentological and morphological development of a beach ridge barrier island, Horseneck Beach, MA, GSA Northeastern Section Abstracts with Programs, v. 18, p. 17.

- FitzGerald, D. M., and Fink, L. K., 1986, Sand circulation of the mouth of the Kennebec River, ME, GSA Northeastern Section Abstracts with Programs, v. 18, p. 17.
- Caldwell, D. W., *Saiz, A., Baldwin, C. T., and FitzGerald, D. M., 1986, Sedimentation on the Androscoggin Lake Delta, Wayne and Leeds, South Central Maine, GSA Northeastern Section Abstracts with Programs, v. 18, p. 6.
- FitzGerald, D. M., and Penland, S., 1986, Factors controlling the historical development of the tidal flats and creeks in the East Friesian Islands, SEPM Abstracts with Programs, v. 3, p. 37.
- *Coffin, C. A., FitzGerald, D. M., and Baldwin, C. T., 1986, Morphology, reworking and origin of Long Sand Shoal, Long Island Sound, SEPM Gulf Coast Section Abstracts with Programs, , p. 8.
- FitzGerald, D. M., Fink, L. K., Fenster, M. S., Baldwin, C. T., and Goldschmidt, P., 1986, Sedimentation processes at the mouth of a tidally-dominated estuary: Kennebec River, Maine, Abstracts with Programs, Hydrodynamics and Sediment Dynamics of Tidal Inlets, Woods Hole Ocn. Inst. and U.S. Army Corps of Eng. Tidal Inlet Meeting, p. 24.
- *Lincoln, J. M., and FitzGerald, D. M., 1986, Tidal distortions in shallow inlets, 1986, Abstracts with Programs, Hydrodynamics and Sediment Dynamics of Tidal Inlets, Woods Hole Ocn. Inst. and U.S. Army Corps of Eng. Tidal Inlet Meeting, p. 11.
- FitzGerald, D. M., *Barker, C. F., *Lincoln, J., and Fink, L. K., 1985, Tidal hydraulics of Scarboro River Inlet, Maine, GSA Northeastern Section Abstracts with Programs, v. 17, p. 19.
- Caldwell, D. W., Bartholomae, G., FitzGerald, D. M., and Belknap, D., 1985, Pleistocene and Holocene sedimentation in Lobster Lake, north central Maine, GSA Northeastern Section Abstracts with Programs, v. 17, p. 9.
- FitzGerald, D. M., *Lincoln, J., and Fink, L. K., 1984, Hydraulic character of Maine's tidal inlets, in: GSA Northeastern Section Abstracts with Programs, v. 16, p. 16.
- *Sands, D. R., and FitzGerald, D. M., 1983, Morphology, hydraulics and sediment transport patterns at Slocum River Inlet: Buzzards Bay, MA, GSA Northeastern Section Abstracts with Programs, v. 15, p. 182.
- *Lincoln, J., FitzGerald, D. M., and Fink, L. K., 1983, Morphodynamics of Maine's tidal inlet systems, GSA Northeastern Section Abstracts with Programs, v. 15, p. 193.
- Fink, L. K., FitzGerald, D. M., and *Lincoln, J., 1983, Relationship between inlet processed and spit morphology along the Maine coast, GSA Northeastern Section Abs. with Programs, v. 15, p. 173.
- FitzGerald, D. M., Nummedal, D., and Penland, S., 1983, Backbarrier dynamics of the East Friesian Islands: Amer. Geophysical Union Trans., v. 64, p. 1044.
- Penland, S., Nummedal, D. and FitzGerald, D.M.,1982, Tidal inlet morphodynamics in a high energy mesotidal environment: East Friesian Island, West Germany, Amer. Geophysical Union Trans., v. 59, p. 1128.
- FitzGerald, D. M., 1982, Relationships among barrier island sedimentation trends, tidal inlet processes and backbarrier evolution, GSA Northeastern Section Abstracts with Programs, v. 15, p. 17.
- *Magee, A.D. and FitzGerald, D.M., 1982, Investigation of shoaling problems at Westport River Inlet, Westport, MA, GSA Northeastern Section Abstracts with Programs, v. 14, p. 37.
- Halsey, S.D., FitzGerald, D.M., and Mauriello, M.N.,1982, Comparison of downdrift offset inlets along barrier island chains: New Jersey (developed) and Delmarva Peninsula (natural), GSA Northeast-Southeastern Section Abstracts with Programs, v. 14, p. 22.
- FitzGerald, D.M., Penland, S., and Nummedal, D., 1982, Tidal inlet control of East Friesian Island morphology, 11th International Assoc. of Sedimentologists Conference, Hamilton, Ontario, Abstracts with Programs, p. 163.
- Caldwell, D. W., Chormann, J., and FitzGerald, D.M.,1981, The origin of reverse deltas in Maine, GSA Northeastern Section Abstracts with Programs, v. 12, p. 125.
- FitzGerald, D.M., 1980, Storm generated sediment transport patterns Winthrop and Yirrell Beaches: Winthrop, MA, GSA Northeastern Section Abstracts with Programs, v. 12, p. 36.
- *Levin, D.R. and FitzGerald, D,M.,1980, Morphology and sediment transport patterns at Pamet River Inlet: Truro, MA, GSA Northeastern Section Abstracts with Programs, v. 12, p. 69.

