**Diane Te Strake**Professor and CMMB Director of Undergraduate Studies

**Contact**

Office: BSF ISA 203 2018F  
Phone: 813/974-1594  
Email: [testrake@usf.edu](mailto:testrake@usf.edu)

**Education**

B.S. 1957, University of Florida  
M.A. 1959, Duke University

**Teaching**

Assistant Professor, 1960-62, Greensboro College, N.C.  
Assistant Professor, 1966-67, California State College  
Assistant Professor, 1967-70, University of South Florida  
Assistant Chairperson, 1975-1979, University of South Florida   
Associate Professor, 1970-90, University of South Florida   
Professor, 1990- , University of South Florida  
Interim Associate Dean, Research and Operations, College of Arts and Sciences, 1995-96,   
University of South Florida  
Associate Dean, Research and Operations, College of Arts and Sciences 1996-2001  
Director Undergraduate Studies, Department of Cell Biology, Molecular Biology and Microbiology 2008-  
Director of USF Herbarium January 2010-

**Research**

GENERAL RESEARCH AREA:  
Marine and medically important fungi

SPECIFIC RESEARCH AREA:   
The widely distributed saprobic fungus, *Basidiobolus*, is sometimes a pathogen of humans and other vertebrates, primarily in tropical areas. One long-range goal of my research is to obtain, information about the physiology, pathogenicity, and distribution of this fungus that is also reported to be an insect pathogen. With colleagues, I hope to determine how much variability exists among these taxa from temperate and tropical environments, and how it might relate to the pathogenicity of this fungus.

Other  interests involve plant/fungal and plant/fungal/insect relationships. Several of these are focused in the marine and coastal environments.

