

CURRICULUM VITA

Kristi West, Ph.D.

University of Hawaii at Manoa, Department of Physiology, John A. Burns School of Medicine, 1960 East-West Road, Biomed T-608, Honolulu, HI 96822

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EDUCATION:

- 1999-2002 University of Hawaii at Manoa, Biomedical Sciences, Physiology Department.
Ph.D. in Biomedical Science.
- 1999-2002 L'Universite de la Polynesie Francaise, Marine Ecology Department.
Ph.D. in Marine Biology.
- 1996-1998 University of the Ryukyus, Japan. Marine Science graduate program.
M.Sc. in Marine Science.
- 1996 University of Hawaii at Hilo, Marine Science major, Biology minor.
Bachelor of Arts Degree granted in 1996 (GPA 4.0)
- 1994 Maui Community College, Associate in Arts degree and Marine Option Program Certificate (GPA 4.0).

EMPLOYMENT:

- Current Junior Researcher, Department of Physiology, University of Hawaii at Manoa: Research on physiological parameters in several dolphin species.
Instructor, Marine Biology Program, University of Hawaii at Manoa: Development and instruction of specialty course on the Biology of Marine Mammals.
- 2003 - 2004 Post-Doctoral Fellow, National Zoo/National Museum of Natural History, Smithsonian Institution:
Research of cetacean lactational energetics.
- 2000 - 2004 Instructor and Lecturer of Marine Biology:
Field study leader and instructor for marine biology courses with an emphasis on field techniques, marine mammal biology and coral reef ecology. Duties included developing curriculum, teaching classes, and supervising other instructors. College credit through University of California at Santa Barbara, San Francisco State University, Minnesota State University, and Institute for Cultural Ecology.
- 1997 - 2002 Graduate Research Assistantship at Hawaii Institute of Marine Biology:
Leader of combined field and laboratory research project on the ecology and reproductive biology of rough-toothed and bottlenose dolphins in Moorea, French Polynesia. Duties included proposal writing for extramural funding, organization of logistical support, leading of fieldwork and laboratory analysis, data compiling and report writing.

COMMITTEE SERVICE:

- Acting primary advisor for Ms. Reena Shah, Master degree candidate, Department of Physiology, University of Hawaii at Manoa, 2003-present.
- Smithsonian National Zoological Park, Department of Conservation Biology Scientific Seminar Coordinator, Spring 2004.
- Dolphin Quest Institutional Animal Care and Use Committee Member (IACUC), 2001-present.
- Member of Hawaiian Islands Stranding Response Group. Coordinator of University of Hawaii at Manoa student participation in stranding events. 2004.

PUBLICATIONS:

Gannier, A. and **K.L. West**. 2004. Distribution of the rough-toothed dolphin (*Steno bredanensis*) around the Windward Islands, French Polynesia. In Press. *Pacific Science*.

West, K.L., Atkinson, S., Carmichael, M., Sweeney, J.C., Krames, B., and J. Krames. 2000. Concentrations of progesterone in dolphin milk during different reproductive states. *General and Comparative Endocrinology*: (117) 218-224.

West, K.L. and R. van Woesik. 2001. Spatial and temporal variance of river discharge on Okinawa (Japan): Inferring the temporal impact on adjacent coral reefs. *Marine Pollution Bulletin*: 42(10) 864-872.

West, K.L. 2002. The ecology and biology of the rough-toothed dolphin, *Steno bredanensis*. University of Hawaii at Manoa and L'Universite de la Polynesie Francasie. Dissertation Thesis.

West, K.L. 1998. Long-term variation in river discharge and the effects on adjacent coral reefs of Okinawa, Japan. University of the Ryukyus. Masters Thesis.

PUBLICATIONS (Submitted and Under Review):

West, K.L., Manire, C.A., Gaspar, C., Rhinehart, H.L., Hanahoe, E., Sweeney, J.C., and R. Stone. Under Review. Hormone concentrations in healthy and rehabilitated rough-toothed dolphins, *Steno bredanensis*. Submitted to *General and Comparative Endocrinology*.

MANUSCRIPTS in Preparation:

West, K.L., Mead, J.M., and C. W. Potter. Reproduction in the rough-toothed dolphin, *Steno bredanensis*: Attainment of sexual maturity. In prep.

West, K.L., Ramer, J.C., Shah, R., Hanahoe, E., Shwetz, C., Van Bonn, W.G., Gaspar, C., Levine, G., Sweeney, J.C., Reidarson, T., and J.M. Rasmussen. Baseline thyroid hormones in *Tursiops truncatus* according to age, sex, and reproductive status. In prep.

SCIENTIFIC CONFERENCE ABSTRACTS:

West, K.L., Ramer, J.C., Van Bonn, W.G. and J.C. Sweeney. 2003. Ultrasound techniques for measurement of the thyroid gland in *Tursiops truncatus*. 34th Annual International Association for Aquatic Animal Medicine Conference. Abstracts.

West, K.L., Sweeney, J.C., Hanahoe, E., Shwetz, C., Ramer, J.C., Levine, G., Stone, R., Reidarson, T., Rasmussen, J.M., and M.M. Garner. 2002. Thyroid hormones in *Tursiops truncatus*: Can we use baseline values to diagnose clinical concerns? 33rd Annual International Association for Aquatic Animal Medicine Conference. Abstracts.

Gaspar, C., **West, K.L.**, Manire, C.A., Rhinehart, H.L., Hanahoe, E., Sweeney, J.C., and R. Stone. 2002. Serum cortisol and thyroid hormone concentrations in stranded and healthy rough-toothed dolphins (*Steno bredanensis*). 33rd Annual International Association for Aquatic Animal Medicine Conference. Abstracts.

West, K.L., Carpenter, J., Atkinson, S., Sweeney, J.C., Krames, B., and J. Krames. 2001. Changes in milk composition during lactation and the relationship to reproductive status in the bottlenose dolphin, *Tursiops truncatus*. 14th Biennial Conference of the Biology of Marine Mammals. Abstracts.

Mead, J.M., **West, K.L.**, and C.W. Potter. 2001. Reproduction in the rough-toothed dolphin, *Steno bredanensis*: Attainment of sexual maturity. 14th Biennial Conference of the Biology of Marine Mammals. Abstracts.

West, K.L., Hanahoe, E., Atkinson, S., Sweeney, J.C., and R. Stone. 2001. Thyroid hormones in female bottlenose dolphins: Establishing baseline values for medical management. 16th Big Island Science Conference, University of Hawaii at Hilo Chapter of Sigma Xi. Abstracts.

West, K.L., Atkinson, S. Schwetz, C., Sweeney J.C., and Stone, R. 2001. Thyroid hormone concentrations during different reproductive states in adult female bottlenose dolphins (*Tursiops truncatus*). 32nd Annual International Association for Aquatic Animal Medicine Conference. Abstracts.

Levine, G., Sweeney, J.C., Stone, R., Wolden, B., and **K.L. West**. 2001. A balanced approach to meeting the nutritional needs of the critically ill neonatal *Tursiops truncatus*. 31st annual International Association for Aquatic Animal Medicine, joint with American Association for Zoo Veterinarians Conference. Abstracts.

West, K.L., Carpenter, J., Atkinson, S., Sweeney, J.C., Krames, B., and J. Krames. 2000. The relationship between milk composition and reproductive status in bottlenose dolphins (*Tursiops truncatus*). 31st annual International Association for Aquatic Animal Medicine, joint with American Association for Zoo Veterinarians Conference. Abstracts.

Gaspar, C., **West, K.L.**, Atkinson, S., and J.C. Sweeney. 2000. Variations in blubber thickness of individual dolphins and between species. 31st annual International Association for Aquatic Animal Medicine, joint with American Association for Zoo Veterinarians Conference. Abstracts.

Panheleux, Y., and **K.L. West**. 2000. Stretcher training with rough-toothed dolphins (*Steno bredanensis*). 27th annual International Marine Animal Trainers Association Conference. Abstracts.

Gaspar, C., Tange, A., and **K.L. West**. 2000. Traditional Roles of Whales and Dolphins in French Polynesia. European Aquatic Animals Education Conference. Abstracts.

West, K.L., Atkinson, S., Sweeney, J.C., and M. Carmichael. 1999. Dolphin milk as a means to monitor reproductive activity. 14th Big Island Science Conference, University of Hawaii at Hilo Chapter of Sigma Xi. Abstracts.

West, K.L., Atkinson, S., Sweeney, J.C., Krames, B., Krames, J., and J. Boehm. 1999. Progesterone concentrations associated with parturition in 3 species of Odontocetes. 13th Biennial Conference of the Biology of Marine Mammals. Abstracts.

Atkinson, S. and **West, K.L.** 1999. Novel approaches to endocrinologic monitoring in marine mammals. Bottlenose Dolphin Reproduction Workshop. Abstracts.

West, K.L., Atkinson, S., Sweeney, J.C., and M. Carmichael. 1998. Dolphin milk as an indicator of reproductive status. 12th Biennial Conference of the Biology of Marine Mammals. Abstracts.

GENERAL PUBLIC LITERATURE AND INVITED PRESENTATIONS:

West, K.L., and C. Gaspar. 2000. A rough-toothed dolphin named Pea. Air Tahiti Nui In-Flight Magazine. December Issue.

West, K.L. 2000. Research investigations into Hawaii's dolphins and whales. Invited Speaker, Teacher's Open House, Hilton Waikoloa Village, September 30th, Waikoloa, Hawaii.

West, K.L. 2000. The rough-toothed dolphin in French Polynesia. Invited Speaker, Teachers Open House, Beachcomber Parkroyal, November 18th, Moorea, French Polynesia.

AWARDED RESEARCH GRANTS:

Dolphin Quest (2004): \$30,000 to tag melon-headed whales, Fraser's dolphins, and rough-toothed dolphins in French Polynesia.

Smithsonian Institution, National Zoological Park (2004): \$15,000 to continue study of the energetics of lactation in cetaceans, post-doctoral extended fellowship award.

Smithsonian Institution (2002/2003): \$30,000 to study the energetics of lactation in cetaceans, post-doctoral fellowship award.

Indianapolis Zoo (2002/2003): \$40,000, co-principal investigator to study thyroid function in bottlenose dolphins.

Dolphin Quest Inc. (2002/2003): \$50,000 over two years to tag and track rough-toothed dolphins and investigate dolphin physiology.

Dolphin Quest Inc. (1998-2002): Total of \$100,000 over a 4 year period.

Graduate research assistantship funds to the University of Hawaii.

National Sea Grant Program (1998-2001): Total of \$75,000 over a 3 year period.

Industrial Graduate Student Fellowship Award, matched industrial funds to study reproduction and development in rough-toothed and bottlenose dolphins.

Private Donation (2002): \$500 to study dolphin reproduction at the University of Hawaii.

Smithsonian Office of Fellowships and Grants (2001): \$2000 to study reproduction in Smithsonian dolphin specimens of 2 species.

Smithsonian Office of Fellowships and Grants (2000): \$1000 to study life history in Smithsonian rough-toothed dolphin specimens.

Dolphin Quest French Polynesia (2000): \$6000 to tag and track rough-toothed dolphins in French Polynesia.

Sea World Inc. (1998): \$5000 to study the rough-toothed dolphin in French Polynesia.

French Polynesian Territorial Government (1998): \$3000 to study the rough-toothed dolphin in French Polynesia.
Dolphin Quest Inc. (1997): \$3000 to investigate progesterone concentrations in dolphin milk.

CERTIFICATIONS:

- Radiation Safety Certified, University of Hawaii at Manoa. 1998-present.
- Biohazard Safety Certified, University of Hawaii at Manoa. 2003-2004.

David R. Blasko

(personal address redacted)

Current Position:

Director of Animal Operations
Six Flags Marine World
2001 Marine World Parkway
Vallejo, CA 94589
707-556-5253
707-556-5261 fax

Affiliations:

American Zoo and Aquarium Association: Professional Member
Elephant Managers Association: Past President
Elephant Taxon Advisory Group/Species Survival Plan:
Steering Committee Member
International Elephant Foundation: Board Member
AZA Professional Training Program: Instructor
Certificate: Wildlife Law Enforcement
(California Department of Fish & Game)

Work Experience:

1972 to 1977: Sea World of Ohio
1978 to 1982: American Seaway Foods
1982 to Present: Six Flags Marine World

Related Experience:

- 22 years of employee management in the exotic animal field.
- 28 years of marine and land animal care, breeding, transportation and training.
- Organization and restructure of problem animal areas, drastically improving employee and public safety while providing better care for the animals.
- Specializing in the care and management of captive elephants.
- Employee development, focusing on safety, training, and setting up guidelines, protocols and new employee orientations.
- Exhibit design, concentrating on safety, function, appeal and breeding.
- Acquisition and disposition of land and marine animals.
- Extensive training and conditioning of a variety of land animals for films, commercials, television, public appearances, parades and promotions.
- Training for daily in-park education presentations, providing hands on contact for Park guests.
- Interviews and appearances on local and national news and talk shows.
- Presentations to State and Federal agencies related to animal care.
- Active in the conservation and reproductive research of endangered species.

Presentations:

- 1985 EMA Conference – Paper on elephant teeth
- Hosted 1993 EMA Conference
- 1994 AZA Conference – Paper on elephant management
- 1995, 1996 Instructor for Riddles Annual Comprehensive School in Elephant Training, Handling and Safety Procedures
- 1997 EMA Conference – Use of infrared light therapy on elephants
- 1997 Elephant Research Symposium – Poster on repairing nail cracks
- 1998 EMA Conference – Behavioral Components in an Elephant Management System & Pharyngeal Endoscopy of an African Elephant
- 1995 through 2003 Instructor for AZA's Principles of Elephant Management Course

Publications:

- Diagnosis and Treatment of Severe Swelling of Pharyngeal Tissues of an African Elephant (*Loxodonta africana*) Laurie J. Gage, D.V.M., David R. Blasko, and Larry D. Galuppo, D.V.M.
- Development of an Enzyme Linked Immunosorbant Assay (ELISA) for Luteinizing Hormone (LH) in the Elephant, *Loxodonta africana* and *Elephas maximus* Nancy J. Dahl, Deborah Olson, Dennis L. Schmitt, D.V.M., RamaSharma Kristipati, David R. Blasko and Janet Roser

References: Available upon request

David R. Blasko
Bio / 2004

David R. Blasko is Director of Animal Operations at Six Flags Marine World, responsible for all aspects of the care and husbandry for a diverse collection of more than 3,000 mammals, birds, reptiles and invertebrates of the land, sea and air. Species in his charge include African and Asian elephants, killer whales, bottlenose dolphins, Pacific walruses, California sea lions, Pacific harbor seals, Bengal tigers, mountain lions, primates, giraffes, Magellanic penguins, hornbills, a variety of raptors, parrots and other birds, sharks, coral, warm- and cold-water fish and invertebrates, butterflies, white-throated monitor lizards and lesser anteaters, among others.

Blasko began his career at Sea World of Ohio, and came to the Six Flags Marine World park (then Marine World Africa USA) in 1982, serving as Elephant Training Supervisor for 20 years. A respected consultant on elephant care, training and safety for other zoos, government agencies (USDA/APHIS, U.S. Fish & Wildlife Service, California Fish & Game, etc.), and to private owners, Blasko is past president of the national Elephant Managers Association and an instructor for the Principles of Elephant Management School of the American Zoo & Aquarium Association. He serves on the steering committee of the Asian and African Elephant Species Survival Program management group, helping preserve elephants in zoos and in the wild.

During his tenure at Marine World, Blasko and the elephants in his charge have participated in groundbreaking efforts to establish and refine artificial insemination techniques and procedures for African elephants. Scientific studies benefiting elephants in zoos and in the wild, including work with elephant foot care, dental care, ultrasonic communication, chemical communication, locomotion, DNA analysis, and pioneering veterinary care procedures including infrared light treatments are among Blasko's cooperative research efforts at Six Flags Marine World. He has presented papers on elephant care at numerous Elephant Managers Association and American Zoo and Aquarium Association conferences.

Blasko is active in the international Alliance of Marine Mammal Parks and Aquariums and a board member of the International Elephant Foundation. He is past president of the Elephant Managers Association and a professional member of the American Zoo and Aquarium Association. Blasko holds a Wildlife Law Enforcement certificate from the California Department of Fish & Game. He lives in Napa, California.

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LANCE G. BARRETT-LENNARD

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EDUCATION

- B.Sc.(hon.). 1980. Biology major, mathematical science minor. University of Guelph.
- M.Sc. 1993. Zoology. University of British Columbia. Thesis title: Echolocation in wild killer whales (*Orcinus orca*). Supervisors: J.K.B. Ford, J.N.M. Smith.
- Ph.D. 2000. Zoology. University of British Columbia. Thesis title: Population structure and mating patterns of killer whale populations in the northeastern Pacific, as revealed by DNA analysis. Supervisors: J.K.B. Ford, J.N.M. Smith. Category 1.

PRESENT POSITION

Senior Marine Mammal Research Scientist, Vancouver Aquarium Marine Science Centre (since Aug. '01)

Adjunct Professor, Department of Zoology, University of British Columbia (since Jan. '02)

PROFESSIONAL ACTIVITIES

Co-Chair: Resident Killer Whale Recovery Team, Fisheries and Oceans Canada (appointed 2004)

Co-Chair: Scientific and Technical Advisory Council on Offshore Oil and Gas. University of Northern British Columbia/ British Columbia Ministry of Energy, Mines and Resources (appointed 2003)

Member: Alaska Scientific Review Group, US National Marine Fisheries Service (appointed 2002)

Board Member: Johnstone Strait Killer Whale Interpretive Centre Society (since 2001)

Member: Vancouver Foundation, Animal Welfare Advisory Committee (since 2001)

Co-Investigator and Project Leader: Western Alaskan Killer Whale Project. A three-year study of ecology, genetics, and bioacoustics of killer whales in the eastern Aleutian Islands. (2002-2005)

Co-Chair: Fourth International Orca Symposium (Chizé, France Sept. 23-28, 2002).

Co-Chair: International Symposium on Marine Mammal Culture (Vancouver, Nov. 28, 2001).

EMPLOYMENT HISTORY (past 15 years)

April 2001-Aug. 2001 Research Scientist, Conservation Section, Canadian Department of Fisheries and Oceans, Pacific Biological Station.

Sept. 2000-April 2001 Population Geneticist, Species at Risk Program, Marine Mammal Section, Canadian Department of Fisheries and Oceans, Pacific Biological Station.

1995-2000 Teaching Assistant in introductory biology, population ecology, statistics, vertebrate zoology, and evolutionary genetics at the University of British Columbia.

1990-2000 Co-founder and partner: Pacific Ecological Research (consulting company, emphasis on population modeling, marine population inventories, and conservation).

1989-1990 Research Technician, Marine Mammal Section, Pacific Biological Station, Canadian Department of Fisheries and Oceans.

RESEARCH INTERESTS

I am interested in the conservation of small populations, inter- and intra-specific variation in animal social systems, mechanisms of sympatric and parapatric speciation, and the effects of competition and predation on population structure. My research has focused on a complex of sympatric and parapatric populations of killer whales off the west coast of British Columbia and Alaska. My M.Sc. project was a comparative study of two sympatric ecotypes: a fish-eating *resident* form and a mammal eating *transient* form. I described differences in echolocation use by the two forms that reflect the avoidance responses of their prey, and I examined the effects of these differences on the maintenance of population segregation.

My Ph.D. research was a study of population structure and mating systems based on DNA analysis. With the assistance of colleagues from Alaska, British Columbia, and France, I used custom-designed pneumatic darts to collect skin biopsies from 300 photo-identified killer whales. My key findings, based on the analysis of mitochondrial and nuclear (microsatellite) DNA are as follows: (1) residents and transient are discrete populations that are sufficiently genetically isolated to speciate sympatrically; (2) since the separation of resident and transient lineages, each has divided by fission into at least three genetically differentiated parapatric subpopulations; (3) acoustic repertoire similarity and relatedness of resident pods are strongly correlated, implying that new pods also arise by fission rather than by the coalescence of emigrants; (4) matings rarely if ever occur within resident pods, but instead occur during temporary associations between pods; (5) most matings occur between pods from different *acoustic clans* from the same subpopulation (an acoustic clan is a group of pods with similar vocal dialects); and (6) this mating pattern maintains low inbreeding levels in relation to the size of resident subpopulations.

I am presently expanding my research on killer whales from its present focus on northeastern Pacific populations to include populations from around the globe, which will allow me to examine relationships between ecological specialization and sympatric and parapatric population segregation in detail. I also intend to broaden my focus to include other marine species characterized by small or fluctuating population size and/or disjunct population distributions, including sea otters and several pinniped species. This new research will include a focus on the role of top level marine predators in shaping life history traits of individual marine mammal species and in structuring their communities. I presently have two graduate students (one MSc and one PhD) and two honours students.

SCIENTIFIC CONTRIBUTIONS

Papers (peer-reviewed)

- Barrett-Lennard, L.G., Heise, K., Martell, S., DeMaster, D.P., Trites, A.W. *in prep.* Killer whale predation on Steller sea lions in western Alaska: a simulation study. Ecological Applications.
- Rayne, S., Ikonomou, M.G., Ellis, G.M., Barrett-Lennard, L.G., Ross, P.S. *submitted* PBDEs, PBBs, and PCNs in Three Communities of Free-Ranging Killer Whales (*Orcinus orca*) from the Northeastern Pacific Ocean Environmental Science and Technology.
- Barrett-Lennard, L.G., Heise, K. *in review* The Killer Whale Paradox: Single-minded Specialization in a Generalist Predator. In Estes, J.A. Whales and Ocean Ecosystems. UCSC Press, Santa Cruz, Ca.
- Heise, K., Barrett-Lennard, L.G., Saulitis, E.L., Matkin, C.O., Bain, D. 2003. Examining the evidence for killer whale predation on Steller sea lions in British Columbia and Alaska. Aquatic Mammals 29:325-334
- Yurk, H., Barrett-Lennard L.G., Ford, J.K.B. and Matkin C.O. 2002. Cultural transmission within maternal lineages: Vocal clans in resident killer whales in Southern Alaska. Animal Behaviour 63:1103-1119.
- Barrett-Lennard, L.G., Deecke, V.B., Ford, J.K.B., Yurk, H. 2001. A sound approach to the study of culture. Behavioural and Brain Sciences. 24:325-326.
- Barrett-Lennard, L.G., Ellis, G.M. 2001. Population structure and genetic variability in northeastern Pacific killer whales: towards an assessment of population viability. Canadian Scientific Advisory Secretariat, Department of Fisheries and Oceans Document 2001/065. URL: http://www.dfo-mpo.gc.ca/csas/csas/English/Research_Years/2001/2001_065e.htm
- Guinet, C. Barrett-Lennard, L.G., Loyer, B. 2000. Coordinated attack behaviour and prey sharing by killer whales at Crozet Archipelago: strategies for feeding on negatively-buoyant prey. Marine Mammal Science 16:829-834.
- Ross, P.S., Ellis, G.M. Ikonomou, M.G., Barrett-Lennard, L.G., Addison, R.F. 2000. High PCB concentrations in free-ranging Pacific killer whales, *Orcinus orca*: effects of age, sex and dietary preference. Marine Pollution Bulletin. 40:504-515.
- Saulitis, E.L., Matkin, C.O., Barrett-Lennard, L.G., Heise, K., Ellis, G.M. 2000. Foraging strategies of sympatric killer whale (*Orcinus orca*) populations in Prince William Sound, Alaska. Marine Mammal Science 16:94-109.

- Ford, J.K.B., Ellis, G.M., Barrett-Lennard, L.G., Morton, A.B., Palm, R.S., and Balcomb, K.C. 1998. Dietary specialization in two sympatric populations of killer whales (*Orcinus orca*) in Coastal British Columbia and adjacent waters. Canadian Journal of Zoology 76:1456-1471.
- Barrett-Lennard, L.G., Smith, T.G., and Ellis, G.M. 1996. A cetacean biopsy system using lightweight pneumatic darts, and its effect on the behaviour of killer whales. Marine Mammal Science 12:14-27.
- Barrett-Lennard, L.G., Heise, K.A., and Ford, J.K.B. 1996. The mixed blessing of echolocation: differences in sonar use by fish-eating and mammal-eating killer whales. Animal Behaviour 51:553-565.

Books

- Matkin, C.O., Ellis, G.M., Saulitis, E.L., Barrett-Lennard, L.G., Matkin, D. 1999. Killer whales of Southern Alaska. Phantom Press, Nanaimo, and North Gulf Oceanic Society, Homer, Alaska. 96 pp.

Reports

- Matkin, C.O., Ellis, G.M., Barrett-Lennard, L.G., Jurk, H., Scheel, D., Saulitis, E.L. 1996-1999. Comprehensive killer whale investigation, Exxon Valdez Oil Spill Trustee Council Annual Reports (Restoration Projects 95012,96012a, 97012, and 98012, respectively). 58, 54, 59, and 74 pp., respectively.
- Barrett-Lennard, L.G., Heise, K.A., Saulitis, E.L., Ellis, G.M., Matkin, C.O. 1995. The impact of killer whale predation on Steller sea lion populations in British Columbia and Alaska. Report of the North Pacific Universities Marine Mammal Research Consortium, Fisheries Centre, 6248 Biological Sciences Rd, Vancouver, B.C., V6T 1Z4, Canada. 66 pp.
- Ford, J.K.B., Heise, K.A., Barrett-Lennard, L.G., Ellis, G.M. 1994. Killer whales and other cetaceans of the Queen Charlotte Islands/Haida Gwaii. Report of the South Moresby/Gwaii Haanas Park Reserve, Queen Charlotte, B.C., Canada. 66 pp.
- Heise, K.A., Barrett-Lennard, L.G., Ford, J.K.B. 1993. Killer whales of the Queen Charlotte Islands: results of research on the abundance, distribution, and population identity of *Orcinus orca* in the waters of Haida Gwaii in 1992. Report of the South Moresby/ Gwaii Haanas Park Reserve, Queen Charlotte, B.C., Canada. 36 pp.

Conference and Symposium Presentations

- Barrett-Lennard, L.G. Low mtDNA variation in social odontocetes revisited: insights from killer whale behaviour and population structure. Fifteenth Biennial Meeting of the Society for Marine Mammalogy. (Greensboro, N.C. Dec. 14 to 19, 2003).
- Fung, C., Barrett-Lennard, L.G. Adaptive evolutionary divergence in sympatric killer whale (*Orcinus orca*) ecotypes. Fifteenth Biennial Meeting of the Society for Marine Mammalogy. (Greensboro, N.C. Dec. 14 to 19, 2003).
- Vergara, V., Barrett-Lennard, L.G. Vocal development in a captive beluga (*Delphinapterus leucas*) calf. Fifteenth Biennial Meeting of the Society for Marine Mammalogy. (Greensboro, N.C. Dec. 14 to 19, 2003).
- Barrett-Lennard, L.G. Natural history of killer whales. Invited presentation. Whales and Ocean Ecosystems Symposium (Santa Cruz, Ca. April 11 to 14, 2003).
- Barrett-Lennard, L.G. Whale of an appetite. Invited lecture, Saving our Seas Forum, Monterey Bay Aquarium, Monterey, California (April 24, 2002).
- Barrett-Lennard, L.G. Extreme population segregation in killer whales: the roles of inbreeding avoidance, song, and traditions. Invited Presentation. Sixteenth Annual Conference of the European Cetacean Society (Liège, Belgium April 7 to 11, 2002).
- Barrett-Lennard, L.G., Ford, J.K.B., Ellis, G.M., Matkin, C.O. Mating patterns and inbreeding avoidance in non-dispersing resident killer whales. Fourteenth Biennial Meeting of the Society for Marine Mammalogy. (Vancouver Nov. 29 - Dec. 3, 2001).
- Ross, P.S., Ellis, G.M., Jeffries, S., Calambokidis, J., Barrett-Lennard, L.G. Pacific killer whales (*Orcinus orca*): sentinels of a contaminated planet Fourteenth Biennial Meeting of the Society for Marine Mammalogy. (Vancouver Nov. 29 - Dec. 3, 2001).
- Barrett-Lennard, L.G. A Propensity for Isolationism: Culture and Population Segregation in Killer Whales. International Workshop on Culture in Marine Mammals (Vancouver Nov. 28, 2001).

