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Education

Ph.D., Aquatic and Fishery Sciences, University of Washington, Seattle, Washington. 2003.

Dissertation: Population genetics of the geoduck clam, *Panopea abrupta*, in Puget Sound, Washington.

Advisors: Paul Bentzen and Fred Utter

M.S., Fisheries, University of Washington, Seattle, Washington. 1999

Thesis: Development and optimization of triploid induction techniques in the geoduck clam, *Panopea abrupta*.

Advisor: William Hershberger

Professional Education Certificate, K-8, Biology, and Agriculture Endorsements, University of California, Davis. 1986

B.A., Human Ecology, The Evergreen State College, Olympia, Washington. 1985

Research Positions

Aquaculture Specialist, Washington Sea Grant, University of Washington. 2019-present

Principal Research Scientist, School of Aquatic and Fishery Sciences, UW, 2009-2018

Research Associate, School of Aquatic and Fishery Sciences, UW, 2004-2009

Research Analyst III, School of Aquatic and Fishery Sciences, UW, 2003.

Professional Memberships and Service

National Shellfisheries Association, Pacific Coast Section

Guest editor, Journal of Shellfish Research

Western Regional Aquaculture Center, Technical Committee

Publications

Venkataraman V.R., Timmins-Schiffman E., Horwith M.J., Lowe A.T., Nunn B., **Vadopalas B.**, Spencer, L., and S.B. Roberts. *In press*. Characterization of Pacific oyster (*Crassostrea gigas*) proteomic response to natural environmental differences. Journal of Shellfish Research. Preprint doi: <https://doi.org/10.1101/460204>

Venkataraman Y., Timmins-Schiffman E., Horwith M., Lowe A., Nunn B., **Vadopalas B.**, Spencer L., and S.B. Roberts. 2019. Characterization of proteomic response to natural environmental differences in the Pacific oyster (*Crassostrea gigas*). Mar Ecol Prog Ser 610:65-81. <https://doi.org/10.3354/meps12858>

- Wood G., Hamilton S., **Vadopalas B.**, Stevick B. and I. Leyva-Valencia. 2018. Geographic Variation in the Life History and Morphology of the Pacific Geoduck *Panopea generosa*, Journal of Shellfish Research 37:919-931
- Juárez, O., Lafarga-De la Cruz, F., Leyva-Valencia, I., López-Landavery, E., García-Esquivel, Z., Díaz, F., Re-Araujo, D., **Vadopalas, B.**, and C. Galindo-Sánchez. 2018. Transcriptomic and metabolic response to chronic and acute thermal exposure of juvenile geoduck clams *Panopea globosa*. Marine Genomics. doi.org/10.1016/j.margen.2018.09.003
- Heare, J.E., S. White, **B. Vadopalas**, and S. Roberts. 2018. Differential response to stress in *Ostrea lurida* as measured by gene expression. PeerJ 6:e4261; DOI 10.7717/peerj.4261
- White, S., **B. Vadopalas**, K. Silliman, and S. Roberts. 2017. Genotype-by-sequencing of three geographically distinct populations of Olympia oysters, *Ostrea lurida*. Scientific Data 4, Article number 170130
- Heare, J.E., B. Blake, J.P. Davis, **B. Vadopalas**, and S. Roberts. 2017. Evidence of *Ostrea lurida* Carpenter 1884 population structure in Puget Sound, Washington. Marine Ecology 38: <https://doi.org/10.1111/maec.12458>
- Hintz, M., K. Gratz, B. Becker, **B. Vadopalas**, and S. Roberts. 2017. A nonlethal anesthesia protocol for accessing the mantle cavity of Olympia oysters in the lab or field. Journal of Shellfish Research 36:353-357
- Timmins-Schiffman, E.B., G.B. Crandall, **B. Vadopalas**, M.E. Riffle, B.L. Nunn, and S. Roberts. 2017. Integrating discovery-driven proteomics and selected reaction monitoring to develop a non-invasive assay for geoduck reproductive maturation. Journal of Proteome Research 16:3298–3309
- Suárez-Moo, P.d.J., E.A. Gilbert-Horvath, **B. Vadopalas**, L.E. Calderon-Aguilera, J.C. Garza, and A. Rocha-Oliveras. 2016. Genetic homogeneity of the geoduck clam *Panopea generosa* in the northeast Pacific. Biochemical Systematics and Ecology 65:66-71
- Vadopalas B.**, Davis J. and C.S. Friedman. 2015. Maturation, spawning, and relative fecundity of farmed Pacific geoduck *Panopea generosa* in Puget Sound, Washington. Journal of Shellfish Research 34:31-38
- Straus, K. **Vadopalas B.**, Davis J. and C.S. Friedman. 2015. Reduced genetic variation and decreased effective number of breeders in five year classes of cultured geoduck (*Panopea generosa*). Journal of Shellfish Research 34:163-170
- Tapia-Morales S, Garcia-Esquivel Z, **Vadopalas B.** and J.Davis. 2015. Growth and burrowing rates of juvenile geoducks, *Panopea generosa* and *P. globosa*, under laboratory conditions. Journal of Shellfish Research 34:63-70
- Dorfmeier E.M., **Vadopalas B.**, Frelie P., and C.S. Friedman. 2015. Temporal and spatial variability of native geoduck (*Panopea generosa*) endosymbionts in the Pacific Northwest. Journal of Shellfish Research 34:81-90
- Leyva-Valencia I., Cruz-Hernández P., Álvarez-Castañeda S. T., Rojas-Posadas D. I., Correa-Ramírez M. M., **Vadopalas B.**, and D. B. Lluch-Cota. 2015. Phylogeny and phylogeography of geoduck clams *Panopea* (Bivalvia: Hiatellidae). Journal of Shellfish Research 34:11-20

