

GOV. MSG. NO. 53

Jo-Ann C. Leong, Ph. D., Professor & Director (retired 9/1/14)
Hawaii Institute of Marine Biology,
School of Ocean & Earth Sciences Technology, University of Hawaii

Education:

University of California, Berkeley	Zoology	B.A.
University of California, San Francisco Med.Sch.	Microbiology	Ph.D.
University of California, San Francisco Med.Sch.	Biochemistry	Postdoc
University of California, San Francisco Med.Sch.	Cancer Res.	Postdoc

Appointments:

Director, Hawaii Institute of Marine Biology, University of Hawaii	2001-
Professor, School of Ocean & Earth Sciences Technology, Univ. Hawaii	2001-
Asst., Assoc., Full Professor of Microbiology, Oregon State University	1975-1992
Distinguished Professor of Microbiology, Oregon State Univ.	1993-2003
Chairperson, Dept. of Microbiology, Oregon State Univ.	1996-2001
Emile Pernot Endowed Professor of Microbiology	1998-2003
Editor, Viral Diseases of Fish, Diseases of Aquatic Organisms	1996-2006
Editorial Board, Marine Biotechnology, J. Virol. Methods, Methods in Cell Sci	1991-2006
USDA/NSF Microbial Genome Sequence	2001,2003, 2004
USDA Molecular Basis of Animal Diseases Panel	2005, 2006
President, Board of Governors, Center for Tropical and Subtropical Aquaculture	2001-
Myron B. Thompson Academy School Board	2002-2011
Co-Chair, Ecosystem Science and Management Working Group, a standing committee of the NOAA Scientific Advisory Board	2008-2015
President, National Association of Marine Laboratories	2012-2013
Chairman, Public Policy Committee of NAML	2010-2012

Refereed Publications (2010-2014):

- Leong, J. C., and G. Kurath. 2010. Novirhabdoviruses. *The Springer Index of Viruses*. (C.A. Tidona and G. Darai, Editors), online. Springer-Verlag.
- Palumbi, S.R., J. D. Allen, M. W. Beck, D. G. Fautin, M.J. Fogarty, B. S. Halpern, L.S. Incze, J. Leong, E. Norse, J. J. Stachowicz, D. H. Wall, and P. A. Sandifer. 2009. Managing for Ocean Biodiversity: Creating a National Biodiversity Agenda to Sustain Marine Ecosystem Services. *Frontiers in Ecology and the Environment* 7(4):204-211.
- Van Oppen, Madeleine JH, Jo-Ann Leong, Ruth D. Gates. 2009 Coral-virus interactions: a double-edged sword? *Symbiosis* 47(1):1-8.
- Work, T.M., J. Dagenais, G.H. Balazs, J. Schumacher, T. D. Lewis, J. C. Leong, R. N. Casey, and J. W. Casey. 2009. In vitro biology of fibropapilloma-associated turtle herpesvirus and host cells in Hawaiian green turtles (*Chelonia mydas*). *Journal of General Virology* 90:1943-1950.
- Hagedorn, M., V.L. Carter, J. C. Leong, and F. W. Kleinhans. 2010. The physiology and cryosensitivity of Coral endosymbiotic algae (*Symbiodinium*). *Cryobiology* 60(2):147-158.
- Mary Hagedorn, Virginia L. Carter, Steven Ly, Raymond M. Andrell, Paul H. Yancey, Jo-Ann C. Leong, and Frederick W. Kleinhans (2010) Analysis of Internal Osmolality in Developing Coral Larvae, *Fungia scutaria*. *Physiological and Biochemical Zoology* 83(1): 157-166.
- Fautin, D., P. Dalton, L. S. Incze, J.C. Leong, C. Pautzke, A. Rosenberg, P. Sandifer, G. Sedberry, J.W. Tunell Jr., I. Abbott, R.E.Brainard, M.Brodeur, L.G. Eldredge, M. Feldman, F.Moretzsohn, P. S.Vroom, M.Wainstein, N.Wolff. 2010. An Overview of Marine Biodiversity in United States Waters. *PloS One* 5(8), e11914, p. 1-47. (Leong, Abbott, Eldredge contributed section on Insular Pacific –Hawaiian Large Marine Ecosystems).
- Wiener, C.S., M. Rivera, R. J. Toonen, J. Leong, R.K. Kosaki, S.A. Karl, K. Keller and H. Johnson. 2010. Creating Effective Partnerships in Ecosystem Based Management: A Culture of Science and Management. *J. Marine Biology* DOI 10.11555/2011/241610.
- Alonso, M.A., P.P. Chiou, and J. Leong. 2011. Development of a Suicidal DNA vaccine for Infectious Hematopoietic Necrosis Virus. *Fish and Shellfish Immunology* 30:815-823.
- Misumi, I., T. D. Lewis, A. Takemura, and J. C. Leong. 2011. Elicited cross-protection and specific antibodies in Mozambique tilapia (*Oreochromis mossambicus*) against two different immobilization serotypes of Cryptocaryon irritans isolated in Hawaii. *Fish and Shellfish Immunology* 30:1152-1158.