- Yurk, H., Barrett-Lennard, L.G. and Ford J.K.B. The role of culture in long-term maintenance of kinship groups in a killer whale population. XXVII International Ethological Conference. (Tübingen, Germany Aug. 22-29, 2001)
- Barrett-Lennard, L.G. Critical factors influencing the viability and recovery prospects of threatened killer whale populations. Invited seminar, Pacific Biological Station, Nanaimo, British Columbia. (May 9, 2001).
- Barrett-Lennard, L.G. Population segregation, kin group fidelity, and mating patterns in northeastern Pacific killer whales. Invited seminar, University of Alaska, Anchorage. (April 10, 2001).
- Barrett-Lennard, L.G. Conservation of unique sub-populations. Conservation Lunch Series Seminar, Departments of Forestry and Zoology, University of British Columbia. (Mar. 29, 2001).
- Barrett-Lennard, L.G. Population segregation and mating patterns in eastern Pacific killer whales: a genetic analysis. Invited seminar, Pacific Biological Station, Nanaimo, British Columbia. (Oct. 2, 2000).
- Yurk, H., Barrett-Lennard, L.G., Ford, J.K.B. The essence of killer whale societies: culturally maintained kinship groups in a hierarchically structured community. Animal Social Complexity and Intelligence Conference (Chicago Academy of Sciences). (Chicago. Aug 23-26, 2000).
- Barrett-Lennard, L.G. Cultural displacement and ecological speciation in killer whales. Zoology Graduate Student Symposium, University of British Columbia. (Apr.1, 2000).
- Barrett-Lennard, L.G. Ecological character displacement of foraging specializations in the killer whale: phylogeny in the making? Symposium on Marine Mammal Phylogenies (invited participant). Thirteenth Biennial Meeting of the Society for Marine Mammalogy. (Maui. Nov. 29-Dec. 3, 1999).
- Ross, P.S., Ellis, G.M., Ikonomou, M.G., Barrett-Lennard, L.G., Addison, R.F. Toxic chemicals in free-ranging Pacific killer whales (*Orcinus orca*): a tale of sex, age and metabolism. Thirteenth Biennial Meeting of the Society for Marine Mammalogy. (Maui. Nov. 29-Dec. 3, 1999).
- Matkin, C.O., Saulitis, E.L., Ellis, G.M, Barrett-Lennard, L.G. The AT1 group of transient killer whales in southern Alaska: a unique population in decline. Thirteenth Biennial Meeting of the Society for Marine Mammalogy. (Maui. Nov. 29-Dec. 3, 1999).
- Barrett-Lennard, L.G. Population segregation, kinship, and mating patterns in British Columbian and Alaskan killer whales. Invited seminar, Biological Sciences Department. Humboldt State University. (Oct. 1, 1999).
- Barrett-Lennard, L.G. Inbreeding avoidance in the absence of dispersal. Invited seminar, Zoology Department, University of Toronto. (Feb. 10, 1999).
- Barrett-Lennard, L.G. Intraspecific niche partitioning and behavioural character displacement. Invited seminar, Zoology Department, University of Toronto (Feb. 8, 1999).
- Barrett-Lennard, L.G. Sex, fraternization, and division of the resource pie: patterns of relatedness in killer whale populations. Biodiversity, Ecology, and Evolution Seminar Series, University of British Columbia. (Sept. 30, 1998).
- Barrett-Lennard, L.G. Sympatric mammal-eating and fish-eating killer whale (*Orcinus orca*) populations: cultural differences limit or prevent gene flow. Annual Meeting of the Society for the Study of Evolution. (Vancouver. June 20-24, 1998).
- Jurk, H., Barrett-Lennard, L.G., Ford, J.K.B. et al. Clan structure of resident killer whales in Prince William Sound Alaska: acoustic and genetic evidence. Twelfth Biennial Conference on the Biology of Marine Mammals. (Monaco. Jan. 20-24, 1998).
- Barrett-Lennard, L.G. Why short term studies are a complete waste of time. Simon Fraser University / University of British Columbia Annual Ecology Retreat. (Squamish, British Columbia. Nov. 8-9, 1997).
- Barrett-Lennard, L.G., Ford, J.K.B., Ellis, G.M., Matkin, C.O. Mitochondrial DNA diversity within and between three sympatric ecological forms of killer whale (*Orcinus orca*). Annual Meeting of the Society for Conservation Biology. (Victoria. June 6-9, 1997).
- Barrett-Lennard, L.G. The mixed blessing of echolocation: sonar and the maintenance of population segregation in killer whales. Eleventh Biennial Conference on the Biology of Marine Mammals. (Orlando. Dec.14-18, 1995).

Heise, K.A., Barrett-Lennard, L.G., Saulitis, E.L. Killer whale predation and the decline of Steller sea lions in Alaska. Eleventh Biennial Conference on the Biology of Marine Mammals. (Orlando. Dec.14-18, 1995).

Barrett-Lennard, L.G., Smith, T.G., Ellis, G.M. A new cetacean biopsy sampling system. International Symposium on Marine Mammal Genetics. (La Jolla. Sept. 22-24, 1994).

Barrett-Lennard, L.G. Echolocation by fish-eating and mammal-eating killer whales. Annual Meeting of the Animal Behavior Society. (Davis. 24-29 July, 1993).

COURSES

Graduate-level courses taken during M.Sc. and Ph.D. studies: biomathematics, field ecology, marine oceanography (aud.), advanced ecology, theoretical population dynamics, underwater acoustics (directed studies), molecular genetics, population genetics (aud.), conservation genetics (aud.).

Special courses (non-credit): Instructional Skills Workshop (Sept.-Oct. 1996, Faculty Development Program, University of British Columbia); Recent Advances in Conservation Genetics (Aug. 10-23, 1997, Conservation and Research Centre, Smithsonian Institution).

REFERENCES

James N.M. Smith. (Professor, University of British Columbia). Zoology Department, 6270 University Blvd., Vancouver, B.C., V6T-1Z4, Canada. *phone*: (604) 822-3363. *fax*: (604) 822-2416. *email*: smith@zoology.ubc.ca.

Sarah P. Otto. (Associate Professor, University of British Columbia). Zoology Department, 6270 University Blvd., Vancouver, B.C., V6T-1Z4, Canada. *phone*: (604) 822-2778. *fax*: (604) 822-2416. *email*: otto@zoology.ubc.ca.

John K.B. Ford. (Director of Marine Mammal Research, Vancouver Aquarium Marine Science Centre, and Adjunct Professor, University of British Columbia). Vancouver Aquarium, P.O. Box 3232, Vancouver, B.C., V6B 3X8, Canada. *phone*: (604) 659-3428. *fax*: (604) 659-3515. *email*: ford@zoology.ubc.ca.

Michael C. Whitlock. (Associate Professor, University of British Columbia) Address: Zoology Department, 6270 University Blvd., Vancouver, B.C. V6T-1Z4, Canada. *phone*: (604) 822-2069. *Fax*: (604) 822-2416. *email*: whitlock@zoology.ubc.ca.

JEFFREY R. BOEHM, DVM

(personal address redacted)

EDUCATION

Doctor of Veterinary Medicine, 1990

School of Veterinary Medicine
University of California, Davis

Bachelor of Arts, 1983

Biochemistry and Cell Biology
University of California, San Diego

EMPLOYMENT

Senior Vice President

Conservation and Veterinary Services

John G. Shedd Aquarium

1200 South Lake Shore Drive
Chicago, Illinois

1992 to present

Member of a multi-disciplinary senior management team; involved in the development and management of the aquarium's annual operating and capital budgets, and strategic short and long range planning. Responsible for a team-managed, preventative veterinary medical program for a collection including marine and terrestrial mammals, birds, amphibians, reptiles and a large and diverse variety of marine and freshwater fishes. Lead and coordinate the institution's conservation division, including in-house captive breeding programs, local, national and international field programs, educational and advocacy programs and partnerships. Serve as chairman of an active in-house research committee.

Zoo Veterinarian

Los Angeles Zoo

5333 Zoo Drive
Los Angeles, California

1991 to 1992

Provided veterinary care to a diverse collection of exotic animals. Extensive involvement, as one of two veterinarians, included primary responsibility for individual case management, health assessment and preventative veterinary care. Significant experience gained in chemical immobilization of primates and hoofstock.

Internship in Small Animal Medicine

West Los Angeles Veterinary Medical Group

1818 South Sepulveda Boulevard
Los Angeles, California

1990 to 1991

Intensive training in a large, twenty-two veterinarian practice offering referral services in the disciplines of internal medicine, ophthalmology and surgery. Responsibilities included primary receiving, medical and surgical case management, overnight emergency receiving and participation in daily rounds.

PROFESSIONAL AFFILIATIONS

American Zoo and Aquarium Association (AZA)
American Association of Zoo Veterinarians
American Veterinary Medical Association (AVMA)
American Veterinary Medical Foundation– Development Committee
American Veterinary Medical Foundation– Director
Human Animal Bond Committee (AVMA) Zoo/Aquatic/Wildlife Medicine Representative
AZA, Research Coordinators' Committee
Illinois State Veterinary Medical Association
Institute of Museum and Library Services– Grants and Awards, Peer Reviewer
International Association for Aquatic Animal Medicine (IAAAM)
Society for Marine Mammalogy
USDA, Small Business Innovation Research Program – *ad hoc* proposal reviewer

PUBLICATIONS AND PRESENTATIONS

- Boehm, J.** 1991. *Filaroides osleri* in a Dog. Pulse - Journal of the Southern California Veterinary Medical Association. Vol. 10: 21
- Boehm, J.** 1993. Fatal Reaction to Levamisole in Beluga Whales, *Delphinapterus leucas*. IAAAM News, Vol. 24, no. 3.
- Miller-Edge, M., S. Amsel, K. Brinkley, **J. Boehm**, and B. Gonzales. 1994. Copper Deficiency in Captive Pronghorn Antelope Fawns. *In Proceedings of the 16th Biennial Pronghorn Workshop* (April 18-21 1994; Emporia, KS).
- Boehm, J.**, W. Williams, W. Hoffmann. 1995. Fasting and Post-Prandial Serum Bile Acids in the Pacific White-sided Dolphin (*Lagenorhynchus obliquidens*). *In Proceedings of the 26th Conference of the International Association for Aquatic Animal Medicine*. P. 109.
- De Guise, S., D. Flipo, **J. Boehm**, D. Martineau, P. Beland, M. Fournier. 1995. Immune Function in Beluga Whales (*Delphinapterus leucas*): Evaluation of Phagocytosis and Respiratory Burst with Peripheral Blood Using Flow Cytometry. *Vet. Immuno. and Immunopath.* 47: 351-362
- Boehm, J.**, M. Greenwell, F. Coe. 1997. Dietary Management in the Treatment of Uric Acid Urolithiasis in a Pacific White-Sided Dolphin (*Lagenorhynchus obliquidens*). *In Proceedings of the 28th Conference of the International Association for Aquatic Animal Medicine*. P. 134.
- Kinsel, M., **J. Boehm**, B. Harris, R. Murnane. 1997. Fatal *Erysipelothrix rhusiopathiae* Septicemia in a Captive Pacific White-sided Dolphin (*Lagenorhynchus obliquidens*). *Journal of Zoo and Wildlife Medicine* 28(4): 494-497.
- Fahner, M., J. Thomas, K. Ramirez, **J. Boehm**. 1998. Acoustic Analysis of Sounds Produced by Pacific White-sided Dolphins (*Lagenorhynchus obliquidens*) at the John G. Shedd Aquarium. *In Proceedings of the World Marine Mammal Science Conference*. P. 40.
- Boehm, J.**, K. Ramirez. 1998. Emerging Resources for Marine Mammal Scientists: Partnerships with managed Collection Facilities. *In Proceedings of the World Marine Mammal Science Conf*. P. 17.
- Lunn, K., H. Hall, A. Vincent, **J. Boehm**. 1999. Captive Breeding and Management of Seahorses. *In Proceedings of the 30th Annual Conference of the International Association for Aquatic Animal Medicine*. P. 58.
- Noren, S., T. Williams, K. Ramirez, **J. Boehm**, M. Glenn, L. Cornell, N. Harvey. 1999. The Effect of Body Size on Odontocete Breath-hold Capacity: Pacific White-sided Dolphins to Killer Whales. *In Proceedings of the 13th Biennial Conference on the Biology of Marine Mammals*. P. 136.
- West, K., S. Atkinson, J. Sweeney, B. Krames, J. Krames, **J. Boehm**. 1999. Progesterone Concentrations associated with Parturition in Three Species of Odontocetes. *In Proceedings of the 13th Biennial Conference on the Biology of Marine Mammals*. P. 199.
- Lunn, K.E., **J.R. Boehm**, H.J. Hall and A.C.J. Vincent, eds. 1999. *Proceedings of the First International Aquarium Workshop on Seahorse Husbandry, Management, and Conservation* (166 pp). John G. Shedd Aquarium: Chicago, USA.
- Calle, P., S. Monfort, L. Dunn, E. Jensen, **J. Boehm**, S. Young and T. Robeck. 2000. Seasonal Testosterone Secretion in Male White Whales (*Delphinapterus leucas*). *In Proceedings of the American Association of Zoo Veterinarians/International Association for Aquatic Animal Medicine Joint Conference*. P. 149.
- Boehm J.**, G. Lacave and R. Patterson. 2001. Advancing the Study and Control of Erysipelas in Cetaceans. *In Proceedings of the 32nd Annual Conference of the International Association for Aquatic Animal Medicine*. P. 101.
- Harris, B. and **J. Boehm**. 2001. A Pilot Surveillance Program for *Erysipelothrix rhusiopathiae* in a Public Aquarium..

Boehm, J., G. Lacave and R. Patterson, *eds.* 2001. Proceedings of the First International Workshop on Erysipelas in Cetaceans (101 pp). John G. Shedd Aquarium: Chicago, USA.

Boehm, J. 2001. Seahorse Research and Conservation Efforts in Public Zoos and Aquariums. Annual Conference of the American Zoo and Aquarium Association.

Miller, M., S. Amsel, **J. Boehm** and B. Gonzales. Presumptive Copper Deficiency in Hand-Reared Captive Pronghorn (*Antilocapra americana*) Fawns. *Journal of Zoo and Wildlife Medicine* 32(3): 373-378, 2001.

Berzins, I., and **J. Boehm**. 2002. Aquatic Animal Health programs in Public Aquariums and Zoos. *AZA Communique*. April 2002, P. 16.

Greenwell, M., **Boehm J.** and B. Harris. 2002. A One-Year Surveillance Program for *Erysipelothrix rhusiopathiae*: Methodology, Findings, and Recommendations. *In Proceedings of the 33rd Annual Conference of the International Association for Aquatic Animal Medicine.*

Fahner, M., **J. Boehm**, K. Ramirez and J. Thomas. Acoustic Properties of Echolocation Signals by Captive Pacific White-sided Dolphins (*Lagenorhynchus obliquidens*) in Echolocation in Bats and Dolphins. J. Thomas, C. Moss and M. Vater, *eds.* The University of Chicago Press. *In press.*

Zwick L, Dutcher M, **Boehm J**, Harris B, Murnane RD, and Kinsel MJ. Chronic *Staphylococcus aureus* bronchopneumonia with secondary thromboembolism in a captive Pacific white-sided dolphin. *J Zoo Wildl Med.* Submitted.

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California, Illinois, Wisconsin (consulting permit)

CURRICULUM VITAE

PERSONNAL INFORMATION

Name: *Élio Salvador Vicente*

Birth Year: (redacted)

Home Address: (redacted)

Work Address: Zoomarine - Est. Nac. 125, Km 65 - Guia - 8200-864 Albufeira - Portugal

E-mail: elio.vicente@zoomarine.pt

Phone: + 351 289 560 311 and + 351 966 966 540

Fax: + 351 289 560 309

academic information

1997 – Ms.C. degree in Marine Biology and Fisheries, by *Unidade de Ciências e Tecnologias dos Recursos Aquáticos* (UCTRA) of the University of the Algarve; final research project intituled “Study of lactation in the bottlenose dolphin, *Tursiops truncatus* (Montagu, 1821)” – final evaluation of 19 (in 20) points.

FURTHER academic information

May-June, 2003 – Leadership, Motivation and Personal Development Course (30 hours; NERA, Loulé)

March-May, 2002 –Animal Welfare Course (51 hours; ISPA); Coordination; Prof. Dr. Rui Oliveira, Master Leonor Galhardo;

February, 2001 –Organization and Animation Course (60 hours; Zoomarine);

January, 2001 –Supervision and Team Coordination Course (30 hours; Zoomarine); Coordinator: Dr. José António de Sousa - Escola de Hotelaria e Turismo do Algarve

March, 2000 –Animation and Dramatic Expression Techniques Course (15 hours; Zoomarine); Coordination: Chapitô

December, 1999 – Teaching Course (120 hours; NERA, Loulé)

May, 1998 – Drivers’ Licence

June, 1993 –Video Production Course (60 hours, IPJ de Faro)

March, 1993 – Photography Course (30 hours, IPJ de Faro)

LANGUAGE

Portuguese – Mother language

English – Excellent, in all domains (spoken, written and reading)

Spanish – Very Good (spoken), Excellent (reading); Good (written)

French – Reasonable (spoken and written); Excellent (reading)

profissional EXPERIeNce

Since April, 2003 – Director of Science and Education at Zoomarine (Mundo Aquático, SA)

Since January, 2000 – Director of Natural Resources at Zoomarine (Mundo Aquático, SA)

Since May, 1997 – Founding member of the Executive Committee (in charge of supervision and management) of the National marina Mammals’ Stranding network, “*Abrigos*”

June-1998 through **December-1999** – Head of the Biology and Education Dept. at Zoomarine

May-1996 through **June-1998** – Head of the Education Dept. of Zoomarine

March-1994 through **April-1996** – Educator at Zoomarine (Mundo Aquático, SA, in Albufeira)

membership

Biologist Association – Member n° 1647;
Projecto Delfim – Member n° 37, since 1998; Vice-President of the Assembly
EAAM – member since 1997; ex-member of the *Information Committee*;
ECS – member since 1997;

Sociedade Portuguesa de Etologia – member since October of 2002;

AMMPA – former member of the ‘Education Task Force’
IMATA – professional member between 1994 and 2000;
EAZA – member of the “Marine Mammal TAG – *Taxon Advisory Group*”
LPN – Member n° 8150, since 2004

symposia and technical meetings

September, 2004 – Policy on Sound and Marine Mammals: An International Workshop, London (United Kingdom)
September, 2004 – *21th Annual Conference of the EAZA - European Association of Zoos and Aquaria*, Kolmarden (Suécia)
July, 2004 – Workshop “Desafios Ambientais para o Algarve – Sistema de Indicadores de Desenvolvimento Sustentável do Algarve”, Instituto Piaget, Silves (Portugal)
April, 2004 – *General Annual Meeting of the AMMPA – Alliance of Marine Mammals Parks and Aquaria*, Alexandria, Washington (E.U.A.)
March, 2004 – *32nd Annual Symposium of the EAAM*, Valencia (Spain)
April, 2003 – Faculdade de Medicina Veterinária: Talk “*Welfare Concepts and Assessment*”, by Prof. Donald Broom (Cambridge University) and Talk “*What Price Cheap Food Coast for People, Animals and the Environment*”, by Prof. Michael Appleby (*The Humane Society of the United States*)
April, 2003 – ISPA: Talk and Workshop: “*Animal Welfare and Animal Use*”, by Prof. Michael Appleby (*The Humane Society of the United States*)
March, 2003 – WISE Observatorium: “*Prestige: uma abordagem complexológica*” Zoomarine (Portugal)
March, 2003 – *31st Annual Symposium of the EAAM*, Puerto de la Cruz, Tenerife (Spain)
March, 2003 – *17th Annual Conference of the European Cetacean Society*, Las Palmas de Gran Canaria (Spain)
December, 2002 – Economist Conferences, Lisbon (Portugal)
October, 2002 – IV Congresso Nacional de Etologia, Sociedade Portuguesa de Etologia, Lisboa (Portugal)
September, 2002 – *19th Annual Conference of the EAZA - European Association of Zoos and Aquaria*, Barcelona (Spain)
May, 2002 – *33rd Annual Conference of the IAAAM - International Association for Aquatic Animal Medicine*, Montechoro (Portugal)
November, 2001 – III Jornadas de Biologia Aplicada, Universidade do Minho, Braga (Portugal)
September, 2001 – *18th Annual Conference of the European Association of Zoos and Aquaria*, Prague (Czech Republic)
March, 2001 – 1º Simpósio de Patologia e Reabilitação de Mamíferos Marinhos, Albufeira (Portugal)
March, 2000 – 1º Workshop Educacional do Zoomarine, Albufeira (Portugal)
December, 2000 – Congresso Nacional da Ordem dos Biólogos, Lisboa (Portugal)
November, 2000 – *1st Meeting of the Sea Alarm Foundation*, Pieterburen (The Netherlands)
September, 2000 – *17th Annual Conference of the European Association of Zoos and Aquaria*, Aalborg (Denmark)
March, 2000 – *28th Annual Symposium of the EAAM*, Benidorm (Spain)
March, 2000 – Pro-Cet, Benidorm (Germany)
September, 1999 – *Symposium of European Association of Zoos Educators*, Becksbergen (The Netherlands)
September, 1999 – *16th Annual Conference of the European Association of Zoos and Aquaria*, Basel (Switzerland)
August, 1999 – *AMMPA Annual Educators’ Meeting*, Orlando (E.U.A.)
July, 1999 – *ASAB Summer Meeting – Communication and Social Ethology*, Lisboa (Portugal)
July, 1999 – II Encontro Técnico sobre Exposição ao Público de Animais Selvagens Vivos, Gaia (Portugal)
June, 1999 – *Bottlenose Dolphin Reproduction Workshop*, San Diego (E.U.A.)
March, 1999 – *13th Annual Conference of the European Cetacean Society*, Valência (Spain)
December, 1998 – III Congresso Nacional de Etologia, Coimbra (Portugal)

October, 1998 – 27th Annual Symposium of IMATA - International Marine Mammals Trainers Association, Montechoro (Portugal)

October, 1998 – I Encontro Técnico sobre Exposição ao Público de Animais Selvagens Vivos, Gaia (Portugal)

September, 1998 – III European Elasmobranch Association Science Meeting, Lisboa (Portugal)

August, 1998 – AMMPA Annual Educators' Meeting, Florida (E.U.A.)

May, 1998 – 4th Biological Sonar Conference, Carvoeiro (Portugal)

January, 1998 – World Marine Mammal Conference, Mónaco (Mónaco)

October, 1997 – Encontro Técnico de la Asociacion Española de Zoos y Aquarios, Barcelona (Spain)

April, 1997 – General Annual Meeting of the AMMPA – Alliance of Marine Mammals Parks and Aquaria, Alexandria, Washington (E.U.A.)

March, 1997 – 25th Annual Symposium of the EAAM, Duisburg (Germany)

March, 1997 – Pro-Cet, Duisburg (Germany)

March, 1997 – 11th Annual Conference of European Cetacean Society, Stralsund (Germany)

March, 1996 – 5th Marine Mammal Medical Workshop, Albufeira (Portugal)

March, 1996 – 24th Annual Symposium of the EAAM - European Association for Aquatic Mammals, Albufeira (Portugal)

March, 1996 – 10th Annual Conference of the European Cetacean Society, Lisboa (Portugal)

November, 1994 – 23rd Annual Symposium of IMATA - International Marine Mammals Trainers Association, Seattle (EUA)

ORGANIZATION Experience

Year 2004

– Member of the Organizing Committee of the 32nd Annual Symposium of the EAAM, Valencia (Spain)

Year 2003

– Member of the Organizing Committee of the 31st Annual Symposium of the EAAM, Puerto de la Cruz, Tenerife (Spain)

Year 2002

– Head of the Organizing Committee of the 33rd Annual Conference of the IAAAM - International Association for Aquatic Animal Medicine (Montechoro, Portugal - May)

Year 2001

– Head of the Organizing Committee of the 1st Symposium of Pathology e Rehabilitation of Marine Mammals (Zoomarine, Portugal - March)

Year 2000

– Member of the Organizing Committee of the 1st Zoomarine's Educational Workshop (Zoomarine, March)

Year 1998

– Head of the Organizing Committee of the 4th Biological Sonar Conference (Carvoeiro, Portugal - May)

– Member of the Organizing Committee of the 27th Annual Symposium of IMATA - International Marine Mammals Trainers Association (Montechoro, October)

Year 1996

– Head of the Organizing Committee of the 24^o Annual Conference of the EAAM - European Association for Aquatic Mammals (Montechoro, Portugal - March)

– Member of the Organizing Committee do 5^o Marine Mammal Medical Workshop (Zoomarine, March)

talks and presentations

2004: SEMAPP – Oral Presentation: *The five groups of Marine Mammals.*

2004: SEMAPP – Oral Presentation: Introduction to Animal Care and Husbandry.

2004: SEMAPP – Oral Presentation: Marine Mammal Preservation in Portugal.

2003: Rotary Club – Oral Presentation: *A conservação da Natureza em Portugal - O papel dos Jardins Zoológicos e Afins.*

2002: Ciclo de Palestras da Faculdade das Ciências do Mar e do Ambiente da Universidade do Algarve – Oral Presentation: O papel dos biólogos na reabilitação de espécimes marinhos.

2001: Jornadas de Biologia Aplicada – Oral Presentation: O papel dos biólogos na reabilitação de espécimes marinhos.

2000: 28th Annual Conference of the European Association for Aquatic Mammals – Oral Presentation: K. Barardo* e Élio Vicente: *Education and Welfare - An overview on integrating efforts.*

2000: Cadeira de Recursos Faunísticos / Curso de Biologia Marinha e Pescas – Talk: Mamíferos Marinhos: taxonomia, biologia e ecologia.

1998: III Congresso Nacional de Etologia – Poster: Vicente, E. I. Gouveia e M. E. dos Santos: Observações de Comportamento de Aleitamento em golfinhos-roazes (*Tursiops truncatus*).

1998: 27th Annual Symposium of IMATA – Poster: Lavia, P., Élio Vicente, K. Barardo e P. Frazão: “Câmara de lobos” - *What? When? How? And With Whom?*

1998: Encontro Técnico sobre Exposição ao Público de Animais Selvagens Vivos – Oral Presentation: Zoomarine as a Zoological Facility.

1998: III European Elasmobranches Association Science Meeting – Oral Presentation: *Elasmobranches at Zoomarine – husbandry, handling and exhibition.*

1997: 25th Annual Conference of the European Association for Aquatic Mammals –Oral Presentation: Vicente, E. and Manuel E. dos Santos: *A Study of Nursing Behaviour in two Bottlenose Dolphin Calves.*

teaching experience

2003 – Introduction to Marine Mammals Course – third edition; Lisbon, Novembro 7-9; 22 hours

2002 – Introduction to Marine Mammals Course – second edition; Lisbon, Novembro 8-10; 22 hours

2002 – Introduction to Marine Mammals Course; Lisbon, October 11-13; 22 hours

PRÉMIOS

1995 – IMATA Best Trained Behaviour - *International Marine Mammals Trainers Association*

David B. Merritt
Indianapolis Zoo
(personal address/phone number redacted)

EXPERIENCE

Vice President of Programs, 2002 to Present

General Curator of Zoological Collections, 1999 to 2002

Aquarium General Curator, 1997 to 1999

Curator of Marine Mammals, 1988 to 1997

Indianapolis Zoological Society, Indianapolis, Indiana

Assistant Head Trainer, 1978 to 1988

Mystic Marinelife Aquarium, Mystic, Connecticut

- Experienced in management principles, staff development, and employee relations
- Skilled in development and implementation of financial budgets
- Familiar with the principles of Director/Board relations
- Experienced in strategies for marketing zoological institutions
- Experienced in modern aquarium construction techniques and contractual relations
- Skilled in the collection and care of animals in zoological settings
- Familiar with U.S. federal legislation and regulatory agencies impacting zoological operations
- Have written and formalized N.M.F.S. and F.W.S. permit applications and subsequently carried out the collection and transport of animals within the U.S. and abroad
- Created and implemented classes for school groups, from kindergarten through university levels
- Presented human interest and educational features for the media in museum/zoological settings
- Assisted in research efforts investigating the natural history, behavior, and physiology of aquatic animals

EDUCATION

- B.A., English Literature, with minors in Education and Theater. 1972

Graduate courses in Education, 1973

Washington College, Chestertown, Maryland

- Association of Zoos and Aquariums Management School, 1993-1994
Wheeling, West Virginia

AFFILIATIONS/APPOINTMENTS

- Association of Zoos and Aquariums (Professional Fellow)
- AZA Appointment to Government Affairs Committee (1999-2002)
- AZA Representative to APHIS Marine Mammal Negotiated Regulations
- International Marine Animal Trainers Association (President 1986-1987)
- Northeast Regional Stranding Network (Founding Member)
- Alliance of Marine Mammal Parks and Aquariums (Director at Large and Accreditation Chair)
- Invited to lecture APHIS inspectors on Water Quality and Polar Bear Husbandry

PUBLICATIONS/PRESENTATIONS

Merritt, David, "A Human Physiotherapy Technique Adapted for Use in Cetaceans," IMATA 11th Annual Conference Proceedings, 1983.

