HUNTER STANTON LENIHAN

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University of California, Santa Barbara
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PROFESSIONAL PREPARATION

B.S. University of California, Berkeley, 1986; Conservation of Natural Resources
M.S. Moss Landing Marine Laboratories, CA, 1994; Marine Science (Adviser: John Oliver)
Ph.D. The University of North Carolina at Chapel Hill, 1996; Marine Science (Adviser: Charles "Pete" Peterson).
Post-doc National Research Council Postdoctoral Fellowship, National Marine Fisheries Service, Beaufort, NC, 1997-1998; Fisheries Ecology and Management
Post-doc The University of North Carolina at Chapel Hill, Institute of Marine Sciences, Morehead City, NC, 1998-2000; Ecotoxicology
Post-doc University of California, Santa Barbara, CA, 2001-2002; Coral Reef Ecology

APPOINTMENTS

Professor, University of California, Santa Barbara, 2010-Present
Associate Professor, University of California, Santa Barbara, 2006-2009
Assistant Professor, University of California, Santa Barbara, 2002-2006
Fisheries Biologist, NOAA-National Marine Fisheries Service, Groundfish Management Program, Northwest Fisheries Science Center, Newport, OR 2000-2001

GRANTS-CURRENT

Center for the Environmental Implications of Nanotechnology. National Science Foundation, Science and Engineering Center. 2013-2018. $24 million.
Moorea Coral Reef LTER. National Science Foundation. LTER Program. 2012-2016. $3.9 million.

PUBLICATIONS (PEER-REVIEWED)

Bielmyer, G., T. Jarvis, H.S. Lenihan, and R.J. Miller. *In review*. Accumulation, distribution, and toxicity of dissolved metals and metal oxide nanoparticles in a marine diatom. **Environmental Toxicology and Chemistry**.

Hanna, S.K., R.J. Miller, and H.S. Lenihan. *In review*. Assessing marine fate and transport of carbon nanotubes using chemical and isotopic tracers. **Journal of Hazardous Materials**.

Yau, A.J, B.E. Kendall, and H.S. Lenihan. *In revision*. Setting catch minimum size-limits in a small-scale fishery under uncertainty in self-recruitment. **Ecological Applications**.

Lenihan, H.S., J.L. Hench, S.J. Holbrook, M. Potoski, and R.J. Schmitt. *In revision*. Hydrodynamic forces affect coral reef resilience through simultaneous top-down and bottom-up controls. **Ecology**.

Wilson, J.R., M.C. Kay, S.R. Valencia, and H.S. Lenihan. *In press*. Integration of marine reserves in the assessment of data-poor fisheries. **Conservation Letters**.

Yau, A.J., H.S. Lenihan, and B.E. Kendall. *In press*. Management priorities vary with self-recruitment in harvested sedentary marine populations. **Ecological Applications.**

Conway, J., S.K. Hanna, H.S. Lenihan, and A.A. Keller. *In review*. Effects and implications of trophic transfer and accumulation of CeO_2 nanoparticles in a marine mussel. **Environmental Science and Technology**.

Muller, E.B., S.K. Hanna, S.K., R.J. Miller, H.S. Lenihan, and R.M. Nisbet. *In press*. Impact of engineered Zinc Oxide nanoparticles on the energy budgets of *Mytilus galloprovincialis*. **Journal of Sea Research**.

Worm, B., and H.S. Lenihan. *2014*. Threats to marine ecosystems: overfishing and habitat degradation. Pages 449-476 *in* M.R. Bertness, B.J. Silliman, and J. Stachowicz (eds.) **Marine Community Ecology and Conservation**. Sinauer Press (Chapter 20).

Hanna, S.K., R.J. Miller, D. Zhou, A.A. Keller, and H.S. Lenihan. 2013. Accumulation and toxicity of metal oxide nanoparticles in a soft-sediment estuarine amphipod**.** **Aquatic Toxicology** 142-143: 441-446.

Ben-Horin, T., H.S. Lenihan, and K.D. Lafferty. 2013. Variable intertidal temperature explains why disease endangers black abalone. **Ecology** 94: 161-168.

Adeleye, A., A.A. Keller, H.S. Lenihan, and R.J. Miller. 2013. Persistence of commercial nanoscaled zero-valent iron (nZVI) and by products. **Journal of Nanoparcticle Research** 15: 1-18.

Jarvis, T., R.J. Miller, H.S. Lenihan, and G. Bielmyer. 2013. Toxicity of ZnO nanoparticles to the copepod, *Acartia tonsa*, exposed through a phytoplankton diet. **Environmental Toxicology and Chemistry** 32: 1264-1269.

