

PAMELA K. YOCHER
Executive Vice President
Hubbs-Sea World Research Institute
2595 Ingraham Street
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EDUCATION

- 2008 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
- 1981 B.S., Biology, San Diego State University, San Diego, CA

LICENSING

- 1992-Present California Veterinary Medical Board
- 1992-Present USDA/APHIS Veterinary Accreditation
- 1992-Present DEA Controlled Substances Registration

PROFESSIONAL EXPERIENCE

- 2012-Present Research Associate, Wildlife Health Center, University of California Davis
- 2004-Present Executive Vice President, Hubbs-SeaWorld Research Institute (HSWRI)
- 2004-Present Chair, Fish Health Management Team, HSWRI
- 1994-Present Veterinary Consultant, Sea World San Diego
- 1992-Present Chair, Institutional Animal Care and Use Committee, HSWRI
- 1996-2004 Senior Vice President - Research, HSWRI
- 1987-1996 Senior Research Scientist, HSWRI
- 1992-1994 Associate Veterinarian, Village Veterinary Hospital, Escondido, CA
- 1991 Research Associate, Wildlife Health Program, University of California Davis
- 1985-1987 Staff Scientist, HSWRI

SELECTED SPONSORED RESEARCH

- 2006-Present Center for Marine Veterinary Virology (DoD; University of Florida; San Diego Foundation; HSWRI Donor Program; Darden Restaurants, Inc. Foundation)
- 1990-Present California pinniped population health and biomedical studies, including epidemiology of infectious and non-infectious diseases (CDFG/OSPR, CA Oiled Wildlife Care Network, Chevron, UC Davis Wildlife Health Program, NOAA/NMFS, Boeing, HSWRI Donor Program)
- 1980-Present Demography and foraging ecology of pinnipeds in southern California (DoD, NOAA/NMFS, CDFG/OSPR, Boeing, HSWRI Donor Program)
- 2006-2008 Initial Steps towards evaluating the potential disease impacts of propagated marine fish on wild stocks (NOAA SeaGrant, CDFG-OREHP)
- 2006-2007 Diversity, distribution and relative abundance of marine mammals, penguins and seabirds from South America to McMurdo Sound during the 2006 transit of the Icebreaker *Oden* (NSF)
- 2005-2007 Post-release monitoring of rehabilitated marine mammals in southern California (NOAA Prescott)
- 2004-2008 Development of a Fish Health Management Plan for marine fish aquaculture programs (Chevron, NOAA/NMFS)
- 2004-2005 Potential impacts of infrastructure improvement project on La Jolla harbor seal colony (PSBS)
- 2000-2004 Foraging ecology and epidemiology of Hawaiian monk seals (NOAA/NMFS)
- 1999-2004 Health, disease and pathology of Antarctic pack ice seals (NSF)
- 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 disturbances on marine mammal populations (EPA, NOAA/NMFS)

1985-1991 Ecology of water birds at Mono Lake, CA (LADWP)

PUBLIC SERVICE

2012-Present Marine Fisheries Advisory Committee (U.S. Dept. of Commerce)

2009-Present Scientific Advisory Committee, CA Oiled Wildlife Care Network

1995-Present Advisory Board, CA Oiled Wildlife Care Network

2006-2008 Environmental Committee, San Diego Unified Port Commission

2000-2001 International Working Group, U.S. Invasive Species Council

PROFESSIONAL ORGANIZATIONS

Alliance of Marine Mammal Parks and Aquariums (HSWRI representative)

American Veterinary Medical Association

Consortium for Ocean Leadership (HSWRI representative)

International Association for Aquatic Animal Medicine

National Association of Marine Laboratories (HSWRI representative)

San Diego County Veterinary Medical Association

Sigma Xi

The Explorers Club (National Fellow)

Wildlife Disease Association

SELECTED PUBLICATIONS

In Preparation or Review

Stewart, B.S., D. Grieg, **P. K. Yochem**, B. Nickel, J. St. Leger, and F. M. D. Gulland. Geographic movements of rehabilitated Guadalupe fur seals (*Arctocephalus townsendi*) along the Pacific coast of North America. *Aquatic Mammals*.