Merritt, David, "Techniques of Force-feeding Cetaceans," Northeast Regional Stranding Network Conference, 1986.

Merritt, David, "Water Quality in a Modern Polar Bear Exhibit," Water Quality for Marine Mammals - A Seminar for A.P.H.I.S. Inspectors, 1992.

Merritt, David, "The Husbandry of Captive Polar Bears (*Ursus maritimus*)," Marine Mammal Husbandry - A Seminar for A.P.H.I.S. Inspectors, 1994.

Rooney, Alexandro, D.Merritt, J.Derr, "Microsatellite Diversity in Captive Bottlenose Dolphins (*Tursiops truncatus*)," Journal of Heredity

Rooney, Alexandro, D.Merritt, J.Derr, "Relatedness in Captive Bottlenose Dolphins (*Tursiops truncatus*)," Journal of Marine Mammal Science

Shyan, Melissa, D.Merritt. "Effects of Pool Size on Free-Choice Selections by Atlantic Bottlenosed Dolphins at One Zoo Facility" Journal of Applied Animal Welfare Science

CHRISTINE DeANGELO
UNEXSO Dolphin Experience, Bahamas

(personal address/phone number/email redacted)

EDUCATION

University of California at Santa Cruz, CA
Bachelor of Arts Degree in Marine Biology – 1990

EXPERIENCE

NATIONAL AQUARIUM IN BALTIMORE –

Curator of Marine Mammals/ Director of Life Support

Sept 1999-Sept 2004

Manage the care and training of the marine mammals at NAIB and in the field. Plan and implement new exhibits, exhibit renovations, and responsible for the coordination and development of new dolphin shows. Plan and administer multiple departmental budgets. Supervise personnel in the Marine Mammal Department and the Life Support Departments. Performs public relations functions associated with the marine mammal section. Serve as the Aquarium representative to professional agencies, institutions, and various committees.

ROGER WILLIAMS ZOO –

Volunteer

July 1999-Sept 1999

Assisted various areas in the zoo with: animal care, feedings, diet preparation, animal enrichment, medical examination, and exhibit/enclosure cleaning and maintenance.

MYSTIC AQUARIUM –

Senior Aquarist of Marine Mammals

Nov 1990-Jul 1999

Hands-on supervisor responsible for animal care and exhibit maintenance of the cetacean collection: Atlantic Bottlenose Dolphins, Tursiops truncatus and Beluga Whales Delphinapterus leucas. Coordinate, develop, and maintain the presentation of marine mammal demonstrations. Develop and implement husbandry procedures. Schedule and oversee medical examinations. Maintain animal and section records. Develop and implement animal training and enrichment procedures. Assist in the transport and acclimation of animals between different facilities. Supervise area volunteers and interns. Monitor life support systems. Coordinate daily routine and supervise staff. Participate in personnel evaluations. Monitor acquisition and inventory of supplies. Develop area budget and work to maintain it. Work with other departments to facilitate aquarium programming needs. Assist in the development of an animal training program for Steller's Sea Lions, Eumetopias jubatus. Involved in the rescue and rehabilitation of numerous species of stranded animals.

LONG MARINE LABORATORY –

Volunteer and paid staff

Jan 1989-Oct 1990

Employed as a volunteer and paid staff for three different research projects focusing on various marine mammals. Assisted in the: training of behaviors, running research trials, medical examinations and general animal care. Responsible for: the care of the facility, filtration systems, and water quality. Also involved in the rescue and rehabilitation of stranded cetaceans. In addition, transported and reintroduced two sub-adult Atlantic Bottlenose Dolphins back into the wild. Also housed at this facility were four Pacific White-sided Dolphins Lagenorhynchus obliquidens. Responsibilities included those already mentioned as well as active participation in training husbandry and show behaviors prior to transport to John G. Shedd Aquarium.

MONTEREY BAY AQUARIUM –

Aquarist

Jun 1989-Oct 1990

Hired to act as a surrogate mother for abandoned and orphaned sea otter pups, Enhydra lutrus. Responsible for the feeding, grooming, general care, and rehabilitation of the pups for future release back into the wild. Assisted with the oiled and injured pups as a result of the EXXON Valdez Oil Spill.

OTHER EXPERIENCE

Pet Shop Manager

Office Assistant
Waitress
SCUBA Certification

AFFILIATIONS

(IMATA) International Marine Animal Trainers Association – Professional Status
Acting Photo Librarian for IMATA
(AZA) American Zoo and Aquarium – member

REFERENCES

Available upon request

**David Charles DeNardo
WCS/New York Aquarium**

**(personal address/phone number redacted)
E-mail: DDenardo@wcs.org**

Education

- Bachelor of Science Degree in Marine Biological Sciences; California State University Hayward.

Employment History

- **4/30/01 to Present:** General Curator/Dir. of Animal Operations WCS-New York Aquarium
- **7/7/97 to 10/15/00:** Project Director, David L. Manwarren, Corp.
- **12/30/80 to 6/20/97:** Director of Oceanarium, Marine World Africa USA
- **9/11/79 to 12/29/80:** Curator of Fishes, Marine World Africa USA
- **12/5/78 to 9/10/79:** Senior Oceanarium Attendant (Aquarist), Marine World Africa USA
- **12/6/77 to 12/4/78:** Water Chemist, Marine World Africa USA
- **12/7/74 to 12/5/77:** Senior Diver, Marine World Africa USA
- **5/27/74 to 12/6/74:** Diver Marine World Africa USA

Wildlife Conservation Society-New York Aquarium: Boardwalk at West 8th Street, Brooklyn, NY 11224, Tel: (718) 265-3436

Job Responsibilities

- **Administration/Budget**
 - Administrate the Animal Department.
 - Develop and implement the annual Animal Department budget.
 - Over see the operation of the Dive Safety Officer and the Volunteer Dive Coordinator.
 - Coordinate activities between the Animal Department and the Operation Department.
 - Acts as the Aquarium's representative and liaison with the aquarium and zoo community
 - Acting Operations Manager for the Osborn Laboratories for Marine Science.
 - Direct all Aquarium life support operations.
- **Husbandry/Collection**
 - Develop and revise the Aquarium Collection Plan.
 - Establish animal husbandry and animal management policies.
 - Directs all animal acquisition, transportation, disposition, care and handling practices for the living collection
- **Special Projects**
 - Assist in special projects, such as the conception, design, and construction of the Aquarium's building projects, life support systems and exhibits.
 - Assist with Master Planning process.
- **Research/Special Committees**
 - Member of the IACUC

David L. Manwarren, Corp.: 9146 9th Street, Rancho Cucamonga, CA 91730, Tel: (909) 989-5883

Job Responsibilities

- Manage and coordinate activities between the exhibit design and prefabrication sections.

- Coordinate David L. Manwarren Corp.'s work with the architects, engineers and other trades on projects.
- Assist with the design development of projects.
 - Develop exhibit species lists for the various exhibits.
 - Develop design criteria for the exhibit based on the species list.
 - Review and comment on project designs.
- Develop, coordinate and submit project bid proposals.
- Develop and monitor project budget and schedule
- Coordinate all shop drawings and project submittals
- Coordinate fabrication and delivery of prefabricated elements.
- Manage and coordinate field construction activities.
- Onsite project management and coordination.

Marine World Africa USA : 2001 Marine World Parkway, Vallejo, CA 94589, Tel: (707) 644-4000

Job Responsibilities

- **Administration/Budget**
 - Administrate the Oceanarium department.
 - Develop and implement the annual Oceanarium department budget.
 - Develop and implement dive safety protocols in accordance with OSHA requirements and the current industry standards.
 - Develop and implement a comprehensive preventive maintenance program for all the life support system equipment.
- **Husbandry/Collection**
 - Developed species list for all aquarium and shark exhibits.
 - Acquired aquarium and shark exhibit collection.
 - Develop and implement aquarium husbandry protocols for the fish and invertebrate species
 - Review and comment on all land and marine animal transactions.
 - Extensive experience with field collection and transport of marine mammals, fish, invertebrates and marine plants.
 - Member of the Beluga Whale collection team in Churchill, Manitoba for the National Aquarium in Baltimore and the New York Aquarium.
- **Government Affairs: State/Federal/International**
 - Review and comment on all State and Federal legislation regarding animals.
 - Lobbied on Capitol Hill for the 1994 re-authorization of the Marine Mammal Protection Act and other animal related issues.
 - Lobbied in the California State capitol on various animal issues.
 - Served on the select committee for the USDA-APHIS negotiated rule making for the revision of the marine mammal care and maintenance standards under the Animal Welfare Act.
 - Participate as a non-governmental observer (NGO) for the Alliance of Marine Mammal Parks and Aquariums (AMMPA)
 - International Whaling Commission (IWC)
 - Convention for Migratory Species (CMS)
 - Convention on International Trade of Endangered Species (CITES).
 - Developed and administrated the Lake Chabot water quality self-monitoring program in accordance with the regulations set by the California Regional Water Quality Control Board.

- **Research/Special Committees**
 - Permanent Chair of the Animal Husbandry Committee (AHC).
 - Staff Executive Officer to the Scientific Advisory Board (SAB).
- **Special Projects**
 - Member of Marine World's New Projects Development Team
 - **1996-97:** Co- project director, Tiger Island Splash Attack.
 - **1994-95:** Co- project director, Walrus Experience exhibit
 - **1993-94:** Co- project director, Marine Research Center retrofit
 - **1991-92:** Project director, Shark Experience.
 - **1986-87:** Team member, Butterfly House
 - **1985-86:** Designer/construction supervisor, Chevron Aquarium
 - **1985-86:** Construction supervisor, marine mammal life support system for the new Marine World Africa USA.
- **Professional Affiliations**
 - American Zoo and Aquarium Association (AZA)
 - Professional Fellow (1980 to Present)
 - Member of Government Affairs Committee
 - Member of Marine Mammal Taxon Advisory Group Steering Committee
 - Member of Marine Fish Taxon Advisory Group Steering Committee
 - Alliance of Marine Mammal Parks and Aquariums (AMMPA).
 - Institutional Representative for twelve years.
 - Served on the Board of Directors of AMMPA for three terms as treasurer.
 - Chair of the membership committee for two terms.
 - NGO to IWC for eight conference of the parties (COPs), CITES for two COPs and CMS for one COPs
 - NAUI SCUBA certificated

Douglas G. Messinger
The Dolphin Connection
(personal address/phone number redacted)

Doug@dolphinconnection.org

Work Experience

The Dolphin Connection 1996 - present
Director / Owner
Responsible for all aspects operations, animal management and program development for public in-water interactives. Responsible for facility design and construction, hiring and staff supervision, and animal husbandry practices. Facility received Alliance accreditation in 2003.

Chicago Zoological Society 1992 - 1998
Site Manager / Collections Manager - Marine Mammals
All aspects of managing marine mammal collection including husbandry training, public presentation including in-water work and long term breeding programs with bottlenose dolphins, California sea lions, Pacific walrus, and harbor seals. Animal transport including international exports and imports establishing training and breeding programs abroad. Supervision of fourteen staff members. Responsible for managing research programs and life support systems, including water quality parameters. Oversight of animals on international breeding loan to Lisbon Zoo.

National Aquarium in Baltimore 1990-1992
Curator of Marine Mammals / Assistant Curator of Bottlenose Dolphins
All husbandry and show aspects, including in-water work, with marine mammal collection of dolphins, beluga whales, harbor and gray seals. Supervised daily training of marine mammal collection. Supervision of eleven staff members, directing training goals and public presentations. Responsible for research programs and departmental budget.

Sea-Arama Marineworld/Entertainment Plus 1984-1990
Vice President / Director of Training
All aspects of husbandry and behavioral maintenance and training of naïve and seasoned sea lions, harbor seals, dolphins, and false killer whales, including themed and educational show supervision, animal transport, and physical plant operation for Sea-Arama as well as off-site facilities. Involved in all aspects of long-term investment and decision making for company, including supervision and scheduling of eleven employees. Basic lab experience with handling and preparation of veterinary medical samples.

Ocean Action 1982-1984
Supervisor of Marine Mammals
All aspects of behavioral maintenance and training of dolphins and sea lions. Included filtration operation and maintenance.

Professional Affiliations

Alliance of Marine Mammal Parks and Aquariums
Animal Management Committee 2000-present
Population Management Task Force

International Marine Animal Trainer's Association
Co-Author of formal presentations
A model for cooperative marine mammal breeding programs 2001
Cooperative breeding and population management in *Tursiops truncatus* 1999
Walrus management program, Brookfield Zoo 1998
Initiation of a dolphin interactive program 1998
Passive restraint training in *Tursiops truncatus* 1997
Behavioral conditioning of *Tursiops truncatus* for voluntary

participation in a reproductive management plan	1995
Spontaneous lactation in a five year old <i>Tursiops truncatus</i>	1994
Public education: dolphins and the big picture	1992
Caring for a stranded sperm whale calf	1990
Husbandry and training of an orphaned bottlenose dolphin	1987
Coping with sea lion rut	1986
American Cetacean Society – Galveston Chapter	
Board of Directors	1986-1989
Nominations Committee Chair	1989
Marr Memorial Scholarship Fund Chair	1988-1989
Texas Marine Mammal Stranding Network	
Active in live stranding transport, medical care, maintenance, and necropsy	1984-1990
SCUBA Certification	
PADI Open Water Diver	1986

Jayne Shannon-Rodriguez
President and CEO

Personal: (redacted)

Education:

- Wayland (Mass.) H.S. (graduated 1969)
- Katherine Gibbs Secretarial School, Executive Secretary Course (graduated 1970)

Professional Experience:

- **1984-present: Dolphin Research Center**

President/CEO

Directing all operations of the facility; overseeing the development of major research and education programs.

- **1977-84: Institute for Delphinid Research**

General Manager

Directing all operations of the facility; establishing and directing the Dolphin Critical Care Unit; training staff as a self-sufficient team of medical technicians; overseeing the transition from tourist attraction to research facility.

- **1974-77: Flipper's Sea School**

Show Trainer, Director of Husbandry Records

Training dolphins for public shows; establishing and directing a record-keeping system for dolphin husbandry.

- **1970-74: New England Aquarium Boston, Mass.**

Director of Training, Veterinary Technician

Training 25 pinnipeds for public shows (California sea lions, Alaska fur seals, harbor seals); acting as public spokesperson for Marine Mammal Department; performing veterinary critical care procedures for the New England Stranding Network.

Research Experience:

- Oil Detection and avoidance by the Atlantic bottlenose dolphin, 1980-83, under contract with the U.S. Bureau of Land Management.
- Thermographic studies of Atlantic bottlenose dolphin skin temperatures, 1981.
- Language-like behavior of the Atlantic bottlenose dolphin, 1977-83.
- Understanding of Numerical Concepts in Atlantic bottlenose dolphins, 2001-to present.

Publications:

- "The Breeding Program at the Institute for Delphinid Research", Proceedings of the International Marine Animal Trainers' Association, November, 1979.
- Morphological and Biochemical Distinction of Off-Shore and Coastal Atlantic Bottlenose Dolphins", (co-authored with Sandra Hersh, D. Duffield, E.D. Asper, D.K. Odell, and J. White), 1986.

Eldon L. Bolton III
Sandy Bay, Roatan, Honduras
Phone (504) 445-1327

Education:

Bachelor of Science, Business Administration
University of Southern Mississippi
Hattiesburg, Mississippi
Graduated May 1980

Work History:

May 1975 - June 1991

Marine Animal Productions
Gulfport, Mississippi

May 1975 - May 1978 Diver/Maintenance - Responsibilities included maintenance and cleanliness of facilities housing bottlenose dolphins, California sealions and indigenous sealife. Capture and restraint of animals for veterinary procedures. Food preparation for marine mammals and aquarium exhibits. Assist in feeding and providing daily vitamins to animals. Assist in preparation of animals for transport. Diver on dolphin collections.

June 1978 - December 1983 Animal Care/Training Staff - Responsible for the care and training of bottlenose dolphins and California sealions. Maintained animals in closed systems taking responsibility for facility and all aspects of water quality and testing. Responsible for water quality and animal health record keeping. Administer vitamins and medication as per veterinarian's instruction. Supervise capture of animals for veterinary procedures and transportation. Performed basic veterinary procedures, i.e. collect blood samples, and blowhole, anal, vaginal cultures. Attendant on animal transports by land and air. Participant in National Marine Fisheries Service Southeast Marine Mammal Stranding Network, Mississippi Coast. NMFS letter of authorization granted permission to collect tissue samples and morphometric data on carcasses for submission to NMFS. In the event of live strandings to stabilize and move animals to rehabilitation facility. Maintained NMFS LOA status until July, 1991. Boat driver and diver on dolphin collections. Trained as aerial observer in study to collect morphometric data and to determine patterns of movement in bottlenose dolphins in the Mississippi Sound.

January 1984 - May 1985 Senior Trainer - Duties as listed above. Senior trainer in program involving three bottlenose dolphins working in the open ocean off of the Mississippi gulf coast.

June 1985 - June 1991 Operations Manager - Supervisor of training staff at Marine Life Oceanarium and ten satellite facilities throughout the United States and in Canada. Responsible for logistics and attendant on all animal transports. Four transports involved the moving of dolphins from the USA to European countries and all were in excess of 20 hours in duration. Fish purchaser for Marine Life Oceanarium and satellite facilities. Supervised collection of bottlenose dolphins for U.S. Navy and other marine facilities. Author of dolphin training schedule and protocol for bid proposal on U.S. Navy contract. Maintained secret security clearance from U.S. Government for duration of the contract bid process.

July 1991 - present

Roatan Institute for Marine Sciences
Sandy Bay, Roatan, Honduras

Director - Supervised collection, transport, acclimation and training of all bottlenose dolphins for RIMS program. Designed concept and training strategy for unique interactive snorkel and open ocean SCUBA diving experience with dolphins. Also designed and implemented a high visitor capacity wade-in encounter with dolphins using available facilities and resources. Researched and aided in the design of educational facility and lab used by visiting students and researchers. Daily duties involve the supervision of some twenty staff involved in animal care, training, education, research and support for RIMS education and recreation programs. Responsible for the health, safety and well being of RIMS dolphin population using all skills acquired from previous work experiences as well assistance from support staff and attending veterinarian.

(home)
952-431-9274 (work)
(personal dfusco@mail.mnzoo.state.mn.us
address redacted)

DianeFusco

- | | | | |
|------------|--------------|---------------|------------------|
| Experience | 2002–current | Minnesota Zoo | Apple Valley, MN |
|------------|--------------|---------------|------------------|
- Marine Mammal Supervisor
- Develop, implement and evaluate training and enrichment program for collection of Tursiops
 - Develop and review marine mammal interpretive programming and presentation.
 - Develop implement and evaluate marine mammal husbandry program; including water quality, nutrition, working with veterinary staff establishing veterinary protocol and health program, record keeping, behavior observations, animal handling, sanitation.
 - Review and participate in proposed facility designs and plans identifying marine mammal management requirements so appropriate facilities are constructed.
 - Supervise team-oriented staff providing direction and professional development opportunities.
- | | | | |
|--|-----------|---------------|------------------|
| | 1990–2002 | Minnesota Zoo | Apple Valley Mn. |
|--|-----------|---------------|------------------|
- Marine Mammal Zoologist
- Supervise, participate and continually review all marine mammal management programs.
 - Develop, supervise, participate and evaluate marine mammal training program and presentations.
 - Participate in preventative and animal medical programs and in diet design to ensure optimal animal health.
- | | | | |
|--|-------------|---------------|------------------|
| | 1977 - 1990 | Minnesota Zoo | Apple Valley, MN |
|--|-------------|---------------|------------------|
- Zookeeper
- Responsible for the care of belugas, dolphins and harbor seals.
 - Conditioned and maintained animal behavior by understanding and applying principles of operant conditioning.
 - Performed various husbandry tasks including animal observations, food prep, water quality tasks, administration of vitamins and medications.
 - Maintained current animal records.
 - Assisted in physical examinations and animal transports.
 - Presented educational interpretive programs.

1972–1977 Burnet Park Zoo. Syracuse, N.Y

Zookeeper

- Responsible for providing daily care for multi-species including primates, carnivores and water fowl.
- Served as a liaison between zoo and consulting veterinarian.

Education

1970–1972 State University College of New York, Brockport

- BS. Biology

1967-1969 Onondaga Community College, Syracuse, N.Y

- A.A. Humanities

Affiliations

International Marine Animal Trainers Association

Institutional representative to Marine Mammal Taxon Advisory Group

Institutional Representative to Alliance of Marine Mammal Parks and Aquariums

SUZANNE M. GENDRON
Ocean Park – Hong Kong

(personal address redacted)

(personal email redacted)

POSITION: ZOOLOGICAL OPERATIONS & EDUCATION DIRECTOR
DATE JOIN: 1-OCT-1998

PROFESSIONAL OBJECTIVES To develop and manage a premiere oceanarium at international standards and to promote ocean awareness and conservation in the community and in the wild.

EDUCATION 1988-1989: University of California, San Diego, CA USA.
Post-graduate courses in psychology, biochemistry and biology.
1973-1978: University of California, Santa Barbara, CA USA.
Bachelor of Arts in Zoology with an emphasis on Marine Biology and Ichthyology.

WORK EXPERIENCE

- Oct. 1998 - Present** Director of Zoological Operations and Education, Ocean Park Corporation, Hong Kong SAR, China
As part of the Park's management team, the management team assist with the decisions for Ocean Park and in particular, lead and manage the Zoological Operations and Education Division in support of the Park's business objectives efficiently and effectively. Oversee the renovation of existing animal facilities and the development of new animal attractions to ensure that the highest animal care standards are met. Develop high quality animal shows with strong education elements and entertainment value. Develop and maintain a strong, stable professional management team and animal care staff in the Division. Support research within the Park to continually improve animal welfare and support strong scientific advisory support to both the Ocean Park Conservation Foundation and the Hong Kong Society for Panda Conservation. Establish and promote the Park's image as a reputable marine animal and giant panda facility, both locally and internationally.
- Jul. 1995 – Sept. 1998** Curator of Exhibits and Education, Sea World Indonesia, Jakarta, Indonesia
Using International standards and techniques, train and manage the animal husbandry and education departments; develop new exhibits, education programs, and conservation awareness programs; prepare and adjust an annual budget to reflect current economic challenges; foster working ties with conservation organizations in Indonesia and with the international aquarium and zoo communities; manage corporate fund raising and promote Sea World Indonesia.
- March 1994 – July 1995** Curator, Sea World Indonesia, Jakarta, Indonesia
Oversaw the final construction phase, opening and management of the aquarium. Promoted SeaWorld Indonesia in the community and began to build ties world wide with other zoos, aquariums and universities. Instituted an Extern Program where University students are allowed to work at Sea World Indonesia for University credit.

**Special
Projects**

2000: Contributed to the design of a new oceanarium for Ocean Park.
1977: Rehabilitation and subsequent care of a stranded *Dugong dugon* from the Sunda Straits.
1997: As a consultant, visited Dubai, U.A.E. to determine the feasibility of building a public aquarium.
1994-1996: Successfully transported *Carcharias taurus*, *Nebrius ferrugineus*, *Stegastoma fasciatum* and *Rhina anclystoma* from overseas to Sea World Indonesia; once using various aircraft such as C130 and cargo 747.
1995: Trained with Sea World California veterinarians and marine mammal staff to learn how to manage a marine mammal care facility.
1993: Organized and transported one *Carcharhinus leucus*, three *Pristis pectinata* and four large *Epinephalus lanceolatus* as part of a fish and marine mammal air transport from Sea World California to Sea World of Texas, Ohio and Florida.
1992: Project Manager for the construction of the artificial reef and the transport of sharks and fishes for the new component of the Shark Encounter in Sea World California.
1987: Built and installed the coral reef decorations for the 350,000 gallon coral fish display and the 400,000 gallon shark display at Sea World of Texas.

**DIVING &
COLLECTING**

University of California Santa Barbara SCUBA Certificate May 1977
Advanced NAUI SCUBA Certificate: Registration No. A15272 February 1977
Basic NAUI SCUBA Certificate: Registration No. 457747 October 1976
Over 1000 hours of diving for collecting fishes, underwater maintenance, repairs and construction. Familiar with the Nikonus V underwater camera.

PUBLICATIONS

2002: Three chapters for the Elasmobranch Husbandry Manual (at publishers)
2000: *Cultural Challenges and Rewards*, V International Aquarium Congress, Monaco
1977: *Shark Tails: Shark Conservation, Indonesian Travel and Nature*, a series of articles discussing various aspects of shark biology and the status of shark conservation in the area and the world for the layperson.
1994: Reidarson, T.H., Jantsch, C.A., and S.M. Gendron. *Medical treatment for multiple foreign objects in a hawksbill turtle (Eretmochelys imbricata)*. Journal of Zoo and Wildlife Medicine 25 (1): 158-160
1992: Johnson, J., Borger, R. and Gendron, S. M. *Fractionation of a Large Saltwater Aquarium*. Proceedings of the Third International Symposium on the Use of Ozone in Aquatic System, Greenwich, CT.

RESUMÉ

Kai Vilhelm Mattsson

Dolphinarium of the Särkänniemi Oy in Tampere, Finland

Date and place of birth: (redacted)

Marrital status: (redacted)

Main working experience:

My work with marine animals has originally started when I managed to get a job, through my hobby, in the largest public aquarium in Finland, the Särkänniemi Aquarium. At that time it was the only recognised public aquarium in Finland.

Before that I had been working in a pet shop in 1980-1981.

At the Aquarium I worked from 1982 to 1986, first as a part time worker but I soon became a full-time employee. The work at the Aquarium was very independent and it included taking care of tropical fresh- and marine fishes as well as fresh- and marine coldwater fishes. Planing and construction of new exhibits and operation, control and maintenance of filtering systems was also part of my work. At the Aquarium we also had two seals; a harbour seal, *Phoca vitulina*, and a grey seal, *Halichoerus grypus*, taking care of these animals was also part of my daily routine.

- In short my experience covers all Aquarium ecosystems and a full understanding of the Aquarium techniques as well as understanding of the practical management of a public Aquarium.

In 1986 I started my work at the Dolphinarium of the Särkänniemi Oy in Tampere, Finland. First I was just assisting the care take of five bottlenosed dolphins, *Tursiops truncatus*. Later I participated also in the training of these dolphins and in 1989 I started to work at the Dolphinarium as Head Trainer of the facility.

Since then my responsibilities have included:

- Training of the dolphins, including husbandry and show behaviours.
- Husbandry and medical care of the dolphins.
- Helping in evaluation of medical samples with local veterinarians.
- Training of the new trainers in our facility and other personnel training.
- General staff development.
- Producing and writing the script of the shows for public display.
- Producing the music and direction of the shows for public display.
- Operation and control of the experimental biological water purification system.
- Writing of educational materials for performances.
- Design and implementation of exhibition materials.
 - Design of a unique PC-based computer monitoring system for the water treatment of the facility as well as the training and health monitoring program of the animals housed in the facility.
 - P.R. work; Making of P.R. plans for different projects and participation in i.e. interviews to newspapers, radio and TV.
 - Latest addition includes also planning of a new exhibition / facility for cetacean. Of this I have experience from Särkänniemi as well as of my personal consulting in a similar situation abroad (1999).

I have also given my input in management of the Dolphinarium as a foreman of the training staff and in planning of the budget of the Dolphinarium.

Currently I am a member of:

- International Marine Animal Trainers Association (IMATA)
- Alliance of Marine Mammal Parks and Aquariums
- European Association for Aquatic Mammals (EAAM), in which I have been a board member since 1997. 1997-2004 I held the position of the Secretary /Treasurer of the EAAM. In 2004 I was re-elected to the board of the Association (past the terms defined in the bylaws) as a co-opted board member. This work keeps me constantly in contact with the marine mammal society.

- In 2000 I was asked by the Finnish government to participate as an expert in the development of organizing a network in Finland for the Agreement of the Conservation of Small Cetacean of the Baltic And North Sea (ASCOBANS). This work is done in co-operation with Finnish Ministry of Environment. The Ministry of Environment chose me to be the official representative of Finland in the Advisory Committee of the ASCOBANS. Basically the work is related to porpoises, *Phocoena phocoena*, the only cetacean rarely found from Finnish coastal areas.
- My personal co-operation with the ASCOBANS already started in 1995.
- In 2004 a formal working group was established by the Ministry of Environment to implement EU regulations and Ascobans references for Recovery Plan of Baltic Harbour porpoise. I was chosen to this working group to the position of a marine mammal expert.
- I am also included in the network for Finland of the newly founded Sea Rescue Foundation.