Hanna, S.K., R.J. Miller, E.B. Muller, R.M. Nisbet, and H.S. Lenihan. 2013. Impact of Zinc Oxide nanoparticles on the individual performance of *Mytilus galloprovincialis*. **PLoS ONE** 8(4): e61800. doi:10.1371/journal.pone.0061800**.**

Needles, L.A., S.E. Lester, R. Ambrose, A. Andren, M. Beyeler, M.S. Connor, J.E. Eckman, B.A. Costa-Pierce, S.D. Gaines, K.D. Lafferty, H.S. Lenihan, J. Parrish, M.S. Peterson, A.E. Scaroni, J.S. Weis, and D.E. Wendt. 2013. Managing bay and estuarine ecosystems for multiple services. **Estuaries and Coasts** DOI 10.1007/s12237-013-9602-7.

Holden, P.R., R.M. Nisbet, H.S. Lenihan, R.J. Miller, G. Cherr, J. Schimel, and J. Gardea-Torresdey. 2013. Ecological nanotoxicology: Nanomaterial hazard considerations at the subcellular, population, community, and ecosystem levels. **Accounts of Chemical Research** 46: 812-822.

Wilson, J.R., M.C. Kay, J. Colgate, R. Qi, and H.S. Lenihan. 2012. Small-scale spatial variation in population dynamics and fishermen response in a coastal marine fishery. **PLoS ONE** 7:e52837.doi:10.1371/journal.pone.0052837

Kay, M.C., H.S. Lenihan, C. Miller, and J.R. Wilson. 2012. Collaborative assessment of CA spiny lobster (*Panularis interruptus*) population and fishery responses to marine reserves. **Ecological Applications** 22: 322-335.

Guenther, C., H.S. Lenihan, L. Grant, D. Lopez-Carr, and D.R. Reed. 2012. Trophic cascades in kelp forests caused by lobster fishing are not ubiquitous. **PLoS ONE** 7(11): e49396.doi:10.1371/journal.pone.0049396

Kay, M.C., H.S. Lenihan, M.J. Kotchen, and C.J. Miller. 2012. Controlling for habitat confirms robust marine reserve effects and gradients of abundance near borders for California spiny lobster. **Marine Ecology Progress Series** 451: 137-150.

Keller, A.A., K. Garner, R.J. Miller, and H.S. Lenihan. 2012. Toxicity of nano Zero-Valent Iron to freshwater and marine organisms. **PLoS ONE** 7(8):e43983.doi:10.1371/journal.pone.004398

Montes, M. A.A. Keller, H.S. Lenihan, and S. Hanna. 2012. Uptake, accumulation, and bioprocessing of metal oxide nanoparticles by mussels. **Journal of Hazardous Materials** 225-226: 139-145.

Xia, T., D. Malasarn, S. Lin, Z. Ji, H. Zhang, R.J. Miller, A.A. Keller, R.M. Nisbet, B.H. Harthorn, H.A. Godwin, H.S. Lenihan, R. Liu, J. Gardea-Torresdey, Y. Cohen, L. Mädler, P.A. Holden, J.I. Zink, and A.E. Nel. 2012. Implementation of a Multidisciplinary Approach to Solve Complex Nano EHS Problems by the UC Center for the Environmental Implications of Nanotechnology. **Small** doi: 10.1002/smll.201201700.

Miller, R.J., S. Bennett, A.A. Keller, S. Pease, and H.S. Lenihan. 2012. TiO_2 nanoparticles are phototoxic to marine phytoplankton. **PLoS ONE** 7(1):e30321.doi:10.1371/journal.pone.0030321

Lenihan, H.S., S.J. Holbrook, R.J. Schmitt, and A.J. Brooks. 2011. Influence of corallivory, competition, and habitat structure on coral community shifts. **Ecology** 92: 1959-1971.

Zeug, S.C., L.K. Albertson, H.S. Lenihan, J. Hosie, and B.J. Cardinale. 2011. Predictors of Chinook salmon extirpation in California's Central Valley. **Fisheries Management and Ecology** 18: 61-71.

Kayal, M., H.S. Lenihan, C. Pau, L. Penin, and M. Adjeroud. 2011. Associational refuges among corals mediate impacts of a crown-of-thorns starfish *Acanthaster planci* outbreak. **Coral reefs** 30: 827-837.