- White, V.C, Morado J.F., Crosson L.M., **Vadopalas B.**, and C.S. Friedman. 2013. Development and validation of a quantitative PCR assay for *Ichthyophonus* spp. Diseases of Aquatic Organisms 104:69-81.
- Leyva-Valencia, I., **Vadopalas B.**, Cruz-Hernández, P., Lluch-Cota D. B. and D. I. Rojas-Posadas. 2013. Reclassification of *Panopea generosa* var. *taeniata* Dall 1918 as a fossil morphotype of *P. globosa* Dall 1898. Malacologia. 56:315-319
- Leyva-Valencia, I., Cruz-Hernández, P., Álvarez-Castañeda S.T., González-Peláez, S., Pérez-Valencia, S., **Vadopalas B.**, Ramírez-Pérez S. and D. Lluch-Cota. 2012. Shell shape differences between two *Panopea* species and phenotypic variation among *P. globosa* aggregations using two geometric morphometrics approaches. Malacologia 55:1-13
- Vadopalas, B.**, LeClair, L.L., and P. Bentzen 2012. Temporal genetic similarity among year classes of the Pacific geoduck clam (*Panopea generosa* Gould 1850), a species exhibiting population genetic patchiness. Journal of Shellfish Research 31:697-709
- Hale, J.R., Bouma J.V., **Vadopalas B.**, and C.S. Friedman. 2012. Evaluation of passive integrated transponders (PIT) for abalone: tag placement, retention, and effect on survival. Journal of Shellfish Research 31:789-794
- Bouma, J.V., Rothaus, D.P., Straus, K.M, **Vadopalas, B.**, and C.S. Friedman. 2012. Low juvenile pinto abalone (*Haliotis kamtschatkana kamtschatkana*) abundance in the San Juan Archipelago, Washington State. Transactions of the American Fisheries Society 141:76-83.
- Vadopalas, B.**, Weidman, C, and Cronin, E. 2011. Validation of age estimation in geoduck clams using the bomb radiocarbon signal. Journal of Shellfish Research 30:303-307
- Vadopalas, B.** Pietsch, T.W., and C.S. Friedman, 2010. The proper name for the geoduck: resurrection of *Panopea generosa* Gould, 1850, from the synonymy of *Panopea abrupta* (Conrad, 1849) (Bivalvia: Myoida: Hiatellidae). Malacologia 52(1):169-173
- Camara, M.D. and **B. Vadopalas.** 2009. Genetic aspects of restoring Olympia oysters and other native bivalves: balancing good intentions, the need for action, and the risks of making things worse. Journal of Shellfish Research 28:121-145
- Wight, N.A., J. Suzuki, **B. Vadopalas,** and C.S. Friedman. 2009. Development and optimization of quantitative PCR assays to aid *Ostrea lurida* Carpenter 1864 restoration efforts. Journal of Shellfish Research 28:33-41
- Rothaus, D, **B. Vadopalas,** and C. Friedman. 2008. Precipitous declines in pinto abalone (*Haliotis kamtschatkana kamtschatkana*) abundance in the San Juan Archipelago, Washington, USA, despite statewide fishery closure. Canadian Journal of Fishery and Aquatic Sciences 65:2703-2711
- Burge, C., Judah, L.R., Conquest, L.L., Griffin, F.J., Cheney, D.P., Suhrbier, A., **Vadopalas, B.**, Olin, P.G., Renault, T., and C.S. Friedman, 2007. Summer seed mortality of the Pacific oyster, *Crassostrea gigas* Thunberg grown in Tomales Bay, California, USA: the influence of oyster stock, planting time, pathogens, and environmental stressors. Journal of Shellfish Research 26:163-172
- Friedman, C.S., Scott, B.B., Strenge, R.E., **Vadopalas, B.**, and T.B. McCormick. 2007. Oxytetracycline as a tool to manage and prevent losses of the endangered white abalone,