- FitzGerald, D.M., and Nummedal, D.,1980, Stratigraphy of ebb-tidal deltas and its relationship to tidal inlet processes, AAPG-SEPM Abstracts with Programs v. 23, p. 53.
- FitzGerald, D.M., 1979, Accretionary shoreline processes at tidal inlets along the South Carolina coast, AAPG-SEPM Abstracts with Programs v.22, p. 87.
- Nummedal, D., Humphries, S.M., Finley, R., and FitzGerald, D.M.,1977, Hydraulic characteristics of mesotidal inlets in South Carolina, GSA Abstracts with Programs, v.18, p. 217.
- Nummedal, D., FitzGerald, D.M., and Humphries, S.M.,1976, Hydraulics of sediment transportation in meso-tidal inlets, GSA Northeast-Southeastern Section Abstracts with Programs, v. 17, p. 34.
- Hubbard, D.K., Ward, L.G., and FitzGerald, D.M., 1976, Reef morphology and sediment transport: Lucaya, Grand Bahama Island, AAPG-SEPM Abstracts with Programs, v. 19, p. 21.
- FitzGerald, D.M., Nummedal, D., and Kana, T., 1976, Sediment transport patterns at Price Inlet, SC, Abstract with Programs. Coastal Engineering, Amer. Soc. of Civil Engineers, Honolulu, HA p. 452.
- Hayes, M. O., Hulmes, L.H., FitzGerald, D.M., and Wilson, S.,1976, Geomorphology of Kiawah Island, SC, GSA Northeast-Southeastern Section Abstracts with Programs, v. 16, p. 34.
- Brown, P.J., Stephen, M., and FitzGerald, D.M., 1975, Variations in South Carolina Barrier Island morphology, in: Abstracts with Programs, Geol. Soc. of Amer., Southeast Meeting, v. 15.
- Hayes, M. O., Ray, P., Hubbard, D.K., and FitzGerald, D.M., 1973, Urbanization as a cause of accelerated beach erosion, GSA Abstracts with Programs, v.18, p. 217.

Invited Talks

- 2023 Barrier Systems, Sand Reservoirs and Storm Transport UMass Amherst, Salt Marsh Working Group
- 2023 Barriers Against the Sea, Massachusetts National Estuary Program
- 2023 Hurricane & Storm Impacts: Gulf Coast versus East Coast, Disturbance in Coastal Wetlands Universities Program
- 2022 Keynote Address for Particles in the Americas, "Latitudinal Differences in Marsh Sedimentation Processes"
- 2021 "Following the Sand Grains" Trustees, Ipswich, MA
- 2020 "Nantucket Geomorphology," Coastal Processes & Vulnerability, Trustees, Nantucket, MA
- 2019 "Wave and Sediment Transport Modeling along the Castle Neck and Adjacent Tidal Inlet Systems" Trustees of Reservation, Ipswich, MA
- 2018 "Long-Term Natural Geomorphologic Evolution of Barrier Islands & Estuaries in Absence of Humans" Corps of Engineers Research Board, Providence, RI
- 2017 "What is the connection between marsh diversity and the future of barrier shorelines" University of New Orleans, New Orleans, LA
- 2017 "Future of Castle Neck and the Great Marsh" Trustees of Reservation, Ipswich, MA
- 2016 "Diverse styles of evolution along the southern coast of Brazil," Institute for Marine and Atmospheric Research, Utrecht University, Utrecht, Netherlands
- 2016 "Future of northern latitude marshes and their effects on barrier island sand reservoirs" Geological Oceanography Department at Federal University of Santa Catarina Santa Catarina.
- 2015 "Wetland loss due to accelerating sea-level rise: Response of barrier shorelines?", UNIVALI University, Itajai, Santa Catarina, Brazil
- 2013 "Interactions among backbarrier marshes, sediment availability, tidal prism, and tidal inlet and barrier sand reservoirs, as they relate to SLR," Penrose-Chapman Conference: Coastal Processes and