Yochem, P.K., S. Venn-Watson, J. Burchell, J. St. Leger, B.S. Stewart, J.F. Wellehan, Jr. and R. Rivera. *Submitted*. Survey of California sea lion astroviruses 1 and 2 (CslAstV1 and CslAstV2) in symptomatic and asymptomatic California sea lions using quantitative PCR (qPCR). *Veterinary Microbiology*.

2013

Boyce, W.M., I. Mena, **P.K. Yochem**, F.M.D. Gulland, A. Garcia-Sastre, N. Moreno, D.R. Perez, A.S. Gonzalez-Reiche and B.S. Stewart. 2013. Influenza A (H1N1)pdm09 virus infection in marine mammals in California. *Emerging Microbes and Infections*. (doi:10.1038/emi.2013.40)

Quinley, N., J.A.K. Mazet, R. Rivera, T.L. Schmitt, C. Dold, J. McBain, V. Fritsch and **P.K. Yochem**. 2013. Serologic response of harbor seals (*Phoca vitulina*) to vaccination with a recombinant canine distemper vaccine. *Journal of Wildlife Diseases* 49:579-586.

2012

Venn-Watson, S., C. Benham, F.M.D. Gulland, C.R. Smith, J. St. Leger, **P. Yochem**, H. Nollens, U. Blas-Machado, J. Saliki, K. Colegrove, J.F.X. Wellehan, Jr., and R. Rivera. 2012. Clinical relevance of novel Otarine herpesvirus-3 in California sea lions (*Zalophus californianus*): lymphoma, esophageal ulcers, and strandings. *Veterinary Research* 2012 43:85. (doi:10.1186/1297-9716-43-85)

2009

Castellini, M.A., S.J. Trumble, T.L. Mau, **P.K. Yochem**, B.S. Stewart and M.A. Koski. 2009. Body and blubber relationships in Antarctic pack-ice seals: Implications for the control of blubber depth. *Physiological and Biochemical Zoology* 82: 113-120.

Nollens, H.H., R. Rivera, G. Palacios, J.F.X. Wellehan, J.T. Saliki, S.L. Caseltine, C.R. Smith, E.D. Jensen, J. Hui, W. I. Lipkin, **P.K. Yochem**, R.S. Wells, J. St. Leger and S. Venn-Watson. 2009. New recognition of Enterovirus infections in bottlenose dolphins (*Tursiops truncatus*). *Veterinary Microbiology* 139:170-175.

Yochem, P.K., B.S. Stewart, T. Gelatt, and D. Siniff. 2009. Health assessment of Weddell seals (*Leptonychotes weddellii*) in McMurdo Sound, Antarctica. Pp. 123-138 *In: Diseases of Antarctic Wildlife*. K.R. Kerry and M.J. Riddle (eds.). Springer-Verlag, Berlin.

Yochem, P.K. and B.S. Stewart. 2009. Hair and fur. Pp. 529-530 *In: Encyclopedia of Marine Mammals*. W.F. Perrin, B. Wursig and G.W. Thewissen (eds.) Second Edition. Academic Press, San Diego.

2008

Hunt, T.D., M.H. Ziccardi, F.M.D. Gulland, **P.K. Yochem**, D.W. Hird, T. Rowles and J.A.K. Mazet. 2008. Health risks for marine mammal workers. *Diseases of Aquatic Organisms* 81:81-92.

Venn-Watson, S., R. Rivera, C.R. Smith, J.T. Saliki, S. Caseltine, J. St. Leger, **P. Yochem**, R.S. Wells and H. Nollens. 2008. Exposure to a novel parainfluenza virus and clinical relevance in 2 bottlenose dolphin (*Tursiops truncatus*) populations. *Emerging Infectious Diseases* 14:397-405.

Ylitalo, G.M., M. Myers, B.S. Stewart, **P.K. Yochem**, R. Braun, L. Kashinsky, D. Boyd, G.A. Antonelis, S. Atkinson, A.A. Aguirre and M.M. Krahn. 2008. Organochlorine contaminants in endangered Hawaiian monk seals from four subpopulations in the Northwestern Hawaiian Islands. *Marine Pollution Bulletin* 56:231-244.

Yochem, P.K., F.M.D. Gulland, B.S. Stewart, M. Haulena, J.A.K. Mazet and W.M. Boyce. 2008. Thyroid function testing in elephant seals in health and disease. *General and Comparative Endocrinology* 155:627-632.