Education;

- Matriculation Examination in 1983
- Driving licence
- Aquarium techniques and the care take of different fish species by the employer.
- Self education in marine mammals as well as numerous participations in different scientific lectures in different Symposia on marine mammals (1994-2004).
- Behavioural studies in techniques of differential and positive reinforcement in cetacean provided by the employer and consultants (i.e. Bruce Stephens, Sea Ways, San Diego, USA)

MICHAEL T. OSBORN

41-202 Kalaniana'ole Highway #7

Waimanalo, Hawaii 96795

Cellular: **Office:** (808) 259-2558 **Fax:** (808) 259-2535
(cell and email redacted)

Curriculum Vitae

March 2, 1998 – Present Sea Life Park Hawaii Waimanalo, Hawaii

November 2001 – Present; General Curator of Mammals and Fish

Report directly to the General Manager and Park Owner on all aspects of Sea Life Park's Animal Program Department. Fifty full time employees and 16 full time interns that produce five different interactive programs along with various shows and exhibit presentations staff the Department.

Primary responsibilities:

- Maintain and improve husbandry standards for the animal collection, coordinating with the attending veterinarian.
- Structure organizational chart of staffing needs to meet the growing demands of the park.
- Develop staff to include management skills for supervisors and application of operant conditioning and animal care with animals.
- Over see interactive program development to meet the company's needs for quality and capacity.
- Develop and implement policies and protocols, to insure staff and animal safety.
- Prepare reports reflecting the current status of animals and programs along with short and long-term goals and plans to meet the needs of the animal collection.
- Daily communication with the attending and on site veterinarian concerning the welfare of the animal collection.
- Liaison with all of the parks departmental managers, concerning all aspects of the animal program department.
- Collect necessary samples from animals and send off to laboratory for diagnostic information, as directed by the veterinarian.
- Administer inject able and oral drugs, as directed by the veterinarian.
- Attend professional conferences in the marine mammal field, to help improve quality and care for the animal collection.
- Communicate with staff and other managers in a professional manner to help create a positive fun work environment.
- Contact and coordinate with contractors concerning on-site construction projects.

December 1999 – November 2001; Assistant Curator of Marine Mammals

Report directly to the General Curator on all affairs with the Marine Mammal training department.

Primary responsibilities and accomplishments:

- Hire and develop staff for animal training management to cover shows, exhibits and marine mammal interactive programs.
- Work hands on with trained animals throughout the park to help ensure consistency in application of operant conditioning and lead by example.
- Develop new and expand on interactive programs.
- Write reports on animal management needs and coordinate transport of animals as needed.

March 1998 – December 2001; Supervisor of Animal Training

Report directly to the General Curator, on development of shows and dolphin interactive programs.

Primary responsibilities and accomplishments:

- When I was brought to Sea Life Park, my primary objective was to assess the existing animal training program and develop a clear and consistent method of training to produce safe and fun interactive programs between animals and guests. As an experienced trainer coming from an outside facility, my

first accomplishment was building a hands on working relationship with the existing staff at that time, to help establish confidence and trust.

1987-February 1998

Sea World

Orlando, Florida

Animal Training Department

- Experienced animal training in behavioral theory and advanced water work training with the following animals:

ATLANTIC BOTTLENOSE DOLPHINS
SPOTTED DOLPHINS
BELUGA WHALES
PSEUDORCA WHALES
PACIFIC WHITE SIDED DOLPHINS
KILLER WHALES
WALRUS
CALIFORNIA SEA LIONS
ASIAN SMALL CLAWED OTTERS
NORTH AMERICAN RIVER OTTERS
POLAR BEARS

1997-1998

Assistant Supervisor of Dolphin Theater Busch Gardens (Sea World)—Tampa, Florida

Primary responsibilities and accomplishments:

- Performed in management role overseeing and supervising the daily operation of the Animal Training staff and animal collection.
- Taught and directed proper husbandry procedures, conditioning techniques, showmanship skills, and advanced water work training.
- Supervised and ensure show quality and continued to raise show ratings on a consistent basis.
- Intensely involved in designing and implementing new shows.
- Organized animal transports for facility rehabilitation and animal care needs.
- Maintained life support system.
- Prepared and presented approved information to industry peers, executive management and general public (media) as required.

March 1995 – January 1997

Senior Trainer: Wild Arctic

Sea World—Orlando, Florida

Primary responsibilities and accomplishments:

- Taught and directed proper husbandry procedures, conditioning/behavioral techniques, and advanced water work training at the Wild Arctic area which housed beluga whales, polar bears, walrus, and harbor seals.
- Responsible for daily care and husbandry of all animals housed at Wild Arctic.
- Area staff scheduling.
- Responsible for daily maintenance of area and monitoring of area life support system.
- Prepared and presented approved information to industry peers, executive management, and general public (media) as required.

September 1991–March 1995
Sea World—Orlando, Florida

Trainer/Senior Trainer: Sea Lion and Otter Stadium

Primary responsibilities and accomplishments:

- Trained and maintained proper husbandry procedures, conditioning/behavioral techniques and advanced water work at the Sea Lion and Otter Stadium.
- Performed and trained in shows and presentations with California sea lions, Pacific walrus, North American river otters, and Asian short clawed river otters.

- Performed and trained advanced water work behaviors in shows, presentations, and training sessions with Pacific walrus and California sea lions.
- Responsible for area daily maintenance.

September 1990-September 1991
September 1989-May 1990
Sea World—Orlando, Florida

Trainer: Whale and Dolphin Stadium
Associate Trainer: Whale and Dolphin Stadium

Primary responsibilities and accomplishments:

- Trained and maintained proper husbandry procedures, conditioning/behavioral techniques and advanced water work at the Whale and Dolphin stadium.
- Performed and trained in shows and presentations with Atlantic Bottlenose dolphins, white sided dolphins, beluga whales, and false killer whales.
- Advanced water work training sessions and performance in shows and presentations.
- Responsible for area daily maintenance and food, vitamin, and medication distribution.

January 1989-September 1989
Sea World—Orlando, Florida

Associate Trainer: Shamu Stadium

Primary responsibilities and accomplishments:

- Trained and maintained proper husbandry procedures, conditioning/behavioral techniques, and water work sessions at Shamu Stadium which houses killer whales (*Orcinus orca*).
- Performed and trained in shows and presentations with killer whales.
- Responsible for daily area maintenance, food, vitamin, and medication distribution.

May 1990-September 1990
October 1987-April 1989
Sea World—Orlando, Florida

Associate Trainer: Sea Lion & Otter Stadium
Apprentice Trainer: Sea Lion & Otter Stadium

Primary responsibilities and accomplishments:

- Assisted, trained and maintained proper husbandry procedures, conditioning/behavioral techniques and water work at the Sea Lion and Otter Stadium.
- Performed and trained in shows and presentations with California sea lions, Pacific walrus, North American river otters, and Asian short clawed river otters. Performed water work in shows and training sessions with Pacific walrus.
- Responsible for area maintenance.
- Responsible for proper food preparation and vitamin distribution.

1981-1985 **EDUCATION: Bachelor of Science in Oceanographic Technology**
Lamar University—Beaumont, Texas

SPECIAL SKILLS / INTERESTS

- Certified in SCUBA, CPR, FIRST AID and WATER RESCUE.
- Professional member of IMATA (International Marine Animals Trainers Association).
- Associate member of AZA
- Directed and directly participated in the rescue and rehabilitation of a melon-headed whale calf (*Peponocephala electra*). Presentation emphasizing the whale's progress from time of rescue was submitted and formally presented at the 1998 IMATA conference in Portugal.
- Experience involving day or night watches for stranded, sick, injured, or newborn marine mammals.

Name: Jan Mosterd

Place and date of birth:

(redacted)

E-mail address: j.mosterd@dolfinarium.nl

Internet: www.dolfinarium.nl

Education and Certifications:

1978: Junior high school

1981: Groenhorst College, specialised in animal care

1992: Management

1996: University, van Hall. Preventive and treatment of Mammals

Work experience at the Dolfinarium Harderwijk

Dolphin trainer: 1983-1994

Head trainer Dolphins: 1994-1998

Teammanager Marine Mammals: 1998- 2003

General Curator of Marine Mammals: 2003 - present

Working at Dolfinarium Harderwijk the Netherlands

Address: Strandboulevard oost-1

3841 AB Harderwijk

Tel: 0031467467 or 031467419

The Netherlands

Housing 8 species of Marine Mammals and different species of fish.

More than 70 individuals of Marine Mammals.

MELINDA ANNE PRUETT-JONES
Chicago Zoological Society
Curator of Primates and Marine Mammals

EDUCATION

- 1981 M.S., Zoology, Brigham Young University, Provo, UT
- 1978 B.S., Psychology/Animal Behavior, University of Washington, Seattle, WA

PROFESSIONAL EXPERIENCE

- 1994 - Present
 - Curator of Primates and Marine Mammals, Chicago Zoological Society, Brookfield, IL
Plans and directs all programs for the Zoo's Primate and Marine Mammal Departments. Develops strategic plans that identify species, breeding, visitor communication, and research priorities for the facility.

 - Director, Behavior Management Program, Chicago Zoological Society, Brookfield, IL
Plans and directs the Zoo's behavioral management program. Oversees the implementation of the Behavioral Husbandry and Research Program and supervises the Behavioral Biologist and Behavioral Husbandry Manager directing this program.

 - Species Coordinator for the Callimico goeldii Species Survival Plan.

- 1995 - 2000
 - Chair, Animal Collection Division, Chicago Zoological Society, Brookfield, IL
Leads, represents, and coordinates management and planning activities of the zoo's animal departments, including birds, mammals, reptiles, primates, Children's Zoo, Zoo Nutrition Services and the Animal Hospital.

- 1989 – 1994
 - Director, Major Gifts and Estate Planning, The Field Museum of Natural History, Chicago, IL

- 1979 – 1989
 - Consultant, Systemwide Administration, Natural Reserve System, University of California at Berkeley; Academic Coordinator, Natural Reserve System, Scripps Institution of Oceanography, University of California at San Diego

- 1981 -1992
 - Secretary-Treasurer, Ecology Research Associates, a non-profit scientific and education corporation

PROFESSIONAL AFFILIATIONS

- Animal Behavior Society
- American Zoo and Aquarium Association
- American Society of Primatologists
- Society for Marine Mammalogy

PROFESSIONAL COMMITTEES

- AZA TAG Steering Committees: New World Primate TAG, Prosimian TAG, Ape TAG (Vice Chair), Marine Mammal TAG
- AZA SSP Management Committees: Colobus, Cotton Top Tamarin, Pygmy Loris, Managbey, Baboon, Ring-tail Lemur, Callimico (Species Coordinator)
- Alliance of Marine Mammal Parks and Aquariums: Population Management Task Force (Chair)

Curriculum Vitae - Melinda A. Pruett-Jones

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PUBLICATIONS

- Samuels, A., Flaherty, C, Pruett-Jones, M. 2003. Managing male bottlenose dolphins: integrating behavioral studies in captivity and the wild to develop behavioral standards. Abstract In Proc. of AZA National Conference, Columbus, Ohio.
- Pruett-Jones, M., Crissey, S., Pribyl, L., Meehan, T. 1999. The complexity of foraging ecology and feeding captive Old World primates with special consideration for vitamin D. International Zoo Yearbook, Vol. 36, pp. 122-130.
- Pruett-Jones, M.A. 1995. Managing neonates and young. Abstract In Proc. of the AZA Symposium on Health and Nutrition of New World Primates, pp. 24-25.
- Pruett-Jones, S.G., Pruett-Jones, M.A. 1993. Sexual competition and courtship disruptions: why do male bowerbirds destroy each others' bowers? *Animal Behavior*, 1994.
- Pruett-Jones, M.A. and Pruett-Jones, S.G. 1991. Analysis and ecological correlates of tick burdens in a New Guinea avifauna, pp. 154-176 In J.E. Loye and M. Zuk (eds.), *Bird-Parasite Interactions: Ecology, Behavior and Evolution*. Oxford University Press
- Pruett-Jones, S.G., Pruett-Jones, M.A., Jones, H.I. 1990. Parasites and sexual selection in birds of paradise. *American Zoologist* 30:287-298.
- Pruett-Jones, S.G., Pruett-Jones, M.A. 1990. Sexual selection through female choice in Lawes' Parotia, a lek-mating bird of paradise. *Evolution* 44:486-501.
- Pruett-Jones, S.G., Pruett-Jones, M.A. 1986. Altitudinal distribution and seasonal activity patterns in birds of paradise. *National Geographic Research* 2:87-105.
- Borgia, G., Pruett-Jones, S.G., Pruett-Jones, M.A. 1985. The evolution of bowers and the assessment of male quality. *Zeitschrift fur Tierpsychologie* 67:225-236.
- Pruett-Jones, M.A., Pruett-Jones, S.G. 1985. Food caching in the tropical frugivore, Macgregor's bowerbird (*Amblyornis macgregoriae*). *Auk* 102:334-341.
- Pruett-Jones, M.A., Pruett-Jones, S.G. 1982. Spacing and distribution of bowers in Macgregor's bowerbird (*Amblyornis macgregoriae*). *Behavioral Ecology and Sociobiology* 11:25-32.

RESEARCH EXPERIENCE

- Control of reproduction in New World primate species using progestin based implants and gonadotropin releasing hormone agonists and antagonists, with special emphasis on *Callimico goeldii*, 1996-present.
- Population ecology and reproductive strategies of marine algae, La Jolla, California, 1986-1987.
- Population ecology of the endangered light-footed clapper rail, San Diego, California and Baja, Mexico, 1985-1988.
- Behavior and ecology of bowerbirds and birds of paradise, Papua, New Guinea, 1980-1987.
- Habitat selection, behavior, and population ecology of shorebirds and small mammals, Prudhoe Bay, Alaska, 1979.
- Reproductive behavior of captive birds of prey, Woodland Park Zoo, Seattle, Washington, 1977-1978.
- Neurophysiology and behavior of lower primates, University of Washington, 1976-1978; Wisconsin Regional Primate Research Center, 1977; University of Oregon, 1975.

RESEARCH GRANTS

- Chicago Board of Trade Endangered Species Fund, 2004. The influence of social and physical environments on the behavior of captive *Callimico goeldii*.
- Institute of Museum and Library Services, 2004. Managing male bottlenose dolphins: integrating behavioral studies in captivity and the wild to develop behavioral standards.
- Col. Stanley R. McNeil Foundation, 2003. EthoTrak: A standardized monitoring system for zoos.
- Institute of Museum and Library Services, 2003. EthoTrak: Developing a standardized monitoring system for zoos.
- Conservation International Margot Marsh Biodiversity Fund, 2001. Analysis of phylogenetic relationships

within the genus *Callimico* using mitochondrial DNA sequence variation.

- Chicago Board of Trade Endangered Species Fund, 1996. Assessing uterine pathology associated with melangesterol acetate contraceptive implants in callimico.
- U.S. Fish and Wildlife Service, Endangered Species Program, Sacramento, California, 1988. Conservation of the light-footed clapper rail.
- George D. Harris Memorial Fund, World Wildlife Fund-U.S., 1983. Behavior and ecology of Macgregor's bowerbird.
- Wildlife Conservation International, New York Zoological Society, 1982. Behavior and ecology of Macgregor's bowerbird.
- Frank M. Chapman Memorial Fund, American Museum of Natural History, 1981, 1982. Behavior and ecology of Macgregor's bowerbird.
- Sigma Xi, The Scientific Research Society of North America, 1980. Behavior and ecology of Macgregor's bowerbird.

FIRST NAME: RENATO
LAST NAME: LENZI
DATE OF BIRTH: (redacted)
PLACE OF BIRTH: (redacted)
NATIONALITY: (redacted)
CIVIL STATUS: (redacted)

WORK EXPERIENCE

Adriatic Sea World Delfinario di Riccione From 1985 to 1990

Member of a rescue team for live stranded cetaceans; assistant in the therapy treatment of a diseased Bottlenose dolphin, involving restrain, force feeding and medical treatment; assistant in the therapy, rehabilitation and release of a stranded Bottlenose dolphin of approximately one year. Maintaining and training of dolphins behaviors. Involved with public talks after show. Worked closely with the veterinarian staff administering different medications for diseased or injured animals. Experience in the restrain and transportation of dolphins.

Aquatic World Delfinario di Cattolica From 1991 to 1993

Responsibilities include: maintaining a show and the training of new behaviors on a group of three Bottlenose dolphins. Trained various medical behaviors. Working closely with the veterinarians in gathering specific specimens on voluntary bases and under restrain. Maintenance of the "in closed" salt water filtration system including: chlorine levels, pH levels, salinity levels, temperature levels (this system has a heating unit), filter backwash, maintenance of the mechanics and water heating system. Working closely with the owner of the facility to realize a dive with the dolphins program. It was my task to realize an educational program and biological lessons for the scuba divers participating in the dive experience. I also had the chance to prepare a plan of study on the dolphin echolocation system. This project was realized with an acoustic engineer from the Italian National Research Commission. The research goal was to study how the calf learns to use the echolocation system, how long it takes to do it and especially how the mother stimulates the calf to start using the system.

In 1992 I started ultrasound exams on dolphins In Italy this was the first ultrasound exam on dolphins. Since then I have participates in over 100 exams and diagnosed 10 pregnancies. I did check the pregnant animals periodically collecting data as well as video samples of each exam. Responsible of the 24 hours a day observation plan on the first pregnant female that we had at the Aquatic World Cattolica. The observation before parturition lasted for 56 consecutive days. We were able foresee the moment of the birth and have a team of selected people ready to operate around the pool. We also could film the birth. I presented a poster about this pregnancy at the 1993 I.M.A.T.A. Conference. Responsible of desensitizing the pregnant female to the underwater camcorder and also responsible to film the birth underwater. The tape was successfully sold to the main Italian National TV channel. Coordinator of public relations with media during the pregnancy and after the calf birth.

Narvalo "Adriatic Sea World and Aquatic World" From 1993 to 1995

Worked in the team that planned and realized the successful transport of two pregnant Bottlenose dolphins from Adriatic Sea World to Aquatic World Cattolica. Responsible of ultrasound monitoring on those two females along their pregnancy and involved in the training of these two animals for husbandry behaviors.

Responsible in the training of behaviors which were performed underwater during a night shows. At this regard was a co-author of a formal paper presented at the 1994 I.M.A.T.A. Conference held in Tacoma by Point Defiance Zoo.

Dolphin Quest French Polynesia From 1995 to 1998

Director of Animal Management. Responsibilities include: hire, fire, supervise, review, and train the staff along with the Director of Operations. Animal Conditioning - oversee all the animal behavioral conditioning, design and implement programs, be responsible for all trainer / dolphin behavioral work performed at the facility, complete knowledge of aggressive behavior, its prevention, causes, and cures, responsible for training medical behaviors and analyze diagnosing behavior. Capable of conditioning any behavior with dolphins (and humans), animal transport and collection, able to write paper on behavioral techniques employed at Dolphin Quest. Design new interactive programs to highlight dolphin behavior and entertainment value. Communicate with other DQ

facilities and assist them in problem solving when necessary. Administrative duties - have input into the management team, and assist in paperwork involved in the smooth operation of the facility, in the marketing, act as liaison with hotel management and know the financial controls within the organization. Retail Issue - have an understanding of the retail shop, assist in hiring and firing, assist in employee reviews, assist in supervision of retail staff. Assist in development and administrative protocols. Gain knowledge of local marine conservation issues and liaison with environmental/conservation organizations.

In 1995 developed the open water boat follow training of the two Steno dolphins resident at the facility. Developed the plan for the training of open water dive with the dolphins interactive program. The program was open to the public in March 1996.

Developed a snorkel with the dolphins interactive program.

Responsible of the logistic of the Moorea land transport of four Navy dolphins (1996) moved from San Diego to Moorea. Responsible of the acclimatization of the four animals in the new facility. Responsible of the training of the four animals to be introduced into interactive programs.

In charge of the organization of the transport from Papeete to Moorea of two dolphins (1997) moved from Dolphin Quest Hawaii to Moorea. The transport from Papeete to Moorea was realized with a helicopter. Special permission was issued for a helicopter night flight. In charge of all the legal aspect of the transport as far as immigration of the animals into French Polynesia territory.

In charge of the rescue and rehabilitation of a baby Steno dolphin estimated to be about 3 months old

Successfully recovered one adult male dolphin that was lost for three weeks. The recovery of the animal took place in Bora Bora, French Polynesia. In charge of organizing the transport of the animal via helicopter. Once found, the animal was collected and transported back to Moorea

Dolphin Quest Hawaii 1998 to 2001:

Transferred from DQFP to Dolphin Quest Hawaii to serve in managerial capacity.

Involved in the training of all 11 dolphins for both Interactive behaviors and Husbandry behaviors. Work for the training of two young calves and their introduction in the daily interactive programs.

Dolphin Discovery 2001 to present:

In the time spent at Dolphin Discovery I served in the two following capacities and in charged of the following responsibilities:

ANIMAL PROGRAM MANAGER:

Job description:

Work very closely with the Director Of Training (DOT). Communicate daily with DOT to ensure proper teamwork at all level in the training department. Work very closely with Vet to provide direct feeds back on animals' medical situations.

Able to coach the training team and guide them toward their personal, professional and company goals.

Must be able to work with DOT designing and implementing new interactive programs, public presentations, educational programs and special events. Work very closely with the Director of Operation to insure a constructive communication and constant feedback for both sides. Full understanding of the local operation as well as a clear understanding on how the Company operates in the different braches. Understanding of the government regulations that concern the care and maintenance of marine mammals under human care. Able to provide the team with training classes. Work closely with DOT in the training and staff evaluations.

Assist the DOT in all aspect of his duties. Must be able to replace any of the supervisors in the training department during vacation time or sick leave as well as special situations. Must be able to work independently in all locations with the local training team and maintain a high level of communication with DOT.

VICE PRESIDENT OF ANIMAL MANAGEMENT:

Hire and fire, supervise and train staff along with the Animal Program Manager (APM). Employee will oversee all animal behavioral conditioning, design and implement of programs. Coordinates and lead with Corporate Director of Operations (CDOO) animal collections and transports.

Be responsible for designing of new interactive programs, public display and educational programs that involve animal presentation.

Complete knowledge of aggressive behaviors, its causes, cures and most of all its preventions.

Able to coordinate and organize the advancement in training knowledge of all the team members in the training department. Be responsible for all trainers' evaluations and periodicals follows up together with local supervisors and the assistance of the ADOT. Must work very closely with the Human resource department to provide specific classes to team members that need to improve specific skills in the training department.

Must be able to organizing training workshops and seminars both for internal use of for nationals and internationals meetings.

Work closely with the Corporate Director Of Operations to gain knowledge of local and non-conservation issues. Work with CDOO in building and maintaining a constructive relationship with Governmental and non-Governmental organizations. If requested must be able to represent Dolphin Discovery in national and international events.

ADDITIONAL RESPONSIBILITIES:

Since 2002 to date, worked as member of the Corporate Executive Board of Directors. The board oversee all aspect of the Corporate operations as well as all aspects of each individual operation.

I was in charged in early 2004 of the transition plan and start up of operation of two new sites. Such start up project was a large team effort and I had the opportunity to lead some 100 team members in this project.

Work closely with the Director of operation and share responsibilities over the managing of close to 400 staff members working at 6 different locations.

In November 2002 I was nominated President Elect of the International Marine Animal Trainers Association. As a Board of Director member I will be serving for the organization until 2005. Currently I am the President of IMATA.

Schools, Conferences, Workshops, and Congress attended:

- In March 2000 I obtained my Doctorate degree in Biology at the University of Bologna.
- "First National Congress on stranded Cetaceans" held in Riccione, Italy;
- "Medical treatments on Cetaceans" held in Riccione;
- "Cetaceans health care workshop on methods for hand rearing new-born Cetaceans" held in Brugge - Belgium - ;
- "20th I.M.A.T.A. Annual Conference" held in Freeport - Bahamas;
- "21st I.M.A.T.A. Annual Conference" held in Kona - Hawaii; (Speaker)
- "22nd I.M.A.T.A. Annual Conference" held in Tacoma - Washington; (Speaker)
- "Fourth Marine Mammal Health Care Workshop" held in Antibes France;
- "24th I.M.A.T.A. Annual Conference" held in Gold Coast - Australia;
- "26th I.M.A.T.A. Annual Conference" held in Algarve Portugal; (Speaker)
- Supervisor training course at the Hilton Waikoloa Village (Hawaii);
- Frontline leadership course at the Hilton Waikoloa Village (Hawaii);
- 7 Habits of Highly effective people 3 days workshop at the Hilton Waikoloa Village (Hawaii);
- First Dolphin Quest Workshop on marine mammals husbandry sampling and analysis procedure;
- 2002 Time Quest management Seminar at Dolphin Discovery;
- "28th I.M.A.T.A. Annual Conference" held in Playa Del Carmen, Mexico; (Speaker)
- "29th I.M.A.T.A. Annual Conference" held in Albuquerque, New Mexico; (Speaker)
- "30th I.M.A.T.A. Annual Conference" held in Orlando, Florida; (Speaker)
- "31st I.M.A.T.A. Annual Conference" held in Long Beach, California; (Speaker)
- Bird Training Seminar at Natural Encounters, lake Wale, Florida;
- 2002 Dolphin Discovery annual training Seminar;
- 2003 Dolphin Discovery annual training Seminar;
- 2004 Bird Training Seminar at Dolphin Discovery;

Publications:

Dr., Lenzi, R., Urbina, E., Lopez, C., Hernandez, L., (2003). The Training of Two California Sea Lions (*Zalophus Californianus*) for a Diving Interactive Program in the Caribbean Sea, 31st I.M.A.T.A. Conference, Long Beach, California, November 2003.

Bossart, G., Lenzi, R., Dr., Sanchez, R., Novoa, S., & Lopez, A. (2003). Marine Mammals Vets Becoming Marine Mammal Trainers: This is the end of an Historical Conflict, 31st I.M.A.T.A. Conference, Long Beach, California, November 2003.

Dr., Lenzi, R., Sanchez, R., Wood, S., Novoa, S., Cortez, M., (2003). First Report on a Stranded False Killer Whale (*Pseudorca Crassidens*) Calf: An Attempt at Rehabilitation, 31st I.M.A.T.A. Conference, Long Beach, California, November 2003.

Dr., Lenzi, R., Urbina, E., Garduno, M., Torner, S., Marques, M., (2003). Adaptation Process of a *Tursiops Truncatus* Gilli with a Group of 15 Bottlenose Dolphins and the Decrease of his Undesirable Behaviors via use of Operant Conditioning, 31st I.M.A.T.A. Conference, Long Beach, California, November 2003.

Dr., Lenzi, R., Urbina, E., Garduno, M., (2003). What Happens When Marine Mammal Trainers get to Train Medical Behaviors with other Species?, A.B.M.A. Conference, Tampa, Florida, February 2003.

Dr., Lenzi, R., Milo, C., Garcia, A., (2002). Training Two West Indian Manatees, 30th I.M.A.T.A. Conference, Orlando, Florida, November 2002.

Dr., Lenzi, R., Urbina, E., Milo, C., Hernandez, L., (2002). Training the Trainers Makes the Role of the Training Team Leader, the Supervisor, Just a Little More Challenging, 30th I.M.A.T.A. Conference, Orlando, Florida, November 2002.

Dr., Lenzi, R. (2001). Dolphin Discovery, An Introduction to the Company, The Three Locations and the Programs Offered, 29th I.M.A.T.A. Conference, Albuquerque, New Mexico, October 2001.

Dr., Lenzi, R., Lopez, C., Reyes, B. (2001). The Training of Husbandry Methods for Medical Behaviors in Sea Lions, 29th I.M.A.T.A. Conference, Albuquerque, New Mexico, October 2001.

Thillemann, S., Cortez-Aguilar, M., Dr., Lenzi, R. (2001). Behavior Records of a Pregnant Bottlenose Dolphin (*Tursiops truncatus*) Maintained in a Marina in the Mexican Caribbean, 29th I.M.A.T.A. Conference, Albuquerque, New Mexico, October 2001.

Dr., Lenzi, R. (2000). Operant conditioning and Ultrasound together at work to get Voluntary Urine Collection, 28th I.M.A.T.A. Conference, Playa del Carmen, Mexico, November 2000.

Languages:

I fluently speak read and write English, Italian, Spanish and French. Some knowledge of Japanese.

