

CURRICULUM VITAE

Michael Savarese

September 7, 2006

PERSONAL

Title: Professor of Marine Science and Director of University Graduate Studies
Florida Gulf Coast University (FGCU)
Research Scientist, Rookery Bay National Estuarine Research Reserve (RBNERR)

Address: H: 3734 Recreation Lane, Naples, FL 34116
W: Florida Gulf Coast University, College of Arts and Sciences, Coastal Watershed
Institute and Department of Marine and Ecological Sciences, 10501 FGCU Blvd.
South, Fort Myers, FL 33965

Phone: H: (239) 455-2756; Cell: (239) 289-1163
W: Office: (239) 590-7165 [Room 210, Whitaker Hall] Fax: (239) 590-7200

Email: msavares@fgcu.edu

Birthdate: July 16, 1959

POSITIONS HELD

15. Fall, 2005 – Present:
Director of Graduate Studies, Florida Gulf Coast University
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, marine biology, functional morphology and biomechanics, reef & estuarine ecology, evolution, historical geology, sedimentology, and stratigraphy.

GENERAL RESEARCH INTERESTS

Sea-level rise and recent history of the Southwest Florida coast
Estuarine ecosystem health, management, and restoration.
Influence of suspension feeders upon water quality and food and nutrient availability; effects of fluid flow and water quality upon suspension feeding.
Interpreting subrecent estuarine environmental conditions using geological techniques: implications for ecosystem restoration.
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

- Oyster reef, sea floor, and sub-seafloor mapping of Southwest Florida's estuaries using side-scan sonar and Chirp technology.
- Ecology and physiology of the eastern oyster, *Crassostrea virginica*, as measures of estuarine ecosystem health: implications for watershed management and restoration. Collaborative research with Drs. Aswani Voley and Greg Tolley.
- The implications of sea level rise on the coastal geomorphologic and environmental evolution of Southwest Florida.
- Geochemistry of near-recent oyster shells as paleoenvironmental indicators: establishing pre-human alteration conditions for watershed restoration. Collaborative research with Ms. Donna Surge.

- The influence of water control structures on the distribution and transport of sediments, organic and metal pollutants, and exotic fishes within estuaries. Collaborative research with Drs. Lenore Tedesco, Michael Shirley, Gabe Filippelli, and Ms. Sharon Thurston.
- The paleoenvironmental context of Pliocene reefs of Southwest Florida.
- Collaborative undergraduate research experiences: their value in the teaching of science.

PAPERS

In Review:

44. Tolley, S.G., Volety, A.K., Savarese, M., Walls, L.D., Linardich, C., and Everham, E.M. III. Multivariate approach to understanding spatial variability of oyster-reef communities. Submitted to: Aquatic Living Resources.

In Print:

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., Volety, 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 (those from the last 4 years)

In Press:

104. Savarese, M., Bridges, A.C., and Linsin, S.R. In press. 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).

In Print:

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. 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.
97. 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.
96. 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.
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.
40. 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.*

TEACHING EXPERIENCE (since arriving at FGCU)

- 2006 Spring: Coastal & Watershed Geology; Graduate Seminar in Taphonomy. Summer: Modern and Ancient Carbonate Depositional Environments: A Field Course in San Salvador, Bahamas; Science workshop 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: Science workshop for Lee & Charlotte County middle school students. Fall: Invertebrate Zoology.
- 2004 Spring: Coastal & Watershed Geology; Topical Seminar: Estuarine Management and Restoration; Advanced Sedimentology. Summer: Science workshop 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?

MISCELLANEOUS PROFESSIONAL EXPERIENCE

- 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 mangement 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-convenor 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-convenor 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 (since arriving at FGCU)

- 54. 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.
- 53. 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.
52. 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.
 51. 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.
 50. 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).
 49. 2005 Development of a field-based course in the Geology of Tropical Marine Environments, San Salvador, Bahamas. Savarese, M. FGCU Professional Development Grant. \$900.
 48. 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.
 47. 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.
 46. 2004 History of environmental change in Estero Bay, Southwest Florida. Savarese, M. South Florida Water Management District. \$9,986.
 45. 2004 Molluscs as environmental indicators of salinity change in southern Florida's estuaries. Savarese, M. & Wingard, L. South Florida Water Management District. \$9,986.
 44. 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.
 43. 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.
 42. 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.
 41. 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.
 40. 2003 Effects of late Holocene environmental change on the mollusc assemblages within Estero Bay. Savarese, M. South Florida Water Management District. \$10,000.
 39. 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.
 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.

PROPOSAL, MANUSCRIPT, PROGRAMMATIC & BOOK REVIEWS (since arriving at FGCU)

- 2006: Manuscript for journal Estuaries and Coasts.
- 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.