Albertson, L.K., B.J. Cardinale, S.C. Zeug, H.S. Lenihan, L. Harrison, and T. Dunne. 2011. Impacts of channel reconstruction on invertebrate assemblages in a restored river. **Restoration Ecology** 19: 627-638

Beck, M.W., R. Brumbaugh, L. Airoldi, A. Carranza, L. Coen, C. Crawford, O. Defeo, G.J. Edgar, B. Hancock, M.C. Kay, H.S. Lenihan, M. Luckenbach, C. Toropova, and G. Zhang. 2011. Shellfish reefs at risk globally and recommendations for ecosystem revitalization. **Bioscience** 60: 107-116.

Thomas, C.R., S. George, A.M. Horst, Z. Ji, R.J. Miller, J.R. Peralta-Videa, S. Pokhrel, L. Mädler, J.L. Gardea-Torresday, P.A. Holden, A.A. Keller, H.S. Lenihan, A.E. Nel, and J.I. Zink. 2011. Nanomaterials in the environment: from materials to high-throughput screening to organisms. **ACS Nano** 5: 13-20.

Miller, R.J., H.S. Lenihan, E. Muller, N. Tseng, and A.A. Keller. 2010. Impacts of metal oxide nanoparticles on marine phytoplankton. **Environmental Science and Technology** 44: 7329-7334.

Kay, M.C, H.S. Lenihan, and J.R. Wilson. 2010. Managing the cost of vessel insurance as a barrier to cooperative fisheries research in California. **California Fish and Game Scientific Journal** 96: 129-145.

Lenihan, H.S., and P.J. Edmunds. 2010. Response of juvenile branching corals to damage from corallivores in varying water flow and temperature. **Marine Ecology Progress Series** 409: 51-63.

Edmunds, P.J., and H.S. Lenihan. 2010. The effect of sub-lethal damage to juvenile colonies of massive *Porites* under contrasting regimes of temperature and water flow. **Marine Biology** 157: 887-897**.**

Keller, A., H. Wang, D. Zhou, H.S. Lenihan, G. Cherr, B.J. Cardinale, R.J. Miller, and Z. Ji. 2010. Stability and aggregation of metal oxide nanoparticles in natural aqueous matrices. **Environmental Science and Technology** 44: 1962-1967.

Wilson, J.R., J. Prince, and H.S. Lenihan. 2010. Setting Harvest Guidelines for Sedentary Nearshore Species Using Marine Protected Areas as a Reference. **Marine and Coastal Fisheries: Dynamics, Management and Ecosystem Science** 2: 14-27.

Godwin, H.A., K. Chopra, K.A. Bradley, Y. Cohen, B.H. Harthorn, E.M.V. Hoek, P. Holden, A.A. Keller, H.S. Lenihan, R. Nisbet, and A.E. Nel. 2009. The University of California Center for the Environmental Implications of Nanotechnology. **Environmental Science and Technology** 43: 6453-6457.

Powers, S.P., C.H. Peterson, J.H. Grabowski, and H.S. Lenihan. 2009. The success of constructed oyster reefs in no-harvest sanctuaries: implications for restoration. **Marine Ecology Progress Series** 389: 158-170.

Mullineaux, L.S., F. Micheli, C.H. Peterson, H.S. Lenihan, and N. Markus. 2009. Historical effects on succession: imprint of past conditions on the structure of a deep-sea hydrothermal vent community. **Oecologia** 161: 387-400.

Lenihan, H.S., M. Adjeroud, M. Kotchen, J. Hench, and T. Nakamura. 2008. Reef structure regulates small-scale spatial variation in coral bleaching. **Marine Ecology Progress Series** 370: 127-141.

Lenihan, H.S., S. Mills, L.S. Mullineaux, C.H. Peterson, C.R. Fisher, and F. Micheli. 2008. Biotic interactions at hydrothermal vents: recruitment inhibition by the mussel *Bathymodiolus thermophilus*. **Deep Sea Research** 55: 1707-1717.

Beck, M.W., R.D. Brumbaugh, A. Carranza, L.D. Coen, O. Defeo, H.S. Lenihan, M.W. Luckenbach, C. Toropova, and J.S. Vincent. 2008. Shellfish at risk: A global assessment of distribution, condition, and threats to habitat-forming bivalves. **Journal of Shellfish Research** 27: 989-990.

Kay, M.C., H.S. Lenihan, C.J. Miller, and K. Barsky. 2008. Numbers, body size, and movement lobster. Pages 8-11 *in* Airame S, Ugoretz J (eds) Channel Islands Marine Protected Areas: First 5 Years of Monitoring. California Dept. Fish & Game, Santa Barbara (Book Chapter).