- Environments Under Sea-Level Rise and Changing Climate: Science to Inform Management: Galveston, TX, 14-19 April 2013.
- 2013 "Can barrier islands survive marsh deterioration in a regime of accelerating sea level rise," University of New Orleans, New Orleans, LA
- 2012 "Impact of accelerated sea-level rise on back barrier wetlands and redistribution of tidal inlet and barrier island sand reservoirs" University of New Orleans, New Orleans, LA
- 2011 "Shoreline Clean-up Assessment Techniques for MC-252," Louisiana for Louisiana Department of Environmental Quality, Baton Rouge, LA
- 2009 "Physical Processes and Geological Framework of Tidal Inlets," North Carolina Department of Natural Resources, NC State, Raleigh, NC
- 2008 "Diverse Styles of Coastal Evolution along Santa Catarina, Brazil," American Quaternary Association, Penn State, PA
- 2008 "Long-term evolution of wetlands, and modeling capabilities," Estuarine Design and Research Needs Workshop, ERDC, Sarasota, FL
- 2007 "Impact of rising sea level on tidal inlets," North Carolina Inlets, Barriers, and Waterways Association, Wilmington, NC
- 2007 "Impacts of Rising Sea Level to Backbarrier Wetlands, Tidal Inlets, and Barrier Islands: Barataria Bay, Louisiana" Sea Level Rise Symposium, Coastal Sediments 2007, New Orleans, LA
- 2007 "Response of Backbarrier Wetlands and Barrier Chains to Sea-Level Rise along the Louisiana Coast" Coastal and Hydraulics Laboratory, Vicksburg, MS
 - "Sediment transport and Dredging Alternative at the Mouth of the Kennebec River Estuary" Coastal and Hydraulics Laboratory, Vicksburg, MS
- 2006 "Physical Impacts of Hurricane Katrina," University of the Itajai, Santa Catarina, Brazil "Sea Level Controls on Sedimentary Regimes: Runaway Transgression in North America Strand Plain Development in South America," Marine Sciences Research Center, SUNY, Stony Brook, NY.
- 2005 Keynote Speaker "Monitoring Tidal Inlets at Different Temporal and Spatial Scales," Association of Brazilian Oceanographers, Vitoria, ES, Brazil.
- 2004 "Tectonic inheritance and evolution of the central Santa Catarina coast, Brazil," Department of Geology and Geophysics, University of New Orleans, LA.
 - "Sand Delivery and Accumulation Forms Along the Coast And Inner Continental Shelf in the Gulf of Maine, University of the Itajai, Santa Catarina, Brazil.
- 2004 "Strand plain development as a function of Cretaceous tectonics, local and continental sediment sources, and multiple transgressions and regressions in southern Brazil," Naval Research Laboratory, Stennis, Mississippi.
- 2004 "Accelerated sea-level rise and its potential effects on barrier coasts of the world," Geology and Geophysics, Woods Hole Oceanographic Institution, Woods Hole, MA.
- 2004 "Model of barrier island and tidal inlet dynamics in a regime of accelerated sea-level rise," Marine and Environmental Systems, Florida Institute of Technology, Melbourne, FL.
- 2003 "Sediment transport trends in riverine-dominated estuaries: New England," Federal Department of Geology, University of Parana, Parana, Brazil.

2003	"Rising sea level and wetland loss and their effects on tidal exchange and sand sequestration at ebb-tidal deltas: Barataria Bay, Louisiana" Department of Geology and Geophysics, University of New Orleans, LA.
2003	"Geology and coastal processes of the Boston Harbor Islands" Boston Harbor Islands Biodiversity Seminar, MIT Sea Grant College, Cambridge, MA.
2002	"Coastal depositional systems and sedimentation processes" Four Lecture Series, University of the Itajai Valley -Itajai, Santa Catarina, Brazil.
2000	"Effects of spring freshets on hydraulics and sediment transport in estuaries" Department of Geology, University of Kuwait, Kuwait.
2000	"Rising sea level and effects on tidal inlets and adjacent shorelines" Rice University, NSF Workshop on Sea Level Rise, Houston, TX.
2000	Keynote Speaker "Coastal processes and geomorphic change at Popham Beach, ME," State-of Maine's Beaches Symposium, Sea Grant Program, Saco, ME.
2000	"Riverine-associated tidal inlets in northern New England: Sediment transport trends," Coastal Morphodynamics Symposium, Woods Hole Oceanographic Institution, Woods Hole, MA.
1999	Two lectures: "Tidal inlet effects on adjacent barrier islands" and "Inlet sediment bypassing and the effects of landward bar migrations: An overview" Waterways Experiment Station, Army Corps of Engineers, Vicksburg, MS.
1998	"New England tidal inlets associated with river systems: Application of classic inlet morphodynamics" 29 th Annual Binghamton Geomorphology Symposium, Woods Hole, MA.
1998	"Riverine-associated tidal inlets in northern New England: Sediment transport trends, University of North Carolina at Wilmington, NC.
1993	"Stratigraphy and evolution of barrier systems along the northern New England coast" University of Southern Maine, Gorham, ME.
1991	"Sediment dynamics during high energy storms" Department of Geology, Salem State College
1990	"Factors controlling tidal inlet variability along the coast of New England" Department of Geological Sciences, University of Maine, Orono, ME.
1988	"Effects of wave-current interaction on sediment transport" SEPM Coastal Research Group, Houston, TX.
1988	"Tidal Inlets and coastal bays of Massachusetts" NEER's Conference, Woods Hole, MA.

