

CURRICULUM VITAE

Michael Savarese

September 2, 2010

PERSONAL

Title: Professor of Marine Science
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POSITIONS HELD

18. Fall, 2010 – Present:
Chair of the Department of Marine & Ecological Sciences, Florida Gulf Coast University
17. Fall, 2010 – Present:
Program Leader, MS Environmental Science, Florida Gulf Coast University
16. Fall, 2005 – Summer, 2010:
Founding Director of University Graduate Studies, Florida Gulf Coast University
15. Summer, 2007 – Summer, 2009:
Interim Director of Whitaker Center, Florida Gulf Coast University's Center for Science,
Technology, Engineering, and Mathematics Education
14. Fall, 2004 – Present:
Professor, College of Arts & Sciences, Florida Gulf Coast University
13. Fall, 2004 – Summer, 2005:
Director of Program in Marine Science, Florida Gulf Coast University
12. Winter, 2004 – Spring, 2006:
Board member of the Bailey-Matthews Shell Museum
11. Winter, 2004 – Summer, 2005:
Vice Chairperson of the Southwest Florida Watershed Council
10. Winter, 2002 – Summer, 2005:
Board member of the Southwest Florida Watershed Council
9. Fall, 2002 – Summer, 2005:
Chairperson of the Graduate Faculty and of the Graduate Curriculum Team in the College of
Arts & Sciences, Florida Gulf Coast University
8. Summer, 2002 – Summer, 2005:
Coordinator of the Graduate Program in Environmental Sciences, Florida Gulf Coast University
7. Summer, 2002 – Fall, 2003:
Co-chairperson of the Southwest Florida Regional Restoration Coordination Team (SWFL
RRCT), a region-wide organization affiliated with the South Florida Ecosystem Restoration
Working Group
6. Fall, 2001– Summer, 2002:
Southeastern section chairperson for the Paleontological Society

5. Summer, 2001 – Fall, 2003:
Coordinator of the Big Cypress Basin – Estero Bay Restoration Coordination Team (BCB-EB RCT), an organization affiliated with the South Florida Ecosystem Restoration Working Group
4. Fall, 1997 – Summer, 2000:
Director of Program in Earth Systems Science, Florida Gulf Coast University
3. Fall, 1997 – Summer, 2004:
Associate Professor, College of Arts & Sciences, Florida Gulf Coast University
2. Fall, 1996 – Summer, 1997:
Research Scientist, Rookery Bay National Estuarine Research Reserve, Florida
Department of Environmental Protection, 300 Tower Road, Naples, FL 34113
1. Fall, 1989 – Fall, 1997:
Assistant Professor of Geobiology, Department of Geological Sciences, Indiana University,
Bloomington, Indiana 47405

EDUCATION

- Ph.D. Geology; University of California, Davis; 9/89; advisors: Drs. Philip W. Signor, Richard Cowen, and Sandra J. Carlson.
- M.S. Geology; University of Rochester; 9/81-5/84; advisor: Dr. Carlton E. Brett.
- B.S. Biology/Geology; University of Rochester; 9/77-5/81.

TOPICAL INTERESTS

Geohistorical analysis of biotic systems, invertebrate paleobiology, paleoecology, functional morphology and biomechanics, taphonomy, reef & estuarine ecology, restoration science, evolution, sedimentology, and stratigraphy.

GENERAL RESEARCH INTERESTS

Sea-level rise and Holocene history of the Southwest Florida coast.
Taphonomy and geobiology of oyster reefs.
Estuarine ecosystem health, management, and restoration.
Interpreting subrecent estuarine environmental conditions using geological techniques: implications for ecosystem restoration.
Pleistocene & Holocene geological history of the Bahamas.
Influence of suspension feeders upon water quality and food and nutrient availability; effects of fluid flow and water quality upon suspension feeding.
Bio-fluid mechanics of marine invertebrate animals.
Determination of archaeocyathan paleobiology, taxonomic affinity, and paleoecology.
Development and structure of Early Cambrian reefs; corals & coralomorphs within Early Cambrian reefs.
Importance of algal symbiosis to reef building.

CURRENT RESEARCH PROJECTS

- Middle Holocene paleoenvironmental landscape of the Bahamas and possible evidence for a sea level highstand.
- Effects of sea-level rise acceleration on the ecology and geomorphology of fresh- and brackish water marshes in South and Southwest Florida.

- Ecology and physiology of the eastern oyster, *Crassostrea virginica*, as measures of estuarine ecosystem health: implications for watershed management and restoration. Collaboration with Drs. Aswani Voley and Greg Tolley, Florida Gulf Coast University.
- Implications of sea-level rise on the coastal geomorphologic and environmental evolution of Southwest Florida.
- Taphonomic characteristics of oyster reefs along estuarine environmental gradients: tools for paleoenvironmental interpretation.
- Collaborative undergraduate research experiences: their value in the teaching of science.

PAPERS AND REPORTS

In Print:

51. RECOVER, 2009. 2009 Systems Status Report, Greater Everglades. Chapter 9: Southern Coastal Systems Module. Restoration Coordination and Verification Program, U.S. Army Corps of Engineers, Jacksonville, FL, and South Florida Water Management District, West Palm Beach, FL. 1 of numerous authors.
50. Kindler, P., Mylroie, J.E., Curran, H.A., Carew, J.L., Gamble, D.W., Rothfus, T.A., Savarese, M., and Sealey, N.E. 2010. Geology of central Eleuthera, Bahamas: a field trip guide. 15th Symposium on the Geology of the Bahamas and Other Carbonate Regions. Gerace Research Centre, San Salvador, Bahamas. ISBN 0-935909-91-5. 74 p.
49. Voley, A.K., Savarese, M., Hoye, B., and Loh, A.N. 2009. Landscape pattern: present and past distribution of oysters in South Florida Coastal Complex (Whitewater Bay / Oyster Bay / Shark to Robert's Rivers). South Florida Water Management District, Technical Report. 105 p. + 46 figs.
48. Voley, A.K., Savarese, M., Tolley, S.G., Arnold, W., Sime, P., Goodman, P., Chamberlain, R., and Doering, P.H. 2009. Eastern oysters (*Crassostrea virginica*) as an indicator for restoration of Everglades' ecosystems. Ecological Indicators 9(Supple 6): S120-S136.
47. Savarese, M. and Voley, A. 2008. Oyster reef health in Pumpkin and Fakahatchee Estuaries: baseline monitoring for Ten Thousand Islands Restoration. South Florida Water Management District, Technical Report. 58 p.
46. Voley, A., Wohlpart, S.L., Savarese, M., and Loh, A.N. 2008. Characterization of community assemblages in oyster-reef habitats of the Estero estuary through the late Holocene: monitoring the ecological impact of watershed management and sea-level rise. Charlotte Harbor National Estuary Program of the Environmental Protection Agency, Technical Report. 84 p. + 38 figs + 9 tables + 1 appendix.
45. Savarese, M., Voley, A., Haynes, L., and Dykes, E. 2007. Feasibility of oyster reef restoration in Naples Bay: a reef-building demonstration project. South Florida Water Management District and City of Naples, Technical Report. 10 p. + 8 figs.
44. Tolley, S.G., Voley, A.K., Savarese, M., Walls, L.D., Linardich, C., and Everham, E.M. III. 2006. Impacts of salinity and freshwater inflow on oyster-reef communities in Southwest Florida. Aquatic Living Resources 19(4):371-387.
43. Savarese, M., Fielder, B., and Dellapenna, T. 2006. Substrate and subsurface mapping of Naples Bay using geophysical techniques: implications for oyster reef restoration. South Florida Water Management District, Technical Report. 23 p. + 34 figs. + 2 appendices.
42. Tolley, S. G., Voley, A. K., and Savarese, M. 2005. Influence of salinity on the habitat use of oyster reefs in three Southwest Florida estuaries. Journal of Shellfish Research 24(1):127-137.

41. Savarese, M. and Volety, A.K. 2004. Southern Golden Gate Estates restoration monitoring plan: oyster reefs. Appendix of the Southern Golden Gate Estates Project Implementation Report. 8 p.
40. Savarese, M., Shirley, M., and Hopkins, T. 2004. Alternative benefit analysis for estuaries affected by South Golden Gate Estates restoration. Section of the Army Corps Project Implementation Report. 17 text pages, 10 fig. & table pages.
39. Popowski, R., Browder, J., Savarese, M., and Shirley, M. 2004. Hydrological and ecological performance measures and targets for the Faka Union Canal and Bay. Southwest Florida Feasibility Study, a Comprehensive Everglades Ecosystem Planning report. 51 p.
38. Volety, A. and Savarese, M. 2004. GIS oyster reef mapping in the Caloosahatchee River and Estero Bay. South Florida Water Management District, Technical Report.
37. Popowski, R., Browder, J., Shirley, M., Savarese, M. + 8 others. 2004. Ten Thousand Islands Conceptual Model. Southwest Florida Feasibility Study, a Comprehensive Everglades Ecosystem Planning report. 49 p.
36. Popowski, R., Savarese, M., Shirley, M., and Hopkins, T. 2004. Hydrological and ecological performance measures for Henderson Creek / Rookery Bay. Southwest Florida Feasibility Study, a Comprehensive Everglades Ecosystem Planning report. 31 p.
35. U.S. Army Corps of Engineers. 2004. Comprehensive Everglades Restoration Plan: Picayune Strand Restoration [formally the South Golden Gate Estates Ecosystem Restoration]. Final Integrated Project Implementation Report and Environmental Impact Statement. 488 p. + 764 p. (appendices), published as CD. *Served as author of all estuarine-related sections and headed the group charged with analysis of estuarine impacts.*
34. Savarese, M., Dellapenna, T., and Volety, A. 2004. Preliminary study of the sedimentary surface and subsurface of Naples Bay and the Ten Thousand Islands using acoustic geophysical techniques. South Florida Water Management District, Technical Report. 45 p. + 26 figs.
33. Savarese, M., Loh, A.N., and Trefry, J.H. 2004. Environmental and hydrologic history of Estero Bay: implications for watershed management and restoration. South Florida Water Management District, Technical Report. 76 p. text + 55 p. figs + 266 p. appendices.
32. Savarese, M. and Wingard, L. 2004. Molluscs as environmental indicators of salinity change in southern Florida's estuaries. South Florida Water Management District, Technical Report. 100 p.
31. Savarese, A., Volety, A., and Tolley, S.G. 2004. Oyster health and habitat quality in Fakahatchee estuary: establishing a baseline performance for Ten Thousand Island estuarine restoration. South Florida Water Management District, Technical Report. 27 p. + 15 figures.
30. Savarese, M. and Oches, R. 2004. Dating fossil oysters using amino acids. South Florida Water Management District, Technical Report, 16 p.
29. Tolley, G., Volety, A., and Savarese, M. 2003. Shellfish research and adaptive resource management in Southwest Florida: oysters as sentinels of ecosystem health. *World Aquaculture* 34(4):64-66.
28. Meers, M.B., Demers, N.E., and Savarese, M. 2003. Integrating scientific philosophy, theory, methods, and ethics in undergraduate science curricula. *Journal of College Science Teaching* 33(3):34-39.
27. Savarese, M., Rein, H., and Lytton, G. (editors). 2003. Restoration Science Plan for the Big Cypress Basin and Estero Bay Watersheds. South Florida Ecosystem Restoration Working Group Report, Comprehensive Everglades Restoration Plan, 98 p.
26. Savarese, M., Volety, A., and Tolley, G. 2003. Influence of watershed alteration on oyster health and oyster-reef habitat: management implications for the Faka-Union and Estero Bays. South Florida Water Management District, Technical Report, 49 p. + 35 figures.
25. Savarese, M., Tedesco, L. P., Mankiewicz, C., and Shrake, L. 2002. Late Holocene sea level rise in Southwest Florida: implications for estuarine management and coastal evolution. 15th Annual Keck Geology Research Symposium in Geology, p. 47-54.

24. Tolley, S. G., Everham, E. M. III, McDonald, M. R., and Savarese, M. 2002. The Campus Ecosystem Model: an interdisciplinary framework for undergraduate education. *Journal of College Science Teaching* 31(6):364-369.
23. South Florida Water Management District and U.S. National Resources Conservation Service. 2001. Southern Golden Gate Estates Watershed Planning Assistance Cooperative Study. Multi-agency Final Report to the U.S. Army Corps of Engineers and South Florida Water Management District. (Savarese 1 of 25 contributors.)
22. Savarese, M. 2001. Watershed management and restoration within the Ten Thousand Islands of Southwest Florida. Guide for the Estuarine Research Federation national meeting field trip. 23 p.
21. Volety, A. and Savarese, M. 2001. Oysters as indicators of ecosystem health: determining the impacts of watershed alteration and implications for restoration. National Fish and Wildlife Federation, Technical Report. 105 p.
20. Savarese, M. and Volety, A. 2001. Oysters as indicators of ecosystem health: determining the impacts of watershed alteration and implications for restoration. South Florida Water Management District, Technical Report. 105 p.
19. Savarese, M., Tedesco, L. P., Filippelli, G., Shirley, M., and Bush, S. 2000. Effects of water control structures on estuaries. NOAA Coastal Zone Management Program, Technical Report, 173 p.
18. Mankiewicz, C., Savarese, M., and Tedesco, L. 2000. Watershed dynamics, Southwest Florida. 13th Keck Research Symposium in Geology, p. 168-174.
17. Surge, D., M. Savarese, J. R. Dodd, and K. C. Lohmann. 1998. Carbon isotopic evidence for photosynthesis in Early Cambrian oceans: Comment & reply. *Geology* 26(2):191-192.
16. Savarese, M. 1998. Collaborative learning in an upper-division university Geobiology course. *Journal of Geoscience Education* 46(1):61-66.
15. Surge, D., M. Savarese, J. R. Dodd, and K. C. Lohmann. 1997. Carbon isotopic evidence for photosynthesis in Early Cambrian oceans. *Geology* 25(6):503-506.
14. Savarese, M., Patterson, M. R., Chernykh, V. I., and Fialkov, V. A. 1997. Trophic effects of sponge feeding in Lake Baikal's littoral zone. 1. In situ pumping rates. *Limnology and Oceanography* 42(1):171-178.
13. Pile, A. J., Patterson, M. R., Savarese, M., Chernykh, V. I., and Fialkov, V. A. 1997. Trophic effects of sponge feeding in Lake Baikal's littoral zone. 2. Sponge abundance, diet, feeding efficiency, and carbon flux. *Limnology and Oceanography* 42(1):178-184.
12. Savarese, M., Dodd, J. R., and Lane, N. G. 1996. Taphonomic and sedimentologic implications of crinoid intraskeletal porosity. *Lethaia* 29(2):141-156.
11. Leighton, L. and Savarese, M. 1996. Functional and taphonomic implications of strophomenid brachiopod valve morphology. Pp. 161-168. In: *Brachiopods. Third International Brachiopod Congress*. Copper, P. and Jin, J. (eds.). A. A. Balkema, Rotterdam.
10. Savarese, M. 1995. Functional significance of regular archaeocyathan central cavity diameter: a biomechanical and paleoecological test. *Paleobiology* 21(3):356-378.
9. Sorauf, J. E. and Savarese, M. 1995. A Lower Cambrian coral from South Australia. *Palaeontology* 38(4):757-770.
8. Savarese, M. 1994. Taphonomic and paleoecologic implications of flow-induced forces on concavo-convex brachiopods: an experimental approach. *Lethaia* 27(4):301-312.
7. Savarese, M., Mount, J. F., Sorauf, J. E., and Bucklin, L. 1993. Paleobiologic and paleoenvironmental context of coral-bearing Lower Cambrian reefs: implications for Phanerozoic reef development. *Geology* 21(10):917-920.
6. Savarese, M., Ambers, C. P., Leshikar, M. E., and Robinson, R. K. 1993. Shipwreck ballast stone petrology and the identification of the 1794 "Wreck of the Ten Sail", Grand Cayman. *The Underwater Archaeology Proceedings from the Society of Historical Archaeology* 1993:151-159.

