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Education and Training:

Institution	Major	Degree	Year
University of Georgia	Environmental Health	B.S	1980
Virginia Tech	Microbiology & Ecology	M.S.	1984
U. of North Carolina, Chapel Hill	Environmental Engineering	Ph.D.	1994

Research and Professional Experience:

- 2004-present **Professor & Director, EERP**, University of the Pacific, Ecological Engineering Research Program, School of Engineering & Computer Science, Stockton, CA
 Scientific lead for large-scale, multi-agency ecosystem restoration research projects including beneficial reuse of agricultural drainage and application of wetland treatment systems for diffuse pollution control. Teach Ecological Engineering, Industrial Waste Management, and other environmental engineering courses.
- 1996-present **Environmental Engineer & Director ELM**, Lawrence Berkeley National Laboratory, Environmental Measurements Laboratory, Earth Sciences Division, Berkeley, CA
 Manager of Environmental Measurements Laboratory providing technical support to on-going groundwater remediation projects. Principal investigator for numerous projects investigating water quality and environmental impacts of energy production (hydrocarbon extraction, biomass energy, & nuclear), including investigation of the 2010 Gulf of Mexico oil spill.
- 1994-1996 **Postdoctoral Researcher**, University of California, Berkeley, Department of Civil and Environmental Engineering, Berkeley, CA
 Investigated biological treatment of polynuclear aromatic hydrocarbons and other water insoluble hydrocarbons with a focus on the role of sorption and desorption processes on biodegradation rates.
- 1990-1994 **Graduate Research Assistant**, University of North Carolina at Chapel Hill, Department of Environmental Sciences and Engineering, Chapel Hill, NC
 Investigated fundamental processes governing the biodegradation of very poorly soluble industrial pollutants, using medium and high molecular weight polynuclear aromatic hydrocarbons as model compounds.
- 1988-1989 **Visiting Researcher**, Institut Pasteur, Departement d'Ecologie, Paris, France
 Optimized production of surface polysaccharides by Staphylococcus pathogens
- 1983-1988 **Senior Research Microbiologist**, Sybron Chemicals, Inc., Salem Research Facility, Salem, Virginia
 Selection, isolation, production, and application of bacteria for the degradation and treatment of industrial wastes. Research and consulting on biological and

- physical-chemical treatment of industrial wastes, including oil & gas, coal coking, steel manufacture, and chemical industries.
- 1981-1983 **Graduate Assistant**, Virginia Polytechnic Institute and State University, Department of Microbiology and the Center for Aquatic Ecology, Blacksburg, Virginia
Impact of phenolic wastes on carbon-cycling in freshwater sediments.
- 1980-1981 **Hazardous Waste Site Investigator**, Ecology and Environment, Inc., Decatur, Georgia
Investigation of hazardous waste sites as part of Resource Conservation & Recovery Act and Superfund implementation. Inspection, sampling, and assessment of uncontrolled hazardous waste sites.

Publications

1. Piceno, Y. M., F. C. Reid, L. M. Tom, M. E. Conrad, M. Bill, C. G. Hubbard, B. W. Fouke, C. J. Graff, J. Han, **W. T. Stringfellow**, J. S. Hanlon, P. Hu, T. C. Hazen, G. L. Andersen. 2014. Temperature and injection water source influence microbial community structure in four Alaskan North Slope hydrocarbon reservoirs. *Frontiers in Microbiology* 5:409
2. **Stringfellow, W. T.**, M. K. Camarillo, W. L. Sandelin, J. K. Domen, and S. Borglin. 2014. Physical, chemical, and biological characteristics of compounds used in hydraulic fracturing. *Journal of Hazardous Materials* 275: 37–54.
3. Gulati, S., A. A. Stubblefield, J. S. Hanlon, C. L. Spier, and **W. T. Stringfellow**. 2014. Use of continuous and grab sample data for calculating total maximum daily load (TMDL) in agricultural watersheds. *Chemosphere* 99: 81–88.
4. Camarillo, M. K., **W. T. Stringfellow**, C. L. Spier, and J. S. Hanlon. 2013. Salinity and nutrient considerations for anaerobic digestion of dairy manure, plant biomass, and agricultural wastes at a full-scale facility. *J. Environmental Management* 128: 233 - 242.
5. Karpuzcu, M. E., D. L. Sedlak, and **W. T. Stringfellow**. 2013. Biotransformation of chlorpyrifos in riparian wetlands in agricultural watersheds: implications for wetland management. *J. Hazardous Materials* 224-225: 111-120.
6. Spier, C. L., **W. T. Stringfellow**, T. C. Hazen, and M. E. Conrad. 2013. Distribution of hydrocarbons released during the 2010 MC252 oil spill in deep offshore waters. *Environmental Pollution* 173: 224-230.
7. Camarillo, M. K., **W. T. Stringfellow**, M. B. Jue, J. S. Hanlon. 2012. Economic sustainability of a biomass energy project located at a dairy in California, USA. *Energy Policy* 48: 790–798.
8. Hazen, T. C., E. A. Dubinsky, T. Z. DeSantis, G. L. Andersen, Y. M. Piceno, N. Singh, J. K. Jansson, A. Probst, S. E. Borglin, J. L. Fortney, **W. T. Stringfellow**, M. Bill, M. S. Conrad, L. M. Tom, K. L. Chavarria, T. R. Alusi, R. Lamendella, D. C. Joyner, C. Spier, J. Baelum, M. Auer, M. L. Zemla, R. Chakraborty, E. L. Sonnenthal, P. D’haeseleer, H.-Y. N. Holman, S. Osman, Z.i Lu, J. D. Van Nostrand, Y. Deng, J. Zhou, O. U. Mason. 2010. Deep-Sea oil plume enriches indigenous oil-degrading bacteria. *Science* 330 (6001): 204-208.
9. **Stringfellow, W. T.**, T. Komada, and L.-Y. Chang. 2006. Drip-feed bioreactor for the treatment of concentrated wastes with minimal dilution. *Chemosphere* 65: 141 – 147.
10. **Stringfellow, W. T.** and L. Alvarez-Cohen. 1999. Evaluation of the relationship between sorption of PAHs to bacterial biomass and biodegradation. *Water Res.* 33: 2535-2544.

Synergistic Activities:

1. Currently investigating produced water treatment and disposal as part of on-going “SB4 Scientific Study” investigation of oil and gas industry environmental impacts in California (USA). This research provides a foundation for the research proposed in this project.
2. Teaching and research activities at the University of the Pacific School of Engineering & Computer Sciences includes mentoring students, directing student thesis research, and including students in projects related to civil and environmental engineering. Master of Engineering students will be included on this project and resources at the University, including assistantships, will be available to students working on this project.
3. The University of the Pacific School of Engineering & Computer Sciences has an active teaching and research exchange with