Tracy Romano

Home Address (redacted along with home phone)

Work Address

Mystic Aquarium & Institute for Exploration
Department of Research & Veterinary Services
55 Coogan Blvd.
Mystic, CT 06355
PH: (860)-572-5955/FAX: (860)-572-5972
E-mail: tromano@mysticaquarium.org

**Professional
Positions
and Education**

Vice President of Research and Veterinary Services, Mystic Aquarium
& Institute for Exploration, May 2004.

Associate Research Scientist in the Dept. of Veterinary
Anatomy/Public Health at Texas A&M University
September, 1999 - present.

Full Graduate Faculty Member of the Marine Biomedicine and
Environmental Science Dept. at the Medical University of South Carolina
December, 2001-present.

Assistant Research Scientist in the Dept. of Veterinary
Anatomy/Public Health at Texas A&M University
June, 1996 - September, 1999.

Adjunct Assistant Professor in the Dept. of Veterinary
Anatomy/Public Health at Texas A&M University
September, 1995 - June, 1996.

Postdoctoral training: joint appointment at the Naval
Command, Control, and Ocean Surveillance Center and
The Scripps Research Institute, San Diego, CA.
October 1993 - June 1996.

University of Rochester, School of Medicine and Dentistry,
Rochester, NY. Doctorate of Philosophy degree in Anatomy;
May, 1993.

Saint Michael's College, Winooski, Vermont. Bachelor of Science
degree; May, 1986.

**Grants and
Fellowships**

Grant from the Office of Naval Research, (P.I.) 10/99-09/04 \$1,038,197
*"Investigation of Immune Competence in Navy Marine Mammals:
Implications for Health, Viability and Mission Readiness"*

Subcontract from the Medical Univ. of South Carolina, (Co P.I.)
03/04-02/05 \$66,255
*"Medical University of South Carolina's Activities in Support of the Charleston
Health and Risk Assessment (HERA) of Bottlenose Dolphin Populations*

Subcontract from the Medical Univ. of South Carolina, (Co P.I.)
11/02-05/03 \$42,712
*"Medical University of South Carolina's Activities in Support of the Charleston
Health and Risk Assessment (HERA) of Bottlenose Dolphin Populations Project"*

Grant from the Office of Naval Research through the Medical University of South
Carolina, (P.I.) 04/03 -03/04 \$27,000; 04/02 – 03/03 \$26,000

“A Functional Genomics Approach to Understanding and Evaluating Health in Navy Dolphins”

Grant from the Florida Fish and Wildlife Conservation Commission through Mote Marine Laboratory (Co P.I.) 11/02 – 06/03 \$5833.00
“Diagnostic Indicators of Manatee Immune Function”

Grant from National Marine Fisheries Service, (P.I.) 01/01-12/02 \$80,000
“Investigation of Lymphoid Organs Collected During Necropsy of Dolphins Killed in the ETP Tuna Purse-Seine Fishery and Development of Reagents for Assessing Immunocompetence in Dolphins”

Defense Univ. Research Instrumentation Program, (P.I.) 03/00-03/01 \$161, 250
“Flow Cytometry: Technology to Advance Research and Clinical Assessment of Health in Navy Marine Mammals”

Grant from the Office of Naval Research, (P.I.) 6/96-9/99 \$300,000
“Investigation of Immune Function in Navy Marine Mammals”

Grant from the National Science Foundation, (Co -P.I.) 6/94-6/98 \$339,918
“Neural-Immune Interactions in the Beluga, Delphinapterus leucas”

National Research Council Postdoctoral Fellowship 1993-1996
Office of Naval Research Fellowship 1986-1989

**Invited Speaker
Presentations/
Session Chairs**

Invited Session Chair for the International Association for Aquatic Animal Medicine, 2003
Invited Speaker for San Diego State University Biology Seminar Series, 2003
Invited Speaker for the Hubbs Research Institute Seminar Series, 2002
Invited Session Chair for the International Association for Aquatic Animal Medicine, 2002
Invited Speaker for the Florida Marine Mammal Health Conference, 2002
Invited Speaker for the Marine Biology Seminar Series at The Scripps Oceanographic Institute, 2002
Organizer and Co-Chair of a symposium entitled: "The Cetacean Brain" for the 13th Biennial Conference of the Society for Marine Mammalogy, 1999
Organizer and Chair of a pre-IAAAM Marine Mammal Immunology Workshop, 1999
Invited Session Chair for the International Association for Aquatic Animal Medicine, 1998
Invited Speaker for the XXII Reunion Internacional para el estudio de los Mamíferos Marinos, Quintana Roo, Mexico, 1998
Invited speaker for the Marine Biology Seminar Series at The Scripps Oceanographic Institute, 1996
Invited speaker for the Toxicology Seminar Series at Texas A&M, 1994
Invited speaker for the American Cetacean Society, 1994
Invited speaker for session entitled: "Interactions of Immunology and Toxicology" at the tenth biennial conference on the Biology of Marine Mammals, 1994

**Review Panels
and Journal
Peer Review**

Peer Reviewer for Harbor Branch Oceanographic Institution, 2003
NSF Panel Review on Evolutionary Immunobiology, 2002
Peer Reviewer for Sea Grant, 1997
Panel Review of National Defense Science and Engineering Graduate Fellowships, 1996
National Science Foundation panel discussion on biodiversity, 1994
Panel Review of ONR graduate fellowship applicants, 1994 and 1993

Peer Reviewer for *Marine Mammal Science*
Peer Reviewer for *Journal Wildlife Diseases*
Peer Reviewer for *Developmental and Comparative Immunology*
Peer Reviewer for *The Marine Ecology Series*
Peer Reviewer for *The Anatomical Record*
Peer Reviewer for Aquatic Mammals

**Teaching
Experience**

Teaching assistant for the Medical Histology course for three years of graduate career. Responsibilities included teaching a laboratory of 30 medical students, conducting review sessions for the entire class of 110 students, participation in examination preparation and grading, individual tutoring. Mentoring undergraduate, graduate, and veterinary students in the laboratory.

**Research
Experience**

SPAWAR Systems Center, US Navy Marine Mammal Program

In charge of my own research laboratory, specializing in environmental influences on the immune system, at the SPAWAR Systems Center, US Navy Marine Mammal Program in collaboration with Texas A&M University. The laboratory is fully equipped for studies of the nervous and immune systems utilizing techniques in flow cytometry, microscopy, antibody production, purification, characterization, molecular biology (PCR, Northern, Southern blot analysis, cloning, RNA/DNA isolation), protein purification, Western blot analysis, electrophoresis, and mammalian tissue culture. Currently, there is 1 undergraduate student, 1 graduate student, and 2 research technicians. Associate Research Scientist 10/99 – Present.

The Scripps Research Institute/Naval Command, Control, and Ocean Surveillance Center

Laboratory of Dr. Vito Quaranta, The Scripps Research Institute, La Jolla, CA. Began the generation of cetacean-specific reagents to use in investigations of the cetacean immune system. Techniques include monoclonal and polyclonal antibody production and characterization (ELISA, flow cytometry, immunoprecipitations, Western blots, immunofluorescence, antibody purification) and molecular biology techniques (DNA/RNA extraction, PCR, DNA sequencing, Southern and Northern blots, cDNA and genomic library screening, gene cloning and expression). Also studied class II and immunoglobulin expression on dolphin peripheral blood lymphocytes and lymphocyte proliferation. Assistant Research Scientist and Postdoctoral work, 10/93 – 10/99; Graduate school, summers of 1989 and '90.

Laboratory of Dr. Sam Ridgway, Naval Ocean Systems Center, San Diego, CA. Studied the anatomy of marine mammals through anatomical dissection, recorded cetacean vocalizations during various training sessions and analyzed the vocalizations on an SD-350 digital analyzer, participated in the training and general care of captive marine mammals, videotaped and observed the dolphin learning process, collected blood samples for mitogen stimulation studies under the direction of Robert Balderas in the Dept. of Immunology at The Scripps Research Institute. Graduate school, summers of 1986, '87, and '88.

The University of Rochester

Laboratories of Drs. David and Suzanne Felten and the laboratory of Dr. John Olschowka, Dept. of Neurobiology and Anatomy, University of Rochester. Examined the effects of neonatal thymectomy on innervation of the rat spleen, examined the effects of pergolide on the deterioration of the dopaminergic nigrostriatal system in Fischer 344 rats, examined the localization of serotonin in the hippocampus and hypothalamus in experimental and control rats, investigated general morphology and innervation of primary and secondary lymphoid organs in rodents and cetaceans, carried out functional neural-immunological studies in rats and

cetacean cells *in vitro*. Techniques included proper histological preparation of tissues, catecholamine histofluorescence, morphometric techniques, golgi-cox staining, immunohistochemistry at the LM and EM levels, tissue culture and HPLC. Graduate school, academic years 1988-93.

Field Experience

Organized and conducted three field expeditions to Churchill, Manitoba, a field expedition to the Northwest Territories, Canada four expeditions to Pt. Lay, Alaska and one expedition to Barrow, Alaska to collect tissues from beluga and bowhead whales taken by native hunters. This is a unique opportunity to obtain fresh cetacean tissues for research and requires establishing working relations with political organizations of the U.S. and Canada as well as the Inuit people, and logistical planning. Also have participated in the live capture of beluga whales for transmitter placement, in order to track their location and the depth of their dives.

Societies and Memberships

International Association for Aquatic Animal Medicine 1987 – Present
(Chair of the Student Liaison Committee for IAAAM) 2000 – Present
Society for Marine Mammalogy 1986 - Present
Toastmaster's International (VP of Membership) 10/02 - Present

Publications

Manuscripts

Zabka, T.S. and T.A. Romano. 2003. Immunological Characterization of Skin from the Atlantic Bottlenose Dolphin, *Tursiops truncatus*, *Ana. Rec.*, 273A:636-647.

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Van Bonn, W., T. Romano, and S. Shippee. 2001. Clinical and Neuroimmunological Assessment of bottlenose dolphins deployed to Sitka, Alaska during exercise Northern Edge 2000. *Navy Technical Report*.

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Plopper, G., J. Falk-Marzillier, S. Glaser, M. Fitchmun, G. Giannelli, T. Romano, J.C. Jones, and V. Quaranta. 1996. Changes in expression of monoclonal antibody epitopes on laminin-5R induced by cell contact. *J. Cell Science*. 109:1965-1973.

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Romano, T. A., S.Y. Felten, J.A. Olschowka, and D.L. Felten. 1993. A microscopic investigation of the lymphoid organs of the beluga, *Delphinapterus leucas*. *J. Morphol.* 215:261-287.

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Abstracts

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- Romano, T.A., M.J. Keogh and Kerri Danil. 2003. Investigation of the Effects of Repeated Chase and Encirclement on the Immune System of Spotted Dolphins (*Stenella Attenuata*) In the Eastern Tropical Pacific. In: *Proceedings of the 2003 International Association for Aquatic Animal Medicine*. Vol. 34 (Abstract and Presentation)
- McArthur-Vaughan, K., W.G. Van Bonn and T.A. Romano. 2003. A Correlative Approach for Assessing Health and Disease in Marine Mammals. In: *Proceedings of the 2003 International Association for Aquatic Animal Medicine*. Vol. 34 (Abstract and Presentation)
- Peden-Adams, M., P. Fair, G. Bossart and T.A. Romano. 2003. Development and Standardization of A Suite of Assays to Assess Immunotoxicity in the Bottlenose Dolphin, *Tursiops Truncatus*. In: *Proceedings of the The 12th International Symposium- Pollutant Responses in Marine Organisms*. Abstract No. 85, pp:82 (Abstract and Presentation)
- Romano, T.A., M.J. Keogh, G. Miller, T. Kamolnik, D. Carder, C. Schlundt, J.Finneran, W. Winhall, and T. Reidarson. 2002. Investigation of the Effects of Loud Sound, Transport and Introduction to a Novel Environment on the Nervous and Immune Systems in the Beluga, *Delphinapterus leucas*, In: *Proceedings of the 2002 International Association for Aquatic Animal Medicine*, Vol. 33 (Abstract and presentation)
- Smith, C.R., W. Van Bonn, P.C. Melnyk, G. Hermanson, M. Wloch, P. Hobart, and T. A. Romano. 2002. Administration of Reporter Gene Plasmid Vaccines to Atlantic Bottlenose Dolphins, *Tursiops truncatus*, In: *Proceedings of the 2002 International Association for Aquatic Animal Medicine*, Vol. 33 (Abstract and presentation)
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Schlock, T.B., W.G. Van Bonn, T.A. Romano, S.E. Poet, and B.W. Ritchie. 2001. Assessment of the humoral response to nucleic acid vaccination in the Bottlenose dolphin (*Tursiops truncatus*). In: *Proceedings of the 2001 International Association for Aquatic Animal Medicine*. Vol. 32 (Abstract and presentation)

Smith, C.R., W. Van Bonn, T.A. Romano, P.Melnyk, E.D. Jensen, and S.H. Ridgway. 2001. Application of DNA vaccine technology to marine mammal Medicine. In: *Proceedings of the 2001 International Association for Aquatic Animal Medicine*. Vol. 32 (Abstract and presentation)

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Romano, T., D.L. Felten, S.Y. Felten, and J.A. Olschowka. 1993. An Anatomical Link Between the Nervous and Immune Systems in the Beluga, *Delphinapterus leucas*. In: *Soc. of Marine Mammalogy Abstracts*. (Abstract and presentation)

Romano, T.A., S.Y. Felten, J.A. Olschowka, and D.L. Felten. 1993.

General Morphology and Innervation of the Lymphoid Organs in the beluga, *Delphinapterus leucas*. In: *The Proceedings of the 1993 International Association for Aquatic Animal Medicine*. Vol. 24. (Abstract and Presentation)

Romano, T.A., J.A. Olschowka, S.Y. Felten, and D.L. Felten. 1992. Communication of Nervous and Immune Systems in the Beluga, *Delphinapterus leucas*. In: *The Proceedings of the 1992 International Association for Aquatic Animal Medicine*. Vol. 23. (Abstract and Presentation)

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Romano, T.A., D.L. Felten, J.A. Olschowka, and S.Y. Felten. 1991. The demonstration of a possible link for neural-immune system interactions in the beluga whale. In: *Soc. Neurosci. Abstracts*. Vol. 17(1):833. (Abstract and presentation)

Ridgway, S.H., D.A. Carder, and T.A. Romano. 1991. The victory squeal of dolphins and white whales on the surface and at 100 m or more in depth. *J. Acoust. Soc. Am.*, Vol. 90(4) pt 2.

Romano, T., S. Ridgway, and V. Quaranta. 1990. MHC class II molecules and immunoglobulins on peripheral blood lymphocytes of the bottlenose dolphin, *Tursiops truncatus*. In: *The Proceedings of the 1989 International Association for Aquatic Animal Medicine*. Vol. 21:9-10. (Abstract and presentation)

Romano T., D.L. Felten and J.A. Olschowka. 1989. Neural-immune interactions in the beluga whale. In: *The Proceedings of the 1989 International Association for Aquatic Animal Medicine*. Vol. 20:82. (Abstract and presentation)

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References

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RESUME

NAME: Ronald E. Hardy
ADDRESS: (redacted)

PHONE: (redacted)
BIRTHDATE: (redacted)
BIRTHPLACE: (redacted)
FAMILY: (redacted)

EDUCATION: College - University of West Florida at Pensacola
M.S. Degree in Supervision & Administration - 1978 University of Alabama at Tuscaloosa
B.S. Degree in Education - 1965
Marion Military Institute, Marion, A L - 1961
Special Training - 100-ton captain's license
Private pilot's license
Certified Scuba Dive Master

CIVIC ACTIVITIES AND ORGANIZATIONS:

Alliance of Marine Mammals Parks and Aquariums
Board of Directors, Treasurer 1998 – 2001, President 2003
National Scuba Retailers Association - Past
Chairman, Board of Directors
Florida Association of Dive Operators - Past
Chairman
Board of Directors Honor Society of Phi Kappa Phi member
Man In The Sea Museum, Executive Secretary,
Board of Directors
Bay County Chamber of Commerce - Board of
Directors
Rotary International, member
Bay County Resort Council - past Vice Chairman,
Board of Directors
Visitors and Convention Bureau - past President,
United Way - past District Representative
Tourist Development Council, Marketing Committee

WORK EXPERIENCE:

Gulf World. Inc. - President 1984 to present
Responsibilities - Planning and developing operating budget, administrative functions, assisting general manager with daily operations, planning for future expansion and development, collecting marine specimens including dolphins.

Ronald E. Hardy Resume
Page 2

Hydrospace International - 1972 to 1999, Owner
Responsibilities - Coordinate general management of two stores, develop training program for managers, and oversee all aspects of operational budget.

Scuba Charters - Dive boat charter operation for Duchess 46'. Capt. Scuba 48', Capt. Scuba II 48', Reef Runner 50', Island Diver 65', Bayou Runner 42' -1969 to 1999.
Responsibilities - Develop training program for captains, coordinate general management and booking of boats, oversee all aspects of operational budget.

Bay County School Board -1984 to 1989, Administrative Assistant to Superintendent of Schools,

Responsibilities - Liaison, Administrative Assistant to the Bay County School Superintendent between school personnel, citizens and community organizations, coordinated extracurricular school activities, chief negotiator and grievance officer representing the school board in contract negotiations and grievance procedures, interpreted and administered the union contract between the teachers and the school board, developed and administered an equal opportunity plan, administered liability insurance program.

Band Director and Educator - 1968 to 1984, Band Director

Everette Jr. High School,

Responsibilities - Develop and implement successful Educational music program.

Band Director and Educator - 1965 to 1968, Foley, AL

Responsibilities - Develop and implement successful Educational music program.

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Professional Experience

- | | | |
|---|-------------------------|---------------------------|
| 1998-Present | Miami Seaquarium | Miami, FL |
| Curator | | |
| <ul style="list-style-type: none">• Oversee the management of the Animal Care and Animal Training Departments and the animals associated with their care. | | |
| 1995-1998 | Miami Seaquarium | Miami, FL |
| Director of Animal Training | | |
| <ul style="list-style-type: none">• Responsible for animal care and training of 50 marine mammals for husbandry and show behaviors. | | |
| 1995 | Ocean Park | Hong Kong |
| Consultant | | |
| <ul style="list-style-type: none">• Provided guidance in the areas of animal care, animal training and staff development. | | |
| 1991-1994 | Ocean World | Ft. Lauderdale, FL |
| Director of Animal Training | | |
| <ul style="list-style-type: none">• Managed all curatorial aspects of 200 animals, including marine mammals, aquatic mammals, exotic birds, sea turtles and fishes. | | |
| 1987-1990 | Sea World | San Antonio, TX |
| Senior Animal Trainer | | |

Education

- | | |
|-------------|--|
| 1987 | Southwest Texas State University San Marcos, TX |
| | Bachelor of Science in Marine Biology |

CURRICULUM VITAE

PERSONAL INFORMATION

Name: Arlete Teresinha Rodrigues Sogorb

Date and Place of Birth: (redacted)

Nationality: (redacted)

PROFESSIONAL CONTACTS

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PORTUGAL

Telephone: 351 – 217 232 945

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E-mail: baiagolf@zoolisboa.pt

Celular phone: (redacted)

ACADEMIC INFORMATION

1991 Diploma in the Veterinary Medicine Course, recognised in Portugal, at the Escola de Medicina Veterinária na Universidade Técnica de Lisboa (School of Veterinary Medicine at the Technical University of Lisbon)

1982–1986 University Course at Faculdade de Medicina Veterinária e Zootecnia da Universidade de São Paulo - USP (Faculty of Veterinary and Zootechnic Medicine, University of São Paulo.)

PROFESSIONAL ACTIVITY

1995–2004 Lisbon Zoo Technical Director.

Responsible for the Marine Life Centre: “Baía dos Golfinhos”, maintaining the zoosanitary directives of health maintenance basically by means of preventive medicine. Also responsible for all the technical aspects related to animal well being, water treatment and general dolphinarium procedures.

1995 Co-ordinator of the project for the new dolphinarium at Lisbon Zoo, “Baía dos Golfinhos”.

1994 Responsible for the Marine Biology Department and Birds at Lisbon Zoo. Developed a new Bird Reproduction Centre, as well as various aspects related to nutrition and facility improvements. During this period was also responsible for the Lisbon Zoo marsupial sector.

1992–1993 Half time work at Lisbon Zoo, developing clinical and well being related work, nutrition, etc., basically regarding birds and marine mammals.

1989–1993 Technical Director and Veterinarian of the company “Mundo Aquático”, having performed the zoosanitary control of the animals in two dolphinariums in Portugal (one located in Lisbon, and “Zoomarine”, in Algarve- southern Portugal) and of one dolphinarium in Spain (“Las Salinas”, in Ibiza). Applied work methodology always enhancing preventive medicine through the training of medical/husbandry behaviours for obtaining biological samples and for periodical medical check-ups.

1986–1989 Worked at “Aquarama”, in São Paulo (Brazil), as Veterinarian of Marine Mammals working with several marine mammals species, as Bottlenose dolphins, Killer whales, California sea lion, South African sea Lions Elephant seals,

ACTIVE PARTICIPATION AT FOLLOWING INTERNATIONAL INSTITUTIONS

- IAAAM (International Association for Aquatic Animal Medicine).
- EAAM (European Association for Aquatic Mammals).
- IMATA (International Marine Animals Trainers Association).
- **Alliance of Marine Mammals Parks and Aquariums**, USA – Official representative from Lisbon Zoo.
- **Pro-Cet** (Europe) – Official representative from Lisbon Zoo.

PUBLISHED WORK

- Keskitalo, P. ; Sogorb,A. (2004). Heat Exchanges and Temperature control. 1st International Symposium of Water Quality and Treatment in Zoos and Aquaria
- Bragança, M.; Sequeira, M.; Sogorb, A; Alves, H.; Vingada,J.; Santos,M.; (2003). Setting up a stranding response network in Portugal for live Marine Mammals. EAAM – Tenerife, Spain
- Matias,S.; Sogorb, A. (2001/ 2003). Food assimilation efficiency and energy requirements for maintenance of captive California Sea Lion (*Zalophus californianus*). SMM – Vancouver, Canada / EAAM – Tenerife, Spain
- Rickett, S.; Sogorb, A. (1997). Laser-therapy: Treatment of a bottlenose dolphin (*Tursiops truncatus*). IMATA. Baltimore, USA.
- Rickett, S.; Sogorb, A. (1996). “How nice it is to have a lifting floor”. EAAM – Algarve, Portugal
- Rickett, S.; Sogorb, A. (1995). A Fishing Village in the Middle of Town – Dolphin Bay – “Baía dos Golfinhos”. IMATA. Las Vegas, USA.
- Sogorb, A. (1993). Endoscopy by voluntary behaviour in *Tursiops truncatus*: a new technique for routine monitoring of gastric problems in marine mammals. IMATA. Hawaii, USA.
- Sogorb, A. (1993). A case of cutaneous mycotic disease in South African fur seals - *Arctocephalus p. pusillus*. IAAM. Chicago, USA.
- Sogorb, A. (1992). Erysipelas: How to Deal with the Illness. EAAM. Bruges, Belgium.
- Sogorb, A. (1990). Candidiasis: How to Monitor and Control the Illness. Presented at the IV Encounter of Marine Mammal Specialists in Chile, South America.
- Sogorb, A. (1990). Candidiasis: How to Monitor and Control the Illness. EAAM, Switzerland.
- Sogorb, A. (1990). Medical Routine in Cetaceans. Presented at the 65th Congress of Veterinary Doctors, on Madeira, Portugal.
- Sogorb, A. (1990). A case of cutaneous mycotic disease in South African Fur Seals - *Arctocephalus p. pusillus*. In the magazine of the Portuguese Society of Veterinary Sciences. Portugal.

OTHER ACTIVITIES

- Consultant at Gardaland Dolphinarium in Verona, Italy since 2001 till nowadays.
- Founder member of the National Network for the Rehabilitation of Marine Mammals in Portugal, in 1999.

- ◆ Consultant to the Octopus Dolphinarium in Tenerife (Spain), from 1995 to 1997.
- ◆ Councillor for various end of course internships, among which:

Sónia Matias (2000). Maintenance Energy and assimilation efficiency of the California sea lion in captivity. Biology Applied to Animal Resources Course (variant – Marine Resources).

Cristiane Carvalho de Lima (1998). Curricular Supervised Internship in the Medical-surgical Clinic Area. Faculty of Veterinary and Zootechnic Medicine. University of São Paulo, Brazil.

Élio Vicente (1997). Study about Nursing in the bottlenose dolphin, *Tursiops truncatus* (Montagu,1821). Marine Biology and Fisheries Course. Algarve University, Portugal.

Maria João Silva Vila (1997). General Management of the bottlenose dolphin – Baía dos Golfinhos – Lisbon Zoo. The importance of training and medical behaviours. Animal Production Course. Higher Agrarian School of Santarém, Portugal.

Maria Leonor Galhardo (1993). Behaviour of Bottlenose Dolphins in two Dolphinaria – M.Sc. Applied Animal Behaviour & Animal Welfare. University of Edinburgh.

CURRICULUM VITAE
MICHAEL ANDREW STAMPER, D.V.M.,
Diplomate American College of Zoological Medicine

PERSONAL INFORMATION

Office Address:

Animal Programs
The Living Seas, Epcot
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2020 North Avenue of the Stars
Lake Buena Vista, FL 32830-1000
407-560-5576
email: andy.m.stamper@disney.com

Home Address: (redacted)

EDUCATION

School	Years	Concentration	Degree Earned
North Carolina State University	1995-1998	Zoological Medicine	Residency Certificate
Purdue University	1989-1993	Veterinary Medicine	Doctor of Veterinary Medicine
Univ. of Calif. at Santa Cruz	1988	Marine Biology	
Purdue University	1986-1987	Biology and Agriculture	

Board Certified in Zoological Medicine (Specialty in Aquatics)**SUPPLEMENTAL TRAINING**

- American College of Zoological Medicine Short Course, Raleigh, NC. (July '95, July '96, July '97)
- Techniques in Wild Animal Immobilization. Purdue University, Lafayette, IN. (November '92)
- Aquavet 2, Woods Hole, MA. (May '92)
- Aquavet 1, Woods Hole, MA. (May '91)

CURRENT POSITIONS

- Research Biologist / Clinical Veterinarian**-Epcot's The Living Seas, Lake Buena Vista, FL 2001-present
- Adjunct Faculty-University of Florida Fisheries and Aquatic Sciences. 2002-present
- Adjunct Faculty-University of Central Florida-Biology Department. 2002-present

PREVIOUS POSITIONS

- Director of Veterinary Services and Marine Animal Rescue and Rehabilitation Departments** New England Aquarium, Boston, MA
- Board Member**-Cape Cod Stranding Network-Bourne, MA
- Adjunct Faculty Member**- Tufts University, School of Veterinary Medicine-Grafton, MA
- Resident in Zoological Medicine (Aquatics Specialty)**, 1995-Present. College of Veterinary Medicine, North Carolina State University, Raleigh, NC.
- Veterinary Intern**, 1993-1995. National Aquarium in Baltimore, Baltimore, MD.
- Laboratory Assistant-Aquaculture**, Jan-June, 1991. Purdue Natural Resource Department in the aquaculture division. Purdue University, Lafayette, IN.
- Research Assistant-Alaska Fish and Game**, June-Aug, 1991. Post Exxon Valdez oil-spill otter study. Prince William Sound, AK.
- National Audubon Project Puffin Research Assistant**, 1989-1990. Seabird Ecology. Damariscotta, ME.
- Laboratory Assistant-Veterinary Toxicology Department**, Sept, 1988-May, 1989. Lafayette, IN.
- Research Assistant (volunteer)**, Jan-Aug, 1988. Pinniped, cetacean, and seabird physiology. Santa Cruz, CA.
- Assistant, Hardwood Island Biological Station**, June-Aug, 1987. Hardwood Island, ME.

LICENSURE

- Licensed to practice veterinary medicine in Florida
- S.C.U.B.A. certified.

MEMBERSHIPS

- American Fisheries Society
- American Association Wildlife Veterinarians
- American Association of Zoo Veterinarians
- American Veterinary Medical Association
- International Association for Aquatic Animal Medicine,
Co-chairperson, Awards Committee, 1997-1998.
Conference Host, 1999

AWARDS AND HONORS

- Phi Zeta, National Honor Society of Veterinary Medicine.
- Holly Watts Scholarship recipient for excellence in exotic animal medicine. 1992. Purdue School of Veterinary Medicine.
- International Association for Aquatic Animal Medicine. Student Presentation Award (Interns and Residents) 1996.
- International Association for Aquatic Animal Medicine. Student Manuscript Scholarship (Interns and Residents) 1997.
- International Association for Aquatic Animal Medicine. Student Presentation Award (Interns and Residents) 1997.