5. Savarese, M. 1992. Functional analysis of archaeocyathan skeletal morphology and its paleobiological implications. *Paleobiology* 18(4):464-480.
4. Savarese, M. and Signor, P. W. 1989. New occurrences of archaeocyathans in the upper Harkless Formation of Esmeralda County, Nevada, and their paleoecological significance. *Journal of Paleontology* 63:539-549.
3. Savarese, M. 1989. Paleobiology of archaeocyathans: functional morphology and phylogenetic affinities. Unpublished Ph.D. dissertation, University of California, Davis, 297 p.
2. Savarese, M., Gray, L. M. and Brett, C. E. 1986. Faunal and lithological cyclicity in the Centerfield Member (Middle Devonian) of western New York: a reinterpretation of depositional history. *New York State Museum Science Service Bulletin* 457:32-56.
1. Brett, C. E., Baird, G. C., Gray, L. M. and Savarese, M. 1983. Middle Devonian coral associations of western and central New York State. In: *Fourth International Symposium on Fossil Cnidaria*, Sorauf, J. E. and Oliver, W. A. Jr. (eds.), p. 65-107.

ABSTRACTS

In Press:

133. Savarese, M., Hoeflein, F.J. IV., Curran, H.A., Park, L.E., and Mylroie, J.E. 2010. Foreshore to dune depositional sequences of middle to late Holocene deposits of the Bahamas: implications of rapid progradation and interpretation of sea-level history. *Geological Society of America Abstracts with Programs* 42(5).
132. Savarese, M. 2010. Engaging paleontology undergraduates in collaborative research experiences across the curriculum. *Geological Society of America Abstracts with Programs* 42(5). *Invited symposium*.
131. Savarese, M. 2010. The science of climate change, public perception, and the need for education. Annual Meeting of the School Science and Mathematics Association.

In Print:

130. Savarese, M. and Hoeflein, F.J. IV. 2010. Sea level and the paleoenvironmental interpretation of the middle to late Holocene Hanna Bay Limestone, San Salvador, Bahamas: a high foreshore setting without a eustatic sea-level highstand. 15th Symposium on the Geology of the Bahamas and Other Carbonate Regions, Gerace Research Centre, San Salvador, Bahamas.
129. Savarese, M., Hoeflein, F. J. IV, and Wohlpart, S. L. 2010. Depositional environmental interpretation of the middle to late Holocene Hanna Bay Limestone, San Salvador, Bahamas: is there evidence for a sea-level highstand? *Geological Society of America Abstracts with Programs* 42(1):109.
128. Wohlpart, S.L. and Savarese, M. 2010. A team mentorship approach to undergraduate research in geoscience: uniting non-majors and majors with graduate students and faculty. *Geological Society of America Abstracts with Programs* 42(1):83.
127. Savarese, M. 2010. The relative rate of sea-level rise and sedimentation upon the coastal geomorphology of the Southwest Florida coast. Sea Level Rise Workshop Sponsored by Florida Center for Environmental Studies, Florida Sea Grant, and U.S. Geological Survey. Florida Atlantic University, Boca Raton.
126. Savarese, M. 2009. Collaborative student research project in applied paleontology: course capstone exercise. Teaching activity submitted to presentation at Teaching Paleontology in the 21st Century Workshop. *On the Cutting Edge: Professional Development for Geoscience Faculty*.

125. Savarese, M. 2009. The fidelity of the fossil record: an inquiry-based activity stressing the interpretation of taphonomic data. Teaching activity submitted to presentation at Teaching Paleontology in the 21st Century Workshop. On the Cutting Edge: Professional Development for Geoscience Faculty.
124. Demers, N.E., Everham, W., Savarese, M., Kakareka, J., Loh, A.N., Hartley, A., Bovard, B., Cassani, J., Brooks, B., and Owen, M. 2009. Preparing citizen-scientists via science research opportunities in Southwest Florida. NCSCE Washington Symposium and SENCER Capitol Hill Poster Session.
123. Cartwright, F.B., Roop, K.B., Abeels, H., Denkert, B.A., Maguire, E., King, J., Danay, H.M., Branciforte, K.A., Faulkner, C.L., and Savarese, M. 2009. Estuarine history as interpreted from a 900-year old oyster reef from the mouth of Broad River: implications for water flow management of Everglades National Park. Geological Society of America Abstracts with Programs 41(1):53-54. *Collaborative student research.*
122. Barthle, J. and Savarese, M. 2009. Reconstructing former Southwest Florida's barrier island down-core history from the distribution of estuarine and open shelf facies. Geological Society of America Abstracts with Programs 41(1):50. *Undergraduate research.*
121. Echols, R.J., Savarese, M., Hoeflein, F.J., and Medwedeff, L.N. 2009. Observations bearing on evolution of Barfield Bay, a large Pleistocene dune-rimmed depression in Southwest Florida. Geological Society of America Abstracts with Programs 41(1):51-52. *Undergraduate student co-authors.*
120. MacDonald, J.H., Jr., Hibbard, S.T., Savarese, M., and Teed, R. 2009. Assessing students' Earth history misconceptions within an introductory geology course. Geological Society of America Abstracts with Programs 41(1).
119. Savarese, M. 2008. Climate change, sea-level rise, and impact upon Southwest Florida's coastal geomorphology. Southwest Florida Water Resource Conference.
118. Savarese, M. & Wohlpart, S.L. 2008. The Holocene development of Southwest Florida's estuaries as exemplified by Estero Bay. Estero Bay Science Symposium sponsored by the South Florida Water Management District.
117. Everham, E.M. III, Tolley, S.G., Kakareka, J., and Savarese, M. 2008. The Campus Ecosystem Model: a framework for campus-based undergraduate research. Florida Statewide Symposium: Engagement in Undergraduate Research. University of Central Florida.
116. Savarese, M. and Isern, S. 2008. Augmenting scholarship through course-based undergraduate research experiences. Florida Statewide Symposium: Engagement in Undergraduate Research. University of Central Florida.
115. Savarese, M., Hoye, B.R., and Wohlpart, S.L. 2008. Effects of sea-level rise and reef sedimentation upon estuary and coastal geomorphologic development: a comparison of oyster and coral reefs. 14th Symposium on the Geology of the Bahamas and Other Carbonate Regions, Gerace Research Centre, San Salvador, Bahamas.
114. Savarese, M., Hoye, B., Wohlpart, Sasha Linsin, and Loh, Ai Ning. 2008. Influence of late Holocene sea-level rise on the geomorphology of the Greater Everglades coast: implications for restoration and water management. American Society of Limnology and Oceanography Ocean Science meeting, Orlando, Florida.
113. Wohlpart, S.L., Savarese, M., and Surge, D. 2007. The development of estuarine systems in Southwest Florida: a perspective from the late Holocene history of oyster reef development. Geological Society of America Abstracts with Programs 39(6):182. *Graduate student's thesis-related research.*
112. Booth, A. and Savarese, M. 2007. Taphonomic analysis of oyster shells: a technique to interpret the Holocene history of coastal environmental change. Geological Society of America Abstracts with Programs 39(6):399. *Graduate student's thesis-related research.*

111. Savarese, M., Kelley, P.H., and Hagstrom, K. 2007. Anticipated versus real taphonomic biases associated with gastropod bore hole-weakened bivalves: keeping Dr. Pangloss away from experimental taphonomy. *Geological Society of America Abstracts with Programs* 39(6):610.
110. Hoye, B.R. and Savarese, M. 2007. Historic distribution of reef-building organisms and their control on coastal geomorphology in the Everglades. *Geological Society of America Abstracts with Programs* 39(6):140. *Graduate student's thesis-related research.*
109. Booth, A., Savarese, M., Portell, R.W., Jones, D.S., and Quitmyer, I.R. 2007. Paleoenvironmental and sclerochronologic reconstruction of large oyster-bearing Pliocene reefs from Curaçao. Submitted to: 1st International Sclerochronology Conference. *Graduate student's thesis-related research.*
108. Savarese, M., Haynes, L., and Dykes, E. 2007. Is water quality suitable for oyster reef development in Naples Bay? A reef restoration demonstration project. Florida Oyster Reef Restoration Summit, St. Petersburg.
107. Tolley, S.G., Volety, A.K., Savarese, M., Walls, L.D., Linardich, C., and Everham, E. III. 2007. Oyster reefs as habitat: understanding the role of freshwater inflow in shaping reef communities. Florida Oyster Reef Restoration Summit, St. Petersburg.
106. Volety, A.K., Tolley, S.G., and Savarese, M. 2007. Achieving ecological restoration: consideration of factors influencing the success or failure of restoration efforts. Florida Oyster Reef Restoration Summit, St. Petersburg.
105. Westphal, M.J., Linsin, S.R., Andresen, M.M., Harris, R.J., Hoye, B.R., Kline, H.E., Linardich, C.M., Mabe, A.C., McConnell, M.N., and Savarese, M.. 2007. Ecological succession within a Holocene oyster reef: an indicator of estuary development in Southwest Florida. *Geological Society of America Abstracts with Programs* 39(2):95. *Collaborative student research.*
104. Savarese, M., Bridges, A.C., and Linsin, S.R. 2006. Development and paleoecology of Holocene oyster reefs relative to coral reefs: an equally significant gauge of global environmental change. *Geological Society of America Abstracts with Programs* 38(7):535-536.
103. Savarese, M. 2006. Holocene history of oyster reef development along the Southwest Florida coast: implications for coastal evolution and estuarine restoration. 2006 Greater Everglades Ecosystem Restoration Conference, Program and Abstracts, p. 196. *Invited workshop presentation.*
102. Bridges, A., Savarese, M., Portell, R.W., and Harper, D.A.T. 2006. Implications for oyster reef restoration through taphonomic comparisons of modern and Pliocene *Crassostrea sp.* 2006 Greater Everglades Ecosystem Restoration Conference, Program and Abstracts, p. 23.
101. Agobian, J.N. and Savarese, M. 2006. Community shifts resulting from anthropogenic manipulation of the Caloosahatchee watershed: mollusk assemblages as indicators of environmental change. 2006 Greater Everglades Ecosystem Restoration Conference, Program and Abstracts, p. 4.
100. Tolley, S.G., Volety, A.K., Savarese, M., Walls, L.D., Linardich, C., and Everham, E.M. 2006. Multivariate analysis of spatial variability of oyster-reef communities: the influence of salinity. National Shellfisheries Association meeting.
99. Fielder, B., Dellapenna, T., and Savarese, M. 2006. Anthropogenic and natural influences on present-day sediment deposition and oyster reef distribution and restoration for the Naples Bay estuarine complex. American Geophysical Union Ocean Sciences Meeting.
98. Agobian, J. and Savarese, M. 2006. Mollusk assemblages as proxies for interpreting water quality: the impact of anthropogenic manipulation of the Caloosahatchee watershed, Southwest Florida. *Geological Society of America Abstracts with Programs* 38(3):16.
97. Bridges, A.C., Savarese, M., Portell, R.W., and Harper, D.A.T. 2006. Paleoenvironmental implications of very large *Crassostrea* oysters from Caracasbaai, Curacao: considerations for

