

William Joseph Jones

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### **Professional Experience**

2022- Undergraduate Director / Instructor, School of the Earth, Ocean and Environment, USC

2021- President's Sustainability Council, University of South Carolina

2019-2022 Clinical Professor / Undergraduate Course Director, ENHS UofSC

2018-2021 Office of the Provost committee, Experiential Learning Outcomes

2017- Instructor, Service-Learning Courses, SC Honor's College

2017-2021 Udall Scholarship Committee

2017-2020 Faculty Senator, ENHS, UofSC

2016- 2022 Undergraduate Course Director, ENHS, UofSC

2015- 2022 ENHS representative, ASPH Undergraduate Advisory Committee

2015- 2020 Undergraduate Committee, Environment and Sustainability Program, UofSC

2014- 2022 Faculty Principal, Green Quad Living, Learning Community, UofSC

2013- 2020 Associate Faculty, Environment and Sustainability Program, UofSC

2011-2019 Research Assistant Professor, ENHS, UofSC

2009- Associate Faculty, Marine Science Program, UofSC

2007-2014 Director, Environmental Genomics Core (EnGenCore) facility, UofSC

2010-2012 Lab director for Dr. Stephen Kresovich, UofSC

2003- 2007 Research Associate, Monterey Bay Aquarium Research Institute

2002 Postdoctoral Researcher, Universitat Konstanz, Germany.

### **Education**

PDF Universitat Konstanz (2002)

Ph. D. University of California at Santa Cruz (2001), Biology

M. Sc. University of South Carolina (1997), Marine Science

B. Sc. University of South Carolina (1995, *cum laude*), Marine Science

### Honors and Awards

2015, 2016, 2022 Two Thumbs Up Award, USC, Office of Student Disability Services

2016 SC Faculty Award for Service Learning, Honoree, Campus Compact

2015 Sustainability Award, ESP Program, UofSC

2018 Excellence in Service-Learning award, UofSC

2014, 2018, 2021 John N. Gardner Inspirational Faculty Award

### Teaching Experience

Course	Title	Credits	Avg size	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
ENHS / ENVR 321	Environmental Pollution and Health	3	40		XX	XX	XXX	XXX	XXX	XX	XX	XX	XX
MSCI 101 and Lab	The Ocean Environment	4	120									X	
MSCI 101H and Lab	The Ocean Environment (Honors)	4	12										X
MSCI 210 and Lab	Ocean and Society	4	375	X				X		XX		X	X
MSCI 599	Aquaponics	3	15				X	X		X			
MSCI 599	The Deep Sea	3	35						X		X	X	
MSCI 375	The Deep Sea	3	35										X
MSCI 399	Independent Study (various)	3	1									X	X
SCHC 389	The Sustainability of Food	3	15								X	X	X
UNIV 101	The Student in the University	3	18			X	X	X	X	X	X	X	
UNIV 401	Graduation with Leadership Distinction	1	14					X	X	X	X		
UNIV 290	Sustainability Seminar	1	12				X	X	X	X	X	X	X
			classes/year	1	2	3	6	8	7	8	7	9	8

### Grants

2017, SC Sea Grant Consortium/NOAA/DOC, Total Funded: \$98,623

2016, SC Sea Grant Consortium/NOAA/DOC, Total Funded: \$98,623

2015, SC Sea Grant Consortium, Total Funded: \$141,596

2018, Aquaponics, Teaching Innovation Grants for Integrative Learning, Office of the Provost, USC, Total Funded: \$3083.95

2016-2020, GEO-Scholar: Broadening undergraduate participation in the geosciences (PI: Benitez Nelson, Geidel, Jones, Beasley, and White), National Science Foundation (NSF), Funded: \$593,571

2010 Department of Health and Environmental Control, Bureau of Water, \$99k 2009 USDA-Beltsville Microbial Genome Sequencing \$45k

2009 Savannah River National Laboratory \$35k

2008-11 \$399k of revenue brought to the USC Research Foundation via EnGenCore facility

## Genetics of rare populations

1. **Jones, W. J.**, and J. M. Quattro. 1999. Phylogenetic affinities of pygmy sunfishes (*Elassoma*) inferred from mitochondrial DNA sequences. *Copeia*:470-474.
2. Quattro, J. M., **W. J. Jones**, J. M. Grady, and F. C. Rohde. 2001. Gene-gene concordance and the phylogenetic relationships among rare and widespread pygmy sunfishes (genus *Elassoma*). *Molecular Phylogenetics and Evolution* 18:217-226.
3. Quattro, J. M., **W. J. Jones**, and F. C. Rohde. 2001. Evolutionarily significant units of rare pygmy sunfishes (genus *Elassoma*). *Copeia*:514-520.
4. **Jones, W. J.**, B. D. Quelvog, and G. Bernardi. 2002. Morphological and genetic analysis of the Red Hills roach (Cyprinidae : *Lavinia symmetricus*). *Conservation Genetics* 3:261- 276.
5. Aguilar, A., and **W. Jones**. 2009. Nuclear and mitochondrial diversification in two native California minnows: insights into taxonomic identity and regional phylogeography. *Molecular Phylogenetics and Evolution* 51:373-381.