- 1986 Keynote Talk "Morphology and evolution of tidal inlets" WHOI and CERC/USACOE Sponsored Conference on Hydrodynamics and Sediment Dynamics of Tidal Inlets, Woods Hole, MA.
- 1984 "Sand Transport at tidal inlets" New England Coastal Engineering Conference, USACOE, Rockport, ME.
- 1984 "Tidal inlet affects on barrier shorelines" Barrier Island Workshop, USACOE, Nags Head, NC.
- "Tidal inlet processes as they pertain to microtidal shorelines" Department of Geology, Suez Canal University, Port Said, Egypt.
- 1983 Fortieth Meeting of the Coastal Engineering Research Board, Woods Hole Oceanographic Institution, Woods Hole, MA.
- 1983 Shorelines, Harbors, and Waterways Short Course, Coastal Engineers, Springfield, VA.
- 1983 Tidal inlets in Massachusetts, Salt Ponds and Tidal Inlets Conference, Massachusetts Coastal Zone Management, Woods Hole Oceanographic Institution, Woods Hole, MA.
- 1982 "Dynamics of tidal inlet systems in Maine" Department of Geology, University of New Hampshire
- Two lectures "Geology of the New England shoreline" and "Tidal inlet processes along South Carolina" Department of Geology and Geophysics, Louisiana State University, Baton Rouge, LA.
- 1980 "Effects of the Blizzard of 1978" Bridgewater State University, Boston, MA.
- 1980 "Morphodynamics of tidal inlet shorelines" Rutgers State University, New Brunswick, NJ.
- 1980 "Sediment transport processes during the large storm events" Department of Geology, Salem State College, MA.
- 1978 "Effects of the Blizzard of 1978 to the Winthrop Shoreline" Department of Geology, Boston State College, Boston, MA.
- 1978 "Tidal inlet processes at Price Inlet, South Carolina" Department of Geology, University of New Hampshire, Durham, NH.
- 1976 "Sediment dynamics along a mesotidal inlet: Price Inlet, SC" Department of Oceanography, University of Maine, Orono, ME.
- 1976 "A sediment budget at Price Inlet, South Carolina" Department of Geology, Wesleyan University, Middleton, CT.

Outreach (Specialized Invited Talks and Presentations)

2011 Shoreline Clean-up Assessment Techniques for MC-252 in Louisiana for Louisiana Department of Environmental Quality, Baton Rouge, LA

Is Beach Tilling a Viable Technique for Treating Buried Oil" Unified Command Center, Macado 252 Oil Spill, New Orleans, LA

- 2008 Three Lecture Series at University of New Orleans
 - "Evolving Wetlands and Field & Modeling Studies"
 - "Tidal Inlet Morphodynamics"
 - "Response of Sea Level Rise on Tidal Inlet-Barrier Island Systems"
- 2006 "Impact of Sea-Level Rise and Hurricanes on Salt and Freshwater Marshes," Essex County Community Foundation
- 2006 "Response of Marshes to Sea-Level Rise and Catastrophic Storms," Massachusetts Audubon Society, Wenham, MA.
- 2005 "Geologic Evolution of Castle Neck and the Great Marsh and Implications of Sea-level Rise, "Trustees of Reservation, Ipswich, MA.
- 2003 "Tidal inlet signatures imaged using ground-penetrating radar along a transgressive barrier coast: Duxbury Beach, MA" Boston Society of Civil Engineers, Boston, MA.
- 2000 "Origin and coastal processes of the Boston Harbor Islands" Boston Harbor Island Symposium Boston, MA.
- 1999 "Are Northern New England Estuaries Sediment Sinks or Sources?" Boston Society of Civil Engineers, Boston, MA
- 1994 "Barrier evolution and variability along the New England coast" New England Waterways Engineers, Boston, MA.
- 1993 "Morphodynamics, sedimentology, and evolution of barriers in New England" MIT's Boston Bay Group, Cambridge, MA.
- 1991 "Tidal hydraulics and morphodynamics at Wells and Little River Inlet, Maine" Wells National Estuarine Research Reserve, Wells, ME.
- 1988 "Tidal hydraulics, morphology, and estuarine processes" Wells National Estuarine Research Reserve, Maine, Wells, ME.