- management and restoration policies. Geological Society of America Abstracts with Programs 38(3):17.
96. Fielder, B., Dellapenna, T., Savarese, M., and Majzlik, E. 2005. Role of antecedent geology and present sediment deposition on oyster reef distribution of Southwest Florida as a result of water management and drainage projects: Naples Bay and Ten Thousand Islands. Estuarine Research Federation meeting, Norfolk, Virginia.
 95. Henry, D., Kakareka, J., Loh, A. N., and Savarese, M. 2005. Summer Research Opportunity for middle school students: the geobiology of oyster reefs. 8th International Conference on Shellfish Restoration, Brest, France.
 94. Tolley, S.G., Volety, A.K., Walls, L., Linardich, C., and Savarese, M. 2005. Multivariate approach to understanding spatial variability of oyster-reef communities. 8th International Conference on Shellfish Restoration, Brest, France.
 93. Savarese, M., Volety, A.K., and Tolley, S.G. 2005. Design of estuarine restoration projects using aspects of oyster physiology and ecology. 8th International Conference on Shellfish Restoration, Brest, France. *Invited abstract. Entire presentation available at: www.ifremer.fr/icsr05/communications/meridienne/Wed%20am/icsr05-savarese-et-al.pdf.*
 92. Agobian, J.N., Bridges, A.C., Coventry-Payne, L., Markley, L.R., DaFrota, J.K., Ercolani, C.P., Erickson, A.R., Shah, B.B., Woodruff, A.J., and Savarese, M. 2005. Variation in taphonomic signatures among modern oyster reefs across an estuarine environmental gradient: implications for interpreting sea-level rise history. Geological Society of America Abstracts with Programs 37(2):12.
 91. Savarese, M., Volety, A. K., and Tolley, S. G. 2004. Aspects of oyster ecology and their utility in the design of estuarine restoration projects in the Greater Everglades: example from Southern Golden Gate Estates. 1st National Conference on Ecosystem Restoration Abstracts with Programs, p. 373.
 90. Volety, A. K., Tolley, S. G., Savarese, M., Rasnake, E., Haynes, L., Winstead, J. T., Barnes, T., and Doering, P. H. 2004. The role of oysters, oyster reef-associated organisms, and adaptive resource management in setting water quality targets in the Caloosahatchee estuary, Florida. 1st National Conference on Ecosystem Restoration Abstracts with Programs, p. 453.
 89. Savarese, M., Demers, N., Everham, E. M., Volety, A., and Kakareka, J. 2004. Scientific Process: an interdisciplinary core natural science course as a mechanism for faculty collaboration. Geological Society of America Abstracts with Programs 36(5):444.
 88. Savarese, M. and Rein, H. 2004. Geomorphological response to late Holocene sea-level rise in coastal Southwest Florida. Geological Society of America Abstracts with Programs 36(5):192.
 87. Savarese, M. 2004. Fostering geoscience education through collaborative research in courses: application across the curriculum. Geological Society of America Abstracts with Programs 36(5);233. *Invited symposium.*
 86. Savarese, M., Volety, A. K., and Tolley, S. G. 2004. Use of oyster reef communities in the design and monitoring of Everglades restoration projects. 70th Annual Meeting of the American Malacological Society, Program and Abstracts, p 77. *Invited symposium.*
 85. Rein, H., Savarese, M., and Loh, A.N. 2004. The effect of late Holocene sea-level rise on the geomorphology of southern Estero Bay. Geological Society of America Abstracts with Programs 36(2):72.
 84. Cone, S.M., Diddle, K.M., Marlowe, B.W., Beck, T.J., Shapiro, C., Ragsdale, T., Mayfield, T., and Savarese, M. 2004. Recent effects of sea-level rise on coastal wetlands in Southwest Florida. Geological Society of America Abstracts with Programs 36(2):72. *Collaborative undergraduate research.*
 83. Savarese, M., Tolley, S.G., and Volety, A.K. 2004. Using oyster reef communities in the design of estuarine restoration projects in South Florida. World Aquaculture Society Abstracts with Programs, Aquaculture 2004, p. 527. *Invited symposium.*

82. Tolley, S.G., Volety, A.K., and Savarese, M. 2004. Managing oyster reefs for ecological function: factors influencing habitat quality for reef-resident communities. World Aquaculture Society Abstracts with Programs, Aquaculture 2004, p. 595. *Invited symposium.*
81. Volety, A.K., Savarese, M., Tolley, S.G., and Winstead, J.T. 2004. Role of anthropogenic and environmental variability on the physiological and ecological responses of oysters in Southwest Florida estuaries. World Aquaculture Society Abstracts with Programs, Aquaculture 2004, p. 614. *Invited symposium.*
80. Rasnake, E., Thurston, S., Tolley, S. G., Savarese, M., Barnes, T., and Volety, A. 2004. Collaboration of community, regulatory agencies and academia in the restoration of oyster reefs in Southwest Florida estuaries: an adaptive management strategy. World Aquaculture Society Abstracts with Programs, Aquaculture 2004, p. 490.
79. Jackson, L., Atekwana, E., Tedesco, L., Savarese, M., and Shrake, L. 2003. Hydrologic exchange and carbon cycling in variably altered subtropical estuaries of Southwest Florida, USA. Geological Society of America Abstracts with Programs 35(6).
78. Koy, K., Tedesco, L., Pachut, J., Licht, K., and Savarese, M. 2003. Changes in late Holocene coastal paleoenvironments in Southwest Florida as reflected in reef-associated macrofauna. Geological Society of America Abstracts with Programs 35(6).
77. Savarese, M. 2003. Late Holocene history of reef development in Estero and Caloosahatchee estuaries. 2003 Charlotte Harbor Conference, Mote Marine Laboratory, p. 34.
76. Savarese, M., Tolley, S.G., and Volety, A.K. 2003. Late Holocene history of oyster reef development in Southwest Florida: implications for management and future coastal environmental change. 17th Biennial Conference of the Estuarine Research Federation, Abstracts with Programs, p. 118. *Symposium on Global Change.*
75. Volety, A.K., Tolley, S.G., and Savarese, M. 2003. Oyster responses as proxies in setting target water quality conditions for restoration of Southwest Florida estuaries. 17th Biennial Conference of the Estuarine Research Federation, Abstracts with Programs, p. 141.
74. Farineau, J.A., Volety, A.K., Savarese, M., Tolley, S.G., and Winstead, J.T. 2003. The distribution and prevalence of the castrator parasite *Loxothylacus panopaei* and the mud crab *Panopeus simpsoni* in three Southwest Florida estuaries. 17th Biennial Conference of the Estuarine Research Federation, Abstracts with Programs, p. 42-43.
73. Tolley, S.G., Volety, A.K., Savarese, M., and Winstead, J.T. 2003. The influence of salinity on the habitat value of oyster reefs in three Southwest Florida estuaries. 17th Biennial Conference of the Estuarine Research Federation, Abstracts with Programs, p. 135.
72. Savarese, M., Volety, A., & Tolley, G. 2003. Oyster physiology and ecological distribution as an indication of environmental health and as a performance measure of restoration effectiveness of Southwest Florida's estuaries. Greater Everglades Ecosystem Restoration Program and Abstracts, April 13-18, p. 464-466. *Invited plenary symposium.*
71. Bost, T., Phillips, H., Rein, H., Chichester, M., Boyle, G., Glinka, C., Moore, C., Cartee, D., Hutto, R., & Savarese, M. 2003. Late Holocene history of oyster reef development in Estero Bay, Southwest Florida: implications for management and future coastal environmental change. Greater Everglades Ecosystem Restoration Program and Abstracts, April 13-18, p. 36-38. *Collaborative undergraduate research.*
70. Savarese, M., Tedesco, L.P., Mankiewicz, C., Lowery, L., Kitchen, C., & Roth, M. 2002. Late Holocene history of the Ten Thousand Islands: sea level rise and its impact on Southwest Florida evolution. Geological Society of America Abstracts with Programs 34(6).
69. Tedesco, L.P., Savarese, M., Koy, K., & Derickson, D. 2002. Late Holocene vermetiform gastropod and oyster reef development and their relation to coastal evolution in Southwest Florida. Geological Society of America Abstracts with Programs 34(6):265.

68. Grindberg, R.V., Rasnake, E.C., Savarese, M., and Volety, A.K. 2002. The eastern oyster as an indicator species to establish restoration targets in Southwest Florida estuaries. National Shellfisheries Association meeting. *Undergraduate research.*
67. Leavor, J., Chichester, M., Moore, C., Rasnake, E., Staugler, E., Smith, M., and Savarese, M. 2002. Late Holocene sea level rise and its effects on the environmental evolution of Southwest Florida. Geological Society of America Abstracts with Programs 34(2):24. *Collaborative undergraduate research.*
66. Savarese, M. 2002. Paleontology taught in the context of an undergraduate earth systems and environmental sciences curriculum. Geological Society of America Abstracts with Programs 34(2):33. *Invited Paleontological Society and National Association of Geoscience Teachers symposium.*
65. Savarese, M. and Volety, A. K. 2002. Monitoring the impact of watershed management on Southwest Florida's estuaries: a model employing oyster physiology and ecology. Charlotte Harbor Watershed Summit Abstracts with Program, p. 24-25.
64. Shrake, L.K., Atekwana, E.A., Tedesco, L.P., and Savarese, M., 2001. Dry season hydrologic mixing in estuaries for different tidal stages: Blackwater River, southwest Florida, USA. Geological Society of America Abstracts with Programs 33(6).
63. Savarese, M., Seiden, E., Palmer, and Lytton, G. 2001. Collaborative undergraduate research expeditions: a valuable opportunity for reserves and students. Annual meeting of the National Estuarine Research Reserve system.
62. Atekwana, E., Tedesco, L., Shrake, L., and Savarese, M. 2001. Identifying hydrologic sources and mixing of estuarine water using dissolved inorganic carbon (DIC): an example from the Blackwater River estuary, Southwest Florida. 16th Biennial Conference of the Estuarine Research Federation. Abstract volume, p. 7.
61. Savarese, M. and Volety, A. K. 2001. Monitoring the impact of watershed management practices on estuarine health. I. Oyster productivity and distribution. 16th Biennial Conference of the Estuarine Research Federation. Abstract volume, p. 122.
60. Thurston, S., Lindland, E., Bankston, S., Grindberg, R., Benolkin, M., Volety, A., and Savarese, M. 2001. Monitoring the impact of watershed management practices on estuarine health. II. Oyster growth, recruitment, and disease. 16th Biennial Conference of the Estuarine Research Federation. Abstract volume, p. 139.
59. Obley, S. P., Savarese, M., and Tedesco, L. P. 2001. The influence of sea level rise on the history of estuarine environments in Southwest Florida. 16th Biennial Conference of the Estuarine Research Federation. Abstract volume, p. 102. *Senior thesis research.*
58. Lindland, E., Savarese, M., and Goodfriend, G. A. 2001. Time of accumulation on an oyster reef: implications for the monitoring of environmental change. 16th Biennial Conference of the Estuarine Research Federation. Abstract volume, p. 80. *Senior thesis research.*
57. Hammermeister, S., Tedesco, L. P., Savarese, M. et al. 2001. Effects of water control structures on the ecology and sedimentology of estuaries in Southwest Florida. 16th Biennial Conference of the Estuarine Research Federation. Abstract volume, p. 56.
56. Savarese, M. 2001. Fostering undergraduate science education through collaborative research in courses across the curriculum. Project Kaleidoscope Summer Educational Workshop. *Invited abstract.*
55. Savarese, M. 2001. Collaborative undergraduate research: an effective hands-on approach to science education. Geological Society of America Abstracts with Programs 33(2):A9. *Invited National Association of Geoscience Teachers symposium.*
54. Lindland, E., Burt, C., Edlin, J., Elkins, M., Leavor, J., Mallon, J., Myers, M., Obley, S., Savarese, M., and Goodfriend, G. A. 2001. Time averaging on oyster reefs: implications for environmental reconstruction and historical change. Geological Society of America Abstracts with Programs 33(2):A74. *Collaborative undergraduate research.*

53. Savarese, M. and Volety, A. K. 2001. Impact of watershed alteration upon oyster growth and distribution within estuaries of Southwest Florida: implications for management and restoration. National Shellfisheries Association, Orlando, Florida. Book of Abstracts – Aquaculture 2001, p. 578.
52. Volety, A. K., Savarese, M., and Tolley, S. G. 2001. Disease status and physiological responses of oysters as indicators of watershed alteration effects in Southwest Florida estuaries. National Shellfisheries Association, Orlando, Florida. Book of Abstracts – Aquaculture 2001, p. 667.
51. Volety, A. K., Savarese, M., and Tolley, S. G. 2000. Effects of watershed alterations on oyster populations in estuaries of Southwest Florida: an ecological approach. International Conference on Shellfish Restoration, Hilton Head, South Carolina, Abstracts with Programs p. 77.
50. Savarese, M., Tedesco, L. P., Mankiewicz, C., and Lytton, G. D. 2000. Estuarine science, management, and restoration: a model for interdisciplinary collaborative undergraduate research. Geological Society of America Abstracts with Programs 32(7):A490.
49. Savarese, M., Tedesco, L. P., Mankiewicz, C., and Lytton, G. D. 2000. Undergraduate collaborative research expeditions: serving the National Estuarine Reserves' research and educational missions. National Estuarine Research Reserve Association meeting, Williamsburg, Virginia.
48. Savarese, M., Wilkening, J. E., Greenstein, B. J., and Fuller, E. R. 2000. Multi-disciplinary approach to the management and restoration of estuarine health. Part I. Ecology and Paleoecology. Geological Society of America Abstracts with Programs 32(2):A71.
47. Obley, S. P., Lucas, M. P., Mallon, J. C., Hammermeister, S., Savarese, M., and Tedesco, L. P. 2000. Recent sedimentologic and sea level history of Estero Bay: implications for the geomorphologic evolution of the Southwest Florida coast. Geological Society of America Abstracts with Programs 32(2):A65. *Collaborative undergraduate research.*
46. Savarese, M., Brewster, S., and Brand, L. E. 1999. Effects of water management practices on oyster distribution and productivity within estuaries of Southwest Florida. 15th Biennial Estuarine Research Federation International Conference Abstracts with Programs, p. 91.
45. Sheppard, J. B., Johnston, D., Lange, C., and Savarese, M. 1999. Impact of sea level rise on the coastal systems of Southwest Florida. Geological Society of America Abstracts with Programs 31(3):A67. *Collaborative undergraduate research.*
44. Brewster, S., Rullo, G. A., Sheppard, J. B., and Savarese, M. 1999. Environmental context of Pliocene and Recent oyster - gastropod reefs from Southwest Florida. Geological Society of America Abstracts with Programs 31(3):A7. *Collaborative undergraduate research.*
43. Savarese, M., Brewster, S., and Brand, L. E. 1999. Influence of water management practices on oyster reef distribution and productivity within estuaries of Southwest Florida. American Society of Limnology and Oceanography, National Meeting, p. 156.
42. Vargo, G. A., Neely, M. B., Erdman, R., Nickerson, N., Skorewicz, K., Kleppel, G., Kirtland, K. R., and Savarese, M. 1998. The impact of benthic filter and suspension feeding invertebrates on water column phytoplankton populations. Florida Bay Science Conference.
41. Savarese, M. 1998. Sponge suspension feeding: implications for food availability and water quality on coral reefs. 9th Symposium on the Geology of the Bahamas. San Salvador.
40. Savarese, M., Demers, N. E., and Meers, M. B. 1998. "Scientific Process": A Course Introducing the Philosophy, Methods, and Ethics of Science in Preparation for Independent Research. EOS, Transactions, American Geophysical Union 79(17):S8.
39. Tolley, S. G., Savarese, M., and Everham III, E. M. 1998. Florida Gulf Coast University's "Campus Ecosystem Model": A Programmatic Framework for Teaching Earth-System and Environmental Sciences. EOS, Transactions, American Geophysical Union 79(17):S8.
38. Rickabaugh, T. A., Tedesco, L. P., Filippelli, G. M., and Savarese, M. 1998. Geochemistry of Surficial Sediments of Rookery Bay National Estuarine Research Reserve, Southwest