Selkoe, K.A., C.V. Kappel, B.S. Halpern, F. Micheli, C. D'Agrosa, J.F. Bruno, K.S. Casey, C. Ebert, H.E. Fox, R. Fujita, D. Heinemann, H.S. Lenihan, E.P. Madin, M.T. Perry, E.R. Selig, M. Spalding, R. Steneck, S. Walbridge, and R. Watson. 2008. Response to technical comment on 'A global map of human impact on marine ecosystems' **Science** 321: 1446-1447.

Halpern, B.S., K.A. Selkoe, C.V. Kappel, F. Micheli, C. D'Agrosa, J.F. Bruno, K.S. Casey, C. Ebert. H.E. Fox, R. Fujita, D. Heinemann, H.S. Lenihan, E.P. Madin, M.T. Perry, E.R. Selig, M. Spalding, R. Steneck, S. Walbridge, and R. Watson. 2008. Response to letter on 'A global map of human impact on marine ecosystems' **Science** 321: 1433-1444.

Halpern, B.S., K.A. Selkoe, C.V. Kappel, F. Micheli, C. D'Agrosa, J.F. Bruno, K.S. Casey, C. Ebert. H.E. Fox, R. Fujita, D. Heinemann, H.S. Lenihan, E.P. Madin, M.T. Perry, E.R. Selig, M. Spalding, R. Steneck, S. Walbridge, and R. Watson. 2008. Assessing and mapping the cumulative global impact of human activities on marine ecosystems. **Science** 319: 948-952.

Beck, M.W., R.D. Brumbaugh, A. Carranza, L.D. Coen, O. Defeo, H.S. Lenihan, M.W. Luckenbach, C. Toropova, and J.S. Vincent. 2008. Shellfish at risk: a global assessment of distribution, condition, and threats to habitat forming bivalves. **Journal of Shellfish Research** 27: 989-990.

Penin, L., M. Adjeroud, M. Schrimm, and H.S. Lenihan. 2007. High spatial variability in coral bleaching around Moorea (French Polynesia): patterns across locations and water depths. **Comptes Rendus Biologies** 330: 171-181.

Lotze, H.K., H.S. Lenihan, B.J. Bourque, R. Bradbury, R. Cooke, M.C. Kay, S. Kidwell, M.X. Kirby, C.H. Peterson, and J.B.C. Jackson. 2006. Depletion, degradation, and recovery of estuaries and coastal seas. **Science** 312: 1806-1809.

Griffiths, J., M.N. Dethier, A. Newsom, J.E. Byers, J.J. Myers, F. Oyarzun, and H.S. Lenihan. 2006. Infaunal Responses to Recreational Clam Digging. **Marine Biology** 149: 1489-1497.

Bishop, M.M., C.H. Peterson, H.C. Summerson, H.S. Lenihan, and J.H. Grabowski. 2006. Deposition and long-shore transport of dredge spoils to nourish beaches: impacts on benthic infauna of an ebb-tidal delta. **Journal of Coastal Research** 22: 530-546.

Ruesink, J., H.S. Lenihan, A. Trimble, K. Heiman, F. Micheli, J.E. Byers, and M.C. Kay. 2005. Introduction of non-native oysters: ecosystem effects and restoration implications. **Annual Review of Ecology, Evolution, and Systematics** 36: 643-689.

Sancho, G., C.R. Fisher, S., F. Mills, Micheli, G.A. Johnson, H.S. Lenihan, C.H. Peterson, and L.S. Mullineaux, L.S. 2005. Selective predation by the zoarcid fish *Thermarces cerberus* at hydrothermal vents. **Deep Sea Research** 52: 837-844.

Conlan, K.E., S.L. Kim, H.S. Lenihan, and J.S. Oliver. 2004. Benthic changes during 10 years of organic enrichment by McMurdo Station, Antarctica. **Marine Pollution Bulletin** 49: 43-60.

Lenihan, H.S., and C.H. Peterson. 2004. Conserving oyster reef habitat by switching from dredging and tonging to diver hand-harvesting. **Fishery Bulletin** 102: 298-305.

Lenihan, H.S., C.H. Peterson, S.L. Kim, K.E. Conlan, R. Fairey, C. McDonald, J.H.

Grabowski, and J.S. Oliver. 2003. How variation in marine benthic community composition allows discrimination of multiple stressors. **Marine Ecology Progress Series** 206: 63-73.

Conlan, K.E., S.L. Kim, H.S. Lenihan, and J.S. Oliver. 2003. Benthic community changes at McMurdo Station, a response to sewage abatement? *In* A. H.L. Huiskes, W.W.C. Gieskes, J. Rozema, R. M. L. Schorno, S. M. van der Vies & W. J. Wolff (editors) **Antarctic Biology in a Global Context**. Leiden, The Netherlands: Backhuys Publishers (Book Chapter).

