

Kendal Elizabeth Harr, D.V.M., M.S., D.A.C.V.P.

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Education:

Cornell University; Ithaca, NY	1986-1990	B.S.
	1991-1995	D.V.M
University of Florida, Gainesville, FL	2002-2004	M.S.

Research Interests: Comparative immunology, hematology, and pathologies thereof. Recent projects have focused on the development of diagnostics in these areas in various species.

Employment:

Florida Veterinary Pathology **2001-present Bushnell, FL**
Pathologist. One of five, boarded pathologists in this private diagnostic consortium and Florida minority-owned business. Responsibilities include cytologic, histopathologic and hematologic evaluation as well as phone consultation with private practitioners and researchers. GLP certification in clinical pathology. Current Florida State veterinary and DEA licensure.

University of Florida **2002-present Gainesville, FL**
Clinical Manatee Veterinarian. Duties from 2002 to present have included providing consultation and clinical assistance to state (Florida Fish and Wildlife Conservation Commission) and federal (United States Geologic Survey) manatee captures since 2002. Currently, clinical pathology interpretation has been requested for all bloodwork to state and federal agencies by field biologists.

University of Florida **2004-2006 Gainesville, FL**
Associate Director Aquatic Animal Health/Clinical Assistant Professor: Duties included education and extension, oversight of marine mammal permitting, sample collection, stranding response, and research in the area of clinical pathology of manatees as well as any assistance required by the Director for implementation of program development

University of Florida **2003-2004 Gainesville, FL**
Visiting Assistant in Aquatic Animal Health: Duties included oversight of marine mammal permitting, sample collection, clinical pathology, and stranding response as well as any assistance required by the Director and Associate Director for implementation of program development.

University of Florida **1998-2001 Gainesville, FL**
Resident in Clinical Pathology. Diplomate, ACVP. Responsibilities included interpretation of daily cytopathology submissions, obtaining and interpretation of bone marrow samples, hematology, urinalysis, and chemistry interpretations and clinician and student consults on current cases. Was also responsible for the education of fourth-year veterinary students taking the clinical pathology rotation and practical laboratory education of first and second year students. Research, successful application for a research grant, and publication required.

Curriculum Vitae Kendal E. Harr

Winter Park Veterinary Clinic 1996-1998 Winter Park, FL
Veterinarian. One of four veterinarians in this predominantly exotic animal practice. Learned rigid endoscopic techniques for sexing and diagnosis in addition to practical medicine for a variety of species kept as pets in Florida. Voluntary veterinary care provided on a daily basis for the Audubon Society's Bird of Prey Center.

Connecticut Veterinary Center 1995-1996 Hartford, CT
Clinician/Intern. Responsibilities included daily office hours and one quarter of the emergency care in this 24-hour, critical care referral hospital. Patient breakdown is approximately 50% small animal and 50% exotics.

Department of Clinical Sciences, Cornell CVM 1992-1994 Ithaca, NY
Veterinary research technician. Performed venipuncture, ELISA progesterone assay, vaginal smears, artificial insemination, and general veterinary care for dogs and puppies that are used in a long-term study on hermaphroditism. Learned ultrasound imaging of pregnant bitches and observed cesarean sections and biopsies.

Dept of Avian and Aquatic Animal Medicine, Cornell CVM 1991-1993 Ithaca, NY
Research technician. Participated in field surveys and diagnostic evaluation of water quality, parasitology, and virology affecting predominantly cultured aquatic organisms. Investigated a hypothetical herpes virus, which causes epizootic epitheliotropic disease of lake trout using molecular and cell culture techniques. Designed an innovative educational computer program on water quality used in the aquatic animal medicine courses.

Nassau Animal Emergency Clinic 1989-1991 Westbury, NY
Veterinary Technician. Responsibilities included venipuncture, catheter placement, full diagnostic tests on blood and fecal samples as well as performing radiography.

Nature's Classroom 1990 Ivoryton, CT
On site marine specialist. Taught 5th-8th grade students hands-on environmental education in a program based on Outward bound. The students included inner city children and were often specially classified children with behavioral problems.