TEACHING:

Awards

- In 2004 Received *College of Arts and Sciences Outstanding Teaching Award in the College*Honors Program
- In 2006 Received Boston University's Undergraduate Research Opportunity Mentor of the Year award.

Boston University

EE 142 Beaches and Shoreline Processes

ES 101 Dynamic Geology	ES 1	101	Dyna	mic	Geo	logy
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ES 331 Sedimentology

GL 503 Marine Geology

ES 333 Earth Surface Processes

ES 541 Coastal Processes

GRS ES 742 Barrier Island and Tidal Inlet Dynamics

GRS ES 762 Non-marine Terrigenous Clastic Deposits and Processes

MET ES 141 Marine Science

MET ES 142 Shoreline Processes and Environments

EE 544 Coastal Sedimentology

Professional Short Courses Taught

2011 Coastal Inlets Short Course, Coastal Sediments 11, Miami, FL (May 2)

- 2007 Inlets and Entrances, Coastal Sediments 07, New Orleans, LA. (May, 2007)
- 2005 Tidal Inlet Systems: Morphodynamics, Hydraulics, and Management Applications, Association of Brazilian Oceanographers, Vitoria, ES, Brazil.
- 2002 Tectonic Effects on Coastal Depositional Systems University of Itajai, Santa Catarina, Brazil.
- 2002 Coastal Depositional Systems, Department of Geology and Geophysics, University of New Orleans.
- 2001 Tidal Inlets and Estuaries, University of North Carolina-Wilmington, NC.
- 2000 Tidal Inlet Morphodynamics and Sedimentation Processes, University of New Orleans, LA.
- 1999 Short Course on Tidal Inlets, American Society of Civil Engineers, Coastal Sediment '99, Long Island, NY.

ADVISING

Post Doctoral Students

Hughes, Zoe Hydrodynamics and sediment transport in Boston Harbor, MA, 2004-2018, now a Research Professor

Susana Costas Holocene evolution of the southern-end of Salisbury Beach, Ma: 2008

sea-level rise and tidal Inlet forcings

Pedro Brito Sedimentary architecture of an ebb-tidal delta system of an emerging barrier island, Troia Peninsula, Portugal.

PhD Students

Tansir Asik entered 2022 Sophia Tigges entered 2021 Alice Staro entered 2019 Lucila Bloemendaal entered 2018

Sarah Black Quantifying erosional and depositional changes to the Boston Harbor Islands due to accelerating sea-level rise and increased magnitude and frequency of major storms.

Sarah Farron Morphodynamic responses of salt marshes to sea-level rise: upland expansion, drainage evolution, and biological feedbacks. Environmental Consultant 2018

- Hein, Chris Holocene sedimentologic evolution of the Merrimack Embayment inner continental shelf, western Gulf of Maine. 2012, Associate Professor, Virginia Institute of Marine Science,
- Wilson, Carol Dissection of platform marshes by ecophysical processes in response to sea-level rise. Associate Professor, Louisiana State University, 2014
- Johnston, S.J. Sediment transport in tidal channels via bedform migration. 237 p., 2007. Associate Professor, James Madison University
- Argow, B.A. Winter processes on New England salt marshes: implications for wetlands survival in a regime of accelerating sea-level rise. Ph.D., Boston University, Boston, Massachusetts, 289 p., 2006. Assistant Professor, Geosciences Department, Wellesley College
- Buynevich, I.V., Fluvial-marine interaction and Holocene evolution of sandy barriers along an indented paraglacial coastline. 339 p., 2001.

 Associate Professor, Temple University
- van Heteren, S., Preserved records of coastal-morphologic and sea-level changes in the stratigraphy of barrier systems, 248 p., 1996.

 Senior Geologist, Netherlands Institute of Applied Geosciences, Utrecht, The Netherlands.
- Fenster, M.S., Sand sheet facies: Long Island Sound. ,328 p., 1995.

 Professor, Environmental Studies, Randolph Macon College, Ashland, VA.

Masters Students

Nick Howes, Samantha Wright, Pamela Manthrop, Mark Rits, Emily Himmelstoss, Elizabeth Pendleton, Amy Dougherty, Anna Tary, Heidi Crider, Don Hunt, Sarah Mills, Paul McKinlay, Todd Montello, J. B. Smith, Rapi Som, Mike Hill, Peter Goldschmidt, Chris Mariano, Craig Fish, Charles Barker, David Sands, Cathy Coffin, Azim Ibrahim, Jonathan Lincoln, Andrew Magee, Doug Levin, David Sullivan, and Charles Lang.