- Florida: Implications for Anthropogenic Inputs. EOS, Transactions of American Geophysical Union Ocean Sciences Meeting 79(1):OS123.
37. Savarese, M. and Sarver, K. 1997. Effects of salinity and water flow on oyster productivity: implications for estuary health. 14th Biennial Estuarine Research Federation International Conference Abstracts with Programs, p. 163.
 36. Surge, D. M., Savarese, M., and Flessa, K. W. 1997. Reconstructing pre-disturbance environmental conditions in estuarine habitats using paleoecological and geochemical approaches. 14th Biennial Estuarine Research Federation International Conference Abstracts with Programs, p. 178.
 35. Rickabaugh, T. A., Tedesco, L. P., Savarese, M., and Filippelli, G. M. 1997. Distribution of trace elements in sediments of Rookery Bay National Estuarine Research Reserve (RBNERR), Southwest Florida. 14th Biennial Estuarine Research Federation International Conference Abstracts with Programs, p. 153.
 34. Hopkins, T. E., Savarese, M., and Shirley, M. A. 1997. Integrating research into resource management at Rookery Bay. Florida Academy of Sciences and Charlotte Harbor Public & Technical Conference, p. 14.
 33. Savarese, M., Patterson, M. R., and Tzeng, M. 1997. Variability in sponge pumping and feeding behavior on a coral reef. American Society of Limnology and Oceanography, National Meeting, Santa Fe, New Mexico.
 32. Savarese, M. 1996. Rookery Bay National Estuarine Research Reserve: A southwestern Florida natural laboratory. Florida Bay Science Conference.
 31. Savarese, M. 1996. The potential impact of sponge suspension feeding behavior upon water quality and food availability. Florida Bay Science Conference.
 30. Savarese, M. 1996. Instilling critical thinking and an appreciation of the scientific method through collaborative learning: example from a senior-level geobiology course. Geological Society of America Abstracts with Programs 28(7):164.
 29. Hagstrom, K. M., Savarese, M., and Dodd, J. R. 1996. Effects of compaction and wave-induced forces on the preservation of naticid predator-prey interactions: implications for taphonomic biasing. Geological Society of America Abstracts with Programs 28(6):42.
 28. Surge, D. M. and Savarese, M. 1995. Carbon and oxygen isotope compositions of Lower Cambrian reefal carbonates indicate preservation of original isotopic compositions, show depth effects, and do not support photosymbiosis in archaeocyaths. Geological Society of America Abstracts with Programs 27(6):270-271.
 27. Leighton, L. and Savarese, M. 1995. Environmental distribution and biomechanics of geniculation in the brachiopod *Rafinesquina alternata*. Geological Society of America Abstracts with Programs 27(6):445.
 26. Dodd, J. R., Savarese, M., Hagstrom, K., Krist, A., and Nell, K. 1995. Taphonomic implications of hydrodynamic behavior of crinoid columnals as determined by settling and entrainment experiments with modern specimens and plastic models. Geological Society of America Abstracts with Programs 27(6):135-136.
 25. Leighton, L. and Savarese, M. 1995. Functional and taphonomic implications of strophomenid brachiopod valve morphology. Third International Brachiopod Congress, Sudbury, Canada, September, 1995.
 24. Savarese, M. 1995. Inferring behavior in the fossil record: How are functional plausibility, utility, and adaptation distinguished? Geological Society of America Abstracts with Programs 27(3):84. *Paleontological Society Symposium invited abstract.*
 23. Surge, D. and Savarese, M. 1995. Lower Cambrian buildups from high- and low-energy environments, Flinders Ranges, South Australia. Geological Society of America Abstracts with Programs 27(3):88.

22. Savarese, M., Mount, J. F., and Sorauf, J. E. 1994. Lower Cambrian archaeocyath-calcimicrobe-coral reef development along an extensional tectonic margin, South Australia. *Geological Society of America Abstracts with Programs* 26(7):426.
21. Dodd, J. R., Savarese, M., Lane, N. G., Leighton, L. R., Surge, D. M., Sands, R., and Bonafair, T. M. 1994. Crinoid columnal porosity: taphonomic, hydrodynamic, and diagenetic implications. *Geological Society of America Abstracts with Programs* 26(7):59.
20. Ziegler, B. J. and Savarese, M. 1994. Application of fluid transport design theory to sponge functional morphology: a quantitative analysis. *Geological Society of America Abstracts with Programs* 26(3):82.
19. Savarese, M., Patterson, M. R., and Chernykh, V. I. 1994. In situ pumping activity of freshwater symbiotic sponges in Lake Baikal, Siberia, Russia. 1994 Ocean Sciences Meeting, American Society of Limnology and Oceanography / American Geophysical Union, 21 - 25 February, San Diego, CA. Pg. 91.
18. Savarese, M. 1993. Archaeocyathan morphology and internal flow dynamics: effects of central cavity diameter on viscous entrainment. *Geological Society of America Abstracts with Programs* 25(6):A332.
17. Savarese, M., Mount, J. F., and Bucklin, L. 1993. Lower Cambrian archaeocyath--calcimicrobe--coral reefs from South Australia: development on a sea-marginal fan. *Geological Society of America Abstracts with Programs* 25(3):78.
16. Savarese, M., Ambers, C., and Vitaliano, C. J. 1992. Ballast stone petrology: application to the identification and historic interpretation of shipwrecks. *Society of Historical Archaeology, National Meeting 1993, Kansas City*, p. 113-114.
15. Savarese, M. and Bucklin, L. 1992. Paleobiologic and paleoecologic significance of archaeocyathan secondary skeletal structures. *Geological Society of America Abstracts with Programs* 24(7):311.
14. Savarese, M. 1992. Taphonomic and paleoecologic implications of flow-induced drag and lift. *Geological Society of America Abstracts with Programs* 24(4):62. *Paleontological Society Symposium invited abstract.*
13. Savarese, M. 1991. Effects of moving fluid on the paleobiology of Paleozoic bottom-dwelling, marine animals. *Geological Society of America Abstracts with Programs* 23(3):58.
12. Gray, L. M. and Savarese, M. 1991. Origin and development of bioherms in the Waldron Shale (Silurian) of Indiana. *Geological Society of America Abstracts with Programs* 23(3):15.
11. Savarese, M. 1990. Evolution of archaeocyathans and the development of Early Cambrian reef communities. *Geological Society of America Abstracts with Programs* 22(7):A129. *Paleontological Society Symposium invited abstract.*
10. Rowland, S. M. and Savarese, M. 1990. The hypothesis of algal symbiosis in Archaeocyatha. *Third International Symposium on the Cambrian System, Novosibirsk, USSR.*
9. Signor, P. W., Savarese, M., and Denny, M. W. 1989. Archaeocyathans as cantilevers: some thoughts on the functional morphology of regular archaeocyathans. *Geological Society of America Abstracts with Programs* 21(6):A287.
8. Savarese, M. 1988. Functional analysis of archaeocyathan skeletal morphology: implications for the group's paleobiology. *Geological Society of America Abstracts with Programs* 20(7):A201.
7. Savarese, M. and Rowland, S. M. 1988. A reappraisal of archaeocyathan paleobiology. *Geological Society of America Abstracts with Programs* 20(3):227.
6. Rowland, S. M. and Savarese, M. 1988. The hypothesis of algal symbiosis in Archaeocyatha. *Geological Society of America Abstracts with Programs* 20(3):226.

5. Signor, P. W. and Savarese, M. 1988. Paleocological and biostratigraphic implications of archaeocyathan bioherms and associated faunas in the Wood Canyon Formation, Death Valley, California. Geological Society of America Abstracts with Programs 20(3):231.
4. Savarese, M. and Signor, P. W. 1987. Morphology and paleobiology of the unusual Early Cambrian archaeocyathan *Retilamina*, and its paleobiologic implications. Geological Society of America Abstracts with Programs 19(7):830.
3. Savarese, M. and Signor, P. W. 1987. New occurrences of archaeocyathans in the upper Harkless Formation of Esmeralda County, Nevada, and their paleoecological significance. Geological Society of America Abstracts with Programs 19(6):447.
2. Savarese, M. 1985. Taphonomy as a tool for interpreting depositional history of some thin bedded Middle Devonian argillaceous limestones. Univeristy of California Paleontological Conference, Bodega Marine Laboratory, Abstract.
1. Savarese, M. and Gray, L. M. 1983. Faunal associations in a shale-limestone-shale depositional cycle. Programme and Abstracts, Canadian Paleontology and Biostratigraphy Seminar, p. 27.

WEB-PUBLISHED TEACHING ACTIVITIES (peer reviewed)

5. Savarese, M. 2009. Predicting the settling velocity of a sediment grain using Stokes' Law: is Stokes' Law of Settling applicable across all sediment grain sizes? Teaching Activity Archived at Science Education Resource Center. <http://serc.carleton.edu/sp/whitaker/activities/30101.html>.
4. Savarese, M. 2009. Functional morphology: philosophy and methodology. Teaching Activity Archived at Science Education Resource Center. <http://serc.carleton.edu/NAGTWorkshops/paleo/activities/33730.html>.
3. Savarese, M. 2009. Capstone research project: Holocene history of estuarine environmental change. Teaching Activity Archived at Science Education Resource Center. <http://serc.carleton.edu/NAGTWorkshops/paleo/activities/33457.html>.
2. Savarese, M. 2009. Taxonomy and phylogeny: building and comparing a taxonomy and phylogeny of bivalve mollusks. Teaching Activity Archived at Science Education Resource Center. <http://serc.carleton.edu/NAGTWorkshops/paleo/activities/34324.html>.
1. Savarese, M. 2009. The fidelity of the fossil record: using preservational characteristics of fossils within an assemblage to interpret the relative state of spatial and temporal fidelity. Teaching Activity Archived at Science Education Resource Center. <http://serc.carleton.edu/NAGTWorkshops/paleo/activities/32945.html>.

POPULAR WRITINGS

4. Savarese, M. 2010 (in press). The Effects of Climate Change on Florida's Ocean and Coastal Resources. A Special Report to the Florida Energy and Climate Commission and the People of Florida Florida Oceans and Coastal Council, Tallahassee. *Authored sections concerning "Increasing Sea Level" and "Changes in Estuaries, Tidal Wetlands, and Tidal Rivers"*.
3. Provided footage, an interview, and background information for "*Changing Seas, Episode 202: Seagrasses and Mangroves*" a documentary produced by WPBT2, Miami, Florida, 2010.
2. Savarese, M. and Wohlpart, S.L. 2010. The Science of Climate Change in the Ten Thousand Islands. Essay within *Unspoiled: Writers Speak for Florida's Coast*. Cerulean, Susan and Ray, Janisse (eds.), Heart of the Earth publisher.
1. Savarese, M. 2007. Metro Opinion: Climate Change. In: Business Currents, A Publication of the Greater Naples Chamber of Commerce. Vol. 2, no. 6, August, 2007.

TEACHING EXPERIENCE

- 2010 Spring: Coastal & Watershed Geology (undergraduate only); Current Topics Seminar: Geology of Florida. Fall: Geobiology (both at undergraduate and graduate levels).
- 2009 Spring: Coastal & Watershed Geology (both at undergraduate and graduate levels). Summer: Modern and Ancient Carbonate Depositional Environments: A Field Course in San Salvador, Bahamas. Fall: Invertebrate Zoology; Graduate Seminar: Sea-level Changes and its Effects.
- 2008 Spring: Coastal & Watershed Geology. Summer: One-week Science Summer Institute for Elementary School Teachers. Fall: Geobiology (both at undergraduate and graduate levels).
- 2007 Spring: Coastal & Watershed Geology; Graduate Seminar: Causes & Implications of Sea-level Change. Summer: One-week Science Summer Institute for Elementary School Teachers; two-week Summer Science Research Opportunity for Lee & Charlotte County middle school students. Fall: Graduate Student Research Seminar.
- 2006 Spring: Coastal & Watershed Geology; Graduate Seminar in Taphonomy. Summer: Modern and Ancient Carbonate Depositional Environments: A Field Course in San Salvador, Bahamas; two-week Summer Science Research Opportunity for Lee & Charlotte County middle school students. Fall: Geobiology.
- 2005 Spring: Coastal & Watershed Geology; Internship Coordinator; guest instructor for Cornell College at Gerace Research Center, San Salvador, Bahamas for one-week field course. Summer: two-week Summer Science Research Opportunity for Lee & Charlotte County middle school students. Fall: Invertebrate Zoology.
- 2004 Spring: Coastal & Watershed Geology; Topical Seminar: Estuarine Management and Restoration; Advanced Sedimentology. Summer: two-week Summer Science Research Opportunity for Lee & Charlotte County middle school students. Fall: Geobiology; Issues in Science & Technology.
- 2003 Spring: Coastal & Watershed Geology; Topical Seminar: Estuarine Management and Restoration. Fall: Global Systems; Topical Seminar: Geobiology Research Group.
- 2002 Spring: Issues in Science & Technology; Internship Coordinator. Fall: Geobiology; Scientific Process.
- 2001 Spring: Earth's Lithosphere; Issues in Science & Technology. Summer: Keck Undergraduate Research Expedition. Fall: Global Systems; Topical Seminar: Beach Nourishment.
- 2000 Spring: Special Topics – Sedimentology & Stratigraphy; Meteorology & Climatology; Physical & Historical Geology. Fall: Physical & Historical Geology; Geobiology; Issues in Science & Technology.
- 1999 Spring: Marine Systems; Physical & Historical Geology; Topical Seminar: Collaborative Undergraduate Research. Summer: Keck Undergraduate Research Expedition; Senior Research. Fall: Global Systems; Physical & Historical Geology; Internship Coordination.
- 1998 Spring: Scientific Process; Global Systems; Topical Seminar: Effects of Water Quality Upon Estuarine Ecology. Summer: Undergraduate Research Working Group. Fall: Geobiology; Physical & Historical Geology; Scientific Process.
- 1997 Spring: Developed and implemented a curriculum for adult volunteers entitled: "Science in Practice" – an educational program that involves the public in on-going research efforts. Fall: Physical & Historical Geology; Scientific Process; Topical Seminar: Paradigms in Tropical Ecosystems: How Similar are Rainforests and Coral Reefs?
- 1996 Spring: Geobiology (G404); The Evolution of Reefs (G690). Course designed: Natural History of Coral Reefs (field course in Bermuda; G341). Fall: Served on curricular development committees for the new Florida Gulf Coast University for two degree programs: "Interdisciplinary Natural Science" and "Environmental Studies".
- 1995 Spring: Geobiology (G404); assisted in Paleoecology course (G561). Fall: Earth, Our

