

JONATHAN B. GELLER

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EDUCATION

University of California, Davis	Zoology	B.S., 1980
University of California, Davis	Ecology	M.S. 1982
University of California, Berkeley	Zoology	Ph.D. 1988

PROFESSIONAL APPOINTMENTS

Current appointment: Professor, Moss Landing Marine Laboratories

2012-present	Fellow	California Academy of Sciences
2011	Visiting Professor	Friday Harbor Laboratories, University of Washington
2005-present	Professor	San Jose State University/Moss Landing Marine Laboratories
2003-2004	Visiting Scholar	Scripps Institution of Oceanography
1998-to 2005	Associate Professor	Moss Landing Marine Laboratories
1998	Associate Professor	University of North Carolina at Wilmington
1993-98	Assistant Professor,	University of North Carolina at Wilmington
1991-93	Postdoctoral Fellow	Hopkins Marine Station, Stanford University
1989-91	Postdoctoral Fellow	University of Oregon
1988	Visiting Professor	University of Oregon

RESEARCH INTERESTS

- Patterns of shallow water marine biodiversity across geographic regions.
- Understanding “dark biodiversity”: unaccountable DNA sequence diversity in environmental samples.
- Marine invasive species ecology and genetics.
- Molecular methods in ecology; DNA barcoding, high-throughput sequencing, eDNA.
- Detection of invasive species in benthic and plankton samples.
- Marine invertebrate phylogeography and phylogenetics.

RECENT PUBLICATIONS (Examples)

2018. Lohan, K.M.P., Campbell, T.L., Guo, G., Wheelock, M., DiMaria, R.A., and **Geller, J.B.** Intact vs. homogenized subsampling: Testing impacts of pre-extraction processing of multi-species samples on invasive species detection. *Management of Biological Invasions*, in press.
2018. Hawk, H. and Geller, J.B. Hawk, H., **Geller, J.B.** DNA entombed in seashells reveals the historical genetic diversity of the endangered white abalone, *Haliotis sorenseni*. *Marine and Freshwater Research*. DOI 10.1071/MF17342
2018. Heller, P., Casaletto, J., Ruiz, G., and **Geller, J.B.** A database of metazoan cytochrome c oxidase subunit I gene sequences derived from GenBank with CO-ARBitrator. *Scientific Data* | 5:180156 | DOI: 10.1038/sdata.2018.156
2018. James T. Carlton, John W. Chapman, **Jonathan B. Geller**, Jessica A. Miller, Gregory M. Ruiz, Deborah A. Carlton, Megan I. McCuller, Nancy C. Treneman, Brian P. Steves, Ralph A. Breitenstein, Russell Lewis, David Bilderback, Diane Bilderback, Takuma Haga, and Leslie H. Harris. Ecological and biological studies of ocean rafting: Japanese tsunami debris in North America and the Hawaiian Islands. *Aquatic Invasions* 13 (1): 1-19
2018. David W. Elvin, James T. Carlton, **Jonathan B. Geller**, John W. Chapman, and Jessica A. Miller. Porifera (Sponges) from Japanese Tsunami Marine Debris arriving in the Hawaiian Islands and on the Pacific coast of North America. *Aquatic Invasions* 13 (1): 31-41.