GRANTS

- Stamper, M.**, Conservation Action Fund. Oak Foundation. \$10,000. Full Award.
- Stamper, M.**, C. Harms, S. Epperly, and M. Stoskopf. Health Assessment of Loggerhead Sea Turtles (*Caretta caretta*) with Light versus Heavy Epibiotic Encrustation National Marine Fisheries Service. \$30,000-Partially funded.
- Stamper, M.**, S. Epperly and M. Stoskopf. The Effects of Restraint Position on Respiratory Function of Loggerhead Sea Turtles Assessed by Blood Gas Analysis. National Marine Fisheries Service. \$8,000-Not funded.
- Stamper, M.**, S. Epperly and M. Stoskopf. The Effects of Restraint Position on Respiratory Function of Loggerhead Sea Turtles Assessed by Blood Gas Analysis. North Carolina State University Department of Companion Animal and Special Species Medicine. \$8,000-Not funded.
- Stamper, M.**, F. VanDolah, S. Epperly, A. Colbert and M. Stoskopf. Baseline Brevetoxin Plasma levels in Sea Turtles. National Marine Fisheries Service. \$8,000-Not funded.

PUBLICATIONS (Peer Review)

- Keller, J.M., J.R. Kucklick, **M.A. Stamper**, C.A. Harms, and P.D. McClellan-Green. 2003. Associations between Organochlorine Contaminant Concentrations and Clinical Health Parameters in Loggerhead Sea Turtles from North Carolina, USA. Environmental Health Perspectives. Vol 112 (10). Page: 1074-1079.
- Muraco, H and **Stamper, A.** 2003. Training Spotted Eagle Rays (*Aetobatus narinari* (Euphrasen)) to Decrease Aggressive Behaviors Towards Divers. Journal of Aquaculture and Aquatic Sciences. 8(4): 88 - 98.
- Stamper, M.A.**, M. Papich, G. Lewbart, S. May and M. Stoskopf. Pharmacokinetics of 2003. Florfenicol in Loggerhead Sea Turtles (*Caretta caretta*) after a Single Intravenous and Intramuscular Injection. Journal of Zoo and Wild Animal Medicine. 34(1):3-8
- Stamper, M.A.**, and T. Norton. 2002. Ovariectomy in a Brook Trout (*Salvelinus fontinalis*). Journal of Zoo and Wild Animal Medicine. 33(2): 172-5.
- Chittick, B., **M. A. Stamper**, G.A. Lewbart, and W.A. Horne. 2002. Medetomidine, ketamine, and sevoflurane anesthesia in loggerhead sea turtles (*Caretta caretta*). Journal of the American Veterinary Medical Association 221(7): 1019-1025.
- Harper, C., C. Dangler, S. XU, Y. Feng, Z. Shen, B. Sheppard, **A. Stamper**, F. Dewhirst, B. Paster, and J. Fox. 2000. Isolation and Characterization of a *Helicobacter* sp. From the Gastric Mucosa of Dolphins, *Lagenorhynchus acutus* and *Delphinus delphis*. Applied and Environmental Microbiology Vol. 66 (11): 4751-4757.
- Bush M., L. Phillips, D. Grobber, **A. Stamper**, W. Lance. 2001. Immobilization of Free-ranging giraffe with medetomidine and ketamine. Zoo and Wild Animal Medicine. Vol. 218(2): 245-9.
- Upton, S. J., **M. Andrew Stamper**, Andrea L. Osborn, Sonia L. Mumford, Laura Zwick, Michael J. Kinsel, and Robin M. Overstreet. A new species of Eimeria (Apicomplexa, Eimeriidae) from the weedy seadragon *Phyllopteryx taeniolatus* (Osteichthyes: Syngnathidae). Diseases of Aquatic Organisms. 2000 Oct 25. 43(1): 55-59.
- Stamper, M.A.**, G. Lewbart, P. Barrington, C. Harms, F. Geoly, and M. Stoskopf. Coccidial Infections in Cownose Rays Associated with Mortality. Journal of Aquatic Animal Health. vol. 10: 264-270.

- Stamper, M.A.**, M. Papich, G. Lewbart, S. May and M. Stoskopf. 1998. Pharmacokinetics of Ceftazidime in Loggerhead Sea Turtles (*Caretta caretta*) after a Single Intravenous and Intramuscular Injection. *Journal of Zoo and Wild Animal Medicine*. vol. 25(4):
- Stamper, M.A.**, T. Norton and M. Loomis. 1998. Clinical Presentation of *Mycobacterium avium* in Touracos. *Journal of Avian Medicine and Surgery*. vol. 12 (2):
- Stamper, M.A.** and F. Gulland. 1998. Leptospirosis in Rehabilitated Harbor Seals (*Phoca vitulina richardii*). *Journal of Wildlife Diseases*. vol. 34 (2): 407-410.
- Stamper, M.A.**, T. Norton, G. Spodnick, J. Marti and M. Loomis. 1998. Hypospadias in a Polar Bear (*Ursus Maritimus*). *Journal of Zoo and Wild Animal Medicine*. vol. 25(4):
- F.B. Nutter, D. Lee, **M.A. Stamper**, G.A. Lewbart, and M.K. Stoskopf. 2000 Hemiovariosalpingectomy in a Loggerhead Sea Turtle (*Caretta caretta*). 146:78-80.
- Hawkins, E.C., F.I. Townsend, G. A. Lewbart, **M.A. Stamper**, V.G. Thayer and H.L. Rhinehart. 1997. Bronchoalveolar Lavage in a Dolphin. *Journal of the American Veterinary Medical Association*. vol. 211 (7): 901-904.
- Upton, S.J., **M. A. Stamper** and B. R. Whitaker. 1995. *Isospora bellicosa* sp.n. (Apicomplexa) from a Peruvian Red-Breasted Meadowlark *Sturnella bellicosa* (Passeriformes: Icteridae). *Archiv für Protisten Kunde*. vol. 145: 132-134.
- Zaias J, Ewing R, Dubey P, Stamper MA, Bossart G. (2002). Prevalence of Sarcocystois in tow mass strandings of Atlantic white-sided dolphins (*Lagenorhynchus acutus*). *Journal of Wildlife Diseases*. 38(2): 291-296.

MANUSCRIPTS IN PREPARATION

Chapters:

- Stamper, M.A.** and B. Bonde. Manatee (Live Animal) Field Sampling Techniques. Submitted to USFWS for the Manatee Husbandry Manual. (*Submitted*)
- Stamper, M.A.** Immobilization of Elasmobranchs: Where We Are, The Issues, and Where We Need to Go -Shark Husbandry Manual. (*Submitted*)
- Stamper, M.A.**, S. Miller, I. Berzins. Pharmacology in Elasmobranchs-Shark Husbandry Manual. (*Submitted*)

Manuscripts:

- Harms, C.A, M. G. Papich, **M. A. Stamper**, P. M. Ross, M. Rodriguez, and A. A. Hohn. Pharmacokinetics of oxytetracycline in loggerhead sea turtles (*Caretta caretta*) after a single intravenous and intramuscular injection. (*Submitted*)
- Stamper, M.A.**, C. A. Harms, S. P. Epperly, J. McNeill, L. Avens, M. K. Stoskopf.. Relationship between barnacle epibiotic load and hematologic parameters in loggerhead sea turtles (*caretta caretta*), a comparison between migratory and residential animals in Pamlico Sound, North Carolina. (*Submitted*)
- Stamper, M.A.**, B. R. Whitaker, D.T. Schofield and J. Geraci. Morbidity in a Pygmy Sperm Whale (*Kogia breviceps*) due to Ocean-borne Plastic. *In prep.*
- Stamper, M.A.**, S. Taylor, C. Rupprecht, and M. Roelke. Rabies Vaccination Characteristics in Free-Ranging Florida Panthers (*Felis concolor*). *In prep.*

PUBLICATIONS (Non Peer Reviewed)

- Turnbull, B.S., C.R. Smith, and **M.A. Stamper**. 2000. Medical Implication of Hypothermia in Threatened Loggerhead and Endangered Kemp's Ridley and Green Sea Turtles. Proceeding of the International Association of Aquatic Animal Medicine Conference, 30
- Snyder, B., M. Richard, I. Berzins, **M. Stamper**. 1998. Immobilization of Sandtiger Sharks (*Odontaspis taurus*) using Medetomidine / Ketamine. Proceeding of the International Association of Aquatic Animal Medicine Conference, 29
- Stamper, M.A.**, M. Papich, G. Lewbart, S. May and M. Stoskopf. 1997. Single Dose Pharmacokinetic of Ceftazidime in Loggerhead Sea Turtles. Proceeding of the International Association for Aquatic Animal Medicine Conference, 28: 13; Proceedings of the American Association of Zoo Veterinarians, 1997: 16.
- Stamper, M.A.**, and T. Norton. 1997. Ovariectomy in a Brook Trout (*Salvelinus*

- fontinalis*). Proceedings of the American Association of Zoo Veterinarians, 1997: 4.
- Stamper, M.A.**, G. Lewbart, P. Barrington, C. Harms, G. Geoly, F. Perkins, M. Dykstra, and M. Stoskopf. 1996. Coccidial Infections in Cownose Rays. Proceedings of the International Association for Aquatic Animal Medicine Conference, 27: 29.
 - Hawkins, E.C., F.I. Townsend, G. A. Lewbart, **M.A. Stamper**, V.G. Thayer and H.L. Rhinehart. 1996. Bronchoalveolar Lavage in a Dolphin. Proceedings of the International Association for Aquatic Animal Medicine, 27: 24.
 - Stamper, M.A.**, and B. R. Whitaker. 1995. Cataract Surgery of a Loggerhead Sea Turtle. Proceedings of the International Association for Aquatic Animal Medicine Conference, 26: 120.
 - Stamper, M.A.**, and B. R. Whitaker. 1994. Medical Observations and Implication on “Healthy” Sea Turtles Prior to Release into the Wild. Proceedings of the American Association of Zoo Veterinarians, 1994: 182-185.

PRESENTATIONS

- Harms C, Lewbart G, Beasley J, Stamper A, Chittick B, Trogdon M. 2002. Clinical implications of hematology and plasma biochemistry values for loggerhead sea turtles undergoing rehabilitation. In: Mosier A, Foley A, Brost B (compilers). Proceedings of the Twentieth Annual Symposium on Sea Turtle Biology and Conservation. NOAA Technical Memorandum NMFS-SEFSC-477, pp 190-191.
- J. M. Keller, Margie Peden-Adams, **M. Andrew Stamper**, John R. Kucklick, Patricia McClellan-Green. 2002. Correlations between organochlorine contaminants and health indicators in loggerhead sea turtles. Society of Environmental Toxicology and Chemistry 23rd Annual Meeting in North America. November 16-20, Salt Lake City, Utah
- J. M. Keller, Margie Peden-Adams, **M. Andrew Stamper**, John R. Kucklick, Patricia McClellan-Green. 2001. Are contaminants affecting loggerhead health? Poster at the 31st Sea Turtle Symposium. Philadelphia, PA
- S. Mumford and **M.A. Stamper**. 2000. Diseases and Treatments of Sea Dragons. Poster at the IAAAM/Zoo Veterinary Conference in September. New Orleans, LA.
- D.J. Chittick, **M. A. Stamper**, G.A. Lewbart, and W.A. Horne. Medetomidine, ketamine, and sevoflurane anesthesia in loggerhead sea turtles (*Caretta caretta*). 30th Annual Sea Turtle Symposium. Orlando, FL
- F.B. Nutter, D. D. Lee, **M. A. Stamper**, G. A. Lewbart, C. B. Quel, W. D. Weber, and M. K. Stoskopf.. Hemiovariosalpingectomy in a loggerhead sea turtle (*Caretta caretta*)30th Annual Sea Turtle Symposium. Orlando, FL
- C.R. Smith, **M.A. Stamper**, A. L. Osborn, C. Merigo, B. Turnbull, S.S. Curry, P. Klein, and E.R. Jacobson. Corneal Ulceration in cold-stunned Kemp’s Ridley sea turtles.30th Annual Sea Turtle Symposium. Orlando, FL
- Gregory Lewbart, Jean Beasley, Craig Harms, **Andy Stamper**, Beth Chittick, and Maria Correa. 2000. Clinical implications of hematology and plasma biochemistry values for sea turtles undergoing rehabilitation. Poster at the 30th Sea Turtle Symposium. Orlando, FL.
- Stamper, M.A.** Testimony in front of the United State House of Representatives Sub- Committee on Fisheries Conservation, Wildlife and Oceans. 1999. Testimony concentrated on the funding needs for the Marine Animal Stranding Network. Washington, D.C.
- Stamper, M.A.** Invited participant. 1998. Sea Turtle Health Assessment Workshop. National Marine Fisheries Service. Charleston, SC.
- Stamper, M.A.** Session Chairperson. 1997. Reptile Medicine. North Carolina Veterinary Association Conference. Raleigh, NC.
- Stamper, M.A.**, I. Berzin, D. Owens and C. Driscoll. Invited Lecturer. 1997. Sea turtle Medicine and Surgery Wet Lab. American Association of Zoo Veterinarians. Houston, TX.
- Stamper, M.A.**, and T. Norton. 1997. Ovariectomy in a Brook Trout (*Salvelinus fontinalis*). American Association of Zoo Veterinarians. Houston, TX.
- Stamper, M.A.**, M. Papich, G. Lewbart, S. May and M. Stoskopf. 1997. Single Dose Pharmacokinetic of Ceftazidime in Loggerhead Sea Turtles. The 28th Annual

- International Association for Aquatic Animal Medicine Conference. Hardivek, Netherlands. American Association of Zoo Veterinarians. Houston, TX.
- Stamper, M.A.**, T. Cornish, G. Lewbart, S. Epperly, R. Boettcher, J. Braun, J. Levine, M. Correa, R. Miller, R. Moeller, C. Driscoll, and A. Colbert. 1996. Invited Lecturer. Cooperative Efforts Between Veterinary Diagnostic Facilities and Government Agencies in Assessing Two Sea Turtle Stranding Episodes. International Sea Turtle Conference. Orlando, FL.
 - Stamper, M.A.** 1996. Invited Lecture. Antibiotic Feeds: Responsible Antibiotic Use in Food Fish. North Carolina Cooperative Extension Service Regional Meeting of Fish Farmers. Greenville, NC.
 - Stamper, M.A.**, G. Lewbart, P. Barrington, C. Harms, G. Geoly, F. Perkins, M. Dykstra, and M. Stoskopf. 1996. Coccidial Infections in Cownose Rays. The 27th Annual International Association for Aquatic Animal Medicine Conference. Chattanooga, TN.
 - Stamper, M.A.** 1996. Sea Turtle Medicine. North Carolina State University College of Veterinary Medicine Wildlife, Avian, Aquatic and Zoological Medicine Club. Raleigh, NC.
 - Stamper, M.A.** 1995. Cetacean Medicine. North Carolina State University College of Veterinary Medicine Wildlife, Avian, Aquatic and Zoological Medicine Club. Raleigh, NC.
 - Stamper, M.A.** and B. R. Whitaker. 1995. Cataract Surgery of a Loggerhead Sea Turtle. The 26th Annual International Association for Aquatic Animal Medicine Conference. Mystic, CT.
 - Stamper, M.A.** et al. 1995. Panel Discussion Member of Opportunities in Aquatic Animal Medicine. The 26th Annual International Association for Aquatic Animal Medicine Conference. Mystic, CT.
 - Stamper, M.A.** 1995. Invited Lecture. Fish and Amphibian Medicine. To the American Laboratory Association Society, National Institute of Health. Reisterstown, MD.
 - Stamper, M.A.**, and B. R. Whitaker. 1994. Medical observations and Implication on "Healthy" Sea Turtles Prior to Release into the Wild. The American Association of Zoo Veterinarians. Pittsburgh, PA.
 - Stamper, M.A.** 1994. Invited Lecture. Aquatic animal medicine lectures to Virginia Tech Pre-veterinary Students. Blacksburg, VA.
 - Stamper, M.A.** 1994. Invited Lecture. Aquatic wildlife diseases lecture to University of Maryland undergraduate students. Rockville, MD.

Jay C. Sweeney, V.M.D.
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Education:

University of Pennsylvania School of Veterinary Medicine, Philadelphia, PA., 1967-1971
(Veterinary Medicine).
San Diego State College, San Diego, California, 1965-1967 (Zoology).
Bates College, Lewiston, Maine, 1963-1965 (Biology).

Honors:

Excellence in Marine Mammal Medicine award from the International Association of Aquatic
Animal Medicine, 2002.
Special award from International Marine Animal Trainers Association recognizing contributions
towards growth of the association and education of its members, 1987.
Graduate Magna Cum Laude, University of Pennsylvania, 1971.
Society of Phi Zeta (Academic Honor Society) University of Pennsylvania, 1969-71.

Fellowships:

American Veterinary Medical Association Student Research Fellowship - 1970.
Project Title: Glucose, Glucagon and Tolbutamide Tolerances in the California Sea Lion,
Zalophus californianus and Harbor Seal, *Phoca vitulina*.
University of Pennsylvania Student Research Fellowship - 1969
Project Title: Glucose, Glucagon and Tolbutamide Tolerances in the California Sea Lion,
Zalophus californianus and Harbor Seal, *Phoca vitulina*.
University of Pennsylvania Student Research Fellowship - 1968
Project Title: Renal transplantation in the dog. Xenon washout technique as a method of
monitoring the rejection response.

Professional Organizations:

Alliance of Marine Mammal Parks and Aquariums (AMMPA)
President, 2004
Board Member 1997-2003
Head of Animal Management Committee, 1996-2002
American Veterinary Medical Association (AVMA), 1971-present
European Association for Aquatic Mammals (EAAM), 1974-present
International Association for Aquatic Animal Medicine (IAAAM)
President, 1977-78
President Elect, 1976-77
Member, Legislative Liaison Committee, 1974-76
Member, Executive Committee, 1973-76
International Marine Animal Trainers Association (IMATA), 1972-present

Current (2003) Advisory Position:

Advisor/Consultant to Taiwan Cetacean Stranding Network

Past Advisory Positions:

Expert panelist on the *Indirect Effects on Dolphins in the Purse Seine Tuna Fishery in the
Eastern Tropical Pacific Expert Panel*, conducted by National Marine Fishery Service, 2002
Board of Advisors, The California Marine Mammal Center, Ft. Cronkite, California.
Board of Scientific Advisors, Diseases of Aquatic Organisms, International Journal, published in
West Germany.
Board of Scientific Advisors, Dolphin Research Center, Marathon, Florida.
Board of Directors, Pacific Marine Life Fund, Honolulu, Hawaii.

Professional Experience:

Owner/President, Dolphin Quest, 1988 - present.

Public display of dolphins in large natural lagoon environments for education through interaction.

Operate facilities at:

- Hilton Waikoloa Village, Waikoloa, Hawaii
- Moorea Beachcomber Intercontinental Resort, Moorea, French Polynesia
- Bermuda Maritime Museum, Bermuda
- Kahala Mandarin Oriental Hawaii, Kahala, Hawaii.

Consulting Practice in Aquatic Animal Medicine, 1978 - Present.

Practice with international clientele in the diagnosis and treatment of diseases of aquatic mammals and fish. Emphasis on preventive medicine and incorporating updated methods for early diagnosis of disease. Services to clients include animal acquisitions, medical support and training of personnel in medical capabilities. Provide support to design and architectural efforts in the areas of conceptual master-planning, site selection, life support systems, environmental layout, preventive maintenance planning and management of personnel. Management services are offered in the acquisition, training and operational maintenance of training, keeper and medical staffs for marine mammal facilities. Conceive and conduct research within the clinical studies discipline and conduct activities in support of field research within the general field of marine mammal biology.

Partner, Dinnes Memorial Veterinary Hospital, May 1977 - September 1978.

Practice limited to zoo and aquatic animal medicine and surgery.

Private Marine Mammal Medical Consultation Practice, September 1974 - May 1977.

General medical consulting practice in the diagnosis and the treatment of marine mammal disease problems.

Sea World of San Diego, September 1974 - January 1977.

Medical consultant for special diagnostic and therapeutic procedures.

Sea World of San Diego, December 1971 - September 1974.

Responsible for park animal health including all aspects of diagnosis and treatment of marine animals, birds and fish. Served in consultant advisory capacity in matters of animal nutrition, housing, transportation, water quality, record keeping, research and animal collecting.

Naval Undersea Center, San Diego, June 1971 - May 1977.

Responsible for marine mammal health including all aspects of nutrition, surgery, radiology, pathology and general husbandry procedures. Responsibilities include medical and logistical support for research projects conducted by facility scientists and the direction of clinical research projects of my own design. Performed supervisory functions as head of the clinical medicine branch of the San Diego facility. Throughout six years, was responsible for collection of all marine mammals for the U.S. Navy and the Naval Undersea Center, including dolphins, seals and sea lions.

Sea World of San Diego, June - September 1969; June - September 1970.

Veterinary assistance in marine mammal medicine including responsibilities in microbiology, pathology, nutrition and general clinical procedures. Performed, under research fellowship, project in carbohydrate metabolism in seals and sea lions.

Village Veterinary Clinic, December 1965 - 67.

Veterinary assistance including animal restraint, clinical laboratory procedures, microbiology, surgical preparation and assistance, anesthesia, treatments and patient maintenance primarily in small domestic animals.

Population Health Assessment Field projects:

Bermuda Dolphin Tracking Project (2003). Principal veterinarian and co-investigator for capture/release, sample collection, and tagging of offshore *Tursiops truncatus* in Bermuda.

This is the first investigation of offshore *Tursiops truncatus* in the northwest Atlantic Ocean.

Wild Dolphin Population Project of Sarasota, Florida, 1984 to present (donated services).

Principal in veterinary team conducting health assessment and collecting vital physiological information from bottlenose dolphins *Tursiops truncatus truncatus* for long term (25 years) population study. Project, under the direction of Dr. Randall Wells, is responsible for the largest accumulation of biological information about *Tursiops* or other cetacean species.

NMFS Marine Mammal Mortality Survey, San Diego, CA, 1983 to 1994 (donated services). Principal in conducting necropsies on marine mammals stranded dead along coast of Southern California. Instructor of necropsy technique to NMFS observers on high seas fishing vessels.

NMFS Assessment of Wild Dolphins in Matagorda Bay, TX, 1992 and Beaufort, NC. 1995.

Principal of veterinary team conducting health assessments of bottlenose dolphins *Tursiops truncatus* in response to a mortality event involving this population. Report establishes procedures, analyses and equipment necessary for critical response to naturally occurring population health disasters.

Pinniped Health Assessment on California Channel Islands, 1972 - 1985.

Veterinary evaluation and collection of physiologic specimens from pinnipeds on San Miguel and San Nicholas Islands.

Various other field projects, some as donated services, 1972 - present.

College Credit Courses Participated in as a Lecturer:

- Workshop on Dolphin Reproduction: Stages of parturition and Normal Early Calf Development, Nutritional Requirements of the Dam. San Diego, CA (1999).
- Workshop on Marine Mammal Medicine. Marine Biological Institute, U. of HI (1997, 98).
- Workshop on Cytology in Marine Mammals Medicine (16 hours of lecture and wet laboratory demonstrations). Conducted at Zoomarine, Albufeira, Portugal (1996).
- Workshop on Treatment Protocol in Marine Mammal Medicine (16 hours of lecture and wet laboratory demonstrations). Conducted at Duisberg Zoo, Germany (1993).
- Workshop on Hand-Rearing of Neonatal Cetaceans (16 hours of lecture and wet laboratory demonstrations). Conducted at Dolphinarium Brugge, Belgium (1992).
- Workshop on Preventive Medicine in Marine Mammals (16 hours of lecture and wet laboratory demonstrations). Conducted at Dolphinarium Brugge, Belgium (1991).
- Behavior and Husbandry of Aquatic Mammals, Moorpark College, Moorpark, CA (1988-91).
- Medicine and Husbandry in Aquatic Mammals, College of Veterinary Medicine, University of Florida, Gainesville, Florida (1984).
- Veterinary Externship offered at Marineland, Palos Verdes, California in cooperation with Schools of Veterinary Medicine in the United States, Canada, Mexico, Holland and Switzerland. (1981, 82, 83, 84, 85, 86, 87, 88).
- Short course on Marine Mammal Medicine and Husbandry (12 hours of lectures), International Congress for Comparative Medicine. Presented through the University of Mexico School of Veterinary Medicine, Cuernavaca, Mexico (1983).
- Short course on Marine Mammal Medicine (8 hours of lecture). Presented through the University of California of Santa Cruz Extension, Santa Cruz, California (1982).
- Comparative Medicine of Aquatic Mammals, short course on Comparative Internal Medicine, Lake Tahoe, California (1979).
- Short course on Marine Mammal Medicine (20 hours of lecture). Presented through International Association for Aquatic Animal Medicine and the Long Beach Ocean Studies Consortium, Los Angeles, California (1979).
- Short course on Marine Mammal Husbandry, California Marine Mammal Center, Ft. Cronkite, California (1977).
- Lecture Series on the Sciences, University of California, Berkeley, California (1977).
- Lecture Series on the Sciences, CA Academy of Science, San Francisco, CA (1977, 78).

- Biology, Zoology and Natural History of Marine Mammals, Museum of Natural History, San Diego, California (1977).
- Biology and Natural History of Marine Mammals, U. of California at Los Angeles (1977).
- Biology of Marine Mammals, Long Beach State University, Long Beach, CA(1975-76).
- Aquatic Animal Medicine, College of Vet. Medicine, U. of Georgia, Athens, GA (1979).
- Aquatic Animal Medicine, College of Veterinary Medicine, Colorado State University, Fort Collins, Colorado (1979).
- Aquatic Animal Medicine, School of Veterinary Medicine, Texas A & M University, College Station, Texas (1979).
- Aquatic Animal Medicine, School of Veterinary Medicine, Louisiana State University, Baton Rouge, Louisiana (1978).
- Aquatic Animal Medicine, University of California School of Veterinary Medicine, Davis, California (1976, 77, 78, 79).

Oceanarium/Zoological Development Projects:

- Aquatic Habitats, Smithsonian Institution/National Zoological Society, Washington, D.C., Liebhardt and Weston Architects, La Jolla, CA.
- Aquaticus, Oklahoma City Zoo, Oklahoma City, OK, Jones and Jones Architects, Seattle, WA, Enartec Consulting Engineers, San Diego, CA.
- Sea Lion Habitat Exhibit, Audubon Zoological Society, New Orleans, LA, Enartec Consulting Engineers, San Diego, CA.
- National Aquarium at Baltimore Marine Mammal Expansion Competition, RTKL Architects, Baltimore, MD, Montgomery Consulting Engineers, La Jolla, CA (2nd place selection).
- Living Seas Pavilion, Walt Disney EPCOT Center, Lake Buena Vista, FL, Value Engineering Study, Montgomery Consulting Engineers, La Jolla, CA.
- Living Seas Pavilion, Walt Disney EPCOT Center, Lake Buena Vista, FL, In House Life Support System and Animal Health Evaluation, W.E.D. Enterprises, Pasadena, CA.
- Sea Cliffs Habitat, New York Aquarium, New York, NY Value Engineering Study, Edward J. Nichols and Assoc., Alexandria, VA.
- Seven Seas Complex, Brookfield Zoological Society, Brookfield, IL, Jones and Jones Architects, Seattle, WA, Enartec Consulting Engineers, San Diego, CA.
- World of the Sea, Ocean Park, Hong Kong, Leigh and Orange Architects, Hong Kong, Montgomery Consulting Engineers, La Jolla, CA.
- National Aquarium at Baltimore Pier 4 Marine Mammal Expansion Project, Baltimore, Maryland, Value Engineering Study, Gilbane Building Company, Landover, MD.
- Santa Barbara Zoological Garden, Santa Barbara, CA, Sea Lion Pool Life Support System renovation.
- Dolphin Lagoon Complex, Hyatt Regency Waikoloa, Waikoloa, HI, Lawton and Umemura Assoc., Honolulu, HI, Architects, Howard Fields and Assoc., Sausalito, CA, Design and Engineering, Sausalito, CA.
- Awaji Sea Life Park, Awaji, Japan, Helman Hurley Charvat Peacock/Architects, Orlando, FL, Enartec Consulting Engineers, San Diego, CA.
- Dolphin Lagoon Complex, Moorea Beachcomber Parkroyal, Moorea, French Polynesia.
- Dolphin Lagoon Complex, Southampton Princess, Bermuda
- Dolphin Lagoon Complex, El Conquistador, Fajardo, Puerto Rico

Of Interest:

- Was veterinarian responsible for the health, research and eventual release of "Gigi", the only grey whale successfully maintained in captivity, Sea World Inc., San Diego, 1971-72.
- Participated in extensive study of diseases of free living marine mammals with emphasis of California sea lions in their natural habitat on the Santa Barbara Channel Islands.
- Have directed the successful transportation of dolphins, killer whales, beluga whales, pilot whales, grey whales and a wide variety of seals and sea lions.
- Pioneered diagnostic methodology in large delphinids and was the first veterinarian to have performed

endoscopy in a killer whale. Implemented design of gastric foreign object retrieval devices for use in large cetaceans.