Haliotis sorenseni, caused by withering syndrome. Journal of Shellfish Research 26:877-885

Vadopalas, B., Bouma, J.V., Jackels, C.R., and C.S. Friedman, 2006. Application of real-time PCR for simultaneous identification and quantification of abalone larvae. Journal of Experimental Marine Biology and Ecology 334:219-228

Vadopalas, B., LeClair, L.L., and P. Bentzen, 2004. Microsatellite and allozyme analyses reveal few genetic differences between spatially distinct aggregations of geoduck clams (*Panopea abrupta*, Conrad 1849). Journal of Shellfish Research 23(3):693-706.

Vadopalas, B. and J.P. Davis, 2004. Optimal chemical triploid induction in geoduck clams, *Panopea abrupta*, by 6-dimethylaminopurine. Aquaculture 230:29-40

Vadopalas, B. and P. Bentzen, 2000. Isolation and characterization of di- and tetranucleotide microsatellite loci in geoduck clams, *Panopea abrupta*. Molecular Ecology 9:1435-1436

Reports

Watson, J.T. and **B. Vadopalas**. 2014. Recovery Plan for Pinto Abalone (*Haliotis kamtschatkana*) in Washington State. 50 pp.

http://restorationfund.org/sites/default/files/2014_Kamtschatkana_Recovery_Plan.pdf

Straus, K.M, McDonald, P.S., Crosson, L. M., and **B. Vadopalas**, 2013. Effects of Geoduck Aquaculture on the Environment: a Synthesis of Current Knowledge. Produced for the 2013 Washington State legislature. Washington Sea Grant Technical Report # WSG-TR 13-02, Seattle. 46 pp. <http://wsg.washington.edu/research/geoduck/Geoduck-Literature-Review-2ndEd.pdf>

Straus, K.M, Crosson, L. M., and **B. Vadopalas**, 2008. Effects of Geoduck Aquaculture on the Environment: a Synthesis of Current Knowledge. Washington Sea Grant Technical Report # WSG-TR 08-01, Seattle. 64 pp.

http://www.wsg.washington.edu/research/geoduck/Geoduck_LiteratureReview.pdf

Vadopalas, B., D. Armstrong, C. S. Friedman, K. Feldman, G. VanBlaricom, D. Cheney, J. Davis, R. Elston, and A. Suhrbier. 2005. Identification of research priorities relevant to geoduck (*Panopea abrupta*) aquaculture environmental impacts. Washington Department of Natural Resources Report, 34 pp.

Feldman, K., **B. Vadopalas**, D. Armstrong, C. S. Friedman, R. Hilborn, K. Naish, J. Orensanz, J. Valero, J. Ruesink, A. Suhrbier, A. Christy, D. Cheney, and J. Davis. 2004. Comprehensive literature review and synopsis of issues relating to geoduck (*Panopea abrupta*) ecology and aquaculture production. Washington Department of Natural Resources Report, 104 pp.

Vadopalas, B. and K. Naish. 2004. Assessment of the current knowledge of geoduck and other shellfish population structure, with general recommendations for the genetic management of cultured and wild geoduck clams. Washington Department of Natural Resources Report 31 pp.

Vadopalas, B., Feldman, K. and C.S. Friedman. 2004. Report on research findings related to subtidal geoduck aquaculture. Washington Department of Natural Resources Report 22 pp.