Teaching Responsibilities:

- 2001-present VEM 5311 Instructor AVIAN HEALTH and DISEASE Taught two hours of clinical pathology lecture with an affiliated 3 hour laboratory.
- 2004-2006 VEM 5378 Course Founder and Coordinator - SEAVET I: Care of Aquatic Megavertebrates was an intensive three credit, two week course designed to teach veterinary medical students, graduate veterinarians, and marine mammal biologists through didactic lecture, facilities tours, and hands-on experience. SEAVET I focuses on Florida megavertebrates including dolphins and other cetaceans, manatees, and sea turtles.
- 2003-2006 VME 6938 Founder and Coordinator TOPICS IN AQUATIC ANIMAL HEALTH A one credit journal club on aquatic animal physiology and pathology held each semester and regularly attended by 6 to 20 members of the aquatic animal program.
- 2004 & 2006 VEM 5375 Instructor ADVANCED FISH MEDICINE Taught two hours of clinical pathology lecture with an affiliated 3 hour laboratory.

Student Mentorship:

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Renee Gray, Univ. of Florida, D.V.M student research advisor. 2002-05

Won best student presentation at IAAAM, Seward, AK 2006

Julia Golden, Univ. of Florida, D.V.M mentor. 2003-2005

Kati Allison, Univ. of Florida, D.V.M research and faculty advisor. 2003-2006

Stacey Thrushman, Univ. of Florida, D.V.M faculty advisor. 2004-2006

Kelly Kirkman, Univ. of Florida, D.V.M student research advisor. 2004-

Arthur Wong, Univ. of Florida, M.S. chair. 2003-2006

Katie Tripp, Univ of Florida, PhD committee. 2005-

Professional membership and offices held

Diplomate of the American College of Veterinary Pathologists – 2002 –present

American Society of Veterinary Clinical Pathologists – 1998-present

Quality Assurance Committee member – 2002- present

American Veterinary Medical Association – member 1991-present

SAVMA delegate representing Cornell University, 1992-94

Ancillary Services Resident Representative at the University of Florida – 1999-2001

International Association of Aquatic Animal Medicine – 1993-present

Founding member and president of the student chapter at Cornell University, 1993-94

American Association of Avian Veterinarians – 1993-present

American Association of Zoo Veterinarians – 1992- present

Student Chapter American AAZV, Cornell – Vice President, 1992-1993

Awards:

Excellence in Clinical Science Research. (2004) University of Florida College of Veterinary Medicine for master's research *Diagnosis of Systemic Inflammatory Disease in Manatees (Trichechus manatus latirostris)*

Tenth Annual Resident Seminar Award (2001) from the CVM University of Florida for presentation of *Mycobacterium tuberculosis in Homo sapiens and Elephas maximus*.

American College of Veterinary Pathology Young Investigator Award (2001) First Place in Toxicology for poster presentation of *Loss of hepatic glutathione S-transferase expression in large mouth bass (Micropterus salmoides) by estradiol as demonstrated by real-time polymerase chain reaction*.

Charles L. Davis Foundation for the Advancement of Veterinary and Comparative Pathology, Award for Scholarship (2000), University of Florida

Cornell Scholar, 1982-1986

Certifications:

Good Laboratory Practice Certification

American Red Cross – CPR and First Aid (previously instructor level and lifeguard trainer)

PADI – advanced SCUBA diver – nitrox certified.

Funded Grants:

Harr, K (PI). Samuelson, D (coPI). 2006. Funded 6/06-6/09 National Oceanographic and Atmospheric Administration (Fisheries) – Prescott granting. \$102,000(direct). \$33,000 (indirect). *Clinical Pathology and Histopathologic Processing of Cetacean tissues in Northern and Central Florida*

Harr, K (PI) 2005 Harbor Branch Oceanographic Institute, 03/15/06-03/14/07, \$9,500 direct costs for educational resources, \$500 indirect costs, *Right Whale Conservation Initiative in the Florida Public Education System*

Used to produce and publish a Right Whale Conservation Lesson Plan Book.

Curriculum Vitae Kendal E. Harr

Harr, K (PI). 2005 CVM Spring Consolidated Faculty Research Development Awards – seed grant. \$7,500. *Effect of Water Temperature on Immune Functional Responses in the Florida Manatee.*

Used to develop monoclonal antibodies to manatee IgG, IgM, and IgA.