## Genetic connectivity

1. **Jones, W. J.**, and J. M. Quattro. 1999. Genetic structure of summer flounder (*Paralichthys dentatus*) populations north and south of Cape Hatteras. *Marine Biology* 133:129-135.
2. Quattro, J. M., and **W. J. Jones**. 1999. Amplification primers that target locus-specific introns in actinopterygian fishes. *Copeia*: 191-196.
3. Quattro, J., **W. Jones**, and K. Oswald. 2001. PCR primers for an Aldolase-B intron in Acanthopterygian fishes. *BMC Evolutionary Biology* 1:9.
4. Ely, B., D. S. Stoner, J. R. A. Bremer, J. M. Dean, P. Addis, A. Cau, E. J. Thelen, **W. J. Jones**, D. E. Black, L. Smith, K. Scott, I. Naseri, and J. M. Quattro. 2002. Analyses of nuclear *ldhA* gene and mtDNA control region sequences of Atlantic northern bluefin tuna populations. *Marine Biotechnology* 4:583-588.
5. Johnson, S. B., C. R. Young, **W. J. Jones**, A. Waren, and R. C. Vrijenhoek. 2006. Migration, isolation, and speciation of hydrothermal vent limpets (Gastropoda ; Lepetodrilidae) across the Blanco Transform Fault. *Biological Bulletin* 210:140-157.
6. **Jones, W. J.**, and R. C. Vrijenhoek. 2006. Evolutionary relationships within the "*Bathymodiolus*" *childressi* group. *Cahiers De Biologie Marine* 47:403-407.
7. **Jones, W. J.**, Y. J. Won, P. A. Y. Maas, P. J. Smith, R. A. Lutz, and R. C. Vrijenhoek. 2006. Evolution of habitat use by deep-sea mussels. *Marine Biology* 148:841-851.
8. **Jones, W.**, and E. Macpherson. 2007. Molecular phylogeny of the East Pacific Rise squat lobsters of the genus *Munidopsis* (Decapoda, Galatheididae) with the description of seven new species. *Journal of Crustacean Biology* 27:477-501.
9. Clague, G., **W. Jones**, J. Paduan, D. Clague, and R. Vrijenhoek. 2011. Distribution and connectivity of *Acesta* clams (Limidae) from the northeastern Pacific. *Marine Ecology* 1- 13.

## Natural History

1. Macpherson, E., **W. Jones**, and M. Segonzac. 2005. A new squat lobster family of Galatheoidea (Crustacea, Decapoda, Anomura) from the hydrothermal vents of the Pacific-Antarctic Ridge. *Zoosystema* 27:1-15.
2. Braby, C., G. Rouse, S. Johnson, **W. Jones**, and R. Vrijenhoek. 2007. Bathymetric and temporal variation among *Osedax* boneworms and associated megafauna on whale-falls in Monterey Bay, California. *Deep-Sea Research Part I* 54:1773-1791.
3. Moller, P. R., and **W. J. Jones**. 2007. *Eptatretus strickrotti* n. sp (Myxinidae): First hagfish captured from a hydrothermal vent. *Biological Bulletin* 212:55-66.
4. **Jones, W.**, S. Johnson, G. Rouse, and R. Vrijenhoek. 2008. Marine worms (genus *Osedax*) colonize cow bones. *Proceedings of the Royal Society B* 275:387-391.
5. Rouse, G., K. Worsaae,

- S. Johnson, **W. Jones**, and R. Vrijenhoek. 2008. Acquisition of dwarf male "harems" by recently settled females of *Osedax roseus* n. sp. (Siboglinidae; Annelida). *Biological Bulletin* 214:67-82.
6. Holland, N., J. Ellena, **W. J. Jones**, H. Ruhl, and K. Smith. 2009. *Tergivelum baldwini* gen. n., sp. n., an epibenthic acorn worm (Hemichordata: Enteropneusta) living in the deep sea. *Zoosystema* 31:333-346.
  7. Newmann, W., and **W. Jones**. 2011. Two Northeast Pacific bathyal barnacle populations (Cirripedia, Scalpellomorpha & Balanomorpha) from seamounts of the Juan de Fuca Ridge; "insular" endemics stemming from Tethys, or from subsequent dispersal from the Western Pacific center of distribution? *Zootaxa* 2789: 49-68.
  8. Thurber, A., **W. Jones**, and K. Schnabel. 2014. Dancing for food in the deep sea: bacterial farming by a new species of Yeti crab. *PLoS One* 6(11):e26243. doi: 10.1371/journal.pone.0026243