Micheli, F., C.H. Peterson, L.S. Mullineaux, C.R. Fisher, S.W. Mills, G. Sancho, G.A. Johnson, and H.S. Lenihan. 2002. Species interactions at deep-sea hydrothermal vents: the role of predation in structuring communities in an extreme environment. **Ecological Monographs** 73: 365-382.

Peterson, C.H., J.B.C. Jackson, M.X. Kirby, H.S. Lenihan, R. Borque, R. Bradbury, R. Cooke, and S. Kidwell. 2001. Factors in the decline of coastal ecosystems- Response. **Science** 293: 1590-1591.

Lenihan, H.S., C.H. Peterson, J.E. Byers, J.H. Grabowski, G.W. Thayer, and D.R. Colby. 2001. Cascading of habitat degradation: oyster reefs invaded by refugee fishes escaping stress. **Ecological Applications** 11: 748-764.

Jackson, J.B.C., M.X. Kirby, W.H. Berger, K.A. Bjorndal, L.W. Botsford, B.J. Bourque, R. Bradbury, R. Cooke, J.A. Estes, T.P. Hughes, S. Kidwell, C.B. Lange, H.S. Lenihan, J.M. Pandolfi, C.H. Peterson, R.S. Steneck, M.J. Tegner, and R. Warner. 2001. Historical overfishing and the collapse of marine ecosystems. **Science** 293: 629-638.

Lenihan, H.S., and F. Micheli. 2001. Soft sediment communities. Pages 253-288 *in* M. Bertness, M.E. Hay, and S.D. Gaines (editors), **Marine Community Ecology**. Sinauer Press (Chapter 10).

Peterson, C.H., H.C. Summerson, E. Thompson, H.S. Lenihan, J.H. Grabowski, L. Manning, F. Micheli, and G. Johnson. 2000. Synthesis of linkages between benthic and fish communities as a key to protecting essential fish habitat. **Bulletin of Marine Science** 66: 759-774.

Lenihan, H.S., and F. Micheli. 2000. Biological effects of shellfish harvesting on oyster reefs: resolving a fishery conflict using ecological experimentation. **Fishery Bulletin** 98: 86-95.

Lenihan, H.S. 1999. Physical-biological coupling on oyster reefs: how habitat form influences individual performance. **Ecological Monographs** 69: 251-275.

Lenihan, H.S., F. Micheli, S.W. Shelton, and C.H. Peterson. 1999. How multiple environmental stresses influence parasitic infection of oysters. **Limnology and Oceanography** 44: 910-924.

Lenihan, H.S., and G.W. Thayer. 1999. Ecological effects of fishery disturbance to oyster reef habitat in eastern North America. **Journal of Shellfish Research** 18: 719.

Lenihan, H.S., and C.H. Peterson. 1998. How habitat degradation through fishery disturbance enhances effects of hypoxia on oyster reefs. **Ecological Applications** 8: 128-140.

Conlan, K.E., H.S. Lenihan, R.G. Kvitek, and J.S. Oliver. 1998. Iceberg scour disturbance to benthic communities in the Canadian High Arctic. **Marine Ecology Progress Series**. 160: 1-16.

Lenihan, H.S., C.H. Peterson, and J.M. Allen. 1995. Does flow also have a direct effect on growth of active suspension feeders: an experimental test with oysters. **Limnology and Oceanography** 41: 1359-1366.

Lenihan, H.S., K.A. Kiest, K.E. Conlan, P.N. Slattery, B.H. Konar, and J.S. Oliver. 1995. Patterns of survival and behavior of marine invertebrates exposed to contaminated sediments from McMurdo Station, Antarctica. **Journal of Experimental Marine Biology and Ecology** 192: 233-255.

Lenihan, H.S. and J.S. Oliver. 1995. Natural and anthropogenic disturbances to marine benthic communities in Antarctica. **Ecological Applications** 5: 311-326.

Lenihan, H.S. 1992. Benthic marine pollution around McMurdo Station, Antarctica: a summary of findings. **Marine Pollution Bulletin** 25: 318-323.

Lenihan, H.S., J.S. Oliver, J.M. Oakden, and M. Stephenson. 1990. Intense and localized benthic marine pollution around McMurdo Station, Antarctica. **Marine Pollution Bulletin** 21: 422-430.
Lenihan, H.S., J.S. Oliver, and M. Stephenson. 1990. Changes in hard-bottom communities related to boat-mooring and Tributyltin (TBT) in San Diego Bay: a natural experiment. **Marine Ecology Progress Series** 60: 147-159.

