

Curriculum Vitae - Shiao Yu Wang

Department of Biological Sciences
University of Southern Mississippi
Hattiesburg, MS 39406

Phone: 601-266-6795
FAX #: 601-266-5797
E-Mail: shiao.wang@usm.edu

Education

Ph.D.	1986	Physiology, Louisiana State University, Baton Rouge, LA
M.S.	1981	Biology, University of Southern Mississippi, Hattiesburg, MS
B.S.	1977	Biology, William Carey College, Hattiesburg, MS

Appointments

2008 –	Professor, Dept of Biological Sciences, USM
1998 – 2008	Associate Professor, Dept of Biological Sciences, USM
1992 – 1998	Assistant Professor, Dept of Biological Sciences, USM
1989 – 1992	Research Assistant Professor, Dept of Biological Sciences, USM
1986 – 1989	Post-doctoral Fellow, Oak Ridge National Laboratory, Oak Ridge, TN

Publications:

- Flood, C., J. Ufnar, S. Wang, J. Johnson, M. Carr and R. Ellender. 2011. Lack of correlation between enterococcal counts and the presence of human specific fecal markers in Mississippi creek and coastal waters. *Water Res.* 45:872-878.
- Ogburn, M.B., K.C. Stuck, R.W. Heard, S.Y. Wang and R.B. Forward. 2011. Seasonal variability in the morphology of blue crab *Callinectes sapidus*, megalopae and early juvenile stage crabs, and distinguishing characteristics among co-occurring Portunidae. *J. Crust. Biol.* 31:106-113.
- Cao, Z.M., S.Y. Wang, V. Breeland, A.M. Moore and J.M. Lotz. 2010. Taura syndrome virus loads in the hemolymph of *Litopenaeus vannamei* following infection and the relationship to differential mortality. *Dis. Aquat. Org.* 91:97-103.
- Carr, M.R., S.Y. Wang, T.I. McLean, C.J. Flood and R.D. Ellender. 2010. Salmonella rarely detected in Mississippi coastal waters and sediment. *J. Applied Microbiol.* 109:2191–2199.
- Harwood, V.J., M. Brownell, S.Y. Wang, J.E. Lepo, R.D. Ellender, A. Ajidahun, K.N. Hellein, E. Kennedy, X.Ye and C. Flood. 2009. Validation and field testing of library-independent microbial source tracking methods in the Gulf of Mexico. *Water Res.* 42:4812-4819.
- Ufnar, J.A., S.Y. Wang, D.F. Ufnar and R.D. Ellender. 2007. *Methanobrevibacter ruminantium* as an indicator of domesticated ruminant fecal pollution in surface waters. *App. Environ. Microbiol.* 73:7118-7121.
- Ufnar, J.A., D.F. Ufnar, S.Y. Wang and R.D. Ellender. 2007. Development of a swine-specific fecal pollution marker based on host differences in methanogen *mcrA* genes. *App. Environ. Microbiol.* 73:5209-5217.