Invited Presentations

- Vadopalas, B.** 2016. Genetic considerations for native shellfish aquaculture. Washington Department of Fish and Wildlife Native Shellfish Genetics Workshop, Port Townsend, Washington, USA. August 10.
- Vadopalas, B.** 2016. Conservation genetic considerations for Olympia oyster restoration. Washington Department of Fish and Wildlife Native Shellfish Genetics Workshop, Port Townsend, Washington, USA. August 10.
- Crim, R., Allen, B., Karpoff, A., Ryan, S. Davis, J. and **B. Vadopalas.** 2015. Olympia Oyster Cultivation for Restoration Part I: Breeding and Hatchery Techniques. 107th Annual Meeting of the National Shellfisheries Association, Monterey, California, USA, March 22-26.
- Vadopalas, B.**, Jackson M., and J. P. Davis. 2015. Induction of triploidy in the purple-hinged rock scallop *Crassadoma gigantea* (Gray, 1825). 107th Annual Meeting of the National Shellfisheries Association, Monterey, California, USA, March 22-26.
- Vadopalas, B.** 2015. Challenges in shellfish aquaculture and –omics based solutions. Ensenada Center for Scientific Research and Higher Education. October 19.
- Heare, J., **B. Vadopalas**, Blake, B., J. Davis, S. Roberts. 2014. Local Native Oyster Stocks for Restoration: Does Local Adaptation Affect Outplant?. 16th International Conference on Shellfish Restoration, Charleston, South Carolina, USA, Dec. 10-14.
- Jackson, K. E., **B. Vadopalas**, S. Roberts. 2014. A Comparison of Breeding Methods for the Olympia Oyster, *Ostrea lurida*, Using Microsatellite Markers. 16th International Conference on Shellfish Restoration, Charleston, South Carolina, USA, Dec. 10-14.
- Davis, J. P., **B. Vadopalas**, B. Allen, B. Peabody, R. Crim, K. Jackson. 2014. Olympia Oyster (*Ostrea lurida*) Restoration in Washington State; The Development of Protocols for use in Hatchery Based Production and Restocking Efforts. 16th International Conference on Shellfish Restoration, Charleston, South Carolina, USA, Dec. 10-14
- Vadopalas, B.**, Davis, J., Friedman C. 2013. Maturation and relative fecundity of cultured Pacific geoducks *Panopea generosa* in Puget Sound, Washington. 105th Annual Meeting of the National Shellfisheries Association. Nashville, Tennessee. February 22-25.
- Leyva-Valencia, I., **Vadopalas, B.**, Lluch-Cota D. B., Cruz-HernP. and Rojas-Posadas, D. I.. 2013. Reclassification of *Panopea generosa* var. *taeniata* Dall 1918, as a fossil morphotype of *Panopea globosa* Dall 1898. 105th Annual Meeting of the National Shellfisheries Association. Nashville, Tennessee. February 22-25.
- Davis, J. **Vadopalas, B.**, Jackson, M., Suhrbier, A., Cheney, D., Middleton, M., Hudson, B., Rasmussen, K., Friedman, C. 2013. Performance of triploid Pacific geoducks *Panopea generosa* in Puget Sound, Washington. 105th Annual Meeting of the National Shellfisheries Association. Nashville, Tennessee. February 22-25.
- Navas, G., Geller, J., **Vadopalas, B.** 2013. Preliminary Results On Genetic Differentiation and Shell Morphology Of The Pacific Geoduck *Panopea generosa* In California. 105th Annual Meeting of the National Shellfisheries Association. Nashville, Tennessee. February 22-25.