- Habitable Planet (G105) - 120 students; Graduate Seminar in Morphometrics (G690); team teaching of Karst Geology of Southern Indiana (G690).
- 1994 Spring: Geobiology (G404); Graduate Seminar in Taphonomy (G690); assisted in Paleocology course (G561). Fall: Earth, Our Habitable Planet (G105) - 2 sections, totaling 225 students; Biomechanics (G528).
- 1993 Spring: Geobiology (G404) and Earth, Our Habitable Planet (G105). Fall: Earth, Our Habitable Planet (G105).
- 1992 Spring: Historical Geology for majors (G112) and a graduate-level seminar (G690: Taphonomy). Fall: Biomechanics and Its Application to Neontology and Paleontology (G701).
- 1991 Spring: Historical Geology for majors (G112); guest lectures for Northeastern's East-West Program at the Discovery Bay Marine Laboratory, University of the West Indies at Jamaica; Fall: Geobiology (G404).
- 1990 Spring: Historical Geology for majors (G112) and a graduate-level seminar (G690: Functional Morphology of Fossil Organisms); Fall: Geobiology (G404).
- 84-89 Teaching assistant at University of California, Davis in Physical Geology, Geological Hazards (a writing class), History of Life, Invertebrate Paleontology, and a Geology Summer Field Course; responsibilities include: lecturing, organizing and running laboratory, leading field excursions.
- 84-88 Discussion leader during an annual orientation program for science teaching assistants.
- 1987 Designed a Physical Geology general education course stressing communication skills.
- 1987 Led a one week University of California Extension trip: Geology of the Lower Granite Gorge, Grand Canyon National Park.
- 86,87 Teaching assistant for University of California, Davis' Summer Field Camp in the White and Inyo Mountains, eastern California.
- 1986 Co-organized and led a two week University of California Research Expedition (UREP) to collect fossils in western Nevada.
- 1986 Received a teaching certificate for completing the "Closer Look at University Teaching" series at UC Davis.
- 1985 Received an Instructional Improvement Award to develop a laboratory manual and to revise fossil displays for a history of life laboratory course.
- 81-84 Head teaching assistant at University of Rochester in Historical Geology, Invertebrate Paleontology, and Invertebrate Zoology within Dept. of Biology.
- 83,84 Organized and led a summer Geological Workshop for High School Teachers through the Rochester Museum and Science Center.
- 1983 Guest lecturer for three weeks in a Paleontology course offered at the Univ. Rochester.

MISCELLANEOUS PROFESSIONAL EXPERIENCE

- 2007 One week Whitaker Center Science Summer Institute for Collier County elementary school teachers titled: Literacy and Math Training Embedded Within a Science Curriculum.
- 2006 Intensive field course in carbonate sedimentology in San Salvador, Bahamas.
- 2005 One week of paleontological field work in Curacao, Dutch West Indies.
- 2005 Invited speaker at International Conference for Shellfish Restoration, Brest, France.
- 2005 Traveled to San Salvador, Bahamas to develop a field course in "carbonate depositional systems".
- 2004 Organized a symposium for the 70th Annual Meeting of the American Malacological Society, titled "Coastal Molluscan Assemblages as Environmental Indicators and Monitors of Restoration Effectiveness".

- 2003 Served on the steering committee for a “State of the Coast” conference for Collier County, Florida decision-makers.
- 2003 Served on the Greater Everglades Ecosystem Restoration (GEER) conference steering committee. Organized both plenary session and a theme session for that conference.
- 2002 Organized symposium for the Paleontological Society and the National Association of Geoscience Teachers at Southeastern – Northcentral Geological Society of America meeting in spring, 2002. Symposium entitled: “New Challenges in Paleontological Education”.
- 2002 Served as Southeast Section Chairperson for the Paleontological Society.
- 2001 Organized and hosted a month-long undergraduate research experience to study the Holocene history of coastal environments of Southwest Florida; program for undergraduates from colleges around the country; funded by the Keck Geology Consortium.
- 2001 Organized a regional Southwest Florida restoration coordination workshop for scientists, managers, and decision makers working within the Big Cypress Basin.
- 2000 Organized a regional Southwest Florida workshop for environmental professionals involved in the Southern Golden Gate Estates restoration, a consortium tasked with restoring an entire watershed from freshwater headlands to estuary.
- 1999 Organized and hosted a month-long undergraduate research experience to study the management and restoration of Southwest Florida estuaries; program for undergraduates from colleges around the country; funded by the Keck Geology Consortium.
- 1999 Organized symposium for the Paleontological Society at Southeastern Geological Society of America meeting in spring, 2000. Symposium entitled: “Paleontology’s Contribution to Environmental Science”.
- 1999 Developed a partnership between FGCU’s Natural Sciences programs and California State University at Monterey Bay’s Earth System Science and Policy Institute.
- 1998 Organized and hosted a 1-week workshop entitled “Integrated Estuarine and Coastal Science” for the Keck Consortium in southwestern Florida.
- 1997 Collaborating scientist on 1-week field & laboratory expedition to Florida Keys Marine Lab studying the effects of suspension feeders upon phytoplankton populations.
- 1997 Chief scientist on a 1-week research cruise on NOAA ship Ferrel off southwestern Florida coast.
- 1996 Chief scientist during a NURC-funded, 3-week day-boat operation in Key Largo, Florida studying the ecology of reef sponges.
- 1995 Organized and hosted the 4th Annual TriCity Paleontology Meeting, a cooperative scientific meeting between Indiana University, Ohio State University, and University of Cincinnati.
- 1994 Six weeks field work in the Flinders Ranges of South Australia to study Lower Cambrian reefs. Funded by the American Chemical Society’s Petroleum Research Fund.
- 1994 One week at Bermuda Biological Station for Research for course development (Natural History of Coral Reefs; to be taught summer, 1996).
- 1993 Organized and hosted the 2nd Annual TriCity Paleontology Meeting, a cooperative scientific meeting between Indiana University, Ohio State University, and University of Cincinnati.
- 1993 Participated as a senior scientist on a 1-month research expedition to Siberia to study the biology and ecology of fresh water sponges in Lake Baikal. A NOAA-sponsored project.
- 1992 Field work for 1-month in Florida Keys. NOAA-funded project to study tropical marine sponges.
- 1992 One month of field work in the Flinders Ranges of South Australia to study Lower Cambrian reefs. Funded by the American Chemical Society’s Petroleum Research Fund.

- 1992 Co-chairperson of Paleontology Theme Session at National Geological Society of America Meeting, Cincinnati.
- 1992 Co-convener and invited participant of Paleontological Society Symposium at North-Central Geological Society of America meeting entitled: Experimentation as a Tool for Paleontological Study.
- 1991 Research at Discovery Bay Marine Laboratory, University of the West Indies, Jamaica (January). Field work in Flinders Ranges of South Australia to study paleoecology of Lower Cambrian reefs (August). Participated in NOAA research cruise, Key Largo, Florida (September).
- 1990 Co-convener and invited participant of Paleontological Society Symposium at National Geological Society of America meeting entitled: The Origin of Animals.
- 1990 Biomechanical research at Hopkins Marine Station, Stanford University during the summer months.
- 1989 Participated in a graduate-level biomechanics summer course at Hopkins Marine Station, Stanford University.
- 1988 Research assistantship with Dr. Sandra Carlson studying the phylogeny and functional morphology of the Brachiopoda.
- 87,88 Experience working in a biomechanics/fluid dynamics laboratory.
- 1988 Participated as a research scientist and aquanaut in a NOAA underwater habitat (Aquarius) mission to study the physiological ecology of reef-building cnidarians.
- 1988 Spent four weeks at the Institut de Paléontologie, Paris, France working with Dr. Françoise Debrenne on archaeocyathan systematics and paleobiology.
- 85-88 Spent numerous weeks doing field work in the Great Basin of Nevada and eastern California.
- 81-84 Field experience in western and central New York State.

GRANTS

- 74. In review. Restoring oyster reef habitat in the Cocohatchee Estuary, Southwest Florida. Lytton, G. and Savarese, M. Gulf of Mexico Foundation. \$34,075.
- 73. Denied. Diverting canal water away from Naples Bay to Henderson Creek: research informing management in southwest Florida estuaries. NOAA's National Estuarine Research Reserve System. Vazquez, V.M. + 8 others. \$816,166 over 3 years.
- 72. Denied. Science Masters Program: an initiative to develop and implement a statewide science masters program for Florida. Bishop, P. and 7 co-principal investigators including Savarese. A collaborative proposal submitted by 8 graduate school deans from across Florida's State University System. National Science Foundation. \$688,500 over 3 years.
- 71. Denied. TERRIFIC: Transforming Everglades Restoration Research into a Florida inquiry-based curriculum. Savarese, M., Parsons, M., Cooper, S., and Everham, W. National Science Foundation. \$2.71M over 5 years.
- 70. 2009 The impacts of variable freshwater inflow on estuarine processes in Southwest Florida. Parsons, M. and 6 co-principal investigators including Savarese. U.S. Department of Education. \$333,000.
- 69. 2009 A statewide initiative in Florida to implement Professional Science Master's Programs. A collaborative proposal submitted by Florida Council of Graduate Deans. Alfred P. Sloan Foundation. \$75,000.
- 68. 2009 Marine and estuarine goal setting for South Florida (MARES). Ortnier, P.B., Bergh, C., Boyer, J.N., Johns, E., Loomis, D., Riegl, B., and Savarese, M. NOAA Center for Sponsored Coastal Ocean Research, Coastal Ocean Program. \$65,108 of \$1.47M collaborative effort.

67. Denied, 2008. Landscape-level change in vegetative habitats and geomorphology in coastal wetlands of Southwest Florida in response to sea-level rise: the interactive effect of anthropogenically altered hydrology and nature systems change. Savarese, M., Hartley, A., and Bovard, B. Florida Sea Grant. \$360,000.
66. Denied, 2008. Effects of sea-level rise and anthropogenic water management on wetland resources in Southwest Florida. Pierce, K., Savarese, M., and Hartley, A. Institute for Wetland and Waterfowl Research. \$13,177.
65. 2008. Evolution of southern Florida's coastal geomorphology in response to recent sea-level rise: distribution and history of tidal ponds, bays, and freshwater and tidal wetlands. Savarese, M. and Hartley, A. FGCU's Office of Sponsored Research, Research Assistantship Initiative. \$10,000.
64. Denied, 2008. Evolution of coastal landscape geomorphology and community composition in response to sea-level rise and anthropogenic water management in the Ten Thousand Islands, Florida. Pierce, K., Savarese, M., and Hartley, A. National Estuarine Research Reserve System Graduate Research Fellowship. \$39,896 over 2 years.
63. Denied, 2007. Building understanding and developing sustainability (BUDS) in STEM education: Mathematics and Science Partnership solutions for Florida's future. Schmidt, D., Savarese, M., Cooper, S., and Lindsey, C. Florida Department of Education. \$8,191,146 for year 1 of a 3-year project totaling \$24M.
62. Denied, 2007. South Florida's Watershed Journal: a print and online weekly watershed journal for south Florida. Sobczak, R.V. and Savarese, M. Everglades Foundation. \$35,000.
61. 2007 Late Holocene history of the Coastal Everglades: implications for landscape development and estuarine restoration. Savarese, M., Volety, A., Loh, A.N., and Hoye, B. South Florida Water Management District. \$50,000.
60. 2007 Literary and math training embedded within an elementary school's science curriculum: a Whitaker Center Summer Institute. Savarese, M. and Schmidt, D.L. Calusa Park Elementary School, Collier County. \$10,000.
59. Denied, 2007. Whitaker summer research programs to promote science education. Schmidt, D.L., Savarese, M., and Everham, E.M. III. Florida Department of Education. \$25,000.
58. 2006 Past and present distribution of oysters in South Florida coastal complex (Whitewater Bay to Lostman's River). Volety, A., Savarese, M., Loh, A.N., and Encomio, V. South Florida Water Management District. \$350,000 over 3 years.
57. 2005 Ecology and Natural History of the Florida Keys and Florida Bay: A Collaborative Undergraduate Research and Education Expedition. A proposal to use the Florida Keys Marine Laboratory. Savarese, M., Volety, A., and Tolley, G. Florida Institute of Oceanography. \$3800.
56. 2005 Oyster reef restoration in Naples Bay. Savarese, M. and Volety, A. Naples Bay Initiative of the South Florida Water Management District & City of Naples. \$50,000.
55. 2005 Substrate and subsurface mapping of Naples Bay using geophysical technologies. Savarese, M., Dellapenna, T., and Volety, A. Naples Bay Initiative of the South Florida Water Management District. \$50,000.
54. 2005 Oyster reef health in Pumpkin and Fakahatchee estuaries: baseline monitoring for Ten Thousand Islands restoration. Savarese, M., Volety, A., and Lee, G.-H. Big Cypress Basin of the South Florida Water Management District. \$190,428 (2-year proposal; \$127,000 for year 1 funded; year 2 pending).
53. 2005 Development of a field-based course in the Geology of Tropical Marine Environments, San Salvador, Bahamas. Savarese, M. FGCU Professional Development Grant. \$900.