#### Microbial Ecology

1. Vrijenhoek, R., M. Duhaime, and **W. Jones**. 2007. Subtype variation among endosymbionts of vestimentiferan tubeworms (Polychaeta: Siboglinidae). *Biological Bulletin* 212:180-184.
2. Goffredi, S., **W. Jones**, H. Erhlich, and R. Vrijenhoek. 2008. Epibiotic bacteria associated with the recently discovered Yeti crab, *Kiwa hirsuta*. *Environmental Microbiology* 10:2623-2634.
3. Won, Y.-J., **W. Jones**, and R. Vrijenhoek. 2008. Absence of cospeciation between deep sea mytilids and their thiotrophic endosymbionts. *Journal of Shellfish Research* 27:129-138.
4. Hamp, T., **W. Jones**, and A. Fodor. 2009. Effects of experimental choices and analysis noise on surveys of the "rare biosphere". *Applied and Environmental Microbiology* 75:3263-3270.
5. Turnbaugh, P., M. Hamady, T. Yatsunenko, B. Cantarel, A. Duncan, R. Ley, M. Sogin, **W. Jones**, B. Roe, J. Affourtit, B. Henrissat, A. Heath, R. Knight, and J. Gordon. 2009. A core gut microbiome in obese and lean twins. *Nature* 457:480-484.
6. **Jones, W.** 2010. High-throughput sequencing and metagenomics. *Estuaries and Coasts* 33:944-952.
7. Goffredi S., A. Gregory, **W. Jones**, N. Morella, and R. Sakamoto. 2014. Ontogenetic variation in epibiont community structure in the deep-sea yeti crab, *Kiwa puravida*: convergence among crustaceans. *Molecular Ecology* 23(6): 1457-72.

#### Technology development

1. Goffredi, S. K., **W. J. Jones**, C. A. Scholin, R. Marin, and R. C. Vrijenhoek. 2006. Molecular detection of marine invertebrate larvae. *Marine Biotechnology* 8:149-160.
2. Scholin, C., S. Jensen, B. Roman, E. Massion, R. Marin, III, C. Preston, D. Greenfield, **W. Jones**, and K. Wheeler. 2006. The Environmental Sample Processor (ESP)- An Autonomous Robotic Device for Detecting Microorganisms Remotely using Molecular Probe Technology. *OCEANS* 2006:1-4.
3. Roman, B., C. Scholin, S. Jensen, E. Massion, R. Marin, III, C. Preston, D. Greenfield, **W. Jones**, and K. Wheeler. 2007. Controlling a robotic marine environmental sampler with the Ruby scripting language. *Journal of the Association for Laboratory Automation* 12:56-61.
4. **Jones, W.**, C. Preston, R. Marin, III, C. Scholin, and R. Vrijenhoek. 2008. A robotic molecular method for in situ detection of marine invertebrate larvae. *Molecular Ecology Resources* 8:540-550.
5. Scholin, C., G. Douchette, S. Jensen, B. Roman, P. D, R. Marin, III, C. Preston, **W. Jones**, J. Feldman, C. Everlove, A. Harris, N. Alvarado, Massion, E, J. Birch, Greenfield, D, K. Wheeler, R. C. Vrijenhoek, C. Mikulski, and K. Jones. 2009. Remote detection of marine microbes, small invertebrates, harmful algae and biotoxins using the Environmental Sample Processor (ESP). *Oceanography* 22:158-167.
6. Smith, K., L. Rhodes, J. Adamson, J. Tyrrell, D. Mount, and **W. Jones**. 2011. Sandwich hybridisation assay, targeting the ribosomal RNA internal transcribed spacer region,

- for rapid on site detection of the Northern Pacific seastar, *Asterias amurensis*. New Zealand Journal Marine Freshwater Research 45: 1, 145-152.
7. Mortensen RA, SA Arnott, **WJ Jones**, DI Greenfield, and D. MacLatchy. 2015. Development of sandwich hybridization assay for the identification and quantification of red drum (*Scianops ocellatus*) eggs: a novel tool for fishery research and management. CJFAS 72:1-11.