FELLOWSHIPS AND HONORS

California Governor's Environment and Economic Leadership Award in Green Chemistry (awarded to the U.C. Center for Environmental Implications of Nanomaterials), 2012
Association of Pacific Rim Universities Fellow, UCSB, 2004
US National Research Council Post-doctoral Associate, 1996-1997
ARCS Foundation Achievement Award for College Scientist, 1991
Dr. Earl and Ethel Meyers Oceanography and Marine Biology Trust Scholarship, 1990

PROFESSIONAL MEMBERSHIPS

Ecological Society of America
International Coral Reef Society
Western Society of Naturalists

TEACHING EXPERIENCE

Bren School Specialization leader for Coastal Marine Ecosystem Process, 2002-present
Bren School Faculty adviser for Latin American Fisheries fellowship, 2011-present
Aquaculture and ecosystems**,** University of California, Santa Barbara, 2011-present
Fisheries Management, University of California, Santa Barbara, 2007-2013
Applied Marine Ecology, University of California, Santa Barbara, 2001-present
Coastal Marine Ecosystem Processes, University of California, Santa Barbara, 2005-present
Restoration Ecology, University of California, Santa Barbara, 2004-2008
Ecological Impacts of War, University of California, Santa Barbara, 2004
Ecology of Marine Reserves, University of Washington, Friday Harbor Laboratories Apprenticeship Program, Fall 2003
Coastal Marine Toxicology, UC Toxics Field/lab course, University California, Bodega Bay Laboratories, Fall 2003-2004
Lectured in Conservation Planning, Ecology, etc., University of California, Santa Barbara, 2003
Ocean Ecology, University of North Carolina at Chapel Hill, Institute of Marine Sciences, 2000

PHD STUDENTS GRADUATED (2006-2013)

Heather Coleman, *Ecotoxicology*
Debra McArdle, *Marine conservation*
Matthew Kay, *Fisheries ecology and management*
Carla Guenther, *Socio-Ecological System Science*
Jono Wilson, *Fisheries management*
Annie Yau, *Fisheries management*
Tal Ben-Horin, *Disease ecology*
Shannon Hanna, *Ecotoxicology*

SCIENTIFIC REVIEWING

EDITOR- MARINE ECOLOGY PROGRESS SERIES (2006-2013)
Biological Oceanography Panel, National Science Foundation, 2008, 2012
CAMEO Panel, NOAA-NSF, 2011
Australian CSIRO reviewer, 2013
NSF Biological Oceanography Proposal Reviewer
NSF Environment, Society, and Economics Reviewer

NSF Physical Oceanographer Reviewer
NSF Sediment geology and Paleobiology Reviewer
NSF Office of Polar Programs Reviewer
NSF Coupled Natural-Human Systems Reviewer
Australian Research Council Proposal Reviewer
CA Ocean Protection Council Reviewer
Sea Grant Program Reviewer for CA, USC, MD, AK, MA, VA, FL, and NC
Reviews for multiple scientific journals: ASC Nano, Biology Letters, Bulletin of Marine Sciences, Bulletin of the CA Academy of Sciences, Canadian Journal of Fisheries and Aquatic Sciences, Coral Reefs, Ecological Applications, Ecology, Ecology Letters, EcoSphere, ESA Frontiers, Environmental Science and Technology, Estuarine Coastal and Shelf Sciences, Estuaries and Coasts, Fisheries Bulletin, Fisheries Research, Functional Ecology, Journal of Experimental Marine Biology and Ecology, Journal of Hazardous Materials, Limnology and Oceanography, Marine Biology, Marine Ecology Progress Series, Marine Environmental Research, Nanotechnology, Nature, Oecologia, Plos One, Proceedings of the National Academy of Sciences, Science.

