

Curriculum Vitae – Karen A. Steidinger

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Education

Ph.D. 1979 University of South Florida, Tampa FL. (Biology)
M.A. 1971 University of South Florida, Tampa, FL (Marine Science)
B.A. 1968 University of South Florida, Tampa Florida (Zoology)

Professional Experience

2011-current OPS Research Scientist, Fish and Wildlife Research Institute, Florida Fish and Wildlife Conservation Commission, St. Petersburg, FL, part-time
2005-2013 Harmful Algae Specialist, Florida Institute of Oceanography, University of South Florida, St. Petersburg, FL, full time to part-time
1993-2003 Senior Research Scientist, Florida Marine Research Institute, Florida Department of Natural Resources St. Petersburg, FL
1980-1993 Chief of Marine Research, then Chief of the Florida Marine Research Institute, Florida Department of Natural Resources/Florida Department of Environmental Protection, St. Petersburg, FL
1978-1980 Laboratory Supervisor, Marine Research Laboratory, Florida Department of Natural Resources, St. Petersburg, FL
1974-1978 Botany and Technical Sciences Section Supervisor, Marine Research Laboratory, Florida Department of Natural Resources, St. Petersburg, FL
1963-1974 Laboratory Technician, and Marine Biologist, Florida Department of Natural Resources, St. Petersburg, FL

Awards/Elections/Appointments (Partial)

Yasumoto Lifetime Achievement Award, International Society for the Study of Harmful Algae, 2008
Gulf Guardian Award, Individual, 2nd Place, Environmental Protection Agency Gulf of Mexico Program, 2008
Editorial Board, *Protist*, 2004-2006
President, International Society for the Study of Harmful Algae, 2000-2004
Lifetime Achievement Award, Phycological Society of America, 2003
Wildlife Foundation of Florida Louise Ireland Humphrey Award, 2001
Vice-President, International Society for the Study of Harmful Algae, 2000
Courtesy Professor, College of Marine Science, University of South Florida, 1981- 2004
Member, Marine Fisheries Advisory Committee, U. S. Department of Commerce, 1994-1997
State Co-Chair, Living Aquatic Resources Committee, EPA Gulf of Mexico Program, 1992-1997
Reviewer Board Member of *Transactions of American Microscopical Society*, 1986-1994
Editorial Board, *Journal of Phycology*, 1990-1992; 2005 – 2007, 2012-2014

Member-at-Large of American Microscopical Society 1985, 1986, 1989
Executive Committee Member of Southern Association of Marine Laboratories, 1986-1987
1983 Florida Academy of Sciences Medalist of the Year

Dinoflagellate Course Instructor (Partial)

2019-2018 Advisory to 3rd and 4th U.S. Course on Harmful Algal Taxonomy, Maine
2017-2016 1st and 2nd U.S. Course on Harmful Algal Taxonomy, East Boothbay, Maine
2015, Advanced Phytoplankton Course 11, October, Stazione Zoologica Napoli, Italy
2014 3rd International Phytoplankton Identification Workshop July, Marine Biological Association, U.K.
2012 2nd International Phytoplankton Identification Workshop July, Marine Biological Association, U.K.
2011 EPA/GOMA Gulf of Mexico Harmful Algal Bloom Taxonomy Training Workshop, Florida Keys
2009-2011 Curso-Taller Sobre Detección, Identificación, y Cuantificación de Florecimientos Algales Nocivos y Otras Especies de Fitoplacton en Aguas Costeras del Golfo de México, Chetumal, Mérida, Campeche, Villahermosa, México
2005, 1998, 1995, 1990, 1985 Advanced Phytoplankton Course, Italy, co instructor
1998 CDC sponsored Course on Identification of *Pfiesteria* and other Dinoflagellates, Florida
1989 AASP Course on Neogene to Holocene Dinoflagellates, Tulsa, Oklahoma (Living Dinoflagellate Instructor)
1983 University of Oslo International Phytoplankton Course, Drobak, Norway

Interests

My research interests include the systematics and biology of marine dinoflagellates, particularly toxic species, their morphology, ultrastructure, life cycles, and adaptations. My HAB management interests are mitigation strategies and the importance of education and outreach in mitigation.