- Davis, J. and **Vadopalas B.** 2012. Aquaculture and fisheries for geoduck clams (*Panopea generosa*) on the west coast of North America. 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington. March 24-29.
- Leyva-Valencia, I., Cruz-Hernández, P. Alvarez-Castañeda S., **Vadopalas, B.**, Correa-Ramirez M., Rojas-Posadas D., Lluch-Cota D. 2012. Phylogeny of living species of geoduck clam *Panopea* (Bivalvia:Hiatellidae). 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington. March 24-29.
- Rocha-Olivares, A., Surarez-Moo, P. Calderon-Aguilera L, Aragon-Noriega, E., Reyes-Bonilla, H., **Vadopalas, B.**, Castaneda, V, De Lara, F. 2012. Genetic and morphological variation of *Panopea* clams in the northeast Pacific. 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington. March 24-29.
- Hale, J. Bouma, J., **Vadopalas, B.**, and Friedman C. 2012. Not just for vertebrates anymore: using microchips to tag abalone. 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington. March 24-29.
- Friedman C., **Vadopalas B.**, Dorfmeier E. Crosson, L., Brombacker S., White S., Strenge, R., Alin S., and Feely, R. 2012. Effects of ocean acidification on the health of Washington state abalone. 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington. March 24-29.
- Dorfmeier E., **Vadopalas B.**, Friedman C., Strenge R., Elston R., Frelie P., Olden, J. 2012. Multivariate statistics reveal seasonal patterns in Pacific geoduck (*Panopea generosa*) disease in the Pacific Northwest. 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington. March 24-29.
- Davis, J., **Vadopalas B.**, Suhrbier A., Cheney D., Middleton M., Hudson B., Rasmussen K., Kuehl, L., and Friedman C. 2012. Growth and maturation in triploid geoducks. 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington. March 24-29.
- Bouma, J., Davis J., Dinnel, P., Friedman C., Peabody B., Rothaus D., Sizemore R., and **Vadopalas B.** 2012. Pinto abalone (*Haliotis kamtschatkana*) recovery strategies in Washington state: where we've been and where we're headed. 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington. March 24-29.
- Straus, K., **Vadopalas B.**, Davis J., and Friedman C. 2012. Microsatellite parentage assignment indicates high variance in reproductive success and decreased genetic diversity in cultured geoduck, *Panopea generosa*. 2012. 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington. March 24-29.
- Vadopalas, B.** and Davis J. 2010. Critical considerations for restoration of marine invertebrates: Olympia oysters. West Coast Native Oyster Restoration Workshop. Suquamish, Washington. September 16-17.
- Straus K., Bouma J., Rothaus D, Davis J., VanBlaricom G., Stevick B., Peabody B., **Vadopalas, B.**, and Friedman C.S. 2010. Approaches to pinto abalone *Haliotis kamtschatkana kamtschatkana* restoration. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.

- Vadopalas, B.**, and Davis J. 2010. A 15 year evolution of geoduck *Panopea generosa* aquaculture in Washington State. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.
- Farfan, C., Mendoza-Porras, O., **Vadopalas, B.**, Maaso-Rojas, J.A., Del Rio Portilla, M.A. 2010. Genetic variability of the clams *Panopea generosa* and *P. globosa* in Baja California. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.
- Friedman, C., Santacruz, A. and **Vadopalas, B.** 2010. Endosymbiotic, commensal, and parasitic organisms associated with wild geoduck clams *Panopea generosa* Gould 1850. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.
- Straus, K., **Vadopalas B.**, Davis J., and Friedman C. 2010. Past, present, and future genetic variation in cultured and wild geoduck clams *Panopea generosa*. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.
- Leyva-Valencia I., Álvarez-Castañeda S., Cruz-Hernández P., **Vadopalas B.**, González-Peláez S., Pérez-Valencia S., Lluch-Cota D., Serviere-Zaragoza E. 2010. Morphometrics and phylogenetic analysis in geoduck clam *Panopea* spp. from Mexican Northwest. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.
- Vadopalas, B.** and Friedman, C. 2010. Critical considerations for restoration of marine invertebrates: abalones. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.
- Bouma J., B. Allen, J. Davis, P.A. Dinnel, C.S. Friedman, B. Peabody, D.P. Rothaus, J. Suzuki, **B. Vadopalas**, J.T. Watson. 2010. Restoration of pinto/northern abalone *Haliotis kamtschatkana* populations in Washington state. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.
- Bouma, J., Rothaus, D., **Vadopalas, B.**, Friedman, C. 2010. Aggregation of adult pinto abalone *Haliotis kamtschatkana* as a restoration technique in the San Juan archipelago. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.
- Stevick, B., Straus, K., **Vadopalas, B.**, Rothaus D., Bouma J., VanBlaricom, G., and Friedman, C. 2010. Experimental evaluation of the relationship of rearing method and outplant success in juvenile pinto abalone. 102nd Annual Meeting of the National Shellfisheries Association, San Diego California. March 1-5.
- Vadopalas, B.**, Wight N., Suzuki J, Santacruz A, Straus K., Davis J., and Friedman C.S. 2009. Cultured geoducks: how different are they? 17th Conference for Shellfish Growers, Washington Sea Grant Program, Alderbrook Resort, Union, Washington. March 2-3
- Friedman, C.S., Santacruz, A. and **Vadopalas, B.** 2009. Endosymbiotic, commensal, and parasitic organisms associated with wild geoduck clams. 17th Conference for Shellfish Growers, Washington Sea Grant Program, Alderbrook Resort, Union, Washington. March 2-3