RESEARCH GRANTS (\$3.5 million last 10 years)

Research Fu	ınding			
2021-2024	Lower Buzzards Bay Sedimentation and Gooseberry Causeway Impact Study Co-PI FitzGerald	Rathmann Family Foundation	\$1,300,000 (BU ~ \$900 k)	
2021-2024	Post-Graduate Internship with Boston University on Nantucket, MA	The Trustees	\$90,000	

^{*} Prior to 2000 the Department's preference was to accept Masters students and not Ph.D. students.

PI: FitzGerald		
2021-2023 Hurricane Sedimentation on Saltmarshes: Process, Provenance and Contribution to Long-Term Marsh Resilience	National Science e, Foundation	\$286,000
PI: FitzGerald		4005.000
2019-2021 Impacts of future storminess, greater wave energy, and increased sediment transport along Castle Neck and into Essex Bay, Essex, MA	Massachusetts Executive Office of Energy & Environmental Affairs	\$226,000
PI: FitzGerald		.
2018-2019 RAPID: Capturing the Hurricanes Florence and Michael Sedimenta Event	National Science ation Foundation	\$21,606
PI: FitzGerald		
2018-2020 Assessing storm energy reduction by the vegetated salt marsh plat in Newbury, MA: a background tenhancing natural protection by living shoreline	form Executive Office of o Energy & Environm	\$225,000 nental
Pl: FitzGerald		
2018-2019 Event Sedimentation on New England Marshes PI: FitzGerald	National Science Foundation	\$8,000
2017-2018 Hurricane Sedimentation on Saltmarshes: Process, Provenance and Contribution to Long-Term Marsh Resilience PI: FitzGerald	National Science e, Foundation	\$25,453
2018-2020 Coastal vulnerability information to improve climate change resilience	National Park Service	\$317,690
PI: FitzGerald		
2015-2017 Hydrodynamics & sediment transport modeling leading to restoration, better management, and improves sustainability of Great Marsh	Interior	\$325,000
PI: FitzGerald		
2012-2015 Collaborative Research: Biophysic alteration of wetland geomorphoresponse to rising sea level		\$450,000
PI: FitzGerald , Co-PI's Hughes, Ma Pennings		
2012-2013 Variability in lateral accretion ar architecture of bars in tidally- information channels		any: \$20,000
Pl: FitzGerald		

2011-2013	Development of the Double Tombolo System of Miquelon-Langlade	University of Perpignan	\$2,600
	PI FitzGerald		
2011-2012	Variability in lateral accretion and internal architecture of bars in tidally-influenced channels	Shell Oil Company	\$100,000
	PI: FitzGerald		
2011-2012	Analyzing Marsh Stability in Cape Romain Wildlife Refuge: Marsh Platform Dissection as a Response to SLR	US Fish and Wildlife Service	\$21,804
	PI: FitzGerald		
2011-2012	Barrier Island Predictive Module for Prioritization Tool for the 2011 Louisiana Master Plan	Louisiana Office of Coastal Protection and Restoration	\$100,000
	PI: FitzGerald		
2010-2011	Marsh platform dissection as a response to sea level rise: physical mechanisms of erosion	Dept. of Energy, NICCR Program	\$70,000
	PI: FitzGerald , Co-PI's Hughes, Mahadevan, Pennings		
2009-2011	ETBC: Feedbacks between nutrients enrichment and intertidal substrates: erosion, stabilization, and landscape evolution	National Science Foundation	\$299,000
	PI Fagherazzi; Co-PI FitzGerald		FitzGerald budget
2009-2010	Newburyport quadrangle geologic mapping project	USGS/UMass	\$17,500
	Pl: FitzGerald		
2010-2014	Geologic and Geomorphic Maps for the Boston Harbor Islands	National Park Service	\$141,808
	PI: FitzGerald , Co-PI Peter Rosen		
2009-2014	Marsh Sedimentation Study: Boston Harbor Islands National Recreation Area Pl: FitzGerald , Co-Pl Peter Rosen	National Park Service	\$280,000
2008-2009	Hydrodynamic Modeling of diversions into Barataria Basin PI: FitzGerald	Lake Pontchartrain Basin Foundation	\$42,000
2007-2009	Determination Of Wave Impacts At Spectacle Island PI: FitzGerald	National Park Service/Island Alliance	\$40,000
2007-2009	Strand plain geometry, stratigraphy, and evolution: Tijucas, Santa Catarina, Brazil	American Chemical Society (PRF)	\$90,000