Harr, K. 2003 Florida Fish and Wildlife Conservation Commission. 6/03-6/06. \$220,000. *Aquatic Animal Health Program Initiative.* Funding for salary support.

Publications:

Harr, KE. Reptilian Hematology. In: Atlas of Exotic Animal Hematology. Clark, Harr, and Boardman (eds). Book in Progress for December 2006.

Harr, KE, Harvey, J, Bonde, R, Murphy, D, Lowe, M, Menchaca, M, Haubold, E. Francis-Floyd, R. 2006. Comparison of Methods Used to Diagnose Generalized Inflammatory Disease in Manatees (*Trichechus manatus latirostris*). *J Zoo Wild Med* . 37(2):151-159.

Harr KE. 2006. Clinical Biochemistry. In: Avian Medicine and Disease. 2nd Ed. Harrison G, Lightfoot T, and Harrison L. (eds) Lake Worth, FL: Wingers Publishing, Inc. pp. 611-630.

Harr KE, Raskin R, Heard DJ. 2005. Temporal Hematologic and Biochemical Effects of Three Commonly Used Anticoagulants on Macaw (*Ara sp.*) and Burmese Python (*Python molurus bivittatus*) Blood. *Vet Clin Pathol.* 34(4):383-388.

Harr KE. 2002. Clinical Chemistry of Companion Avian Species: A Review. *Vet Clin Pathol.* 31(3):140-151.

Harr K, Alleman AR, Maxwell L, Jacobson E, Lock B, Bennett A, and Dennis P. 2001. Green Iguana (*Iguana iguana*) blood cell morphology, cytochemistry, and hematologic and plasma biochemical reference ranges. *JAVMA.* 218(6):915-921.

Harr K, Henson K, Raskin R, Heard D, Phillips L, Greiner E. 2000. What Is Your Diagnosis? Gastric Lavage from a Madagascar Tree Boa (*Sanzinia madagascarensis*) *Vet Clin Pathol.* 29(3):93-96.

Harr K, Kollias G, Randano V, De La Hunta A. 1997. A modified technique for avian myelography. *J Vet Rad and Ultrasound.* 38 (3): 187-192.

Rember R, **Harr KE,** Ginn PE, Lightsey J, Keller M, Bonde RK, Reid J. 2006 Chronic boat strike and polycystic kidneys in a free-ranging Florida Manatee (*Trichechus manatus latirostris*). In Progress for Journal of the American Veterinary Medical Association.

Harvey JW, **Harr KE,** Murphy D, Walsh, MT, Chittick EJ, Bonde RK, Pate MG, Deutsch CJ, Edwards HH, Haubold EM. 2006. Clinical Biochemistry In Healthy Manatees (*Trichechus Manatus Latirostris*). Submitted JZWM.

Alison, K. **Harr KE,** Bonde RK, Murphy D, Harvey JW. 2006. Optimization Of Aspartate Aminotransferase And Alanine Aminotransferase Methodologies For Diagnosis In Manatees (*Trichechus Manatus Latirostris*). Submitted JZWM.

Siegal-Willott, J, Estrada, A, Bonde, B, Wong, A, Estrada, DJ, **Harr, KE.** 2006. Electrocardiography in two subspecies of manatee (*trichechus manatus latirostris* and *T. M. Manatus*). In Press J Zoo and Wildlife Medicine.

Bledsoe, EL, **Harr, KE,** Cichra, MF, Philips EJ, Bonde, RK and Lowe M. 2006. Comparison Of Biofouling Communities Associated With Free-Ranging And Captive Florida Manatees (*Trichechus Manatus Latirostris*) *Marine Mammal Science* 22:4 997-1002.