- Misumi, I., Leong J.C., Takemura, A., and Lewis, T.D. 2012. Immune protection of Mozambique tilapia (*Oreochromis mossambicus*) exposed to different infectious doses of ectoparasite (*Cryptocaryon irritans*). *Parasitology Research* 110 (1):363-372.
- Ackermann, M. M. Koriabine, F. Hartmann-Fritsch, P.J.de Jong, T.D. Lewis, N. Schetle, T. M. Work, J, Dagenais, G.H. Balazs and J. C. Leong. 2012. The Genome of Chelonid Herpesvirus 5 Harbors Atypical Genes. *PLoS One* 7(10): e45523. Doi:10.1371/journal.pone.0046623
- Alonso, M. and J. C. Leong. 2012. Licensed DNA Vaccines against Infectious Hematopoietic Necrosis Virus (IHNV). *Recent Patents DNA Gene Sequences*. Bentham Science, June 12 Epub ahead of print. PMID 22670604.
- Hagedorn, M., Carter,V., Martorana, K. Paresa, MK., Acker, J., Baums, I.B., Borneman, E., Brittson, M.,Byers, M., Henley, Ml., Laterveer, M. Leong, J., McCarthy, M., Meyers, S., Nelson, B.D., Petersen, D., Tiersch, T., Cuevas Uribe, R., Woods, E., Wildt, D. 2012. Preserving and using germplasm and dissociated embryonic cells for conserving Caribbean and Pacific coral. *PLoS One* 7(3)e.33354.
- Farrar, CE, Forsman, ZH, Gates, RD, Tooen, RJ, and Leong, J.C. 2013. Observing the Coral Symbiome Using Laser Scanning Confocal Microscopy. *Science* 339 (6119):515-518.
- Chiou, P.P., M.J. Chen, C-M. Lin, J. Khoo, J. Larson, R. Holt, J. Leong, G. Thorgaard, T.T. Chen. 2013. Production of Homozygous Transgenic Rainbow Trout with Enhanced Disease Resistance. *Marine Biotechnol.*, DOI 10. 1007/S 10126-013-9550-z.
- J. C. Leong and T. A. Wilhelm. 2011. Coastal and Marine Spatial Planning and the Northwestern Hawaiian Islands. *Proceedings of the Fifth International Fishers Forum on Marine Spatial Planning and Bycatch Mitigation*, Taipei, Taiwan.. ed E. Gilman, A. Ishizaki, D. Chang, W-Y Liu, and P. Dalzell. *Western Pacific Regional Fishery Management Council*.
- J.C. Leong and J. J. Marra (Convening Lead Authors); M. Finucane, T. Giambelluca, M. Merrifield, S.E. Miller, J. Polovina, E. Shea (Lead authors); M. Burkett, J. Campbell, P. Lefale, F. Lipschultz, L. Loope, D. Spooner, and B. Wang. 2014 Chapter 23. Hawaii and U.S. Affiliated Pacific Islands. *Climate Change Impacts in the United States: The Third National Climate Assessment*, J. M. Melillo, Terese Richmond, and G W. Yohe (eds.) U.S. Global Change Research Program, 537-556. Doi:10.7930/JOW66HPM.
- Falter, J., Hochberg, E., Schar, D., and Leong, J. 2013. Obituary. Marlin J. Atkinson 1951-2013. *Limnology & Oceanography Bulletin* 22 (2): 56-58.
- Evenson, O., and Leong, J. 2013. DNA Vaccines against viral diseases of farmed fish. *Fish & Shellfish Immunology* 56:1751-1758.
- Davies, N., Field, D., Amaral-Zettler, L., Clark, M.S., Deck, J., Drummond, A., Faith, D.P., Geller, J., Gilvert, J., Clockner, F.O., Hirsch, P.R., Leong, J. A., et al. 2014. The founding charter of the Genomic Observatories Network. *GigaScience* 3:2.
- Chen, P.P., Chen, M.J., Lin, C-M., Khoo, J., Larson, J. Holt, R., Leong, J., Thorgaard, G., and Chen, T.T. 2014. Production of homozygous transgenic rainbow trout with enhanced disease resistance. *Marine Biotechnol.* 16: 299-308.
- Thesis Advisor & Postgraduate Scholar Sponsor:**
- | | |
|----------------------|--|
| Marta Alonso | NEIKER- Tecnalia, Spain |
| Eric Anderson | Maine Bio-tek, VP |
| Rosemary Barrie | Newberg, Oregon |
| Linda Bootland | Novartis, retired |
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| John D. Drennan | Schering-Plough Animal Health Corp |
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| Linda Durrin | Beckman Research Institute, CA. |
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Grant D. Trobridge University of Washington
Scott W. Wong Gene Therapy Institute, OHSU
Dawn Jordan Hayes Calif. Animal Health & Food Safety Lab
Li Xu Sea Lane Biotechnologies, Menlo Park

Synergistic Activities:

Executive Secretariat, National Climate Assessment Development Advisory Committee, 2010-2014
NCADAC and convening Lead Author, Hawaii and the Pacific Islands Chapter, 2010-2014
Team Leader, Ecogenomics and Metabolomics, Hawaii EPSCoR statewide, IMUA III (Investing in Multidisciplinary University Activities) 2009-2015; Team Leader Ecological and Evolutionary Genetics, IMUA II, 2006-2009.
Chairman, Marine Biology Graduate Program Initiative at UH Mānoa. Co-Director, 2011-2013.

Sabbatical Visitors:

Mathias Ackerman University of Zurich, Institute for Virology, Faculty of Veterinary Med., Switzerland
Borre Robertsen University of Tromsø, Tromsø, Norway
Colin Munn Plymouth University, Plymouth, UK