2018. Henry H. C. Choong, Dale R. Calder, John W. Chapman, Jessica A. Miller, **Jonathan B. Geller**, and James T. Carlton. Hydroids (Cnidaria: Hydrozoa: Leptothecata and Limnomedusae) on 2011 Japanese tsunami marine debris landing in North America and Hawai'i, with revisory notes on *Hydrodendron Hincks*, 1874 and a diagnosis of Plumaleciidae, new family. *Aquatic Invasions* 13 (1): 43-70
2018. Megan I. McCuller, James T. Carlton, **Jonathan B. Geller**. *Bugula tsunamiensis* n. sp. (Bryozoa, Cheilostomata, Bugulidae) from Japanese tsunami marine debris landed in the Hawaiian Archipelago and the Pacific coast of the USA. *Aquatic Invasions* 13 (1): 163--171
2018. Miller, J.A., Carlton, J.T., Chapman, J.W., **Geller, J.B.**, Ruiz, G.M. Transoceanic dispersal of the mussel *Mytilus galloprovincialis* on Japanese tsunami marine debris: An approach for evaluating rafting of a coastal species at sea. *Marine Pollution Bulletin*. <https://doi.org/10.1016/j.marpolbul.2017.10.040>
2017. Carlton, J.T., Chapman, J.W., **Geller, J.B.**, Miller, J.A., Carlton, D.A., McCuller, M.I., Treneman, N.C., Steves, B.P., Ruiz, G.M. Tsunami-driven rafting: Transoceanic species dispersal and implications for marine biogeography. *Science* 357:1402-1406. OI: 10.1126/science.aao1498
2017. Ransome, E., **Geller, J.B.** Timmers, M., Leray, M., Mahardini, A. Sembiring A., Collins, A.G., Meyer, C.P. The Importance of standardization for biodiversity comparisons: a case study using Autonomous Reef Monitoring Structures (ARMS) and metabarcoding to measure cryptic diversity on Mo'orea coral reefs, French Polynesia. *PLoS ONE* 12(4): e0175066. <https://doi.org/10.1371/journal.pone.0175066>
2016. Ashton, G. V., Davidson, I. C., **Geller, J.B.**, Ruiz, G. M. Disentangling the biogeography of ship biofouling: barnacles in the Northeast Pacific. *Global Ecology and Biogeography*. 25(6), 739-750
2015. Marraffini M.L., **Geller J.B.**, 2015 Species richness and interacting factors control invasibility of a marine community. *Proc. R. Soc. B* 282: 20150439. <http://dx.doi.org/10.1098/rspb.2015.0439>
2014. Lin, M.F., Kitahara, M.V., Luo, H., Tracey, D., **Geller, J.**, Fukami, H., Miller, D.J., Chen, C.A. Mitochondrial genome rearrangements in the scleractinia/corallimorpharia complex: implications for coral phylogeny. *Genome Biology and Evolution* 6(5): 1086-1095.
2014. Calder, D.R., Choong, H.H.C., Carlton, J.T., Chapman, J.W., Miller, J.A., **Geller, J.** Hydroids (Cnidaria: Hydrozoa) from Japanese tsunami marine debris washing ashore in the northwestern United States. *Aquatic Invasions* 9(4): 425-440.
2014. Zhang, H., **Geller, J.B.**, and Vrijenhoek, R.J. Genetic diversity in native and introduced populations of the amethyst gem clam *Gemma gemma* (Totten, 1834) from the U.S. east and west coasts. *Biological Invasions*. DOI 10.1007/s10530-014-0699-9
2014. Davies, N., ... **Geller, J.**, et al. The founding charter of the Genomic Observatories Network, *GigaScience*, 3: 1–5, <https://doi.org/10.1186/2047-217X-3-2>
2013. McIlroy, S.E., Smith, G.J., and **Geller, J.B.** FISH-Flow: a quantitative molecular approach for describing mixed clade communities of *Symbiodinium*. *Coral Reefs* (DOI: 10.1007/s00338-013-1087-0)
2013. **Geller, J.**, Meyer, C.P., Parker, M., and Hawk, H. Redesign of PCR primers for mitochondrial cytochrome c oxidase subunit I for marine invertebrates and application in all-taxa biotic surveys. *Molecular Ecology Resources* 13(5): 851-861. (DOI: 10.1111/1755-0998.12138)
2013. Kahn, A.S., **Geller, J.B.**, Reiswig, H.M. and Smith, K.L. *Bathydorus laniger* and *Docosaccus maculatus* (Lyssacinosa; Hexactinellida): Two new species of glass sponges from the abyssal eastern North Pacific Ocean. *Zootaxa* 3646(4): 386-400.
2012. Mackie, J.A., Darling, J.A. and **Geller, J.B.** Ecology of cryptic invasions: latitudinal segregation among *Watersipora* (Bryozoa) species. *Sci. Rep.* 2, 871; DOI:10.1038/srep00871/
2010. Mackie, J. and **Geller, J.B.** Experimental parameters affecting quantitative PCR of *Artemia franciscana*, a model for a marine planktonic target, in natural plankton samples. *Limnology and Oceanography Methods*. 8:337-347
2010. Hoos, P.M., Miller, A.W., Ruiz, G.M., Vrijenhoek, R., **Geller, J.B.** Genetic and historical evidence disagree on likely sources of the Atlantic amethyst gem clam *Gemma gemma* (Totten, 1834) in California. *Diversity and Distributions*, 16:582-592.
2009. Tepolt, C. Darling, J., Bagley, M., **Geller, J. B.**, Blum, M., Grosholz, T. European green crabs (*Carcinus maenas*) in the northeastern Pacific: genetic evidence for high population connectivity and current-mediated expansion from a single introduced source population. *Diversity and Distributions* 15:997-1009.