Myers MR, Heard DJ, **Harr KE.** 2006. A comparison of serum and plasma for determination of blood biochemical values in Malaysian flying foxes (*Pteropus vampyrus*) over time. *J Zoo and Wildlife Medicine.* 37(3): 245–248

Lafortune M, Gobel T, Jacobson ER, Heard DJ, Brown D, Alleman R, Vliet K, **Harr KE,** Hernandez J. 2005. Respiratory bronchoscopy of subadult American alligators (*Alligator mississippiensis*) and tracheal wash evaluation. *J Zoo Wildl Med* 36(1):12-20

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Heard D, **Harr K**, Wellehan J. Diagnostic Sampling and Laboratory Tests. 2004. in British Small Animal Veterinary Association Manual of Reptiles (2nd ed.). Girling SJ and Raiti P (eds.) p. 71-86.

Gicking J, Foley A, **Harr KE**, Raskin RE, Jacobson, E, . 2004. Plasma Electrophoresis of the Atlantic Loggerhead Sea Turtle (*Carretta carretta*). *J Herp Med and Surgery*. 14(3):13-18.

Dennis, PM, Bennett, RA , **Harr, KE**, Lock, BA. 2001. Plasma concentration of ionized calcium in healthy iguanas. *JAVMA*. 219(3): 326-329.

Selected Abstracts

Harr, KE, Maners, J, Roberts, J, Troutman, MJ, Chittick, E, Walsh, MT, Rowles, T. Failure of passive transfer in a neonatal right whale calf (*Eubalena glacialis*). *Proceedings of the International Association of Aquatic Animal Medicine*. Seward, AK. May 2005.

Harr K., Harvey J., and Francis-Floyd R., Comparison of Methods to Diagnose of Infection/Inflammation in Florida Manatees (*Trichechus manatus latirostris*). *Proceedings of the International Association of Aquatic Animal Medicine*. Galveston, Texas. May 2004.

Harr K., Harvey J., and Francis-Floyd R., Acute Phase Inflammatory Proteins Used to Diagnose of Infection/Inflammation in Florida Manatees (*Trichechus manatus latirostris*). *Proceedings of the International Association of Aquatic Animal Medicine*. Kona, Hawaii. May 2003.

Harr K., Bowman C., Sabo T., Gardner J., Denslow N, Gallagher E. Loss of hepatic glutathione S-transferase expression in large mouth bass (*Micropterus salmoides*) by estradiol as demonstrated by real-time polymerase chain reaction. *Proceedings of the American College of Vet Pathol*. December, 2000.

Richey L., Harr K., Harvey J., Schoeb T. Intraerythrocytic Inclusions in American Alligator (*Alligator mississippiensis*) Hatchlings. *Proceedings of Third International Virtual Conference I Veterinary Medicine: Diseases of Reptiles and Amphibians*. 2000.

<http://www.vet.uga.edu/ivcvm/2000/>

Invited Talks:

Harr, KE. 2006. C reactive protein: Function and Diagnostic Utility in Small Animal Medicine. CVC West, San Diego, CA

Harr, KE. 2006. Clinical Pathology of Reptilian Species and Small Mammals. CVC West, San Diego, CA

Harr, KE. 2006. Diagnosis of Renal Disease in Avian and Reptilian species. CVC West, San Diego, CA

Harr, KE. 2006. Identification of Blood Cells in Exotic Species. CVC West, San Diego, CA

Harr, KE. 2006. The Ins and Outs of Quality Sample Collection. CVC West, San Diego, CA

Harr, KE. 2006. Acute Phase Proteins: An Overview. CVC West, San Diego, CA

Harr, KE. 2006. Exotic Animal Case Presentations. CVC West, San Diego, CA

Harr, KE. 2006. The Clinical Pathology of Avian Species. CVC West, San Diego, CA

Harr, KE. 2005. Identification of Blood Cells in Exotic Species. Wild West Veterinary Conference (WWVC). Reno, Nevada. October, 2005.

Harr, KE. 2005. The Ins and Outs of Quality Sample Collection. WWVC. Reno, Nevada. October, 2005.

Harr, KE. 2005. Acute Phase Proteins: Domestic and Exotic Animals. WWVC. Reno, Nevada. October, 2005.

Harr, KE. 2005. Exotic Animal Clinical Pathology Case Presentations. WWVC. Reno, Nevada. October, 2005.

Harr, KE. 2005. The Clinical Path of Avian and Reptile Species. WWVC. Reno, Nevada. October, 2005.