Yochem, P.K., B.S. Stewart, J.A.K. Mazet and W.M. Boyce. 2008. Hematologic and serum biochemical profile of the northern elephant seal (*Mirounga angustirostris*): variation with age, sex and season. *Journal of Wildlife Diseases* 44:911-921.

2007

Aguirre, A.A., T.J. Keefe, J.S. Reif, L. Kashinsky, **P.K. Yochem**, J.T. Saliki, J.L. Stott, T. Goldstein, J.P. Dubey, R. Braun and G. Antonelis. 2007. Infectious disease monitoring of the endangered Hawaiian monk seal. *Journal of Wildlife Diseases* 43:229-241.

Jessup, D.A., **P.K. Yochem**, M. Stoelting, R.S. Tjeerdema and B.S. Stewart. 2007. Baseline health parameters and polycyclic aromatic hydrocarbon (PAH) exposure levels for clinically normal harbor seals (*Phoca vitulina*) in California, USA. Pp. 68-78 *In: J.G. Massey, J.G., Proceedings, Ninth International Effects of Oil on Wildlife Conference, Monterey, California*. University of California, Davis, CA.

2006

Littnan, C. L., B.S. Stewart, **P. K. Yochem** and R. Braun. 2006. Survey for selected pathogens and evaluation of disease risk factors for endangered Hawaiian monk seals in the main Hawaiian islands. *EcoHealth* 3:232-244.

Stewart, B.S., G.A. Antonelis, J.D. Baker and **P.K. Yochem**. 2006. Foraging biogeography of Hawaiian monk seals in the Northwestern Hawaiian Islands. *Atoll Research Bulletin* 543:131-145.

Zagzebski, K.A., F.M.D. Gulland, M. Haulena, M.E. Lander, D. J.Greig, L. J.Gage, M.B. Hanson, **P.K. Yochem** and B.S. Stewart. 2006. Twenty-five years of rehabilitation of odontocetes stranded in central and northern California, 1977 to 2002. *Aquatic Mammals* 32:334-345.

2004

Yochem, P.K., R.C. Braun, B. Ryon, J.D. Baker and G.A. Antonelis. 2004. Contingency plan for Hawaiian

monk seal unusual mortality events. NOAA Technical Memorandum NMFS-PIFSC-2.

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.

Stewart, B. S., **P. K. Yochem**, T. S. Gelatt, and D. B. Siniff. 2003. The pack ice niche of Weddell seals in the Ross Sea. Pp. 224-228 *In*: A. H. L. Huiskes, W.W.C. Gieskes, J. Rozema, R. M. L. Schorno, S. M. van der Vies and W. J. Wolff (eds.). *Antarctic biology in a global context*. Backhuys Publishers, Leiden, The Netherlands.

Wolski, L.F., R.C. Anderson, A.E. Bowles and **P.K. Yochem**. 2003. Measuring hearing in the harbor seal (*Phoca vitulina*): Comparison of behavioral and auditory brainstem techniques. *Journal of the Acoustical Society of America* 113:629-637.

2002

Yochem, P.K. and B. S. Stewart. 2002. Hair and fur. Pp. 548-549 *In*: W.F. Perrin, B. Wursig, and H.G.M. Thewissen (eds.), *Encyclopedia of Marine Mammals*. Academic Press, San Diego.

2001

Castellini, M.A., **P.K. Yochem** and J.M. Castellini. 2001. 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**. 2001. 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**. 2001. 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**. 2000. Community ecology of Channel Islands pinnipeds. Pp. 413-420. *In*: D.R. Browne, K.L. Mitchell, and H.W. Chaney (eds.). *Proceedings of the 5th Symposium on the Biology of the California Islands*. Minerals Management Service, U.S. Department of the Interior.

Stewart, B.S., **P.K. Yochem**, T.S. Gelatt, and D.B. Siniff. 2000. First-year movements of Weddell seal pups in the western Ross Sea, Antarctica. Pp. 71-76 *In*: W.Davison, C.H.Williams, and P.Broadly (eds.). *Antarctic Ecosystems: Models for Wider Ecological Understanding*. New Zealand Natural Sciences, Canterbury University.

Yochem, P.K., B.S. Stewart, and D.A. Jessup. 2000. 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.).