52. Denied. Collaborative Research: The Geobiology of Oyster Reefs. Walker, S.A., Savarese, M., and Oches, E.A. (Savarese, Project Director). National Science Foundation. \$108,483 of \$361,496 (36 months).
51. 2004 Ecology and Natural History of the Florida Keys and Florida Bay: A Collaborative Undergraduate Research and Education Expedition. A proposal to use the Florida Keys Marine Laboratory. Volety, A., Savarese, M., and Tolley, G. Florida Institute of Oceanography. \$3800.
50. 2004 Research programs at Florida Gulf Coast University related to the study of coastal watersheds in Southwest Florida. Tolley, S.G., Volety, A.K., Savarese, M., Loh, A.-N., and Lee, G.-H. U.S. Environmental Protection Agency. \$1.35 million.
49. 2004 History of environmental change in Estero Bay, Southwest Florida. Savarese, M. South Florida Water Management District. \$9,986.
48. 2004 Molluscs as environmental indicators of salinity change in southern Florida's estuaries. Savarese, M. & Wingard, L. South Florida Water Management District. \$9,986.
47. 2004 Oyster reef and bay floor mapping: a preliminary test of new geophysical techniques. Savarese, M. & Volety, A. Big Cypress Basin Subdistrict of the South Florida Water Management District. \$9,995.
46. 2004 Coordination of environmental restoration efforts in the Big Cypress Basin. Savarese, M. & Rein, H. Big Cypress Basin Subdistrict of the South Florida Water Management District. \$25,000.
45. 2003. Characterization of community assemblages in oyster-reef habitats of the Estero estuary: monitoring the ecological impact of watershed management. Volety, A., Savarese, M., Tolley, G., & Loh, A. N. Charlotte Harbor NEP. \$54,343.
44. Denied. The geobiology of Holocene oyster reefs: implications for coastal evolution and environmental change. Savarese, M., Walker, S., Oches, R., Parsons-Hubbard, K., and Joye, M. National Science Foundation. 3 year collaborative project among 3 institutions: University of Georgia, FGCU, and USF Tampa. \$106,756 of \$399,000.
43. 2003 Natural history of the Florida Keys and Florida Bay: a collaborative undergraduate research and educational experience. Volety, A., Savarese, M., & Tolley, G. Florida Institute of Oceanography: Proposal to use the Florida Keys Marine Laboratory. \$2,800.
42. Denied. Rookery Bay National Estuarine Research Reserve Environmental Learning Center Project. Savarese, M. & Shirley, M. National Science Foundation. \$73,700.
41. 2003 Effects of late Holocene environmental change on the mollusc assemblages within Estero Bay. Savarese, M. South Florida Water Management District. \$10,000.
40. 2003 Oyster health and habitat quality in Fakahatchee estuary: establishing a baseline performance for Ten Thousand Island estuarine restoration. Savarese, M. FGCU Internal Grant Program. \$5000.
39. 2003. Biologic effects of suspended sediments on shellfish in the Charlotte Harbor watershed: implications for water releases and dredging activities. Volety, A., Tolley, S., & Savarese, M. Charlotte Harbor National Estuary Program. \$28,593.
38. 2003 Community-based restoration of oyster reefs in Southwest Florida-Western Everglades watersheds. Volety, A., Tolley, S. G., Savarese, M., Wilkinson, N., Murphy, B., & Wasno, B. National Oceanic and Atmospheric Administration.
37. 2003 Community-based restoration of oyster reefs in Charlotte Harbor – Everglades watershed: collaboration of secondary and post-secondary education. Volety, A., Tolley, S. G., Savarese, M., Wilkinson, N., Murphy, B., & Wasno, B. National Fish and Wildlife Foundation. \$45,000.
36. 2003 Environmental and hydrologic history of Estero bay: implications for watershed management and restoration. Savarese, M., Loh, A. N., & Trefry, J. H. South Florida Water Management District. \$72,504.

35. 2003 Oyster health and habitat quality in Fakahatchee Estuary: establishing a baseline performance for Ten Thousand Island estuarine restoration. Savarese, M., Volety, A., & Tolley, G. South Florida Water Management District. \$25,000.
34. 2003 Coordination of environmental restoration efforts in the Big Cypress Basin. Savarese, M. & Rein, H. Big Cypress Basin Subdistrict of the South Florida Water Management District. \$21,000.
33. 2002 Natural history of the Florida Keys and Florida Bay: a collaborative undergraduate research and educational experience. Savarese, M., Volety, A., & Tolley, G. Florida Institute of Oceanography: Proposal to use the Florida Keys Marine Laboratory. \$2,800.
32. 2002 Sea level rise in Southwest Florida: implications for environmental management and coastal evolution. Savarese, M. FGCU Internal Grant Program. \$5000.
31. 2002 Influence of watershed alteration on oyster health and oyster-reef habitat: management implications for the Faka-Union and Estero bays. Savarese, M., Tolley, G., & Volety, A. South Florida Water Management District. \$49,725.
30. 2002 Community-based restoration of oyster reefs and enhancement of essential fish habitat in Charlotte Harbor watershed. Volety, A., Tolley, G., Savarese, M., Thurston, S., Wilkinson, N., Murphy, B., & Wasno, B. Charlotte Harbor National Estuary Program Restoration Partners Fund. \$19,736.
29. 2002 Florida Institute of Oceanography shiptime proposal. Tolley, Volety, & Savarese. Shiptime support for Florida Gulf Coast University's Earth and Marine Sciences curriculum. \$12,000.
28. 2002 Caloosahatchee River and Estuary collaborative research plan: the state of estuarine health. A cooperative project by Mote Marine Laboratory and FGCU. FGCU investigators: Volety, A., Tolley, G., and Savarese, M. \$31,000 to FGCU.
27. 2002 Collaborative undergraduate research experiences in estuarine habitats: a proposal for the National Estuarine Research Reserve System. Savarese, M., Tedesco, L., and Lytton, G. Pilot program funded by cooperatively by NOAA's National Ocean Services Program and the Keck Geology Consortium. \$70,000.
26. 2001 Funding to support the Big Cypress Basin's Regional Restoration Coordination. Savarese, M. & Lytton, L. Big Cypress Basin Subdistrict of the South Florida Water Management District. \$20,000 to support a half-time administrative assistant for one year.
25. 2001 Funding to support the "Big Cypress Basin Regional Action Forum: A Conference to Promote Coordination of Environmental Restoration Efforts". South Florida Federal Ecosystem Restoration Task Force. \$5000.
24. 2001 Watershed health and coastal evolution in Southwest Florida: a student-faculty research program. Savarese, Tedesco, Mankiewicz, & Lytton. Keck Geology Consortium. \$55,000.
23. 2000 Oysters as indicators of ecosystem health: determining the impacts of watershed alteration and implications for restoration. Volety & Savarese. FGCU Faculty Development Grant Program. \$5,000.
22. 2000 Radiocarbon geochronology of sedimentary cores from Estero Bay, SW Florida. Obley [undergraduate] & Savarese. FGCU's Office of Research & Sponsored Programs Provost Fund. \$1,800.
21. 2000 Funding to support the Southern Golden Gate Estates Restoration Workshop. Lytton & Savarese. Funding provided by: National Wildlife Federation, Florida Wildlife Federation, Collier Audubon Society, and Friends of Rookery Bay. ~\$6000.
20. 2000 Oysters as indicators of ecosystem health: determining the impacts of watershed alteration and implications for restoration. Savarese & Volety. SFWMD Big Cypress Basin. \$18,000.

19. 2000 Florida Institute of Oceanography shiptime proposal. Tolley & Savarese. Shiptime support for Florida Gulf Coast University's Earth and Ocean Sciences curriculum. \$12,000.
18. 1999 Shell Marine Habitat Program at the National Fish & Wildlife Foundation. Volety & Savarese. Oysters as indicators of ecosystem health: implications for watershed restoration in Southwest Florida. \$90,000.
17. 1999 NOAA's Coastal Zone Management Program. Savarese, Shirley, Tedesco, & Filippelli. Restoring estuarine habitat quality: effects of alternative types of water control structures on freshwater inflow, the distribution of non-point source pollutants, and the dispersal of non-indigenous species. \$65,000.
16. 1999 NASA's Earth System Science Education Program (ESSE). Funding to support an FGCU-hosted workshop for California State University at Monterey Bay. \$5,000.
15. 1999 Keck Consortium. Mankiewicz, C. (PI), Savarese (collaborator). Proposal for student-faculty research on Rookery Bay estuary near Naples, Florida. \$54,201.
14. 1998 Florida Institute of Oceanography shiptime proposal. Tolley & Savarese. Shiptime support for Florida Gulf Coast University's Earth-systems science program. \$12,000.
13. 1998 NSF - Division of Undergraduate Education Institutional Laboratory Improvement. Kakareka et al. (Savarese 1 of 4 PIs). Instrumentation to support Florida Gulf Coast University's "Campus Ecosystem Model". \$87,958.
12. 1998 Florida Sea Grant Seminars Program. Savarese & Tolley. Proposal to bring two marine science scholars to Florida Gulf Coast University. \$2,000.
11. 1997 Keck Geology Consortium. Proposal for a college-level faculty educational workshop. Submitted by Mankiewicz C., Curran, A., Savarese, M., & Hinchcliff, G. Title: Natural history and sedimentary environments of tropical estuaries, Southwestern Florida. \$12,540.
10. 1997 NOAA OCRM Ship Time Utilization Program. Title: Substrate and benthic community mapping of southwestern Florida: a database for study of the coupling of marine and estuarine processes. Five days ship time funded.
9. 1996 NOAA National Undersea Research Program. Title: Diel Pumping of Marine Sponges: Influence of Efficient Suspension Feeding and Hydraulic Conditions on Food Availability. Senior Principal Investigator: Mark R. Patterson, Virginia Institute of Marine Science.
8. 1996 Grant-in-Aid of Research award from Indiana University. Title: Paleobiology and paleoecology of coral-bearing Lower Cambrian reefs. \$2,000.
7. 1994 American Chemical Society Petroleum Research Fund, Type-AC Grant. Title: Paleobiological and paleoenvironmental context of coralomorph-bearing Lower Cambrian reefs, South Australia: implications for Paleozoic reef ecology. \$50,000.
6. 1993 Course development award from Howard Hughes Undergraduate Initiative for Natural History of Coral Reefs (G341). \$1,900.
5. 1991 NOAA's National Undersea Research Center, Florida Keys Underseas Research Opportunity. Title: Detection of algal symbiosis in fossil reef builders via stable carbon isotopic signatures: a test of the method's applicability using modern scleractinian corals. \$3,200.
4. 1991 Petroleum Research Fund of the American Chemical Society. Title: A paleoecological field test of the functional interpretation of archaeocyathan paleobiology using Lower Cambrian reefal carbonates from South Australia. \$21,000.
3. 1991 Summer Faculty Fellowship, Indiana University. Title: Effects of moving fluid and substrate consistency on the paleobiology of bottom-dwelling, marine animals. \$4500.
2. 1990 Grant-in-Aid of Research award from Indiana University. Title: Effects of moving fluid on the paleobiology of benthic invertebrates. \$2,000.
1. 1989 Start-up equipment money from Indiana University. \$38,500.

PROPOSAL, MANUSCRIPT, PROGRAMMATIC & BOOK REVIEWS

- 2010: NSF proposal; Maryland Sea Grant proposal.
- 2007: Manuscript for edited volume titled “Current Developments in Bioerosion”, Erlangen Earth Conference Series, Springer.
- 2006: Manuscript for journal Estuaries and Coasts, manuscript for journal The Nautilus, manuscript for Eos.
- 2005: 1 NOAA-NERR graduate student fellowship proposal.
- 2004: 4 NOAA-NERR graduate student fellowship proposals, manuscript for journal Palaios.
- 2003: 2 NOAA-NERR graduate student fellowship proposals, manuscript for journal Palaios, 1 NOAA National Undersea Research Program (NURP) proposal..
- 2002: Manuscript for Journal of Geoscience Education, manuscript for journal Aquaculture.
- 2001: 2 NOAA-NERR graduate student fellowship proposals, 1 NOAA National Undersea Research Program (NURP) proposal.
- 1999: 1 NSF proposal, 1 NOAA National Undersea Research Program (NURP) proposal, review of Earth System Science and Policy program at California State University at Monterey Bay, invited to serve on a NOAA NURP proposal review panel (declined).
- 1998: 1 manuscript for Lethaia, 7 NOAA-NERR graduate student fellowship proposals, served as panel member for NOAA-NERR graduate fellowship program, 1 NOAA’s Cooperative Institute for Coastal & Estuarine Environmental Technology proposal, book review for W. H. Freeman: Merritts & DeWet’s Earth System Science and Global Change.
- 1997: 1 NSF proposal, 1 PRF type-B proposal, 7 NOAA-NERR graduate student fellowship proposals, 1 manuscript for Lethaia, served as panel member for NOAA-NERR graduate fellowship program.
- 1996: 3 NSF proposals.
- 1995: 1 PRF type-AC proposal, 40 proposals for NOAA (while serving as a panel reviewist for NURP); 1 manuscript for Lethaia; 1 manuscript for Third International Brachiopod Congress.
- 1994: 2 PRF type-AC proposals; 2 proposals for NOAA; 1 manuscript for Lethaia.
- 1993: 1 NOAA proposal; 1 NSF proposal (Program in Geology and Paleontology).
- 1992: 1 NSF proposal (Program in Geology and Paleontology); 1 manuscript for Palaios; 1 PRF type-AC proposal.
- 1991: 1 NSF proposal (Program in Geology and Paleontology).

HONORS, AWARDS, AND APPOINTMENTS

- 2010 Recipient of “Senior Faculty Teaching Excellence Award” from Florida Gulf Coast University.
- 2008 Paper of distinction awarded by South Florida Ecosystem Restoration Working Group for Voley, Savarese et al., 2008.
- 2007 Appointed as “Village Elder” of Project Kaleidoscope.
- 2007 Nominated for FGCU’s “Senior Faculty Scholarship Excellence Award”.
- 2006 Coastal America Partnership Award for the collaborative project “Community-based Restoration of Oyster Reefs in Southwest Florida.”
- 2006 Nominated for FGCU’s “Senior Faculty Teaching Excellence Award”; nomination declined.
- 2003 Finalist for FGCU's "Senior Faculty Teaching Excellence Award".
- 1999 Appointed as member of the “Faculty for the 21st Century Network” of Project Kaleidoscope (PKAL F21).

- 1999 Nominated FGCU's "Professor of the Year".
- 1998 Liaison to California State University at Monterey Bay's Institute of Earth System Science and Policy (MOA with FGCU).
- 1998 FGCU's Professor of the Week, October 26, 1998.
- 1998 Outstanding Service Award from Rookery Bay National Estuarine Research Reserve.
- 97-05 Florida Gulf Coast University liaison to and research associate of Rookery Bay National Estuarine Research Reserve.
- 96-98 Chairperson for Northcentral Section of the Paleontological Society.
- 91-96 Research Affiliate of Indiana University's Center for Research into the Anthropological Foundations of Technology (CRAFT).
- 90-96 Research Associate of Indiana University's Underwater Science and Educational Resources Group (USER).
- 1993 Selected as Runner Up for Sigma Gamma Epsilon's (IU Chapter) "Best Geology Professor Award".
- 1991 Received a Summer Faculty Fellowship, Indiana University.
- 1991 Fellowship nominee from the David and Lucile Packard Foundation.
- 1990 Fellowship nominee from the David and Lucile Packard Foundation.
- 1989 Myers Oceanographic Summer Fellowship, Hopkins Marine Station, Stanford University.
- 1989 Recipient of the R. Merton Love Award for Excellence in Graduate Ecology Research, UC Davis.
- 1988 Selected as an alternate for a University of California Regents Fellowship.
- 1986 Nominated as a finalist for an Outstanding Graduate Student Teaching Award.
- 1983 Best student paper at Canadian Paleontology and Biostratigraphy Seminar.
- 1981 Graduated cum laude.