	PI: FitzGerald		
2007-2008	Dissection of Platform Marshes by Ecophysical Processes in Response to Sea-Level Rise	Dept. of Energy, NICCR Program	\$180,000
	PI: FitzGerald , Co-PI's Hughes, Mahadevan, Pennings		
2006-2008	Wave, hydrodynamic, and sediment transport study of the northern Long Island, Boston Harbor, MA	National Park Service/Island Alliance	\$197,423
	PI: FitzGerald Co-PI Peter Rosen		
2006- 2007	Hurricane Impact within the Caernarvon Basin: Wetland Habitat Response and Hydrodynamic Processes	NOAA, Pontchartrain Restoration Program, LA	\$95,000
	PI: FitzGerald		
2005-2007	Hydrologic Modeling of the Pontchartrain Basin: A Simulation Study to Analyze the Feasibility of Dike and Terrace Construc- tion and Channel Constriction at the intersecti MRGO and Bayou la Loutre to Reduce Saltwat Intrusion, Storm Surge Flooding, and Wetland	NOAA, Pontchartrain Restoration Program, LA	\$50,752
	PI: FitzGerald		
2003- 2006	Mechanisms of Sediment Transport in Tidal Inlet Channels	Dept. of Defense Army Waterways Experiment Station	\$168,204
	PI: FitzGerald	· 	
2004- 2008	Documenting sand and gravel deposits on the inner continental shelf: Merrimack Embayment, New England	Mineral Management Service	\$105,000
	PI: FitzGerald , Co-PI's: Steve Mabee, Mark Leckie		
2003- 2008	Boat Wake Impacts and their Role in Shore Erosion Processes, Boston Harbor Islands National Recreation Area	National Park Service	\$435,710
	PI: FitzGerald, Co-PI's: Peter Rosen		
2001- 2002	Estuarine Responses to Dredging: Analysis of Sedimentary and Morphological Change in a Back-Barrier Marsh to Aid Local Management Continuation Study	NOAA/CICEET	47,976
	Co-PI with Michele Dionne		
2000-2003	Geomorphic Investigation of Tidal Inlets: Applications in Coastal Engineering	Department of Defense/Army Waterways	154,000
	PI: FitzGerald	Experimental Station	
2000-2001	Acquisition of Near-Surface Geophysical and Sampling Equipment for Earth Surface	NICE MDI	111 600
	Processes and Quaternary Stratigraphic Research	NSF-MRI	111,692

		NSF-MRI	4,182
	PI: FitzGerald , Co-PI's: Dave Marchant, Geoff Abers, Paul Goldberg	Supplemental	
1999-2001	Estuarine Responses to Dredging: Analysis of Sedimentary and Morphological Change in a Back-Barrier Marsh to Aid Local Management	NOAA/CICEET	67,652
	Co-PI with M. Dionne		
1997-2000	New Stratigraphic and Evolutionary Models for Complex Barrier Sequences	American Chemical Society	50,000
	PI: FitzGerald		
1995-1997	Sand and Gravel of the Wells, Maine Embayment: Nearshore and Barrier Sediment Volumes and Transport Paths	NOAA, MIT Sea Grant Program	15,000
	PI: FitzGerald		
1993-1994	A Sediment Budget for Maine's Sandy Embayments	NOAA, Maine Sea Grant Program	9,995
	PI: FitzGerald		
1992-1993	Study of the Surface Water, Suspended Sediments, and Nutrient Influx	Wells Estuarine Research Reserve	17,503
	PI: FitzGerald , Co-PI: D.W. Caldwell		
1991-1992	A Study of Surface Water and Groundwater Discharges to the Wells National Estuarine Research Reserve	NOAA, National Estuarine Research Reserve	12,384
	PI: FitzGerald , Co-PI: D.W. Caldwell		
1990-1991	Foraminiferal characterization of Wells marsh system & stratigraphic study of Wells-Drakes Island-Laudholm barriers	NOAA, National Estuarine Research Reserve	21,000
	PI: FitzGerald		
1990-1991	Surface water hydrology of the Wells National Estuarine Research Reserve	NOAA, National Estuarine Research Reserve	20,000
1000 1001	PI: FitzGerald , Co-PI: D.W. Caldwell	MIT Con Crown	C 700
1990-1991	Sediment budget for Maine's sandy embayment	MIT Sea Grant Program	6,700
	PI: FitzGerald		
1990	Investigation of backbarrier tidal channel & shoal evolution at Nauset Beach	U.S. Army Corps of Engineers, Coastal Engineering Research	13,500
1080	PI: FitzGerald Study of giant cand wayes in Long Island	Center NOAA/NURR	3 000 plus
1989	Study of giant sand waves in Long Island Sound	NOAA/NURP	3,000 plus Submersible Time
	PI: FitzGerald , Co-PI: C. Baldwin		