- Vadopalas, B.** 2007. Geoduck genetics: what we know, what we don't know, and why it matters. Northwest Workshop on Bivalve Aquaculture and the Environment, Talaris Conference Center, Seattle Washington, September 13-14
- Vadopalas, B.**, Ma, C.S.Y., Wight, N.A., Davis, J. P., and Friedman, C.S. 2007. Potential genetic effects of geoduck aquaculture on wild stocks: current and future research. 15th Conference for Shellfish Growers, Washington Sea Grant Program. Shelton, Washington, March 5-6.
- Vadopalas, B.**, Ma, C.S.Y., Wight, N.A., Davis, J. P., and Friedman, C.S. 2007. Avoiding genetic effects of geoduck clam *Panopea abrupta* aquaculture on wild stocks: proactive steps toward sustainability. 99th Annual Meeting of the National Shellfisheries Association, San Antonio, Texas, Feb 26- March 2
- Vadopalas, B.**, Suzuki, J. Wight, N. and Friedman, C. 2006. Using qPCR to understand Olympia oyster larval dispersal. NOAA Olympia Oyster Restoration Workshop, San Rafael, CA September 6-8.
- Vadopalas, B.**, Friedman C, Armstrong D, Feldman K, Van Blaricom G, Cheney D, Davis J, Elston R, and Suhrbier A 2005. Ducks on our beaches: investigating potential effects of geoduck aquaculture on wild stocks and the environment. 13th Conference for Shellfish Growers, Wash. Sea Grant, Feb 28-March 1
- Vadopalas, B.** 2004. Some consequences of sex at age 168: population genetics of geoduck clams in Puget Sound, Washington. RACE Division, NOAA-NMFS, Seattle WA 13 April
- Vadopalas, B.**, LeClair, L.L., and P. Bentzen. 2003. Are old growth clams drifting with the tide? Population genetics of geoduck clams (*Panopea abrupta*) in Puget Sound. State Capitol Fish and Wildlife Seminar Series, Washington Cooperative Fish and Wildlife Research Unit, BRD, USGS, Olympia, WA. 12 February.
- Vadopalas, B.**, LeClair, L.L., and P. Bentzen. 2003. Analyses of geoduck clam (*Panopea abrupta*) genetic structure in Puget Sound. Hartstene Pointe Association, 9 February.
- Vadopalas, B.** and P. Bentzen. 2000. Microsatellite variation in geoduck clams (*Panopea abrupta*) in Puget Sound, Washington. 92nd Annual Meeting of the National Shellfisheries Association. Seattle, WA. 18-23 March.

Contributed Papers (published abstracts)

- Gurr, S., **Vadopalas, B.**, Roberts, S., and H. Putnam. 2019. Metabolic recovery and compensatory shell growth of the juvenile Pacific geoduck (*Panopea generosa*) following short-term exposure to acidified seawater. 73rd Annual Joint Annual Meeting of the National Shellfisheries Association, Pacific Coast Section and the Pacific Coast Shellfish Growers Association, Portland, Oregon, USA, 17-19 September.
- Gavery, M., **Vadopalas, B.**, Roberts, S. and A. Luckenbach. 2019. Applying cutting-edge technology for reproductive control in bivalves. 73rd Annual Joint Annual Meeting of the National Shellfisheries Association, Pacific Coast Section and the Pacific Coast Shellfish Growers Association, Portland, Oregon, USA, 17-19 September.