### Recent Publications

1. Frye, B.E. and D. Te Strake. 1956. A preliminary survey of the habitat types of two species of Cypripedium,C. calceolus var. pubescens and C. acaule. Virginia Jour. Sci. 7: 176-188. (R)
2. Te Strake, D. 1959. Estuarine distribution and saline tolerance of some Saprolegniaceae.
3. Phyton (Intenat'l. Jour. Exp. Bot.)12: 147-152. (R)
4. Wagner, D. Te Strake. 1965. Developmental morphology of Leptosphaeria discors(Saccardo and Ellis) Saccardo and Ellis. Nova Hedwigia 9: 45-61. (R)
5. Johnson, T.W. and D. Te Strake Wagner. 1967. Aquatic fungi of the Lake Itasca region. Duke University (mimeo) 111 pages.
6. Wagner, D. Te Strake. 1969. A monocentric, holocarpic fungus in Lemna minor L. Nova Hedwigia 18: 203-208. (R)
7. Wagner, D. Te Strake. 1969. Ecological studies on Leptosphaeria discors, a graminicolus fungus of salt marshes. Nova Hedwigia 18: 383-396. (R)
8. Wagner, D. Te Strake. 1970. Audience participation in demonstrating the Hardy- Weinberg Law in mass lecture. Bull. Assoc. S.E. Biologists 17: 75- 76. (R)
9. Wagner-Merner, D. Te Strake and C.J. Dawes. 1970. Taxonomic revision of Saprochaetae
10. saccharophila. Mycologia 62: 791- 796. (R)
11. Wagner-Merner, D. Te Strake, G. Griepenburg, and K. Tyson. 1970. Mosses of the Tampa Bay Area. University of South Florida. 56 pp.
12. Wagner-Merner, D. Te Strake. 1972. Arenicolous fungi from the south and central Gulf Coast of Florida. Nova Hedwigia 23: 915-922. (R)
13. Bergen, L. and D. Te Strake Wagner-Merner. 1977. Comparative survey of fungi and potential pathogenic fungi from selected beaches in the Tampa Bay area. Mycologia 69: 299-671. (R)
14. Wagner-Merner, D. Te Strake. 1979. Observations on a trichomycete from Uca pugilatorMycologia 71: 669-671. (R)
15. Wagner-Merner, D. Te Strake. 1979. Dispersed fungal spores associated with a central Florida peat bog. Nova Hedwigia 31: 667-675. (R)
16. Wagner-Merner, D. Te Strake and J.M. Lawrence. 1980. Occurrence of fungi (Thraustochytriaceae) in the gut of Lytechinus variegatus(Lamarck) (Echinodermata: Echinoidea). Florida Scientist 43: 62-63. (R)
17. Wagner-Merner, D. Te Strake, W.R. Duncan and J.M. Lawrence. 1980. Preliminary comparison of Thraustochytriaceae in the guts of a regular and irregular echinoid. Botanica Marina 23: 93-97. (R)
18. Wagner-Merner, D. Te Strake. 1980. Estuarine distribution of Saprolegniaceae in the Tampa Bay area: I. Botanica Marina 23: 707-709. (R)
19. Eilers, F.I., D. Te Strake Wagner-Merner and J.A.Kimbrough. 1980. Rare occurrences of large mushrooms {Tricholoma)sp. Florida Scientist 43: 50-54. (R)
20. Wagner-Merner, D. Te Strake. 1980. Bryophytes of Hillsborough River State Park, Florida. I. Mosses. Castanea 45: 97-100. (R) ,
21. Yangco, B.G., J. Okafor and D. Te Strake. 1984. In Vito susceptibilities of human and wild- type isolates of Basidiobolus andConidiobolus species. Antimicrobial Agents and Chemotherapy 25: 413-416. (R)
22. Okafor, J.,D. Te Strake, H. Mushinsky and B.G. Yangco. 1984. A Basidiobolus sp. and its association with reptiles and amphibians in Southern Florida. Sabouraudia: J.of Vetern. Mycology 22: 47-51. (R)
23. Yangco, B.G., D. Te Strake and J. Okafor. 1984. Phialophora richardsiae isolated from infected human bones: morphological physiological susceptibility studies. Mycopathologia 86: 103-111 (R)
24. Halvorson, M., D. Te Strake and D.F. Martin. 1984. The effect of aponin, substances from a green alga Nannochloris sp., on spore germination of two fungi. Microbios 41: 105-113. (R)
25. Te Strake, D. and H. Aldrich. 1984. Ultrastructure of two associations involving marine fungi and green algae. Botanica Marina 26: 515-519. (R)
26. Te Strake, D., R.B. Lassiter, I.A.Lassiter and D.A. Breil. 1985. Bryophytes from mangroves and adjacent shoreline plant communities of Tampa Bay, Florida. Florida Scientist 49: 31-39. (R)
27. Te Strake, D. 1985. Fungi, their occurrence and potential roles in the Tampa Bay Ecosystem. p. 305-327. Tampa Bay Area Scientific Information Symposium. Simon, J.and E. Esteves (eds.). (R)
28. Yangco, B.G., A. Nettlow, J. Okafor, J.Park and D. Te Strake. 1986. Comparative antigenic studies of species of Basidiobolus and other medically important fungi. J.Clinical Microbiology 23(4):679-682. (R)
29. Te Strake, D. 1986. Ulcerative Mycosis: Research in Florida, Fourth Annual Neuse River Foundation Symposium. New Bern, N.C. p. 27-28.
30. Te Strake, D. and D. V. Lim. 1988. Bacterial and fungal studies of ulcerative fish in the St. Johns River. Department of Environmental Regulation, State of Florida. Report: contract WM138.
31. Okafor, J.,H.C. Gugnani, D. Te Strake and B. Yangco. 1987. Extracellular enzyme activities by Basidiobolus and Condidiobolus isolates on solid media. Mykosen 30(9): 404-407. (R)
32. Te Strake, D., W.C. Jaap, E. Truby and R. Reese. 1988. Fungal filaments in Millepora complanata Lamarck, 1816 (Cnidaria: Hydrozoa) after mass expulsion of zooxanthellae. Florida Scientist 51: 184-188. (R)
33. Dykstra, M.J., J.F. Levine, E.J. Noga, J.W. Hawkins, P. Gerdes, W.J. Hargis, H.J. Hargis and D. Te Strake. 1989. Ulcerative Mycosis: A serious menhaden disease of the southeastern coastal fisheries of the United States. Journal of Fish Diseases 12: 175-178. (R)
34. Te Strake, D., J. Park and B. Yangco. 1989. Exoantigen comparisons of selected isolates of
35. Basidiobolus species. Mycologia 81: 284-288. (R)
36. Alberts, V., S. Khan, D. Lim and Diane Te Strake. 1989. Extracellular enzyme activity of some
37. Saprolegniaceae from a Florida estuary. Mycologia 81: 460-463. (R)
38. Cochrane, B., J. Brown, R. Wain, B. Yangco, and Diane Te Strake. 1989. Genetic studies in the genus Basidiobolus I. Isozyme variations among isolates of human and natural populations. Mycologia 81: 504-513. (R)
39. McGarey, D.J., T. Kraxberger Beatty, V.A. Alberts, D. Te Strake and D.V. Lim. 1990. Investigations of potential microbial pathogens associated with ulcerative disease syndrome (UDS) of, Florida fish. In F.O. Perkins and T.C. Cheng (ed) Pathology of Marine Science, pp. 65-75, Academic Press, New York. (R)
40. Nelson, R., D., Te Strake, B. Yangco, and B. Cochrane. 1990. Genetic studies in the genus
41. Basidiobolus, phylogenetic relationships inferred from ribosomal DNA analysis. J. Exptl. Mycology 14: 197-206. (R)
42. Nelson, R., D., B. Cochrane, and D. Te Strake. 1998. The distribution of Basidiobolus and Conidiobolus in soil and litter at sites near Tampa, Florida. Mycologia 90: 121-134. (R)
43. Essig, F.B., Y. R. Taylor and D. Te Strake. 1999. Florida's Wax Palm: The Silver Form of Serenoa repens (Arecacaceae) Florida Scientist 63: 13-16. (R)
44. Nelson, R., B. Cochrane, P. Delis, and D. Te Strake. 2002. Basidioboliasis in Anurans in Florida. Journal of Wildlife Diseases. 38: 463-467.
45. TeStrake, D. 2003. AAAS Report to MSA. Inoculum: 54:17
46. TeStrake, D. 2006. Fungi Associated with Borrichia frutescens (Asteraceae): insect galls and endophytes. Sida. 22(1):755-763.
47. TeStrake, D. 2007. Ruminations. Pinesong August p.4