Selected Publications (of >100)

2018 Steidinger, K. A. Chapter III: Toxic and potentially harmful dinoflagellates in the Gulf of Mexico. In Steidinger, K. A. and Meave del Castillo, M. E. (Eds.) Guide to the Identification of Harmful Microalgae in the Gulf of Mexico, Volume I: Taxonomy, pp. 211-342. St. Petersburg, FL: Florida Fish and Wildlife Research Institute. PDF. Retrieved (Date) from <http://myfwc.com/research/redtide/research/scientific-products/>

2018 Steidinger, K. A. and Christman, M. C. Chapter VI: Post-sampling treatment, laboratory methods, and approaches for marine microalgae quantification. In Steidinger, K. A. and Meave del Castillo, M. E. (Eds.) Guide to the Identification of Harmful Microalgae in the Gulf of Mexico, Volume II: Methods & Approaches, pp. 407-432. St. Petersburg, FL: Florida Fish and Wildlife Research Institute. PDF. Retrieved (Date) from <http://myfwc.com/research/redtide/research/scientific-products/>

2015 Tong, M., Smith, J. L., Richlen, M., Steidinger, K. A., Kulis, D. M., Fux, E., and Anderson, D. M. Characterization and comparison of toxin-producing isolates of *Dinophysis acuminata* from New England and Canada. J. Phycol. 51: 66–81.

2013 Henrichs, D. W., Scott, P.S., **Steidinger, K.A.**, Errera, R. M., Abraham, A. and Campbell, L. Morphology and phylogeny of *Prorocentrum texanum* sp. nov., (Dinophyceae): A new toxic dinoflagellate from the Gulf of Mexico coastal waters exhibiting two distinct morphologies. J. Phycol. 49:143-155.

2012 Soto, I., Hu C., **Steidinger, K.**, Muller-Karger, F., Cannizaro, J., Wolny, J., Cerdeira-Estrado, S., Santamaria-del-Angel, E., Tafoya-del-Angel, F., Alvarez-Torres, P., Herrera Silveira, J. and Allen, J.. 2012. Binational collaboration to study Gulf of Mexico's harmful algae. Eos 93:49-50.

2010 Steidinger, K. A. Classic taxonomy of toxic dinoflagellates. In K. C. Ho, M. Y. Zhou and Y.Z. Qi (eds.) Harmful Algae 2008. ISSHA and EPHHK, 107-109.

2009 Steidinger, K. A. Historical perspective on *Karenia brevis* red tide research in the Gulf of Mexico. Harmful Algae 8: 549-561.

2008. Steidinger, K.A., J.L. Wolny & A.J. Haywood. Identification of Kareniaceae (Dinophyceae) in eastern Gulf of Mexico. Nova Hedwigia 133, 269-284.

2006 Steidinger, K. and E. Garcés. Importance of life cycles in the ecology of harmful microalgae, pp. 37-49. In E. Granéli and J. T. Turner (Eds) Ecology of Harmful Algae, Springer Verlag Berlin.

2006 Steidinger, K., J. Landsberg, P. Mason, W. Vogelbein, P. Tester, & W. Litaker. *Cryptoperidiniopsis brodyi* gen. et sp. Nov. (Dinophyceae), a small lightly armored dinoflagellate in the Pfiesteriaceae. J. Phycol. 42: 951-967.

2006 Walsh, J. J., J. K. Jolliff, B. P. Darrow, J. M. Lenes, S. P. Milroy, A. Remsen, D. A. Dieterle, K. L. Carder, F. R. Chen, G. A. Vargo, R. H. Weisberg, K. A. Fanning, F. E. Muller-Karger, E. Shinn, **K. A. Steidinger**, C. A. Heil, C. R. Tomas, J. S. Prospero, T. N. Lee, G. J. Kirkpatrick, T. E. Whittedge, D. A. Stockwell, T. A. Villareal, A. E. Jochens and P. S. Bontempi. Red tides in the Gulf of Mexico: Where, when, and why? J. Geophys. Res. 111, C11003, doi: 10.1029/2004JC002813.

2006 Landsberg, J.H., Hall, S., Johannessen, J.N., White, K.D., Conrad, S.M., Abbott, J.P., Flewelling, L.J., Richardson, R.W., Dickey, R.W., Jester, E. L. E., Etheridge, S.M., Deeds, J.R., Van Dolah, F.M., Leighfield, T.A., Zou, Y., Beaudry, C.G., Benner, R.A., Rogers, P.L., Scott, P.S., Kawabata, K., Wolny, J.L., and **Steidinger, K.A.** Saxitoxin puffer fish poisoning in the United States, with the first report of *Pyrodinium bahamense* as the putative toxin source. Environ. Health Perspect. 114: 1502-1507.