- Hassan, W.M., R.D. Ellender and S.Y. Wang. 2007. Fidelity of bacterial source tracking: *Escherichia coli* versus *Enterococcus* spp and minimizing assignment of isolates from non-library sources. J. Applied Microbiol. 102:591-598.
- Ufnar, J.A., S.Y. Wang, J. Christiansen, H. Yampara-Iquise, C. Carson and R.D. Ellender. 2006. Detection of the *nifH* gene of *Methanobrevibacter smithii*: a potential tool to identify sewage pollution in recreational waters. J. Applied Microbiol. 101:44-52.
- Clay, L.A., S.Y. Wang, W.R. Wolters, B.C. Peterson and G. Waldbieser. 2005. Molecular characterization of the insulin-like growth factor-I (IGF-I) gene in channel catfish (*Ictalurus punctatus*). Biochim. Biophys. Acta - Gene Struct. Expr. 1731:139-148.
- Hassan, W.M., S.Y. Wang and R.D. Ellender. 2005. Methods to increase fidelity of repetitive extragenic palindromic PCR fingerprint-based bacterial source tracking efforts. App. Environ. Microbiol. 71:512-518.
- Lu, Y., S.Y. Wang and J.M. Lotz. 2004. The use of differential display to isolate viral genomic sequence for rapid development of PCR-based detection methods - a test case using Taura syndrome virus. J. Virol. Meth. 121:107-114.
- Wang, S.Y., P.M. Biesiot and D.M. Skinner. 1999. Toward an understanding of satellite DNA function in Crustacea. Amer. Zool. 39:471-486.
- Biesiot, P.M., S.Y. Wang, H.M. Perry and C. Trigg. 1999. Organic reserves in the midgut gland and fat body of the giant deep-sea isopod *Bathynomus giganteus*. J. Crustacean Biol. 19:450-458.
- Denson, D.R. and S.Y. Wang. 1998. Distinguishing the dark false mussel, *Mytilopsis leucophaeata* (Conrad, 1831), from the non-indigenous zebra and quagga mussels *Dreissena* spp., using spermatozoan external morphology. Veliger 41:205-211.
- Carls, M.G., L. Holland, M. Larsen, J.L. Lum, D.G. Mortensen, S.Y. Wang and A.C. Wertheimer. 1996. Growth, feeding, and survival of pink salmon fry exposed to food contaminated with crude oil. Amer. Fish. Soc. Symp. 18:608-618.
- Stuck, K.S. and S.Y. Wang. 1996. Establishment and persistence of *Baculovirus penaei* (BP) infections in cultured Pacific white shrimp, *Penaeus vannamei*. J. Invert. Path. 68:59-64.
- Lei, J., B.S. Payne and S.Y. Wang. 1996. Filtration dynamics of the zebra mussel, *Dreissena polymorpha*. Can. J. Fish. Aquat. Sci. 53:29-37.
- Wang, S.Y., C. Hong and J.M. Lotz. 1996. The development of a PCR procedure for the detection of *Baculovirus penaei* in shrimp. Dis. Aquat. Organ. 25:123-131.
- Stuck, K.S., L.M. Stuck, R.M. Overstreet and S.Y. Wang. 1996. Relationship between BP (*Baculovirus penaei*) infection and energy reserves in larval and postlarval Pacific white shrimp (*Penaeus vannamei*). Dis. Aquat. Organ. 24:191-198.
- Stuck, K.S., L.M. Stuck, R.M. Overstreet and S.Y. Wang. 1996. Relationship between BP (*Baculovirus penaei*) infection and energy reserves in larval and postlarval Pacific white shrimp (*Penaeus vannamei*). Dis. Aquat. Organ. 24:191-198.
- Stuck, K.C., S.A. Watts and S.Y. Wang. 1996. Biochemical responses during starvation and subsequent recovery in postlarval Pacific white shrimp, *Penaeus vannamei*. Mar. Biol. 125:33-45.
- Denson, D.R. and S.Y. Wang. 1994. Morphological differences between zebra and quagga mussel spermatozoa. Amer. Malacol. Bull. 11:79-81.

- Wang, S.Y., J.L. Lum, M.G. Carls and S.D. Rice. 1993. Relationship between growth and total nucleic acids in juvenile pink salmon, *Oncorhynchus gorbuscha*, fed crude oil contaminated food. Can. J. Fish. Aquat. Sci. 50:996-1001.
- Stickle, W.B., M.A. Kapper, L.L. Liu, E. Gnaiger and S.Y. Wang. 1989. Metabolic adaptations of several species of crustaceans and molluscs to hypoxia: tolerance and microcalorimetric studies. Biol. Bull. 177:303-312.
- Wang, S.Y. and W.B. Stickle. 1988. Biochemical composition of the blue crab *Callinectes sapidus* exposed to the water-soluble fraction of crude oil. Mar. Biol. 98:23-30.
- Wang, S.Y. and W.B. Stickle. 1987. Bioenergetics, growth and molting of the blue crab, *Callinectes sapidus*, exposed to the water-soluble fraction of South Louisiana crude oil. In: Physiology and Pollution of Marine Organisms. F.J. Vernberg, W.B. Vernberg, A. Calabrese and F.P. Thurberg (eds.) Univ. of South Carolina Press, Columbia, South Carolina, p. 107-126.
- Livingstone, D.R., W.B. Stickle, M. Kapper and S. Wang. 1986. Microsomal detoxication enzyme responses of the marine snail, *Thais haemastoma*, to laboratory oil exposure. Bull. Environ. Contam. Toxicol. 36:843-850.
- Wang, S.Y. and W.B. Stickle. 1986. Changes in nucleic acid concentration with starvation in the blue crab *Callinectes sapidus* Rathbun. J. Crust. Biol. 6:49-56.