1987-1988	Exploration and Inventory of Sand and	USGS, Minerals	22,535
	Gravel Resources offshore of Boston Harbor	Management Service	
	PI: FitzGerald , Co-PI: C. Baldwin		
1987-1988	New Methodology for determining the Flux and Geometry of Septic System Plumes	EPA	10,000
	PI: FitzGerald Co-PI's: Caldwell, Baldwin		
1987-1988	Long Island Sound: Seasonal Investigation	NOAA/NURP	6,097
	of Bedforms and Animal/Sediment Interactions		Submersible Time
	PI: FitzGerald Co-PI		
1987-1988	Investigation of Large Tidal Inlets/Estuaries in Maine	UME/MIT Sea Grant Program	11,000
	FitzGerald, Co-PI: Ken Fink		
1987-1988	Hydraulic and Sediment Transport Study of	NOAA/Marine	10,000
	the Webhannet River Estuary	Sanctuary Program	
	PI: FitzGerald		
1987-1988	Sedimentation and Hydraulic Study of Little	NOAA/Marine	10,000
	River Estuary	Sanctuary Program	
	PI: FitzGerald		
1986-1987	Sand circulation at the mouth of the	NOAA, MIT Sea Grant	3,000
	Kennebec River	Program	
	PI: FitzGerald Co-PI: Ken Fink		
1986-1987	Continuation of Pollution Study of Buttermilk Bay, MA	EPA	10,000
	PI: FitzGerald , Co-PI's: D.W. Caldwell, Chris Baldwin		
1985-1986	Study of seismic stratigraphy and Holocene	United States	22,000
	evolution of Plymouth Bay	Geological Survey,	
	PI: FitzGerald, Co-PI: Chris Baldwin	Minerals Management Service	
1985-1986	Pollution study of Buttermilk Bay, MA	EPA	24,000
	PI: FitzGerald Co-PI's: D.W. Caldwell, Chris Baldwin		
1985-1986	Submersible study sand wave dynamics of	NOAA/NURP	9,000
	Long Island Sound	Program	Submersible Time
	Pl: FitzGerald, Co-Pl: Chris Baldwin		Time
1984-1985	Study of seismic stratigraphy and Holocene	United States	21,000
	evolution off Nantasket Beach	Geological Survey, Minerals	
	Pl: FitzGerald	Management Service	
1984-1985	Study of Morpho-dynamics of Scarboro	NOAA, Maine Sea	12,000
	and Kennebec River Estuaries, Maine	Grant Program	

	PI: FitzGerald, Co-PI: Ken Fink		
1983-1985	Relationships between Maine's moderate to large tidal inlets and beach systems	NOAA, Maine Sea Grant Program	30,000
	PI: FitzGerald Co-PI: Ken Fink		
1983-1984	Pollution study of Westport River Estuary	Town of Westport	25,000
	PI: FitzGerald Co-PI's: Chris Baldwin, D. W. Caldwell		
1982-1984	Hydraulic and morphologic Investigation of small sized tidal inlets in southern Maine	NOAA, Maine Sea Grant Program	21,000
	PI: FitzGerald Co-PI Ken Fink		
1982-	Investigation of Shoaling Problems at	Coastal Zone	18,200
1983	Slocum River Inlet, South Dartmouth, MA	Management	
	PI: FitzGerald		
1981-1982	Coastal Hazards Study of Massachusetts	Coastal Zone	18,000
	South Shore	Management	
	PI: FitzGerald		
1980-1981	Investigation of Shoaling Problems at Bass	Coastal Zone	14,000
	River Inlet	Management	
	PI: FitzGerald		
1980-1981	Study of Reverse Deltas in Maine	Graduate School	1,800
	Pl: FitzGerald	Seed Grant	
1979-1980	Shoaling Study of Winthrop Harbor, MA	Coastal Zone	18,000
	Dis Fite-County	Management	
1979-1980	PI: FitzGerald	Coastal Zone	17.600
1979-1980	Westport River Inlet and Beach System Study, Westport, MA	Management	17,600
	Stady, Westport, With	Wanagement	
	PI: FitzGerald		
1978-1979	Yirrell Beach Erosion Study	Coastal Zone	18,000
	Dir Fiter Carolid	Management	
	PI: FitzGerald		

UNIVERSITY SERVICE

Chair		1982-1987
Acting Chair		1995
Director of Undergraduate Studies		1993-1996
Advisory Committee for Remote Sensing	1988	
Buck Committee		1988-1992
University Council (alternate)		1988-1989

National Science Olympiad Committee 1988-1989

Academic Conduct Committee 1989-1990

Selection Committee for Waquoit Bay Fellowship 1993-1994

Case-Melville Scholarship Committee 1994

Boston University Spring Phonathon 1994-2003

Joint Committee on Admissions for Seven-Year

Liberal Arts/Medical Education Program 1994-present
Academic Conduct Committee` 2003-2007

39Earth Science Liaison to School of Education,

Masters of Arts in Teaching Science 2004-2007

Advisory 39Bo39a39r39d39 39o39f39 39t39h39e39 39W39r39i39t39i39n39g39 39P39r39o39g39r39a39m39 2005-2006

Natural Science Curriculum Committee 2006-2008