SELECTED INVITED PRESENTATIONS

UC Davis, Bodega Marine Laboratory Seminar Series, 2014
Sustainability of Nanotechnology Organization, UC Santa Barbara, 2013
Department of Economics, Universidad de Concepcion, Chile, 2013
Department of Economics, Universidad de Talca, Chile, 2013
International Coral Reef Symposium, Cairns, Australia, 2012
NSF Nanoscale Science and Engineering Grantees Conference: Focus on Environment, Washington, DC, 2012
Duke University Marine Laboratory, Beaufort, NC, 2011
Department of Geography, UC Santa Barbara, 2011
CA World Oceans, San Francisco, CA, 2010
Channel Islands National Park, Ventura, CA, 2010
Channel Islands National Marine Sanctuary, Santa Barbara, CA, 2010
Engineering Department, UCLA, 2010
Institute of Marine Sciences, UNC, Chapel Hill, NC 2010
NSF Mini-Symposium on Social-Ecological Science within the LTER Program, Washington, DC, 2010
CA Department of Fish and Game Commission, Marine Resources Subcommittee, Santa Barbara, CA, 2009
Marine Science Institute, UC Santa Barbara, CA, 2008
Bodega Marine Laboratory, UC Davis, CA, 2007
California World Oceans Conference, Long Beach, CA. 2006
West Coast Native Oyster Restoration Conference, San Francisco, CA, 2006
CEA-CREST, Cal State University- Los Angeles, CA, 2006
Environmental Fluids Mechanics Laboratory, Stanford University, 2006
Ecology and Evolutionary Biology, University of California, Santa Cruz, 2005
UCSB Bren School Dean's Council Breakfast Club, University Club, Santa Barbara, CA, 2004
Bernumwood Seminar Series, Montecito, CA, 2003
UCSB Bren School Dean's Council Meeting, University of California, Santa Barbara, CA, 2003
Coral Reef Fish Conservation Conference, Moorea, French Polynesia, 2002
Netherlands Journal of Sea Research 125 yr. Anniversary, Amsterdam, 2001
Scientific Committee on Antarctic Research, Amsterdam, 2001
Biological Sciences, University of New Hampshire, Departmental Seminar, 2001
School of Biology, Department, Georgia Tech University, Departmental Seminar, 2001
Ancona Marine Laboratory. Departmental Seminar, Ancona, Italy, 1999

International Shellfish Restoration Conference, Cork, Ireland, 1999
British Ecological Society, Sussex, England, 1999
National Science Foundation, McMurdo Station Seminar Series, Antarctica, 1998
Earth and Atmospheric Sciences, University of California, Santa Cruz, CA. Departmental Seminar, 1998
Curriculum in Marine Sciences, University of North Carolina at Chapel Hill, NC. Departmental Seminar, 1997
Ecology, Evolution, and Marine Biology, UCSB, Departmental Seminar, 1997
International Shellfish Restoration Conference, Hilton Head Island, S.C., 1995 and 1998
North Carolina Marine Fisheries Commission, Raleigh, N.C., 1993
International Marina Conference, Kingston, R.I., 1989

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13 December 2013

Search Committee – Director, School of Fisheries, Aquaculture, and Aquatic Sciences
Attention: Managing Director Breckenridge Partners
1025 West Everett Road, Suite #4
Lake Forest, Illinois 60045

Dear Search Committee:

I am writing in response to your advertisement that seeks a Director for the School of Fisheries, Aquaculture, and Aquatic Sciences in the College of Agriculture at Auburn University. I am excited about the opportunity to apply for the Director position and believe that my research, teaching, management, and leadership background make me a strong candidate. I am a full professor at the Bren School of Environmental Science and Management, and prior to joining the faculty at UC Santa Barbara, was a fishery biologist with the US National Marine Fisheries Service.

Over the years, I have conducted and led innovative research in fisheries ecology and management, marine population and habitat restoration and enhancement, ecotoxicology, and marine ecology. I also co-led a project for the CA-Federal Bay Delta Program on freshwater salmon spawning habitat restoration in the Merced River, CA. I address research questions with a multidisciplinary focus, and have led teams of post-docs, PhD students, masters, and undergraduate students in novel research designed to address pressing problems facing marine and freshwater resource science and management. My research group develops quantitative models for managing fishery species and ecosystems using theory, empirical information, and collaborative methods, including those based on marine reserves, data-poor assessments techniques, and partnerships with fishing communities, environmental NGOs, and State, Federal, and foreign fishery managers and policy makers. My recent work also focuses on aquaculture, with an emphasis on developing public-private partnerships and catch-share approaches. In addition, I am a leader in a NSF Science Center for the Environmental Implications of Nanotechnology (UC CEIN), as well as an investigator within NSF-funded Moorea Coral Reef Long-Term Ecological Research (MCR LTER) program in French Polynesia and Santa Barbara Coastal LTER program in Santa Barbara.