- Pioneered techniques in marine mammal anesthesia, biopsy procedures, intravenous catheterizations for both clinical and research purposes, adapted liver function test procedures to cetaceans, established cytology as a routine clinical diagnostic procedure plus conducted numerous drug trials establishing new therapeutic measures in marine mammals.
- Headed research team funded by the U.S. Navy that established practical testing procedures for measuring immune globulins and presence of T-lymphocytes in cetaceans. This important effort allows for the identification of pre-disease susceptibility states in dolphins and whales.
- Was co-investigator in the establishment of ultrasound sector and linear ray scanning as a major advance in diagnostic capabilities in marine mammals. Monitoring of fetal development as well as evaluation of organ pathology was made possible by this work.
- Traveled to Argentina, Belgium, Brazil, Canada, England, Finland, France, Germany, Guam, Holland, Hong Kong, Iceland, Israel, Italy, Japan, Mexico, Panama, Peru, Portugal, Scotland, Spain, Sweden, and Switzerland to consult on marine mammal health procedures.
- During six years with the Naval Undersea Center, San Diego, was the only veterinarian in the world performing successful routine general anesthesia on dolphins.
- Special interest with a wide experience in the design and maintenance of water purification systems for aquatic mammals, fish and invertebrates in intensive culture and in the design and functional management of natural habitat displays for aquatic mammals.

Publications:

Sweeney, J.C., Reddy, M. L., Lipscomb, T.P., Bjerneby, J.M., and Ridgeway, S.H. (2003). Handbook of Cetacean Cytology. 3rd Edition. San Diego, CA: Dolphin Quest Productions.

Wells, R. S., Rowles, T.K., Borrell, A., Aguilar, A., Rhinehart, H.L., Jarman, W. M., Hoffman, S., Hohn, A.A., Duffield, D.A., Mitchum, G., Stott, J., Hall, A., and Sweeney, J.C. (2003). Integrating data on life history, health, and reproductive success to examine potential effects of POPs on bottlenose dolphins (*Tursiops truncatus*) in Sarasota Bay, Florida. *Organohalogen Compounds*. 62:208-211.

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Stone, L.R., Johnson, Sweeney, J, and Lewis (1999). Fetal Ultrasound In Dolphins With Emphasis On Gestational Aging. In M.E. Fowler and R.E. Miller (Eds.), Zoo and Wild Animal Medicine: Current Therapy, 4. Orlando, FL: W.B. Saunders Co.

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Sweeney, J. C., Stone, L. R., Townsend, F. G., and Casper, D. (1992). Veterinary Assessment Report: *Tursiops truncatus*, Matagorda Bay, Texas. Report to National Marine Fisheries Service, Contract #40GENF200556.

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Hokama, Y., Asahina, A.Y., Hong, T.W.P., Katsura, K., Shang, E., Miyahara, J.T., Sweeney, J.C. and Stone, L.R. (1990). Causitive Toxin(s) in the Deaths of Two Atlantic Dolphins. J. Clin. Lab. Analysis. 4:474-478.

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Sweeney, J.C. (1990). Medical Behavior in Aquatic Mammals. In L.A. Dierauf (Ed.), Handbook of Marine Mammal Diseases. CRC Press, Inc., Boca Raton, FL.

Sweeney, J.C. (1990). Surgical Procedures on Aquatic Mammals. In L.A. Dierauf (Ed.), Handbook of Marine Mammal Diseases. CRC Press, Inc., Boca Raton, FL.

Sweeney, J.C. (1990). Techniques for Radiography in Pinnipeds. In Handbook of Marine Mammal Diseases. Edited by L.A. Dierauf. CRC Press, Inc., Boca Raton, FL.

Hohn, A.A., Scott, M.D., Wells, R.S., Irvine, A.B., and Sweeney, J.C. (1989). Growth Layers in Teeth from Known-Age, Free-Ranging Bottlenose Dolphins. Marine Mammal Science. 315-342.

Sweeney, J.C. (1989). What Practitioners Should Know About Whale Strandings. In Current Veterinary Therapy, Small Animals. Edited by M.E. Fowler. W.B. Saunders Co., Philadelphia, PA. 721-727.

Sweeney, J.C., Samansky, T. (1987). Course of Therapy Utilized in a California Sea Lion with Blastomycosis. Proc. Int'l Assoc. Aquatic Animal Medicine Conference, Monterey, CA.

Sweeney, J.C., Vedros, N., and Stone, L.R. (1987). Dolphin IgG Determination in Clinical Applications Using Field-Use Radial Immunodiffusion Assay Plate Method. Proc. Int'l Assoc. Aquatic Animal Medicine Conference, Monterey, CA.

Sweeney, J.C. (1985). A Comprehensive Overview of Marine Mammal Diseases. Zoo Biology. 4:213-214.

Sweeney, J.C. (1984-85). Articles in each bi-monthly issue on subjects related to fish diseases. *International Koi and Watergardens*. Beginning Volume I No. 2.

Sweeney, J.C. (1984). Behavioral Techniques for Preventive Medicine in Marine Mammals. Proc. Int'l Assoc. Aquatic Animal Medicine Conference, Tampa, FL.

Sweeney, J.C. (1982-89). Articles in each quarterly issue entitled "Clinic's Corner" on the subject of Marine Mammal Health Care. *Soundings*, Journal of the International Marine Animal Trainers Association. Brookfield Zoo, Brookfield, IL.

Bernirschke, K., Henderson, J.R. and Sweeney, J.C. (1981). Vaginal Fetus in *Delphinus delphis*. Proc. Cetacean Reprod. Workshop. National Marine Fisheries Service, Southwest Region. San Diego, CA.

Barham, E.G., Sweeney, J.C. Leatherwood, S., Beggs, R.K. and Barham, C.L. (1979). Aerial Census of the Bottlenosed Dolphin, *Tursiops truncatus*, in a Region of the Texas Coast. Fisher & Bull, Vol. 77, No. 3.

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- Sweeney, J.C. (1979). Medical Care and Husbandry Practices: the Role of Stress in Disease. Proc. Int'l Marine Animal Trainers Assoc. Redwood City, CA. 8-II.
- Sweeney, J.C. (1979). The Professionals in Aquatic Animal Medicine: The State of the Art. Proc. Int'l Assoc. Aquatic Animal Medicine Conference, St. Augustine, Florida.
- Sweeney, J.C. and Geraci, J.R. (1979). Medical Care of Strandings. In Biology of Marine Mammals: Insights Through Strandings. Ed. J.R. Geraci and D.J. St. Aubin. Marine Mammal Commission Report No. PB 293890, MMN-77/13.
- Geraci, J.R. and Sweeney, J.C. (1978). Clinical Techniques: Marine Mammals (Cetacea, Pinnipedia and Sirenia). In Zoo and Wild Animal Medicine. Edited by M.F. Fowler, W.B. Saunders Co., Philadelphia, PA. 580-587.
- Sweeney, J.C. (1978). Clinical Consideration of Parasitic Diseases: Marine Mammals (Cetacea, Pinnipedia and Sirenia). In Zoo and Wildlife Medicine. Edited by M.F. Fowler, W.B. Saunders Co. Philadelphia, PA. 596-599.
- Sweeney, J.C. (1978). Infectious Diseases: Marine Mammals (Cetacea, Pinnipedia and Sirenia). In Zoo and Wild Animal Medicine. Edited by M.F. Fowler, W.B. Saunders Co., Philadelphia, PA. 589-592.
- Sweeney, J.C. (1978). Noninfectious Diseases: Marine Mammals (Cetacea, Pinnipedia and Sirenia). In Zoo and Wild Animal Medicine. Edited by M.F. Fowler, W.B. Saunders Co., Philadelphia, PA. 599-601.
- Sweeney, J.C. (1978). Reproduction: Marine Mammals Cetacea, Pinnipedia and Sirenia). In Zoo and Wildlife Medicine. Edited by M.F. Fowler, W.B. Saunders Co. Philadelphia, PA. 602-604.
- Sweeney, J.C. (1977). Diagnosis of Pregnancy in Small Cetaceans with Doppler Sonography and Other Techniques. Proc. Dolphin Breeding Workshop. Ed. by S.H. Ridgway and K. Benirschke. Marine Mammal Commission Report.
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- Sweeney, J.C. (1976). Intratracheal Injection of Antibiotics in the California Sea Lion, *Zalophus californianus*, and Bottlenosed Dolphin, *Tursiops truncatus*. J. Wildlife Disease.
- Sweeney, J.C., Migaki, G., Vainik, P.M., and Conklin, R.H. (1976). Systemic Mycoses in Marine Mammals. J.A.V.M.A. 169:946-948.
- Ridgway, S.H., Green, R.F. and Sweeney, J.C. (1975). Mandibular Anesthesia and Tooth Extraction in the Bottlenosed Dolphin. J. Wildlife Diseases. 11:415-418.
- Sweeney, J.C. (1975). Dolphin Medical Selection Manual. Naval Undersea Center TN 1619. San Diego, CA.
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- Sweeney, J.C. and Ridgway, S.H. (1975). Common Diseases of Small Cetaceans. J.A.V.M.A. 167:533-540.
- Sweeney, J.C. and Ridgway, S.H. (1975). Procedures for the Clinical Management of Small Cetaceans.

J.A.V.M.A. 167:540-545.

Sweeney, J.C. (1974). Common Diseases of Pinnipeds. J.A.V.M.A. 165:805-810.

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Sweeney, J.C. (1974). Radiographic Atlas of the California Sea Lion Naval Undersea Center TP 378. San Diego, CA.

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Sweeney, J.C. and Gilmartin, W.G. (1974). Survey of Diseases in Free Living California Sea Lions. J. Wildlife, Dis. 10:370-376.

Sweeney, J.C. and Mattison, J. L. (1974). Surgical Attachment of a Telemetry Device to the Dorsal Ridge of a Yearling California Gray Whale, *Echrichtius robustus*. Marine Fisheries Review. 36:20-22.

Sweeney, J.C., Mattison, J.L. and Geraci, J.R. (1974). Minimum Standards for the Care and Maintenance of Marine Mammals. Accepted as policy representing the I.A.A.A.M.

Publications:

In Press:

- Wells, R.S., H.L. Rhinehart, L.J. Hansen, J.C. Sweeney, F.I. Townshend, R. Stone, D. Casper, M.S. Scott, A.A. Hohn, and T.K. Rowles. (in press). Bottlenose dolphins as marine ecosystem sentinels: Developing a health monitoring system. *Ecohealth* 1(2).
- Ewing, B.S., Christopher, M.M., and Sweeney, J.C. (in press). Hematological and Serum Biochemical Values of Free-Ranging Bottlenose Dolphins, *Tursiops truncatus*, from Matagorda Bay, TX. *Bull. Marine Science*.
- Rhinehart, H., Wells, R., Sweeney, J., Townsend, D., Casper, R. and Hohn, A. (in press). Blood Profiles Of Free-Ranging Atlantic Bottlenose Dolphins Along The Central West Coast Of Florida. *J. Wildlife Diseases*.
- Sweeney, J.C., Casper, D., Townsend, F., Wells, R., Hansen, L. Rhinehart, H., Hohn, A., Buck, J. Worthy, G., Reif, J., and Driscoll, C. (in press). A Model For Assessing The Relative Health Of Dolphin Populations. *Bull. Marine Science*.
- Sweeney, J.C., Casper, D., and Worthy, G. (in press). Recommendations For Implementing Health Assessment Studies. *Bull. Marine Science*.
- Sweeney, J.C., Stone, R., Casper, D., Townsend, F., and Hansen, L. (in press). Dolphin Health Assessment: Matagorda Bay, TX. *Bull. Marine Science*.
- Wells, R., Rhinehart, H., Sweeney, J., and Townsend, F. (in press). Dolphin Health Assessment: Sarasota, FL. *Bull. Marine Science*.
- West, K., Atkinson, S., Sweeney, J. and Carmichael, M. (in press). Dolphin Milk As An Indicator Of Reproductive Status. *Marine Mammal Science*.

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Curriculum Vitae July, 2004

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EDUCATION

M.S., Oceanography, May 1980.
Old Dominion University, Norfolk, Virginia.
B.S., Biology, May 1976.
College of William and Mary, Williamsburg, Virginia.

WORK EXPERIENCE (Virginia Aquarium and Marine Science Center)

Director of Research and Conservation

(February 2004 to Present) Directing new Research and Conservation department responsible for development and implementation of institutional research and conservation plans. Areas of responsibility include the aquarium's marine animal stranding program, aquatic animal collection and quarantine operations, animal medical care programs and animal care annex.

Curator of Stranding Program & Acquisitions/Quarantine

(September 1999 to January 2004) Responsibilities included management of aquatic animal acquisitions/quarantine and veterinary medical services. Serve as coordinator of the marine animal stranding program and oversee recruitment/training of volunteer stranding team, stranding response, research and data analysis, educational outreach, fund-raising and grants procurement and management.

Curator of Stranding Program, Aquarium Systems & Acquisitions/Quarantine

(January 1997 to September 1999) Supervised a staff of fourteen employees. Responsibilities included management of water quality laboratory, life support systems operations, aquatic animal acquisitions/quarantine, and veterinary medical services. Served as coordinator of marine animal stranding program and all research activities.

Assistant Curator of Exhibits (July 91 to January 97)

Aquarist Virginia Marine Science Museum (July 87 to July 91)

Exhibit Technician II Virginia Marine Science Museum (July 84 to July 87)

Exhibit Technician I Virginia Marine Science Museum (August 83 to July 84)

Exhibit Researcher Virginia Marine Science Museum (Jan. 82 to August 83)

RESEARCH AND MANAGEMENT EXPERIENCE

Scientific coordinator and grants manager for numerous projects, including:

- 2004 *Enhanced necropsy examinations of stranded sea turtles in Virginia*, a contract from the National Marine Fisheries Service.
- 2004 *Sea turtle stranding response on Virginia's eastern shore*, a contract from the National Marine Fisheries Service.

RESEARCH AND MANAGEMENT EXPERIENCE (cont.)

- 2004 *Mid-Atlantic humpback whale biopsy surveys*, a contract from the National Marine Fisheries Service, Northeast Fisheries Science Center.
- 2003 *Stranding response for north Atlantic right whales from New Jersey to Florida*, a contract from the National Marine Fisheries Service.
- 2003 *Supporting response to dead marine mammal strandings in Virginia*, a grant from the Prescott Stranding Grant Program, National Marine Fisheries Service.
- 2002 *Improving response to and assessments of dead marine mammal strandings in*

- Virginia*, a grant from the Prescott Stranding Grant Program, National Marine Fisheries Service.
- 2002 *Improving triage and treatment of live stranded marine mammals in Virginia*, a grant from the Prescott Program, National Marine Fisheries Service.
- 1996-2003 *Marine mammal and sea turtle stranding network operation*, an annual grant from Virginia Coastal Resources Management Program.
- 2000 *Development of a mid-Atlantic humpback whale photo-ID catalog in support of the stock identification project*, a grant from the National Marine Fisheries Service, Northeast Fisheries Science Center.
- 1998-99 *Boat Safely ~ Respect Wildlife: a program to teach Virginia's boat and personal watercraft operators to recognize and respect protected marine species*, a grant from Virginia Coastal Resources Management Program.
- 1997-99 *Bottlenose dolphin photo-identification in Virginia coastal waters*, a contract from the National Marine Fisheries Service.
- 1998 *Aerial surveys to document presence of marine mammals and commercial fishing effort in Maryland-Virginia-North Carolina coastal waters*, a contract from the National Marine Fisheries Service.
- 1997 *Member of research team studying the heart rate, nesting and diving behavior of leatherback sea turtles at Playa Grande, Guanacaste, Costa Rica.*
- 1996 *Sighting patterns of coastal migratory bottlenose dolphins (*Tursiops truncatus*) in the near shore waters of Virginia and North Carolina*, a grant from Virginia Coastal Resources Management Program.
- 1996 *Analysis and mapping of Virginia marine mammal strandings 1991-1996*, a grant from Virginia Coastal Resources Management Program.
- 1989-95 *Scientific coordinator at VMSM for research project to study the early growth potential and post-release viability of captive-raised loggerhead sea turtles.* Joint project with Columbus Zoo, Virginia Institute of Marine Science, and Back Bay National Wildlife Refuge.
- 1987 *Volunteer member of Dolphin Response Team* investigating the east coast bottlenose dolphin mortality event.

PROFESSIONAL AWARDS AND ACTIVITIES

- 2003 to present *Chair of Stranding Committee of the Alliance of Marine Mammal Parks and Aquariums*, facilitating support and cooperation between member facilities and NMFS with regard to research, rescue, rehabilitation and education activities related to stranding response.

PROFESSIONAL AWARDS AND ACTIVITIES (cont.)

- 2001 to present *Member of NMFS Bottlenose dolphin Take Reduction Team*, representing scientific perspective from the mid-Atlantic region on dolphin distribution and fisheries interactions as determined from photo-identification studies and analyses of stranded animals.
- 2000 to present *Member of Bycatch Prioritization Committee of the Atlantic Coastal Cooperative Statistics Program, Atlantic States Marine Fisheries Commission*, a state-federal cooperative initiative to improve the collection and management of Atlantic coast commercial, recreational, and for-hire fisheries data.
- 1999 to present *Chair of the Sea Turtle Working Group (STWG)* to institute a national survey of sea turtles in aquariums, to develop guidelines for medical and husbandry care and to establish support for field conservation, American Zoo and Aquarium Association.
- 1997 *Virginia Beach City Manager's Creativity, Innovation, and Public Service Award* for implementation of laboratory water treatment systems that dramatically reduced expenses and improved the quality of water used for animal husbandry and water chemistry.
- 1997 to present *Member of NMFS Large Whale Take Reduction Team*, representing

- present scientific perspective from the mid-Atlantic region on large whale distribution and fisheries interactions as determined from analyses of stranded animals.
- 1997 Invited participant at *Workshop on Bycatch Data Collection: Developing an Atlantic Coast Bycatch Monitoring Program*, hosted by the Atlantic States Marine Fisheries Commission, September 3-5, Baltimore, Maryland.
- 1996 Invited speaker at *Chesapeake Bay Region Marine Mammal and Sea Turtle Stranding Network Workshop*, hosted by the National Marine Fisheries Service and Cooperative Oxford Laboratory, January 24-25, Oxford, Maryland.
- 1995 Invited speaker at workshop on the *Management of Protected Species/Fisheries Interactions in State Waters*, hosted by the Management & Science Committee of the Atlantic States Marine Fisheries Commission, July 17-18, Richmond, Virginia.
- 1994 VMSM Stranding Team honored by Volunteer Connection of Hampton Roads for outstanding contributions to marine animal research and conservation in region.
- 1993 Represented Virginia at the *Workshop on the Biology and Management of Coastal Bottlenose Dolphins*, a meeting to formulate a conservation plan for the depleted stock of dolphins, hosted by the National Marine Fisheries Service, September 13-14, Duke University Marine Laboratory, Beaufort, North Carolina.
- 1993 Served on the committee which developed a conservation plan for sea turtles and marine mammals in Virginia. Planning was coordinated by Virginia Department of Game and Inland Fisheries and Virginia Institute of Marine Science.
- 1993 VMSM Stranding Program wins *Conservationist of the Year Award* from Virginia Wildlife Federation for its continuing role in the research and conservation of sea turtles and marine mammals.

PROFESSIONAL AWARDS AND ACTIVITIES (cont.)

- 1991 Invited participant in *Marine Mammals and Turtles Strategic Planning Session and Workshop*, hosted by Cooperative Institute for Fisheries & Oceanography, Duke University Marine Laboratory, March 21-22, Beaufort, North Carolina.
- 1990 Virginia Beach *City Manager's Creativity, Innovation, and Public Service Award* for design of exhibit on Virginia's sea turtles. Exhibit wins award as *Virginia Conservation Project of the Year* from Virginia Wildlife Federation.

PUBLICATIONS

- Barco, S., McLellan, W., Allen, J., Asmutis, R., Mallon-Day, R., Meagher, E., Pabst, D.A., Robbins, J., Seton, R., Swingle, W.M., Weinrich, M., and Clapham, P. 2002. **Population identity of humpback whales, *Megaptera novaeangliae*, in the waters of the U.S. mid-Atlantic states.** *Journal of Cetacean Research and Management* 4(2): 135-141.
- Barco, S.G. and Swingle, W.M. 2001. **Boat Safely ~ Respect Wildlife: A project to educate Virginia's boaters about wildlife issues.** Final Report for Virginia DEQ Coastal Resources Management Program Grant # NA87OZ0253-01. Virginia Marine Science Museum Scientific Report 2001-001, 65 pp.
- Swingle, W.M. and S.G. Barco (curators). 2000. **Mid-Atlantic humpback whale catalog: Stranding and Live Sighting editions.** Virginia Marine Science Museum Scientific Report 2000-01, 80 pp.
- Barco, S.G., Swingle, W.M., McLellan, W.A., Harris, R.N., and Pabst, D.A. 1999. **Local abundance and distribution of bottlenose dolphins (*Tursiops truncatus*) in the near shore waters of Virginia Beach, Virginia.** *Marine Mammal Science* 15(2): 394-408.
- Fearnbach, H., Barco, S.G., Swingle, W.M., and Walton, W.J. 1998. **A temporal index of association for bottlenose dolphins (*Tursiops truncatus*).** In: Rommel, S.A., Reynolds, III, J.E., Wells, R.S. Proceedings of Sixth Atlantic Coastal Dolphin Conference, May 1-3, 1998, Mote Marine Laboratory, Sarasota, Florida, 120 p.

- Goldman, K.E., George, R.H., and Swingle, W.M. 1998. **Dietary regulation of blood calcium and phosphorus values in Virginia Marine Science Museum sea turtles.** In: Barco, S.G. (Compiler). Proceedings of the 1998 Northeast Region Stranding Conference, March 27-29, Virginia Beach, Virginia. Virginia Marine Science Museum Scientific Report 1998-002, 54 p.
- Swingle, W.M. and Barco, S.G. 1998. **1997 state reports: Virginia strandings.** In: Barco, S.G. (Compiler). Proceedings of the 1998 Northeast Region Stranding Conference, March 27-29, Virginia Beach, Virginia. Virginia Marine Science Museum Scientific Report 1998-002, 54 p.
- Cox, T.M., Read, A.J., Barco, S., Evans, J., Gannon, D.P., Koopman, H.N., McLellan, W.A., Murray, K., Nicolas, J., Pabst, D.A., Potter, C.W., Swingle, W.M., Thayer, V.G., Touhey, K.M. and Westgate, A.J. 1998. **Documenting the bycatch of harbor porpoises, *Phocoena phocoena*, in coastal gillnet fisheries from stranded carcasses.** *Fish. Bull.* 96(4): 727-734.
- Swingle, W.M. and Barco, S.G. 1997. **Analysis and mapping of Virginia marine mammal strandings 1991-1996.** Final report to the Virginia Coastal Resources Management Program, NOAA CZM Grant # NA77OZ0204-01. Virginia Marine Science Museum Scientific Report 1997-001, 37 p.
- Barco, S.G. and Swingle, W.M. 1997. **Distribution of the Atlantic bottlenose dolphin in Virginia tidal rivers: A volunteer effort.** Final report to the Virginia Coastal Resources Management Program, NOAA CZM Grant # NA47OZ0287-01. Virginia Marine Science Museum Scientific Report 1997-002, 14 p.
- Barco, S.G. and Swingle, W.M. 1996. **Sighting patterns of coastal migratory bottlenose dolphins (*Tursiops truncatus*) in the near shore waters of Virginia and North Carolina.** Final report to the Virginia Coastal Resources Management Program, NOAA CZM Grant # NA47OZ0287-01. Virginia Marine Science Museum Scientific Report 1996-001, 32 p.
- Barco, S.G. and Swingle, W.M. 1996. **Large whale strandings in Virginia, January 1990-September 1995.** In: Blaylock, R.A., Mase, B.G., and Driscoll, C.P. (Compilers). Final Report on the Workshop to Coordinate Large Whale Stranding Response in the Southeast U.S., September 27-28, 1995, SEFSC Contribution MIA-96/97-43.
- Swingle, W.M., Barco, S.G., McLellan, W.A., and Pabst, D.A. 1995. **Strandings of Bottlenose dolphins and harbor porpoises in Virginia (1990-1994).** In: Kopelman, A.H., and Sadove, S.S. (Compilers). Proceedings of the 1995 Northeast Region Stranding Network Conference, April 28-30, Riverhead, New York, 40-49.
- Swingle, W.M. 1994. **What do we know about coastal bottlenose dolphins in Virginia?** In: Wang, K. R., Payne, P.M., and Thayer, V.G. (Compilers). Coastal Stock(s) of Atlantic Bottlenose Dolphin: Status, Review and Management. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-OPR-4, 121 p.
- Swingle, W.M., Warmolts, D., Keinath, J., and Musick, J. 1994. **Loggerhead sea turtle head-start evaluation: captive growth rates and post-release movements and behavior.** Proceedings of the Fourteenth Annual Symposium on Sea Turtle Biology and Conservation, March 1-5, Hilton Head, South Carolina. NOAA Tech. Memo. NMFS-SEFSC-351, 289-292.
- Swingle, W.M., Warmolts, D.I., Keinath, J.A., and Musick, J.A. 1993. **Exceptional growth rates of captive loggerhead sea turtles, *Caretta caretta*.** *Zoo Biology* 12(5): 491-497.
- Swingle, W.M., Barco, S.G., Pitchford, T.D., McLellan, W.A., and Pabst, D.A. 1993. **Appearance of juvenile humpback whales feeding in the nearshore waters of Virginia.** *Marine Mammal Science* 9(3): 309-315.
- Swingle, W.M., Warmolts, D.I., Keinath, J.A., and Musick, J.A. 1992. **Exceptional growth rates of captive loggerhead sea turtles.** Proceedings of the 11th Annual Workshop on Sea Turtle Biology and Conservation, February 26 - March 2, 1991, Jekyll Island, Georgia. NOAA Tech. Memo. NMFS-SEFSC-302, 182-184.

PUBLICATIONS (cont.)

- Barco, S.G. and Swingle, W.M. 1991. **Virginia sea turtles: Incorporating aquariums in temporary exhibits at the Virginia Marine Science Museum.** Proceedings of the 1991 AAZPA Southern Regional Conference, March 10-12, Greensboro, North Carolina, 131-137.
- Keinath, J.A., Musick, J.A., and Swingle, W.M. 1991. **First verified record of the Hawksbill sea turtle (*Eretmochelys imbricata*) in Virginia waters.** Bulletin of the Virginia Herpetological Society, *Catesbeiana*, 11(2): 35-38.
- Swingle, W.M., Warmolts, D.I., and Keinath, J.A. 1990. **Loggerhead sea turtle head-start evaluation project: a classic example of the conservation role of zoological parks and aquariums.** Proceedings of the 1990 AAZPA Annual Conference, September 23-27, Indianapolis, Indiana, 107-115.

ABSTRACTS, PRESENTATIONS, REPORTS

- Swingle, M. and Barco, S. **“Boat Safely ~ Respect Wildlife”: A public education and outreach program for Virginia boaters.** Presented to: Viewing Marine Mammals in the Wild: A Workshop to Discuss Responsible Guidelines and Regulations for Minimizing Disturbance. 14th Biennial Conference on the Biology of Marine Mammals, Vancouver, B.C. Canada, Nov. 28 - Dec. 4, 2001.
- Swingle, W.M. 2000. **Sea turtles in aquariums: a national survey.** Presented to the 20th Annual Symposium on Sea Turtle Biology and Conservation, March 1-4, Orlando, Florida.
- Swingle, W.M., and Barco, S.G. **It’s their ocean too! Incorporating marine mammal protection into boater education in Virginia.** Presented to the 13th Biennial Conference on the Biology of Marine Mammals, Maui, Hawaii, Nov 28 - Dec 3.
- Swingle, W.M., Barco, S.G., Fearnbach, H., Marchant, R.R., and Walton, W.J. 1999. **Documenting an inshore resident group of coastal bottlenose dolphins (*Tursiops truncatus*) in Virginia Beach, Virginia.** Presented to the 1999 Northeast Region Stranding Network Conference, May 20-23, Baltimore, Maryland.
- Swingle, W.M., Barco, S.G., and Walton, W.J. 1997. **Extralimital habitation of a shallow water bay in Virginia by a bottlenose dolphin, *Tursiops truncatus*.** 1997 Northeast Region Stranding Network Conference, May 26-28, 1997, Plymouth, Massachusetts.
- Swingle, W.M., Barco, S.G., McLellan, W.A., and Pabst, D.A. 1995. **Two years and counting: Virginia’s shore-based coastal bottlenose dolphin survey.** Third Annual Atlantic Coastal Dolphin Conference, March 24-26, 1995, Duke University Marine Laboratory, Beaufort, North Carolina.
- Swingle, W.M., Barco, S.G., McLellan, W.A., and Pabst, D.A. 1995. **Virginia’s shore-based bottlenose dolphin surveys.** Eleventh Biennial Conference on the Biology of Marine Mammals, December 14-19, Orlando, Florida.