HONORS, AWARDS, AND APPOINTMENTS

- 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".
- '98- 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- 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 (those from the last 4 years)

23. 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.
24. May 2003: Connecting Science to Management. “State of the Coast” workshop for decision-makers of Collier County, Florida.
25. 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.
26. July 2003: Environmental and hydrologic history of Estero Bay: implications for watershed management and restoration. Presentation of proposed work. South Florida Water Management District.
27. 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.
28. November 2003: Implications of sea level rise on past and future ecology of reef systems in South Florida. American Water Resources Association Conference.
29. January 2004: Everglades Restoration: The Method Behind the Madness. First Presbyterian Church of Bonita.
30. January 2004: Big Cypress Basin - Estero Bay Restoration Coordination Team: Report of Accomplishments. Big Cypress Basin Board of the South Florida Water Management District.
31. January 2004: The Effects of Sea-level Rise on Southwest Florida. Southwest Florida Watershed Council.
32. 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.
33. April 2004: Orchestrating Everglades Restoration: An Example from the Ten Thousand Islands. FGCU Renaissance Academy at Rookery Bay National Estuarine Research Reserve.
34. April 2004: Effects of Sea-level Rise and Reef Development on the Evolution of the Southwest Florida Coast. Scientist Society of Southwest Florida.
35. September 2004: Coastal Processes and Their Effects Upon Southwest Florida. Coastal Training Institute, Rookery Bay National Estuarine Research Reserve.
36. November 2004: Environmental and Hydrologic History of Estero Bay: Implications for Watershed Management and Restoration. South Florida Water Management District.
37. November 2004: Everglades Restoration: The Method Behind the Madness. University of South Florida, Tampa.
38. January 2005: Moving Sands – Why Barrier Islands Are Always Changing. The Friends of Tigertail Beach.
39. February 2005: Coastal Response to Late Holocene Sea-level Rise in Southwest Florida. University of Miami.
40. February 2005: History of Reef Development. Gerace Research Center, San Salvador, Bahamas.
41. February 2005: Coastal Response to Late Holocene Sea-level Rise in Southwest Florida. Gerace Research Center, San Salvador, Bahamas.
42. March 2005: Marine Sciences at Florida Gulf Coast University. Marco Island Rotary Club.
43. November 2005: Naples Bay Oyster Reef Restoration Project. Naples City Council.
44. January 2006: Oyster Reef Restoration and Substrate Condition in Naples Bay. Big Cypress Watersheds Restoration Coordination Team.

45. January 2006: The Effect of Sea Level Rise on Southwest Florida. The Friends of Tigertail Beach.
46. February 2006: Oysters and the Design of Everglades Restoration Projects. Marco Island Shell Club.
47. April 2006: The Marriage of Teaching and Research: A Match Made in Heaven or One Necessitated by a Comprehensive University? Whitaker Center Faculty, FGCU.
48. April 2006: New Directions in Graduate Education. College of Arts & Sciences, FGCU.
49. April 2006: The Future of Graduate Education in Southwest Florida. Greater Fort Myers Chamber of Commerce.
50. July 2006: Landscape Pattern: Present and Past Distribution of Oysters in South Florida's Coastal Complex. Everglades National Park Staff.
51. September 2006: Summer Science Research Opportunity: A Collaborative Scientific Research Experience for Middle School Students. Florida State Science Fair Board.

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. Started 9/02.
"Holocene history of Estero Bay, Southwest Florida."
- (9) Perry Dunlap. Started 9/04.
"History of river sedimentation into Estero Bay."
- (10) Jorge Agobian. Started 9/04.
"Mollusks as salinity indicators in evolving estuaries."
- (11) Amanda Bridges. Started 1/05.
"Taphonomy of oyster reefs."
- (12) Sasha Linsin. Started 9/05.
"Paleoenvironmental history of Holocene oyster reefs as recorded by stable isotope geochemistry of oyster shell."

PhD Secondary Advisor (IU student unless otherwise noted):

- (13) Tadewos Assebework, Anthropology [Savarese left IU prior to graduation]
- (14) Wesley Boberg, Science Education [Savarese left IU prior to graduation]
- (15) Zhuan Dong, Anthropology, graduated: 12/95
- (16) Gary Garufi, Anthropology [Savarese left IU prior to graduation]
- (17) Amy Krist, Biology, graduated: 5/98
- (18) Amalia Olivera, Geology, Purdue University, graduated: 7/95
- (19) Nanlin Peng, Anthropology [Savarese left IU prior to graduation]
- (20) Mary Pirkel, Anthropology [Savarese left IU prior to graduation]
- (21) Mohamed Sahnouni, Anthropology, graduated: 12/95
- (22) Ruilang Wang, Geology, graduated: 5/96

MS Secondary Advisor:

- (23) Audrey Aronowsky, Geology [Savarese left IU prior to graduation]
- (24) Wesley Boberg, Geology, graduated: 12/90
- (25) Erin Holman, Geology, University of Cincinnati [Savarese left IU prior to graduation]
- (26) Bryan Fielder, Geology, Texas A&M Galveston, anticipated graduation: 5/06.

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

- (27) Karen Koy, MS Student at IUPUI, graduation: 5/03.
- (28) Michael Mazzaro, anticipated graduation: 12/05.
- (29) Kevin Kaufman, anticipated graduation: 12/05.
- (30) Laura Walls, anticipated graduation: 12/05.

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: Paleoecology 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.

At Other Colleges / Universities:

52. Nine students from Keck Geoscience Consortium schools participating in Undergraduate Research Expedition (estuarine processes & human alteration) during summer '99.
53. 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