CURRICULUM VITAE

Karl E. Huggins - Director USC Catalina Hyperbaric Chamber / USC Wrigley Marine Science Center Avalon, CA 90704

EDUCATION

B.S. Atmospheric & Oceanic Science (Biol. Oceanography), University of Michigan, Ann Arbor, MI, 1979.

M.S. Bioengineering, University of Michigan, Ann Arbor, MI, 1986.

POSITIONS

Director, Catalina Hyperbaric Chamber & Diving Control Board Member (1992-2012), University of Southern California; Assistant in Research (1980-1983), Associate Researcher (1984-1985), Research Associate (1985-1992), & Diving Control Board Member (1987-1992), University of Michigan; Sport Diving Decompression Table Advisory Board (1988-1992), Diver's Alert Network; Vice President for Research and Development (1982-1983), ORCA Industries, Inc.; Diving and Decompression Consultant (1981-1994).

SCIENTIFIC AND PROFESSIONAL ORGANIZATIONS

Undersea and Hyperbaric Medical Society, American Academy of Underwater Sciences, National Association of Underwater Instructors, National Board of Diving and Hyperbaric Medical Technology

AWARDS

2008 California Scuba Service Award, 2004 Conrad Limbaugh Memorial Award for Scientific Diving Leadership, 1993 DAN/Rolex Diver of the Year, 1990 Leonard Greenstone Diving Safety Award

SELECTED PUBLICATIONS

Huggins KE, "Dive Computer Considerations," in Blogg, S.L., M.A. Lang, and A. Møllerløkken, eds. <u>Proceedings of the</u> <u>Validation of Dive Computers Workshop</u>, European Underwater and Baromedical Society Symposium, Gdansk. Trondheim: Norwegian University of Science and Technology, 2012.

Huggins KE, "Decompression Algorithms," in Fife CE, St. Leger Dowse M, eds. <u>Women and Pressure – Diving and Altitude</u>, Flagstaff: Best Publishing Co.; 2010, p.81-93.

Huggins KE, "Evaluation of Dive Computer Options for Potential Use in 300 fsw Heliox/Trimix Surface Supplied Scientific Diving," in <u>Proceedings of the Advanced Scientific Diving Workshop</u>, Smithsonian Institution, Washington, D.C., 2006.

Huggins KE, Sipsey JJ, <u>Treatment of Decompression Sickness in Recreational Trimix (Technical) Divers: Report of Three Cases</u>, Undersea and Hyperbaric Medical Society Annual Meeting, Las Vegas, 2005 (Abstract).

Huggins KE, <u>Tender Bailout Decompression from Arterial Gas Embolism/Cardiac Arrest Treatments: Evolution of a</u> <u>Simple, Standard Protocol</u>, Undersea and Hyperbaric Medical Society Annual Meeting, Sydney, 2004 (Abstract).

Huggins KE, <u>Performance of Dive Computers Exposed to Profiles with Known Human Subject Results</u>, Undersea and Hyperbaric Medical Society Annual Meeting, Sydney, 2004 (Abstract).

Dunford RG, Vann RD, Gerth WA, Pieper CF, Huggins KE, Wacholtz C, Bennett PB, <u>The incidence of venous gas emboli</u> in recreational diving, Undersea and Hyperbaric Medicine, 29(4):247-59, Bethesda, 2002.

Huggins KE, "Reverse Profiles verses Forward Profiles: A Review of Divers Treated at the USC Catalina Hyperbaric Chamber," in <u>Proceedings of the Reverse Dive Profile Workshop</u>, Smithsonian Institution, Washington, D.C., 2000.

Huggins KE, The Dynamics of Decompression Workbook, University of Michigan, Ann Arbor, 1992.

Huggins KE, "The History of Decompression Devices and Computers," in <u>Proceedings of the American Academy Dive</u> <u>Computer Workshop</u>, University of Southern California Sea Grant Publication #USCSG-TR-01-89, 1989.

Huggins KE, "Decompression Computer Considerations," in <u>Decompression in Surface-Based Diving - Proceedings of</u> <u>the Thirty-sixth Undersea and Hyperbaric Medical Society Workshop</u>, Bethesda, 1987.

Huggins KE, <u>Microprocessor Application to Multi-Level Air Decompression Problems</u>, Michigan Sea Grant Publication MICHU-SG-87-201, Ann Arbor, 1987.

Huggins KE, "Doppler Evaluation of Multi-Level Dive Profiles," in <u>Proceedings of the Fourteenth International</u> <u>Conference on Underwater Education</u>, National Association of Underwater Instructors, Montclair, 1983.

Huggins KE, <u>New No-Decompression Tables Based on No-Decompression Limits Determined by Doppler Ultrasonic</u> <u>Bubble Detection</u>, Michigan Sea Grant Publication #MICHU-SG-81-205, Ann Arbor, 1981.

Huggins KE, Somers, L., <u>Mathematical Evaluation of Multi-Level Diving</u>, Michigan Sea Grant Publication #MICHU-SG-81-207, Ann Arbor, 1981.