- Houle, K., Hudson, B., Davis, J., Shumway, S., Morton, S., Borchert, J. and **B. Vadopalas**. 2019. Biotoxin accumulation and depuration in field exposed rock scallops (*Crassadoma gigantea*) – a prerequisite for culture. 2019. 73rd Annual Joint Annual Meeting of the National Shellfisheries Association, Pacific Coast Section and the Pacific Coast Shellfish Growers Association, Portland, Oregon, USA, 17-19 September.
- Lowell, N., **Vadopalas, B.**, Suhrbier, A., and L. Hauser. 2019. Population genetics of *Apostichopus californicus* across the Pacific coast of North America. 73rd Annual Joint Annual Meeting of the National Shellfisheries Association, Pacific Coast Section and the Pacific Coast Shellfish Growers Association, Portland, Oregon, USA, 17-19 September.
- Trigg, S., Mitchell K., Elliot, R. Eudeline, B., **Vadopalas, B.**, Timmens-Shiffman, E., and S. Roberts. 2019. A protein inventory reveals mechanisms of temperature impact on oyster development. 73rd Annual Joint Annual Meeting of the National Shellfisheries Association, Pacific Coast Section and the Pacific Coast Shellfish Growers Association, Portland, Oregon, USA, 17-19 September.
- Davis, J., Jackson, M., and **B. Vadopalas**. 2018. Development of aquaculture production techniques for purple hinge rock scallops. 110th Annual Meeting of the National Shellfisheries Association, Seattle, WA. 18-22 March.
- Hintz, M., Becker, B., Carson H., Rusk B., Hatch M., Allen, B, **Vadopalas B.**, and S. Roberts. 2018. Trace elemental fingerprints: an ecological detective's tool to track Olympia oysters (*Ostrea lurida*). 110th Annual Meeting of the National Shellfisheries Association, Seattle, WA. 18-22 March.
- Spencer, L., **Vadopalas B.**, Simchick C., Crim, R., Goetz R., and S. Roberts. 2018. Genetic characterization of wild and hatchery produced *Ostrea lurida* in Puget Sound, Washington USA. 110th Annual Meeting of the National Shellfisheries Association, Seattle, WA. 18-22 March.
- Lowell, N., Jackson, M., **Vadopalas, B.**, Crim, R. Davis, J., Hauser, L., and B. Blake. 2016. Assessing local adaptation and the response to ocean acidification in rock scallops to inform aquaculture practice. Salish Sea Ecosystem Conference, Vancouver, British Columbia. April 13-15.
- Jackson, M., Davis J., **Vadopalas B.**, and L. Hauser. 2015. Investigating local adaptation in Washington State purple hinge rock scallops. 69th Joint Annual Meeting of the National Shellfisheries Association Pacific Coast Section and the Pacific Coast Shellfish Growers Association, Hood River, Oregon, USA, September 22-24.
- Lowell, N., Davis J. **Vadopalas B.**, and L. Hauser. 2015. Assessing population structure and local adaptation of rock scallops to inform aquaculture practice. . 69th Joint Annual Meeting of the National Shellfisheries Association Pacific Coast Section and the Pacific Coast Shellfish Growers Association, Hood River, Oregon, USA, September 22-24.

- Jackson, M. Davis J., and **B. Vadopalas**. 2015. Update on development of commercial hatchery production techniques for purple hinged rock scallops. 69th Joint Annual Meeting of the National Shellfisheries Association Pacific Coast Section and the Pacific Coast Shellfish Growers Association, Hood River, Oregon, USA, September 22-24.
- Jackson, M., Wykoff, S., Davis J., and **B. Vadopalas**. 2014. Advances in rock scallop *Crassadoma gigantea* culture: seed production and induction of triploidy. 68th Joint Annual Meeting of the National Shellfisheries Association Pacific Coast Section and the Pacific Coast Shellfish Growers Association, Vancouver, Washington, USA, September 22-25
- Vadopalas, B.**, Davis, J., Blake B., and S.R. Roberts. 2013. Local adaptation in Olympia oysters. 67th Joint Annual Meeting of the National Shellfisheries Association, Pacific Coast Section, and the Pacific Coast Shellfish Growers Association. Sunriver, OR. September 30-October 3.
- Davis, J. and **B. Vadopalas**. 2013. Field performance of triploid geoducks. 67th Joint Annual Meeting of the National Shellfisheries Association, Pacific Coast Section, and the Pacific Coast Shellfish Growers Association. Sunriver, OR. September 30-October 3.
- Jackson, K., **Vadopalas B.**, and S.R. Roberts. 2013. Putting an aphrodisiac to sleep. 67th Joint Annual Meeting of the National Shellfisheries Association, Pacific Coast Section, and the Pacific Coast Shellfish Growers Association. Sunriver, OR. September 30-October 3.
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