

CURRICULUM VITAE
WHITLOW W.L AU

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EDUCATION

Ph.D. Electrical Science, Washington State University, 1970
M.S. Electrical Engineering, Washington State University, 1964
B.S. Electrical Engineering, University of Hawaii, 1962

PRESENT POSITION: Chief Scientist, Marine Mammal Research Program, HIMB

PROFESSIONAL AWARDS

Silver Medal in Animal Bioacoustics – Acoustical Society of America, Oct., 1998.
Fellow, Acoustical Society of America, May, 1990
Navy Meritorious Civilian Service Award (3rd highest national award for a Navy Civilian employee), for contributions in dolphin bioacoustics, 1986
Publication Award, Naval Ocean Systems Center, 1990, 1991, 1992
Award of Merit - Quality Step Increase - Dec. 1974; Nov. 1976; Dec. 1979

INTERNATIONAL RECOGNITION

1. Selected by the Danish National Research Foundation to be on a blue ribbon panel to evaluate several biological research centers in Denmark, May, 1997.
2. One of only two Americans invited to lecture in a summer bioacoustics workshop for PhD students in bioacoustics, at the University of Odense, Odense, Denmark, Aug. 1996.
3. Invited lecturer, Underwater Bioacoustics Workshop sponsored by the Ettore Majorana Center for Scientific Culture: International School of Ethology, Erice, Sicily, Nov. 1994.
4. Plenary speaker, 13th Biennial Conference on the Biology of Marine Mammals, Wailea, Maui, Hawaii, 1999.
5. Keynote speaker at Western Pacific Acoustics Conference, Australia, 2003.
6. Keynote speaker at the International Acoustics Congress, Kyoto, 2004
7. Keynote speaker European Underwater Acoustics Congress, Delf, The Netherlands, 2004

PROFESSIONAL ACTIVITIES

Acoustical Society of America Chair – Acoustics2012-Hong Kong-joint meeting with Acoustical Society of China.
President, Acoustical Society of America, 2009-2010
President Elect, Acoustical Society of America, 2008
Vice President, Acoustical Society of America, 2006
Co-organizer, 3rd Conf on Animal Acoustics Communications, Aug, 2011, Cornell U.
Council of Scientific Society Presidents, 2009-2010
Evaluator: Office of Naval Research Ocean Acoustics, 2010.
Scientific Committee: 5th Animal Biosonar Conference, Sept, 2009, Kyoto. Japan Co-Organizer, 2nd Conf on Animal Acoustics Communications, Aug, 2008, Corvallis, OR
Ocean Studies Board, National Res. Council, National Academies, 2004 -2006.
Associate Editor, J. Acoust. Soc. Am., Animal Bioacoustics, 1998-present
Executive Council, Acoustical Society of America, 2001-2004.
Organizer and Session chairman, Animal Bioacoustics Session, 127th meeting of the Acoustical Society of America, Austin, Texas, 1994. Organizing Committee member and Session chairman, International symposium on sensory systems and behavior of aquatic mammals, Moscow, 1991.
Organizer and Session chairman, Animal Bioacoustics Session, 122th meeting of the Acoustical Society of America, Houston, 1991.
Session Chairman, Psychological and Physiological Acoustics, Joint Meeting of the Acoustical Society of America and Acoustical Society of Japan, Honolulu, Hawaii, 1988.

Organizing Committee member, 3rd International symposium on animal sonar systems, Helsingor, Denmark, 1986.
Organizer and Chairman Session on Animal Bioacoustics, 106th meeting of the Acoustical Society of America, San Diego, 1983.
Organizing Committee member and Session chairman, 2nd International symposium on animal sonar systems, Jersey Island, 1979.

PATENTS

Simulated Echo Transponder for Training Marine Mammals
Marine Mammal Guidance Device
Broadband Sonar Signal Processor and Target Recognition System

PUBLICATION SUMMARY

3 authored books, 2 edited books, 208 paper in open literature, 188 Published abstracts

Books: Au, W. W. L. (1993). *The Sonar of Dolphins*, Springer-Verlag N.Y.

Marine Mammal Populations and Ocean Noise: Determining When Noise Causes Biologically Significant Effects, The National Academies, 2005.

Au, W. W.L. and Hastings, M. (2008). *Principles of Marine Bioacoustics*, Springer-Verlag, N. Y.

Edited Books: Au, W. W. L., Popper, A., and Fay, R., editors, (2000). *Hearing in Whales and Dolphins*, Springer-Verlag, New York.

Nachtigall, P. E., Lien, J., Au, W. W. L. and Read, A. J. (1995). *Harbour Porpoises: A Study of Bycatch*, De Spiel, The Netherlands.

Most Recent Publications

Au, W. W. L. (2014). "Dolphin biosonar target detection in noise: wrap up of a past experiment," J. Acoust. Soc. Am. **136**, 9-12.

Au, W. W. L., Ou, H. (2014). "Temporal signal processing of dolphin biosonar echoes from salmon prey," J. Acoust. Soc. Am. Express Letter, **136**, EL67-71.

Wei, C., Zhang, Yu, Au, W. W. L. (2014). "Modeling of Ultrasound Beam Formation of Baiji (*Lipotes vexillifer*)." J. Acoust. Soc. Am. **136**, 423-429.

Wei, C., Wang, Z., Song, Z., Wang, K., Ding, W., Au, W. W. L., Zhang, Y., (2014). "Acoustic Property Reconstruction of a Yangtze Finless Porpoise's (*Neophocaena asiaeorientalis asiaeorientalis*) Head Base on CT," accepted in PlosOne

Au, W. W. L., Giorli, G., Chen, J., Copeland, A., Lammers, M., Richlen, M., Jarvis, S., Morrissey, R., and Moretti, D. (2014). Presence and seasonal variation of deep diving foraging odontocetes around Kauai, Hawaii using remote autonomous acoustic recorders." J. Acoust. Soc. Am, **135**, 521-530.

Au, W. W. L., Giorli, G., Chen, J., Copeland, A., Jarvis, S., Morrissey, R., Moretti, D., and Klinck, H. (2013). "Nighttime Foraging by Deep Diving Echolocating Odontocetes off the Hawaiian Islands of Kauai and Ni'ihau as Determined by Passive Acoustic Monitors," J. Acoust. Soc. Am. **133**, 3119-3127.