2005 Litaker, R.W., **K.A. Steidinger**, P.L. Mason, J.H. Landsberg, J.D. Shields, K.S. Reece, L.W. Haas, W.K. Vogelbein, M.W. Vandersea, S.R. Kibler, and P.A. Tester. 2005. The reclassification of *Pfiesteria shumwayae*: *Pseudopfiesteria*, gen. nov. J. Phycol. 41: 643-651.

2004 Steidinger, K. A., J. H. Landsberg, C. R. Tomas, and G. A. Vargo (Eds.). Harmful Algae 2002. Florida Fish and Wildlife Conservation Commission, Florida Institute of Oceanography, and Intergovernmental Oceanographic Commission of UNESCO.

2004 Haywood, A.J., K.A. Steidinger, E.W. Truby, P.R. Bergquist, P.L. Bergquist, J. Adamson L MacKenzie. Comparative morphology and molecular phylogenetic analysis of three new species of the genus *Karenia* (Dinophyceae) from New Zealand. *J. Phycol.* 40:165-179.

2001 Walsh, J.J. and K.A. Steidinger. Saharan dust and Florida red tides: The cyanophyte connection. *J. Geophys. Res.* 106(C6):11597-11612.

2001 Steidinger, K. J. Landsberg, R.W. Richardson, E. Truby, B. Blakesley, P. Scott, P. Tester, T. Tengs, P. Mason, S. Morton, D. Seaborn, W. Litaker, K. Reece, D. Oldach, L. Haas, & G. Vasta. Classification and identification of *Pfiesteria* and *Pfiesteria*-like species. *Environ. Health Perspect.* 109(S5), 661-665.

1998 Steidinger, K.A., J.H. Landsberg, E.W. Truby, and B.S. Roberts. First report of *Gymnodinium pulchellum* (Dinophyceae) in North America and associated fish kills in the Indian River, Florida. *J. Phycol.* 34:431-437.

1998 Steidinger, K.A., G.A. Vargo, P.A. Tester, and C.R. Tomas. Bloom dynamics and physiology of *Gymnodinium breve* with emphasis on the Gulf of Mexico, pp.133-153. *In* D. M. Anderson, A. D. Cembella and G. M. Hallegraeff (Eds.). *Physiological Ecology of Harmful Algal Blooms*. Springer- Verlag, Berlin.

1997 Steidinger, K.A. & K. Tangen. Dinoflagellates, pp. 387-584. *In*: C.R. Tomas (Ed). *Identifying Marine Phytoplankton*. Academic Press, San Diego.

1996 Steidinger, K.A., J.H. Landsberg, E.W. Truby, & B.A. Blakesley. The use of SEM for identification of small gymnodinioid dinoflagellates. *Nova Hedwigia* 112: 415-422.

1993 Steidinger, K.A. Some taxonomic and biologic aspects of toxic dinoflagellates, *In*: I. Falconer (Ed). *Algal Toxins in Seafood and Drinking Water*. Academic Press, London, 1-28.

1990 Steidinger, K.A., C. Chase, J. Garret, B. Mahmoudi, B. Roberts, C. Tomas & E. Truby. The use of optical pattern recognition in dinoflagellate taxonomy. *In*: E. Graneli, B. Sundstrom, L. Edler & D.M. Anderson (Eds). *Toxic Marine Phytoplankton*. Elsevier Science Publishing Co., N.Y. 285-288.

1985 Steidinger, K.A. and W.E. Gardiner. Phytoplankton of Tampa Bay: a review, pp. 147-183. *In* S.- A. F. Treat, J.L. Simon, R.R. Lewis III, and R.L. Whitman, Jr. (Eds.). *Proceedings, Tampa Bay Area Scientific Information Symposium*. Bellwether Press, MN.

1981 Steidinger, K.A. and K.D. Haddad. Biologic and hydrographic aspects of red tides. *BioScience* 31:814-819.

1979 Walker, L.M. and K.A. Steidinger. Sexual reproduction in the toxic dinoflagellate, *Gonyaulax monilata*. *J. Phycol.* 15: 312-315.

1978 Steidinger, K.A., E. W. Truby, and C.J. Dawes. Ultrastructure of the red tide dinoflagellate *Gymnodium breve* 1. General description. J. Phycol. 14:72-79.

1975 Steidinger, K.A. Basic factors influencing red tides, pp. 153-162. *In* V.R. LoCicero (Ed.) Proc. 1st Internl. Conf. Toxic Dinoflagellate Blooms. Mass. Sci. Found., Wakefield, MA.

1970 Steidinger, K. A. & J. Williams. Dinoflagellates. Memoirs of the Hourglass Cruises vol. II, 251 pp.