ABSTRACTS, PRESENTATIONS, REPORTS (cont.)

- Swingle, W.M., Barco, S.G., McLellan, W.A., and Pabst, D.A. 1994. **Virginia's operation dolphin count, 1993**. Second Annual Atlantic Coastal Dolphin Conference, March 18-20, 1994, Duke University Marine Laboratory, Beaufort, North Carolina.
- Swingle, W.M., Barco, S.G., McLellan, W.A., and Pabst, D.A. 1994. **Studying the migratory population of coastal bottlenose dolphins (*Tursiops truncatus*) in Virginia**. 1994 Chesapeake Research Conference, June 1-3, Norfolk, Virginia.
- Swingle, W.M. 1993. **Atlantic dolphin research network and operation dolphin: who, what, where, when and how**. 1993 Northeast Region Stranding Network Conference, April, 1993, Plymouth, Massachusetts.
- Swingle, W.M., Barco, S.G., and McLellan, W.A. 1993. **Characterizing a migratory population of coastal bottlenose dolphins (*Tursiops truncatus*) in Virginia**. Tenth Biennial Conference on the Biology of Marine Mammals, November 11-15, Galveston, Texas.
- Swingle, W.M. 1992. **Response to the stranding of a live pygmy sperm whale**. 1992 Northeast Region Stranding Network Conference, April 3-5, 1992, Virginia Beach, Virginia.

MEMBERSHIPS

Society for Marine Mammalogy
American Zoo and Aquarium Association
Alliance of Marine Mammal Parks and Aquariums

PERSONAL (redacted)

PAMELA K. YOICHEM

POSITION

Senior Research Biologist and Vice President - Research
Hubbs-Sea World Research Institute
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EDUCATION

2004 (expected), Ph.D., Comparative Pathology, University of California, Davis, CA
1992 D.V.M., Wildlife emphasis, University of California, Davis, CA
1987 M.S., Ecology, San Diego State University, San Diego, CA, Thesis: "Haul-out patterns and site fidelity of harbor seals at San Nicolas and San Miguel islands, California"
1981 B.S., Biology, San Diego State University, San Diego, CA

PROFESSIONAL EXPERIENCE

1996-Present	Vice President - Research, Hubbs-Sea World Research Institute
1987-Present	Senior Research Biologist, Hubbs-Sea World Research Institute
1994-Present	Veterinary Consultant, Sea World of California
1994-Present	Adjunct Professor of Biology, University of San Diego
1992-Present	Chair, Institutional Animal Care and Use Committee, Hubbs-Sea World Research Institute
1991	Research Associate, Wildlife Health Program, University of California Davis,
1985-1987	Staff Scientist, Hubbs-Sea World Research Institute

MAJOR FIELD STUDIES AND SPONSORED RESEARCH

1999-Present	Health, disease and pathology of Antarctic pack ice seals (NSF)
1996-Present	Migratory ecology of Weddell seals in the Ross Sea, Antarctica (NSF, HSWRI Donor Program)
1995-Present	Behavioral ecology and demography of pinnipeds at the Seal Rock Marine Mammal Reserve (City of San Diego, HSWRI Donor Program)
1990-Present	Pinniped Biomedical Studies (CDFG-OSPR, OWCN, Chevron, UC Davis Wildlife Health Program, NMFS, HSWRI Donor Program)
1980-Present	Demography and foraging ecology of pinnipeds at the Southern California Channel Islands (USAF, NMFS, CDFG-OSPR, HSWRI Donor Program)
1994-2001	Behavioral responses of pinnipeds and cetaceans to novel objects (NOAA/NMFS)
1993-2001	Development of a satellite-linked radio-transmitter for small cetaceans (ONR)
1990-2001	Reproductive physiology of harbor seals and elephant seals (U.C. Davis Wildlife Health Program; NOAA/NMFS; HSWRI Donor Program)
1997-1998	Migratory and diving behavior of a rehabilitated gray whale calf (HSWRI Donor Program, SeaWorld San Diego)

- 1978-1997 Potential impact of space vehicle launch-generated noise on the biota of the California Channel Islands (USAF)
- 1986-1992 Monitoring entanglement of pinnipeds in marine debris in the Southern California Bight (NOAA/NMFS)
- 1991-1992 Critical review and synthesis of the effects of oil spills and other anthropogenic and natural disturbances on marine mammal populations (EPA, NOAA)
- 1985-1991 Ecology of waterbirds at Mono Lake, CA (LADWP)
- 1987-1989 Diving patterns and movements of pinnipeds in the Southern California Bight (Marjorie-Mosher Schmidt Foundation and HSWRI Donor Program)
- 1984-1989 Non-metrical studies of pelage pattern variation in harbor seals (NOAA/CINMS, USSR Academy of Sciences, USSR Fisheries Research Inst., Windstar Foundation, HSWRI Donor Program).
- 1981-1988 Aerial surveys of pinnipeds in the Channel Islands National Park and National Marine Sanctuary (NOAA/NMFS, NOAA/CINMS)
- 1984-1987 Age determination of North Pacific killer whales (Sea World, Inc.)
- 1982, 1984 Aerial surveys of marine mammals in the eastern Bering Sea, Gulf of Alaska and eastern Aleutian Islands (NOAA/OCSEAP)
- 1982-1984 Radiotelemetry studies of hauling patterns, site fidelity and movements of harbor seals on San Nicolas and San Miguel islands, California (NOAA/NMFS)
- 1982-1983 Behavioral and physiological responses of captive beluga whales to playbacks of drilling noise (API)

PUBLIC SERVICE

- 2000-Present Member, International Working Group, U.S. Invasive Species Council
- 1999-Present Member, CDF&G Marine Mammal and Seabird Team
- 1995-Present Member, Advisory Board, California Oiled Wildlife Care Network

PROFESSIONAL AFFILIATIONS

- American Association of Wildlife Veterinarians
- American Association of Zoo Veterinarians
- American Veterinary Medical Association
- California Veterinary Medical Association
- International Association for Aquatic Animal Medicine
- The Society for Marine Mammalogy
- Sigma Xi
- Wildlife Disease Association

PUBLICATIONS

In Review

Yochem, P.K., B.S. Stewart, T. Gelatt, and D. Siniff. Health and seroprevalence studies of Weddell seals in McMurdo Sound: implications for population susceptibility to epizootics. Proceedings of the

Workshop on Diseases of Antarctic Wildlife. Springer-Verlag.

2003

Ackley, S.F., J.L. Bengtson, P. Boveng, M. Castellini, K.L. Daly, S. Jacobs, G.L. Kooyman, J. Laake, L. Quetin, R. Ross, D.B. Siniff, B.S. Stewart, I. Stirling, J. Torres and P.K. Yochem. 2003. A top-down, multidisciplinary study of the structure and function of the pack ice seal ecosystem in the eastern Ross Sea, Antarctica. *Polar Record* 39:219-230.

Goldstein, T., F.M.D. Gulland, B. M. Aldridge, J.T. Harvey, T. Rowles, D. M. Lambourne, S. J. Jeffries, L. Measures, P.K. Yochem, B.S. Stewart, R.J. Small, D.P.King, J.L. Stott, and J.A.K. Mazet. 2003. Antibodies to Phocine herpesvirus-1 in North American harbor seals (*Phoca vitulina*). *Journal of Wildlife Diseases* 39:487-494.

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2002

Yochem, P.K. and B. S. Stewart. Hair and fur. Pp. 548-549 In: *Encyclopedia of Marine Mammals*. (W.F. Perrin, B. Wursig, and H.G.M. Thewissen, eds.). Academic Press, San Diego.

2001

Castellini, M.A., P.K. Yochem and J.M. Castellini. Differential concentration of glucose in red blood cells and plasma of a rehabilitating gray whale calf. *Aquatic Mammals* 27(3): 277-278.

Reidarson, T.R., J. McBain and P.K. Yochem. Medical and nutritional aspects of a rehabilitating California gray whale calf. *Aquatic Mammals* 27(3): 215-221.

Stewart, B.S., J. Harvey, and P.K. Yochem. Post-release monitoring and tracking of a rehabilitated California gray whale. *Aquatic Mammals* 27(3): 294-300.

2000

Stewart, B.S. and P.K. Yochem. Community ecology of Channel Islands pinnipeds. In: Pp. 413-420. In: *Proceedings of the Fifth Symposium on the Biology of the California Islands*. Minerals Management Service, U.S. Department of the Interior. (D.R. Browne, K.L. Mitchell, and H.W. Chaney, eds.).

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Ecological Understanding (W. Davison, C. H.-Williams, and P. Broady, eds.). New Zealand Natural Sciences, Canterbury University.

Yochem, P.K., B.S. Stewart, and D.A. Jessup. Health assessment of pinnipeds at the California Channel Islands. Pp. 421-423. In: Proceedings of the Fifth Symposium on the Biology of the California Islands. Minerals Management Service, U.S. Department of the Interior. (D.R. Browne, K.L. Mitchell, and H.W. Chaney, eds.).

1999

Ham-Lamme, K.D., D.P. King, B.C. Taylor, C. House, D.A. Jessup, S. Jeffries, P.K. Yochem, F.M.D. Gulland, D.A. Ferrick and J.L. Stott. The application of immuno-assays for serological detection of morbillivirus exposure in free ranging harbor seals (*Phoca vitulina*) and sea otters (*Enhydra lutris*) from the western coast of the United States. Marine Mammal Science 15:601-608.

1997

Yochem, P.K., B.S. Stewart, and D.A. Jessup. Baseline biomedical database for free-ranging California pinnipeds: Health assessment and PAH analyses. Proceedings, Fifth International Conference on the Effects of Oil on Wildlife.

1994

Stewart, B.S., B.J. Le Boeuf, P.K. Yochem, H.R. Huber, R.L. DeLong, R. Jameson, W. Sydeman, and S.G. Allen. History and present status of the northern elephant seal population. In: B.J. Le Boeuf and R.M. Laws (eds.). Elephant Seals. University of California Press, Berkeley, CA.

Stewart, B.S. and P.K. Yochem. Ecology of harbor seals in the Southern California Bight. Pp. 123-134 In: W.L. Halvorson and G.J. Maender (eds.). Fourth California Islands Symposium: Update on the Status of Resources. Santa Barbara Museum of Natural History, Santa Barbara, CA.

1993

Stewart, B.S., P.K. Yochem, R.L. DeLong, and G.A. Antonelis, Jr. Status and trends in abundance of pinnipeds on the Southern California Channel Islands. Pp. 501-516 In: F. G. Hochberg (ed.). Third California Islands Symposium: Recent Advances in Research on California Islands. Santa Barbara Museum of Natural History, Santa Barbara, California.

1991

DeLong, R.L., G.A. Antonelis, C.W. Oliver, B.S. Stewart, M.C. Lowry, and P.K. Yochem. Effects of the 1982-83 El Niño on several population parameters and diet of California sea lions on the California Channel Islands. Pp. 167-172. In: F. Trillmich and K. Ono (eds.). Pinnipeds and El Niño: responses to environmental stress. Springer-Verlag, Berlin.

Lowry, M.S., B.S. Stewart, C.B. Heath, P.K. Yochem, and J.F. Francis. Seasonal and annual

variability in the diet of California sea lions, *Zalophus californianus*, at San Nicolas Island, California, from 1981 through 1986. U.S. Fish. Bull. 89:331-336.

Paul, D.S., J.R. Jehl, Jr., and P.K. Yochem. California Gull populations nesting at Great Salt Lake, Utah. Great Basin Naturalist 50:299-302.

Stewart, B.S., and Yochem, P.K. Northern elephant seals on the southern California Channel Islands and El Niño. Pp. 234-243. In: F. Trillmich and K. Ono (eds.). Pinnipeds and El Niño: responses to environmental stress. Springer-Verlag, Berlin.

Yochem, P.K., J.R. Jehl, Jr., B.S. Stewart, S. Thompson, and L. Neel. Distribution and history of California Gull colonies in Nevada. Western Birds. 22:1-12.

1990

Stewart, B.S. and P.K. Yochem. Pinniped entanglement in synthetic materials in the southern California Bight. Pp. 554-561. In: R. S. Shomura and M. L. Godfrey (eds). Proceedings of the Second International Conference on Marine Debris. NOAA Tech. Memo. NMFS, NOAA-TM-NMFS-SWFSC-154.

Yochem, P.K., B.S. Stewart, M. Mina, A. Zorin, V. Sadovov, and A. Yablokov. Non-metrical analyses of pelage patterns in demographic studies of harbor seals. Rep. Int. Whal. Commn, Special Issue 12:87-90.

1989

Stewart, B.S., S. Leatherwood, P.K. Yochem, and M.-P. Heide-Jorgensen. Harbor seal tracking and telemetry by satellite. Mar. Mamm. Sci. 5:361-375.

Stewart, B.S., S. Leatherwood, P.K. Yochem, and M.-P. Heide Jorgensen. Prospects for tracking pinnipeds at sea using the Argos DCLS: Insights from studies of free-ranging harbor and ringed seals. Conference Proceedings of the 1989 North American Argos Users Conference and Exhibit, pp. 193-203.

1988

Myrick, A.C., Jr., P.K. Yochem, and L.H. Cornell. Toward calibrating dentinal layers in captive killer whales by use of tetracycline labels. Rit Fiskideildar 11: 285-296.

Stewart, B.S., G.A. Antonelis, R.L. DeLong, and P.K. Yochem. Abundance of harbor seals at San Miguel Island, California, 1927 through 1985. Bull. S. Calif. Acad. Sci., 87:39-43.

1987

Jehl, J.R., Jr., and P.K. Yochem. A technique for capturing Eared Grebes (*Podiceps nigricollis*). J. Field Ornithol. 58:231-233.

Stewart, B.S., P.K. Yochem. Entanglement of pinnipeds in synthetic debris and fishing net an line

fragments at San Nicolas and San Miguel islands, California, 1978-1986. *Mar. Pollut. Bull.* 18:336-339.

Stewart, B.S., P.K. Yochem, R. L. DeLong, and G.A. Antonelis. Interactions between Guadalupe fur seals and California sea lions at San Nicolas and San Miguel islands, California. NOAA Tech. Rept. NMFS, 51:103-106.

Yochem, P.K., B.S. Stewart, R.L. DeLong, and D.P. DeMaster. Diel hauling patterns and site fidelity of harbor seals (*Phoca vitulina richardsi*) at San Miguel Island, California, in autumn. *Marine Mammal Science*, 3:323-332.

1986

Jehl, J.R., Jr., and P.K. Yochem. Movements of Eared Grebes indicated by banding recoveries. *J. Field Ornithol.* 57:208-212.

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1985

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Yochem, P.K. and S. Leatherwood. Blue whale *Balaenoptera musculus* (Linnaeus 1758). In *Handbook of Marine Mammals*, Vol. 3 (S. Ridgway and R. Harrison, eds.)

1984

Stewart, B.S., S.A. Karl, P.K. Yochem, S. Leatherwood, and J.L. Laake. Aerial surveys for cetaceans in the former Akutan, Alaska, whaling grounds. *Arctic*, 40:33-42.

Stewart, B.S., and P.K. Yochem. Radio-tagged harbor seal, *Phoca vitulina richardsi*, eaten by a white shark, *Carcharodon carcharias*, in the Southern California Bight. *Calif. Fish and Game*, 71:113-115.

Stewart, B.S., and P.K. Yochem. Seasonal abundance of pinnipeds at San Nicolas Island, California, 1980-1982. *Bull. S. Calif. Acad. Sci.*, 83:121-132.

Stewart, B. S., P.K. Yochem, and R.W. Schreiber. Pelagic red crabs as a food source for gulls: a possible benefit of El Niño. *Condor*, 86:341-342.

Kim B. Terrell
Dolphin Encounters Ltd.
(personal address/email and cell number redacted)

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Fax: 242-394-2244

EDUCATION: Bachelor of Science, Zoology
Mississippi State University
Starkville, Mississippi

**PROFESSIONAL
AFFILIATIONS:** International Association for Aquatic Animal Medicine
International Marine Animal Trainers Association
European Association of Aquatic Mammals
Facility Representative for Alliance of Marine Mammal Parks and
Aquariums

EXPERIENCE: Director of Marine Mammals
Dolphin Encounters Ltd.
Nassau, Bahamas
May 1996 to Present

- Coordinate all aspects of animal care and training.
- Responsible for an animal care staff of 30 persons.
- Coordinate all aspects of marine mammal veterinary care.
- Coordinate all research projects.
- Assist in design and implementation of educational programs.
- Begin all initial behavioral modification in juvenile animals.
- Animal Care Coordinator for DE and sister facility in Dominican Republic
- Design and implement all new interactive animal programs.
- Liaison between facility and Bahamas government for implementing new legislation (MMPA).

Director of Marine Mammals
Marine Animal Productions, Inc.
Gulfport, Mississippi
May 1982 to May 1996

Assistant Curator
Marine Animal Productions, Inc.
Gulfport, Mississippi
October 1985 to May 1996

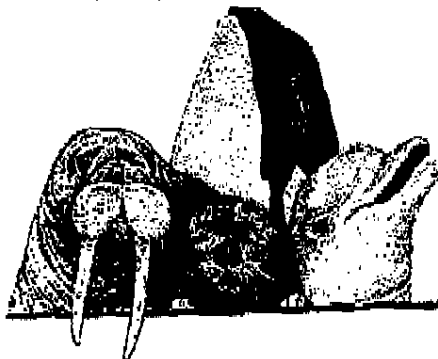
Director of Education
Marine Life Oceanarium
Gulfport, Mississippi
October 1985 to May 1996

REFERENCES: Available Upon Request

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ALLIANCE

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ALLIANCE OF MARINE MAMMAL PARKS AND AQUARIUMS

Dedicated to Conservation through Public Display, Education and Research

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MESSAGE:

*Resumes of John Rupp &
Beverley Abbitt Osborne*

CJM

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ALLIANCE

703 549 0488 P. 02/09

John H. RuppTel: FAX e-mail: *Personal
contact info
redacted.
JR***Professional Experience****November 2001-Present****Aquatic Animal Curator
Point Defiance Zoo & Aquarium
Tacoma, Washington**

Responsibilities include but are not limited to providing for the primary care and husbandry of marine mammals (beluga whale, walrus, polar bear, sea otter, others as required), birds (puffin, penguin), marine fish (including sharks) and invertebrates; collection planning; permitting; animal acquisition and disposition; record keeping; create and manage budgets; personnel management (11 FT, 3-15 PT, docents and volunteers); conduct performance reviews; hiring and firing; over sight of exhibit design, construction and renovation; creation and development of interpretive exhibits and materials; coordination and participation in research and conservation with local universities, state and federal agencies

March 1982-November 2001**Curator of Fishes and Invertebrates
Point Defiance Zoo & Aquarium
Tacoma, Washington**

Responsibilities included supervision of six full-time employees and the management of a 50,000 square foot Pacific Rim themed aquarium; animal collection planning; permitting; acquisition and disposition; exhibit design and construction, special projects coordination and management (Jellies, Sharks, Deadly Sea Creatures, Alien Invaders); conservation and research (basking shark and six gill shark abundance and distribution)

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September 1978 – June 1981**Assistant Curator of Fishes, Field Manager
Sea World Shark Institute Long Key, Florida**

Responsibilities included the supervision of 5 FT employees, development of work plans and schedules, acquisition of selected elasmobranch species, general husbandry, nutrition, water quality, life support systems, health and veterinary medicine. Designed and conducted research including elasmobranch parasitology, bioenergetics, experimental fishing, abundance and distribution, advanced life support systems and animal transport techniques. Prepared and managed budgets.

October 1977 – June 1978**Research Associate
Hubbs-SeaWorld Research Institute San Diego, California**

Conducted field studies for the distribution, abundance and movement patterns for whale sharks along the northern coast of Venezuela. Coordinated activities with the Venezuelan government and Turismo Isla Maragrita to enable the safe passage of animals and passenger vessels between Puerto La Cruz and Isla Margarita. Conducted field studies for abundance, distribution and zoo geography of great white sharks from the Farallon Islands to Cape San Lucas, Baja California, Mexico.

August 1974 – September 1978**Senior Biologist/Aquarist
SeaWorld of California, San Diego, CA**

Responsibilities included supervision of three subordinate biologist/aquarists in the daily husbandry of living fishes, invertebrates and reptiles; assigning work, ensuring quality control for water chemistry, diets and nutrition, life support systems, animal acquisition and disposition including field research and animal collection. Planned designed and carried out long distance, international, live animal transports. Team member for research, design and development of worlds first large scale shark display and research aquarium.

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703 549 0488 P. 04/09

July 1973 – August 1974

Research Assistant
National Marine Fisheries Service
Southwest Fisheries Center, La Jolla, CA

Investigated migration of albacore tuna in the northeastern Pacific region using ultrasonic telemetry to correlate daily activity patterns with thermal fronts and foraging behavior; qualitative and quantitative plankton measurements; attempts to correlate migration patterns with ocean hot spots using radioactive strontium as markers

January 1971 – March 1973

Graduate Research Assistant
University of Guam Marine Science Center
Mangilao, Guam

Investigated the effects of thermal effluents from power generating stations on coral reef invertebrates; conducted reef surveys throughout Micronesia to determine extent and possible control of Crown of Thorns starfish; culture and laboratory propagation of selected echinoderms; measured recovery rates of coral damaged by Crown of Thorns;

Related Experience/Special Projects

July 1994 – Present

Pacific Rim Basking Shark Project
Clayoquot Bioserve, Vancouver Is., B.C.

March 1998 – Present

Assessor of Living Collections
Conservation Assessment Program
Institute of Museum and Library Service
Washington, D.C.

Conduct formal, written assessments of living zoological collections held by zoos, museums, science centers and related non formal learning environments.

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October 1990 – Present

Representative, Northeastern Pacific Region
IUCN Shark Specialist Group

June 1987 – May 2003

Special Projects Director
Point Defiance Zoo & Aquarium Tacoma, WA

A Seahorse Odyssey: seahorses, seadragons and their relatives new exhibit 2003.. Alien Invaders, non indigenous species special exhibit 2001. Deadly Sea Creatures; dangerous marine fishes and invertebrates special exhibit 1997. Jellies: Jewels of the Sea; jellyfish, ctenophores, corals and their relatives special exhibit 1995. South Pacific Aquarium/Sharks: new aquarium construction 1989. Rocky Coast Tide Pool, wave swept interactive new exhibit 1987.

January 1985 – March 1996

Biological Consultant
Underwater World Inc. Auckland, New Zealand

Project consultant for planning, development, construction and commissioning of Underwater World aquarium facilities in Auckland, New Zealand; San Francisco, California; Minneapolis, Minnesota.

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ALLIANCE

703 549 0488

P.06/09

Publications, Papers and Contributions

Smith, M. and J. Rupp, In Press. Elasmobranch Husbandry Manual: Capture and Transport. American Zoo and Aquarium Association Marine Fish Taxon Advisory Group.

Powell, D., Rupp, J. and M. Wisner. In Press. Elasmobranch Husbandry Manual: Exhibit Design. American Zoo and Aquarium Association Marine Fish Taxon Advisory Group.

Hemmelgram, K., D. Secord, J. Rupp and P. Heimowitz. 2002. Reducing The Impact: Using Public Aquarium Exhibits For Aquatic Nonindigenous Species Education and Outreach. Digest of Aquatic Invaders 13: 1-7, 2002

Rupp, J. 2002. A natural history of the sixgill shark, *Hexanchus griseus*, in Puget Sound. In: Proceedings, Puget Sound research conference 2001, The Puget Sound/Georgia Basin Ecosystem.

Partick, T and J. Rupp. 2000. Reproductive behavior and dominance hierarchies in a captive population of nurse sharks, *Ginglymostoma cirratum*.

Rupp, J. 1998. Field Observations of Basking Sharks in Clayoquot Sound. British Columbia Ministry of Parks Annual Report.

Rupp, J. 1998. The Basking Shark Report. Water Quality and Primary Productivity. Point Defiance Zoological Society Zoo Points 11:4.

Rupp, J. 1997. Deadly Sea Creatures. Point Defiance Zoological Society Zoo Points 11:2.

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Rupp, J. 1992. Sharks: The survivors. Point Defiance Zoological Society Zoo Points 6:1.

Bronstead, C. and J. Rupp 1991. Operant conditioning of a sand tiger shark. American Elasmobranch Society annual meeting New York, NY

Rupp, J. 1985. Captive biology of the sevengill shark, *Notorynchus cepedianus*. Proceedings: Sharks, Recent Advances in Captive Biology. National Aquarium, Baltimore, MD.

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Rupp, J. 1983. *Erilepis zonifer*, The Mystery Fish. 1983. Proceedings: American Zoo and Aquarium Association Regional Conference Santa Barbara, CA.

Rupp, J. and J. Gerassi. 1980. Infestations of monogenetic trematodes among captive lemon sharks. Proceedings: American Zoo and Aquarium Association Regional Conference Orlando, FL

Rupp, J. 1978. Investigations of collisions involving large unidentified marine animals and Boeing jetfoils at Isla Margarita, Venezuela. Hubb's Research Institute Technical Report.

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ALLIANCE

703 549 0488 P.08/09

BEVERLEY ABBITTP.O. Box 1739
Islamorada, Florida 33036**EXPERIENCE****Theater of the Sea
Islamorada, Florida****January 1989 - present**

Theater of the Sea is a marine animal facility which houses Atlantic bottlenose dolphins, California sea lions, sea turtles, crocodilians, tropical, game, and sport fish, sharks, stingrays, raptors, and marine invertebrates. Programs include dolphin and sea lion shows, "Swim with the Dolphin", "Swim with the Sea Lion", "Swim with the Stingray", "Trainer for a Day. Internship, and an assortment of special events.

Curator**May 1994 - present****Assistant Curator****April 1992 - May 1993****Director of Training****January 1991 - April 1992****Trainer****January 1989 - January 1991**

Oversee all aspects of facility operation.

Accomplishments include:

- Conceptualized and implemented "Trainer for a Day", "Swim with the Sea Lion", and "Swim with the Stingray" programs
- Created an educational display about various marine environment conservation issues
- Authored a variety of educational handouts to respond to mail and customer inquiries
- Authored an all-inclusive animal care staff standard operating procedure-manual
- Formed corporate sponsorships with companies whose products are utilized by staff
- Designed shows integrating environmental and educational material into entertaining and dynamic formats with the addition of music, water work, and visual aids
- Streamlined animal care, husbandry, handling, and training procedures
- Trained marine mammal behaviors including aerials and medical behaviors
- Experienced in animal medical procedures. Have successfully overseen the recovery of a dolphin with erysipelas and the teaching of a dolphin calf to eat who would not ingest fish on her own.
- Assist in content and design of facility public relations material
- Participate in radio, television, and newspaper pieces including Nickelodeon, the Today Show, and American Journal. Responsible for interviews and for coordinating staff and animal participation
- Liaison with Alliance of Marine Mammal Parks and Aquariums
- Personnel, supervision, and management of staff of 16

ZooVet Enterprises / Six Flags Great Adventure**Jackson, New Jersey****Marine Mammal Handler****May 1988 - November 1988**

Conducted dolphin and sea lion shows for audiences of up to 5000.

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ALLIANCE

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EA Engineering

Sayreville, New Jersey

Fisheries Biologist

October 1987 - May 1988

Researched environmental effects of power plants on fresh an brackish water fish populations.

University of Miami

Miami, Florida

Field Research Assistant

Summer 1987

Interacted with top marine scientists as a member of a crew researching the bioenergetics of lemon sharks.

Shoals Marine Laboratory

Gulf of Maine

Field Research

Summer 1996

Completed transect study of intertidal flora and fauna on Maine's rocky coast.

EDUCATION**James Madison University**

Harrisonburg, Virginia

Bachelor of Science degree

May 1987

University of Florida

Gainesville, Florida

Completed a year, College of Veterinary Medicine

August 1993 - May 1994

Left to return to the marine animal business