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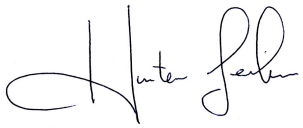
I have more than a decade of teaching experience in multidisciplinary environmental problem solving at the Bren School, where I created the Coastal Marine Resource Management specialization for our Masters of Environmental Science and Management program. More than 180 masters students have graduated from this specialization, having been trained in fisheries management, marine conservation, pollution remediation, corporate environmental management, restoration, and/or aquaculture. Eight PhD students graduated from my laboratory from 2003-2013, and two more will graduate in 2014. Their research is published in top journals, has produced innovative tools for fisheries management and conservation, and all students have gone on to exciting careers, including as professors, fishery scientists for The Nature Conservancy, fish stock assessors for NOAA-NMFS, and post-docs in shellfish disease epidemiology, to name a few. I teach courses in applied marine ecology, coastal oceanography, fisheries management, and aquaculture. As with my research program, I provide visionary leadership in multidisciplinary education and teaching at the Bren School.

Throughout my tenures at UC Santa Barbara, NMFS, and at UNC-Chapel Hill, I have successfully secured funding for exciting and impactful research. For example, our UC CEIN program was recently awarded a $24 million renewal grant, thus generating a total of $48 million dollars of support from 2009-2019. My responsibilities as a professor in the UC system have included chairing admissions and hiring committees, leading recruitment drives to enhance diversity, creating collaborations with industries, and helping to both develop and assess academic programs. At the Bren School, we developed the Latin American Fisheries Fellowship program with Walton Family Foundation support, and I work with corporations interested in problem solving in marine ecosystems and with fisheries and aquaculture. Most recently, I began work with a consortium of universities in Chile to help develop small-scale aquaculture in Patagonia, an effort supported in part by the large-scale salmon aquaculture industry. There is a great wealth of support waiting to help fund the new School of Fisheries, Aquaculture, and Aquatic Sciences at Auburn University.

Included in this packet, please find my curriculum vitae, a list of references, and my leadership philosophy. I appreciate being considered for the Director position. Please let me know if I can provide additional information in support of my application.

Sincerely,



Hunter S. Lenihan, PhD
Professor of Fisheries Ecology and Management

Leadership philosophy

This is a summary of my personal beliefs about leadership. I will use this document to guide my actions and decisions. I developed this set of ideas through mentoring graduate students, leading research teams in multidisciplinary science, and learning from great leaders.

Generate resources: My primary focus in leadership is to generate resources for faculty, staff, and students that will provide expanding opportunities so that people thrive in their work. The major bottleneck in science is not good ideas or technology but research support. While government funding is still very important, a growing program poised to solve real environmental problems and advance research science requires innovative forms of support from private donors and public-private partnerships. My objective as a Director will be to tap the vast wealth corporate, private, and international donors willing to partner in cutting edge science for fisheries management, aquaculture, conservation, and aquatic sciences. This includes new market-based and catch-share management strategies, working with stakeholders on spatial-based and data-poor management approaches, green permitting, marine reserve-based fishery management, and ecotechnology.

Leadership by example: Leaders can inspire their teams of faculty, students, and staff by practicing innovative, impactful, and rigorous science. Leaders should continue to teach and mentor students to seek excellence and creativity. A leader must clearly communicate science to the public and encourage others to do the same. A leader also encourages colleagues through fairness, joy, honesty, and dedication to the profession.

Clarity: Team members should know what a leader wants and not waste time guessing. A leader's intent is clear thus creating and implementing policies and procedures is made easy. Identifying clear priorities stimulates better use of resources. Leaders who are consistent and clear will win employees' trust and confidence.

Safety: Safety is the number one priority. A leader does everything possible to ensure the safety of all who work in an organization. All injuries can be prevented.

Holistic lifestyle: A leader recognizes that each of us is a whole person and that a large part of who we are is outside of the workplace—with families, friends, and recreation. A leader will support others in achieving balance in their lives. That will inspire a team to work hard and do their best. Leaders will not ask more than they are willing to do themselves.

Listening and Cooperating: A leader will continue to seek input and advice and stimulate leadership qualities in others. A leader encourages new perspectives and risk taking, listens to new ideas, and takes the heat when ideas and programs fail. Mistakes are opportunities for learning: honest mistakes are forgiven while those that compromise core values must be account for.

Accountability: A leader does what he/she says and expects others to keep their word and follow through on responsibilities. Leaders work together with others to find mutually beneficial solutions. Leaders do not whine or make excuses.

Communication: Leaders provide regular feedback that is direct and constructive relative to the needs of the individual and the organization. A leader is candid but not critical in communicating with team members with you. A leader celebrates the wins of others, no matter how small. Small victories are the stepping stones to great accomplishments.

Generosity: My life philosophy is to "pass it on". A leader should be generous with their time, resources, ideas, and feelings. The job of the leader is to help the team or organization thrive.