INVITED COLLOQUIA & PRESENTATIONS

1. October 1989: Indiana University - Purdue University at Indianapolis. Title: Paleobiology of an enigmatic group of Early Cambrian reef-builders, the Archaeocyatha.
2. October 1990: Paleontological Society Symposium entitled "The Origin of Animals". Co-convenor and presenter.
3. January 1991: Discovery Bay Marine Laboratory, Jamaica. Three research talks during Northeastern University's East-West Sciences Programs.
4. April 1992: Paleontological Society Symposium entitled "Experimentation as a Tool for Paleontological Study". Co-convenor and presenter.
5. January 1993: Indiana University Center for Research into the Anthropologic Foundations of Technology (CRAFT) Symposium entitled "Ballast Stone Petrology: Applications to the Identification of Shipwrecks".
6. March 1993: Indiana University - Purdue University at Indianapolis. Title: Unusual Paleoecologic and Paleoenvironmental Context of Lower Cambrian Reefs from South Australia.
7. April 1993: Indiana University Bloomington, Department of Geological Sciences. Title: Biomechanics: An Experimental Approach to Paleobiology and Paleoecology.
8. April 1993: Indiana University Bloomington, Department of Biology. Title: Biomechanics: An Experimental Approach to Paleobiology and Paleoecology.
9. February 1994: Indiana University - Purdue University at Indianapolis. Title: Adventures in Siberia -- Both Above and Below the Water: The Biology and Ecology of Freshwater Sponges.

10. March 1994: University of Cincinnati, Department of Geology and Sigma Xi. Title: Adventures in Siberia -- Both Above and Below the Water: The Biology and Ecology of Freshwater Sponges.
11. May 1994: Bermuda Biological Station for Research. Title: Physiology of Algal Symbiont Bearing Sponges.
12. December 1994: The College of Wooster, Department of Geology. Title: Biomechanics as a Tool for Interpreting the Biology and Ecology of Sponges.
13. December 1994: University of Southeastern Missouri, Departments of Geology and Biology. Title: Biomechanics as a Tool for Interpreting the Biology and Ecology of Sponges.
14. February 1995: State University of New York at Binghamton, Department of Geology. Title: Biomechanics of Sponges: What do Lake Baikal and Lower Cambrian Reefs Have in Common?
15. April 1995: Paleontological Society Symposium entitled "Inferring Animal Behavior in the Fossil Record". Presenter.
16. September 1995: Indiana University Bloomington, Department of Geological Sciences. Title: Practical and Philosophical Approaches to Functional Morphology: Good Science or Elaborate Story-Telling?
17. May 1997: Florida Gulf Coast University. Title: The Foundation of Science Education: "Practicing What We Teach".
18. June 1997: Georgia State University, Atlanta. Title: The Practice of Functional Morphology: Good Science or Elaborate Story-Telling?
19. January 1998: Florida Association of Environmental Professionals. Title: Influence of Climatic Change and Rising Sea Level on Coastal Environments in Southwestern Florida.
20. February 1998: Marco Island Shell Club. Title: Impact of Waterflow Alteration to Estuarine Life and Managing Flow Restoration.
21. July 1998: California State University at Monterey Bay. Title: Florida Gulf Coast University's Earth Systems Science Program and Its Innovative Approaches to Education.
22. October 1998: Estuarine Science Symposium at Rookery Bay NERR. Title: Oysters Past & Present: A Key to Southwest Florida Estuarine Health and Environmental Change. Savarese, M. & Surge, D. M.
23. September 1999: Coastal Zone Management Workshop for NERR. Title: Oyster health, growth, and geochemistry: indicators of estuarine degradation and metrics for restoration. Savarese, M. & Surge, D. M.
24. September 1999: Florida Gulf Coast University seminar series. Title: Effects of Water Management Upon Estuary Health. Savarese, M. & Surge, D. M.
25. October 1999: University of South Florida at Tampa, Department of Geology. Title: Oyster health, growth, and geochemistry: indicators of estuarine degradation and metrics for restoration.
26. February 2000: Marco Island Shell Club. Title: Estuary health through the "eyes" of an oyster.
27. May 2000: Lee County Paleontological Society. Title: Ecology and biology of the planet's first reef builders.
28. June 2000: South Golden Gate Estates Restoration Workshop, South Florida Water Management District. Title: Distribution and productivity of the eastern oyster: implications for the restoration of Faka-Union estuary.
29. June 2000: Society for the Study of Evolution Meeting. Title: 'Scientific Process': A course introducing the philosophy, methods, and ethics of science in preparation for independent research. Poster presentation by: Meers, M., Demers, N. E., and Savarese, M. [no published abstract].

30. October 2000: National Estuarine Research Reserve Association Meeting, Williamsburg, Virginia. Moderated a panel discussion entitled: Innovative Undergraduate Education & Research Experiences at Research Reserves.
31. May 2001: South Florida Ecosystem Restoration Task Force Meeting, Marco Island, Florida. Presented status of restoration coordination efforts within the Big Cypress Basin.
32. July 2001: Project Kaleidoscope Summer Institute, Snowbird, Utah. Fostering undergraduate science education through collaborative research in courses across the curriculum.
33. November 2001: 11th Southwest Florida Water Resources Conference. Sea level rise and its impact on coastal environmental evolution in Southwest Florida. Savarese, M., Tedesco, L. P., & Obley, S.
34. February 2002: South Florida Ecosystem Restoration Working Group's Science Coordination Team. Monitoring estuarine ecosystem health in Southwest Florida: testing restoration effectiveness.
35. February 2002: South Florida Ecosystem Restoration Working Group's Science Coordination Team. Overview of the Big Cypress Basin's Restoration Coordination Team.
36. February 2002: Sea level rise and its geomorphologic effects on Southwest Florida. Southwest Florida Gem and Rock Club.
37. March 2002: Sea level rise and its potential impact on Southwest Florida. Marco Island Shell Club.
38. March 2002: Oyster reefs as sentinels of ecosystem health: implications for environmental restoration. Sanibel-Captiva Shell Club.
39. April 2002: Oysters as sentinels for ecosystem health: implications for environmental restoration. Volety, A., Savarese, M., & Tolley, G. FGCU Research Day Celebration.
40. May 2002: Two presentations to FGCU's Renaissance Academy: (1) Sea level rise and its effects upon the Southwest Florida coast. (2) Oysters as sentinels of ecosystem health.
41. May 2002: Sea level rise and its effects upon the Southwest Florida coast. Lee County Paleontological Society.
42. July 2002: Southwest Florida Regional Restoration Coordination Team report presented to the South Florida Ecosystem Restoration Working Group.
43. November 2002: Late Holocene history of Southwest Florida: the impacts of reef development and sea level rise on coastal evolution. Everglades Geological Society.
44. December 2002: Natural history of Southwest Florida's estuaries. Workshop for Professional Sport Fishing Guides.
45. January 2003: The Big Cypress Basin – Estero Bay Restoration Coordination Team's Science Plan. Presented by: Rein, H. & Savarese, M. to the South Florida Ecosystem Restoration Working Group's Science Coordination Team.
46. May 2003: Connecting Science to Management. "State of the Coast" workshop for decision-makers of Collier County, Florida.
47. June 2003: Potential for utilization of remote sensing techniques in quantifying and characterizing intertidal oyster habitat in Southwest Florida estuaries. Savarese, M. and Tolley, G. NOAA-sponsored Coastal Issue Workshop at North Inlet-Winyah Bay NERR and Baruch Marine Laboratory, University of South Carolina.
48. July 2003: Environmental and hydrologic history of Estero Bay: implications for watershed management and restoration. Presentation of proposed work. South Florida Water Management District.
49. August 2003: Influence of watershed alteration on oyster health and oyster reef habitat: management implications for the Faka Union and Estero Bays. Big Cypress Basin Board of the South Florida Water Management District.
50. November 2003: Implications of sea level rise on past and future ecology of reef systems in South Florida. American Water Resources Association Conference.

51. January 2004: Everglades Restoration: The Method Behind the Madness. First Presbyterian Church of Bonita.
52. January 2004: Big Cypress Basin - Estero Bay Restoration Coordination Team: Report of Accomplishments. Big Cypress Basin Board of the South Florida Water Management District.
53. January 2004: The Effects of Sea-level Rise on Southwest Florida. Southwest Florida Watershed Council.
54. February 2004: Invited speaker at "Love Your Bay", a celebration surrounding the restoration of Naples Bay, sponsored by: City of Naples and the South Florida Water Management District.
55. April 2004: Orchestrating Everglades Restoration: An Example from the Ten Thousand Islands. FGCU Renaissance Academy at Rookery Bay National Estuarine Research Reserve.
56. April 2004: Effects of Sea-level Rise and Reef Development on the Evolution of the Southwest Florida Coast. Scientist Society of Southwest Florida.
57. September 2004: Coastal Processes and Their Effects Upon Southwest Florida. Coastal Training Institute, Rookery Bay National Estuarine Research Reserve.
58. November 2004: Environmental and Hydrologic History of Estero Bay: Implications for Watershed Management and Restoration. South Florida Water Management District.
59. November 2004: Everglades Restoration: The Method Behind the Madness. University of South Florida, Tampa.
60. January 2005: Moving Sands – Why Barrier Islands Are Always Changing. The Friends of Tigertail Beach.
61. February 2005: Coastal Response to Late Holocene Sea-level Rise in Southwest Florida. University of Miami.
62. February 2005: History of Reef Development. Gerace Research Center, San Salvador, Bahamas.
63. February 2005: Coastal Response to Late Holocene Sea-level Rise in Southwest Florida. Gerace Research Center, San Salvador, Bahamas.
64. March 2005: Marine Sciences at Florida Gulf Coast University. Marco Island Rotary Club.
65. November 2005: Naples Bay Oyster Reef Restoration Project. Naples City Council.
66. January 2006: Oyster Reef Restoration and Substrate Condition in Naples Bay. Big Cypress Watersheds Restoration Coordination Team.
67. January 2006: The Effect of Sea Level Rise on Southwest Florida. The Friends of Tigertail Beach.
68. February 2006: Oysters and the Design of Everglades Restoration Projects. Marco Island Shell Club.
69. April 2006: The Marriage of Teaching and Research: A Match Made in Heaven or One Necessitated by a Comprehensive University? Whitaker Center Faculty, FGCU.
70. April 2006: New Directions in Graduate Education. College of Arts & Sciences, FGCU.
71. April 2006: The Future of Graduate Education in Southwest Florida. Greater Fort Myers Chamber of Commerce.
72. July 2006: Landscape Pattern: Present and Past Distribution of Oysters in South Florida's Coastal Complex. Everglades National Park Staff.
73. September 2006: Summer Science Research Opportunity: A Collaborative Scientific Research Experience for Middle School Students. Florida State Science Fair Board.
74. January 2007: Monitoring the Health of Estuaries and the Science of Everglades Restoration. The Friends of Tigertail Beach.
75. February 2007: Climate Change and Sea-level Rise: Implications for Southwest Florida. Gulf of Mexico Alliance.
76. April 2007: Climate Change, Sea Level Rise, and Southwest Florida: Lessons from the Past and Implications for Its Future. FGCU's Research day.

77. May 2007: Thirty minute documentary for local television Comcast Broadcasting entitled Climate Change and Sea-level Rise: Implications for Southwest Florida; funded by the Gulf of Mexico Alliance.
78. September 2007: Savarese, M. & Linsin Wohlpart, S. Gauging Environmental Health and the Effects of Global Climate Change: A Study of Holocene Oyster Reef Development and Paleoecology. Dauphin Island Sea Lab, State of Alabama's Marine Science Institution.
79. September 2007: Geobiological Approaches to Managing Estuarine Restoration and the Effects of Climate Change in Southwest Florida. Department of Geology, Appalachian State University, North Carolina.
80. September 2007: Facilitated a workshop concerning Graduate Program Assessment for Appalachian State University's Graduate School.
81. September 2007: Climate Change, Sea-level Rise, and Their Implications for Southwest Florida. Two presentations given to Ecotour Operators of Lee and Collier Counties.
82. October 2007: Geobiological Approaches to Managing Estuarine Restoration and the Effects of Climate Change in Southwest Florida. Department of Geography and Geology, University of North Carolina at Wilmington.
83. October 2007: The Geologic History of Southwest Florida's Coastal Environments. Public lecture at FGCU's 10th Anniversary Celebration.
84. December 2007: Savarese, M., Volety, A. K., and Tolley, S. G. Estuarine restoration design and performance in the Ten Thousand Islands using aspects of oyster physiology and ecology. Mark A. Benedict Symposium on Science, Conservation, and Restoration of Southwest Florida Ecosystems.
85. January 2008: Focus the Nation and the Science of Climate Change. Gulf Coast Live, a call in radio show at WGCU, Southwest Florida.
86. January 2008: The Science of Climate Change. Plenary Speaker at Focus the Nation. Florida Gulf Coast University.
87. February 2008: The Geologic History of Estero Bay: The Influence of Sea-level Rise and Climate Change. Bailey-Matthews Shell Museum.
88. February 2008: The Marriage of Teaching and Research: A Match Ideally Suited for a Comprehensive University. FGCU Graduate Studies Workshop: Synergy Between Teaching and Scholarship: Improving Your Scholarship Through Teaching.
89. March 2008: Climate Change: Florida Adjusting to New Challenges. A presentation and moderated panel discussion for local government decision-makers. Gulf of Mexico Alliance, State of the Gulf Conference.
90. April 2008: Climate Change, Sea-level Rise, and Impact Upon Southwest Florida's Coastal Geomorphology. Ave Maria University.
91. August 2008: Graduate Student Mentorship – What A Student Should Expect. FGCU's New Graduate Student Orientation.
92. October 2008: Effects of Sea-level Rise and Oyster Reef Sedimentation Upon Estuary and Coastal Geomorphologic Development in Southwest Florida. University of Florida, Department of Geology.
93. November 2008: Sea-level Rise and Its Effects on Southwest Florida's Coastal Geomorphology and Estuary Development. Florida Coastal Ocean Observing Systems Consortium. Caucus 14: Climate Change: Florida's Changing Coastal Ocean Environment.
94. November 2008: The Holocene Development of Southwest Florida's Estuaries as Exemplified by Estero Bay. Savarese, M. & Wohlpart, S.L. Estero Bay Science Symposium sponsored by the South Florida Water Management District.
95. November 2008: Climate Change, Sea-level Rise, and Impact Upon Southwest Florida's Coastal Geomorphology. Annual Southwest Florida Water Resource Conference.

96. January 2009: Sea-level Rise and Its Effects Upon Southwest Florida. Greater Naples Leadership Master Class.
97. January 2009: Teaching and Research Synergy: Improving Faculty STEM Research Through Undergraduate Teaching Activities. FGCU Whitaker Center Workshop.
98. May 2009: Historic Development of the Estuarine Landscape in the Ten Thousand Islands and Everglades National Park: Differential Effects of Sea-level Rise and Oyster Reef Formation. South Florida Water Management District Headquarters.
99. September 2009: Ecological Succession within a Holocene Oyster Reef: An Indicator of Estuary Development in Southwest Florida. S. Linsin Wohlpart and M. Savarese. Poster presentation at Estero Bay Watershed Public Symposium.
100. October 2009: The Science, Design, and Implementation of Environmental Restoration: An Example from the Greater Everglades of Southwest Florida. Cornell College.
101. October 2009: Oyster Reefs, Sea-level Rise, and Their Effects on the Holocene Development of Coastal Geomorphology in Southwest Florida. Cornell College.
102. October 2009: 350 – International Day of Climate Action and “Naples” Leading the Way to Sustainability. Panelist to discuss Coastal Resilience for City of Naples.
103. November 2009: Canaries in the coal mine: Use of the oyster *Crassostrea virginica* responses in environmental monitoring and restoration. Volety, A. and Savarese, M. Greater Everglades RECOVER’s Southern Estuaries Evaluation Team meeting.
104. March 2010: Climate Change and Sea-level Rise: What Can We Expect in Southwest Florida? Marco Island Shell Club.
105. March 2010: Climate Change, Its Impact, and the Ethical Choices for Today and Tomorrow. Savarese, M. and Hartley, A. Naples Men’s Club.
106. March 2010: Student Research Integrated into the Classroom. Savarese, M. and Wohlpart, S.L. College of Arts & Sciences’ Teaching Breakfast.
107. April 2010: Is There Evidence for a Sea-level Highstand in Earth’s Recent Past (~3000-5000 ybp)? Clues, or Lack Thereof, From the Bahamas. Savarese, M. and Hoeflein, F. FGCU’s Research Day.
108. August 2010: Evolution of the Southwest Florida Coastline & Its Influence on the Region’s Ecology. NOAA MARES workshop for Integrated Conceptual Ecosystem Model Development.
109. January 2011: Climate Change, Sea-level Rise, and the Past and Anticipated Effects for Southwest Florida. Friends of Barefoot Beach.
110. April 2011: Climate Change, Sea-level Rise, and Future of Southwest Florida’s Estuaries. Bailey-Matthews Shell Museum.

GRADUATE STUDENTS

PhD Primary Advisor:

- (1) Karl Leonard, Geology, graduated: 12/99
"Sequence Stratigraphy of the Muscatatuck Group (Middle Devonian) in southern Indiana: implications for paleoecological analysis."

MS Primary Advisor:

- (2) Kristen Hagstrom, Geology, graduated: 5/96
"Effects of compaction and flow-induced forces on the preservation of naticid predator-prey interactions: implications for taphonomic biasing."
- (3) Lindsey Leighton, Geology, graduated: 8/95
"Factors influencing morphological variation in the articulate brachiopod *Rafinesquina alternata*."
- (4) Katrina Nell, Geology [Savarese left IU prior to graduation]

“Defensive and competitive mechanisms of the Porifera during modern and ancient times.”

(5) Donna Surge, Geology, graduated: 5/96
"Isotopic geochemistry of Lower Cambrian buildups: implications for photosymbiosis and diagenetic history."

(6) Susan Timmons, Geology [Savarese left IU prior to graduation]

(7) Barbara Ziegler, Geology, graduated: 5/95

"Application of fluid transport design theory to sponge functional morphology."

At Florida Gulf Coast University: MS in Environmental Science

(8) Heather Rein, MS Environmental Science. Started 9/02.

“Holocene history of Estero Bay, Southwest Florida.”

(9) Perry Dunlap, MS Environmental Science. Started 9/04.

"History of river sedimentation into Estero Bay."

(10) Amanda Booth, MS Environmental Science, graduated 12/08.

“Preservational analysis of oyster shells on estuarine reefs: a technique to interpret the history of coastal environmental change.”

(11) Sasha Linsin Wohlpart, MS Environmental Science, graduated: 7/07.

“The development of estuarine systems in Southwest Florida: a perspective from the late Holocene history of oyster reef development.”

(12) Brian Hoye, MS Environmental Science, graduated 12/08.

“Holocene history of the coastal geomorphology of Everglades National Park: the roles of reef development, tidal pond formation, and sea-level rise.”

(13) Jorge Agobian, MS Environmental Science, graduated 12/09.

"The impact of water management practices in the Caloosahatchee River: mollusk assemblages as indicators of environmental change."

(14) Kimberly Pierce, Environmental Science, anticipated graduation 12/10.

“Effects of sea-level rise and water management on coastal wetlands in the Ten Thousand Islands, Southwest Florida.”

PhD Secondary Advisor (IU student unless otherwise noted):

(15) Tadewos Assebework, Anthropology [Savarese left IU prior to graduation]

(16) Wesley Boberg, Science Education [Savarese left IU prior to graduation]

(17) Zhuan Dong, Anthropology, graduated: 12/95

(18) Gary Garufi, Anthropology [Savarese left IU prior to graduation]

(19) Amy Krist, Biology, graduated: 5/98

(20) Amalia Olivera, Geology, Purdue University, graduated: 7/95

(21) Nanlin Peng, Anthropology [Savarese left IU prior to graduation]

(22) Mary Pirkel, Anthropology [Savarese left IU prior to graduation]

(23) Mohamed Sahnouni, Anthropology, graduated: 12/95

(24) Ruilang Wang, Geology, graduated: 5/96

MS Secondary Advisor:

(25) Audrey Aronowsky, Geology [Savarese left IU prior to graduation]

(26) Wesley Boberg, Geology, graduated: 12/90

(27) Erin Holman, Geology, University of Cincinnati [Savarese left IU prior to graduation]

(28) Bryan Fielder, Geology, Texas A&M Galveston, anticipated graduation: 5/06.

At Florida Gulf Coast University: MS in Environmental Science, unless otherwise specified

(29) Karen Koy, MS Student at IUPUI, graduation: 5/03.

(30) Michael Mazzaro, anticipated graduation: 12/05.

(31) Kevin Kaufman, anticipated graduation: 12/05.

(32) Laura Walls, anticipated graduation: 12/05.

(33) Falon Cartwright, anticipated graduation: 12/10.

UNDERGRADUATE RESEARCH, INTERN SUPERVISION, & STUDENT HONORS

At Indiana University:

1. Tim Bonafair, Geobiology Intern from Indiana University, Summer, 1994.
2. Louis Bucklin, Senior Honors Thesis: Paleocology of Lower Cambrian reefs, Spring, 1996.
3. Hilary Davis, Geobiology Intern from Guilford College, Summer, 1993
4. Michael Delgass, Senior Honors Thesis: Stable isotopic compositions of modern reef-building corals, Spring, 1992.
5. Rebecca Robinson, Junior Research: Petrology of 18th Century shipwreck ballast stones, Spring, 1992.
6. Jeremy Sadler, Geobiology Intern from DePauw University, January, 1994.
7. Eric Shock, Honors Division Associate Instructor Internship for G112 (Historical Geology), Spring, 1991.
8. Mimi Tzeng, Senior Thesis: Pumping rates and feeding activities of sponges from Florida Keys, Spring, 1995.
9. Gary Wilhite, Senior Thesis: Functional morphology of concavo-convex brachiopods, Spring, 1996.

At Florida Gulf Coast University:

10. Krista Sarver, Florida Institute of Technology, Senior Thesis, Spring '97 - Fall '97.
11. Alex Sulecki, Senior Thesis & Internship, Fall '97 - Summer '98.
12. James Rotz, Senior Thesis, Fall '97 - Spring '98.
13. Shannon Platz, Senior Thesis, Fall '97 - Spring '98.
14. Debbie Johnston, Senior Thesis, Spring '98 - Summer '98.
15. Jonathan Sheppard, Senior Thesis, Spring '98 - Summer '98.
16. Steve Brewster, Research Intern & Senior Thesis, Fall '98 – Fall '99.
17. Alex Sulecki. Undergraduate research proposal published within Ampersand (FGCU's on-line journal). Spring '98.
18. Betty Gilpin. Undergraduate research proposal published within Ampersand. Spring '99.
19. Undergraduate collaborative research abstracts submitted to Geological Society of America, Southeastern meeting, Spring '99 (see abstract numbers 44, 45, & 47).
20. Steve Brewster, undergraduate co-author of abstract submitted to American Society of Limnology and Oceanography meeting (see abstract number 43).
21. Supervised interns working on "Restoring estuarine habitat quality" grant: Cheryl Layton, Jon Sheppard, Derek Low (F'99); Sara Hammermeister, Craig Thompson, Steve Brewster (S'00).
22. Michael Lucas, Senior Thesis, Spring '99 – Fall '99.
23. Gary Rullo, Senior Thesis, Fall '99.
24. Steve Brewster, Spring '00. Recipient of undergraduate research award. \$350 from the Marco Island Shell Club.
25. Stephanie Obley, Spring '00. Recipient of undergraduate research award. \$1560 from the Hudson Fund for Marine Research. \$1800 from FGCU's Office of Research and Sponsored Programs.
26. Undergraduate collaborative research abstracts submitted to Geological Society of America, Southeastern meeting, Spring '00 (see abstract number 47).
27. Sara Hammermeister, Spring '00. Recipient of Sea Grant's Aylesworth Scholarship for Marine Science.

28. Michael Lucas, Fall '00. Recipient of FGCU's Grant-in-aid for Continuing Education. Award is for a one-semester sabbatical leave for a staff member to pursue an undergraduate degree.
29. Supervised interns working on "Oysters as measures of ecosystem health" grant: Sara Hammermeister, Craig Thompson, & Emily Lindland (Summer & Fall '00); Emily Lindland, Sherith Bankston, Rashel Grindberg (Spring '01).
30. Undergraduate collaborative research abstract submitted to Geological Society of America, Southeastern meeting, Spring '01 (see abstract number 54).
31. Emily Lindland, Spring '01. Recipient of undergraduate research award. \$500 from the Marco Island Shell Club & \$1000 from the Lee County Explorer Scouts.
32. Undergraduate research thesis presentations at the Estuarine Research Federation meeting: Lindland (abstract 58) and Obley (abstract 59).
33. Best student presentation award to Emily Lindland at Estuarine Research Federation meeting (abstract 58).
34. Best student research award to James Leavor and Michael Chichester, FGCU 1st Annual Research Day.
35. James Leavor, Senior Thesis, Spring '03: Effects of salinity on the distribution of molluscs within the Caloosahatchee River estuary.
36. Todd Bost, Michael Chichester, & Heather Rein, Spring '03. Recipients of undergraduate travel awards.
37. Molly Meadows, Spring '03. Senior thesis: Clastic sedimentology of mangrove peats.
38. Brian Marlowe, Spring '03 to present. Senior thesis: Effect of tidal exposure to the degradation of red mangrove leaf litter.
39. Susan Cone, Fall '03 to present. Senior thesis: Influence of recent sea level rise on coastal fresh- and brackish-water wetlands.
40. Susan Cone, Spring '03. Recipient of student research award from the Everglades Geological Society.
41. Susan Cone, Kamila Diddle, and Brian Marlowe. Spring '04. Recipient of FGCU's Student Research Day Award. Title: Recent effects of sea-level rise on coastal wetlands in Southwest Florida.
42. Arvind Krishnan. Spring '04. Middle school student. Winner of regional science fair and honorable mention in Florida State Science Fair. Title: Oyster reef development on inactive tidal deltas within Estero Bay.
43. Bahar Shah. Fall '04. Middle school student. Science fair project. Title: The effect of differential predation pressure on oyster morphology across an estuarine salinity gradient.
44. Philip Schaller. Fall '04. Undergraduate intern. Title: An analysis of salinity tolerances among south Florida's mollusks.
45. Amanda Bridges. Fall '04. Undergraduate intern. Title: The interpretation of late Holocene history of Estero Bay.
46. Jorge Agobian. Spring '05. Graduate student. Recipient of Marco Island Shell Club research award. \$600.
47. Amanda Bridges. Spring '05. Graduate student. Recipient of Marco Island Shell Club research award. \$600.
48. Student research travel awards to: Jorge Agobian, Amanda Bridges, Julianna DeFrota, Andrew Erickson, and Laura Markley. Spring '05. Travel to Geological Society of America meeting, Biloxi, Mississippi.
49. Bridges, A., Agobian, J., Markley, L., Erickson, A., Coventry-Payne, L., DaFrota, J., & Ercolani, C. Spring '05. Title: Variation in taphonomic signatures among oyster reefs across an estuarine environmental gradient: implication for interpreting sea-level rise history. College of Arts & Sciences Best Student Research Award.

50. Laura Walls. Spring '05. Title: Responses of oyster-reef organisms to variation in freshwater inflow and their use in the restoration of Southwest Florida estuaries. College of Arts & Sciences Best Student Research Award.
51. Amanda Bridges. Fall '05. Research award to support travel to Curacao from Whitaker Center & the Office of Research and Sponsored Programs.
52. Justin Barthle. Spring '09. Title: Reconstructing former Southwest Florida's barrier island down-core history from the distribution of estuarine and open shelf facies.
53. Erin Maguire. Spring '10. Title: Comparing death assemblages of mollusks along a salinity gradient in Pumpkin Bay.
54. Hannah Raney. Spring & Fall '10. Title: Use of life and death mollusk assemblages in reconstructing pre- and post-water management conditions in the Ten Thousand Islands.

At Other Colleges / Universities:

54. Nine students from Keck Geoscience Consortium schools participating in Undergraduate Research Expedition (estuarine processes & human alteration) during summer '99.
55. Eleven students from Keck Geoscience Consortium schools participating in Undergraduate Research Expedition (late Holocene history of SW FL coast) during summer '01.

PROFESSIONAL AFFILIATIONS

Paleontological Society
 International Paleontological Association
 Geological Society of America
 American Geophysical Union
 SEPM -- Society for Sedimentary Geology
 Sigma Xi
 National Association of Geology Teachers
 International Society for Reef Studies
 American Society of Limnology and Oceanography
 Estuarine Research Federation
 Project Kaleidoscope
 National Shellfisheries Association
 Council of Graduate Schools
 Conference of Southern Graduate Schools