

Appendix B: Credentials, experience, and expertise of the AVMA committee members

The credentials detailed here for the committee members of the two working groups that were most likely directly involved in the discussion and decision on thoracic compression were compiled from public sources (via internet search) with the exception of the information for Barry Hartup, who was kind enough to provide his *Curriculum vitae*. We have attempted to be as thorough and inclusive as possible as it was our intent to determine which, if any, of the committee members had relevant experience or expertise. It is possible that one or more of the committee has relevant experience or expertise that we were unable to identify. We have not deliberately omitted information that might suggest experience with thoracic compression or work with small birds.

Though the committee members have outstanding credentials in a general sense, it appears that only Joanne Paul-Murphy, Laurel Degernes, Barry Hartup, and Cheryl Greenacre have worked with birds on a regular basis. Dr. Hartup has worked with birds small enough for the use of thoracic compression as a means of euthanasia but the publications in his *Curriculum vitae* do not report the use of thoracic compression in those studies. One study – of a single American Robin – entailed euthanasia, but that occurred in a clinical setting, where other means of euthanasia should have been readily available. It is unlikely that thoracic compression was used. It appears that Dr. Degernes has worked only with birds that are far too large for use of thoracic compression as a means of euthanasia. Drs. Paul-Murphy and Greenacre have worked with psittacines, some of which are small enough for use of thoracic compression as a means of euthanasia, but the literature we were able to find suggests that they have not worked with birds in the wild and thus would have had no reason to use thoracic compression.

The names of the members of the committee and the working groups were not revealed until the time of publication and, to the best of our knowledge, the *Curricula vitae* of these individuals have not been made public by the AVMA, it seems unlikely that OLAW could have ascertained that the committee members had the requisite credentials and experience expertise. The latter attribute is particularly important when making decisions for which there is little or no published data as, in the absence of experience and expertise, the decision could be based only on personal opinion.

Zoo/Wildlife/Reptiles Working Group

Dr. Dave Miller, Chair

We have not been able to find a *Curriculum vitae* for Dr. Miller. He is certified as a wildlife biologist by The Wildlife Society. According to the Wildlife Society, “A professional wildlife biologist is a person with the educational background and demonstrated expertise in the art and science of applying the principles of ecology to the conservation and management of wildlife and its habitats. An applicant for professional certification who demonstrates this expertise through education and experience, and is judged to be able to represent the profession as an ethical practitioner, will be designated as a Certified Wildlife Biologist (CWB).” An internet search revealed that Dr. Miller has experience with exotic animals in the captive (zoo) setting.

The publications we were able to locate (below) evidence some field experience, although very little with birds and none with birds of the size for which thoracic compression is appropriate.

- Miller, D.S.**, Weiser, G.C., Ward, A.C., Drew, M.L., and P.L. Chapman. 2012. Pasteurellaceae isolated from bighorn sheep (*Ovis canadensis*) from Idaho, Oregon, and Wyoming. *American Journal of Veterinary Research* 7:1024-8.
- Miller, D.S.**, Weiser, G.C., Aune, K., Roeder, B., Atkinson, M., Anderson, N., Roffe, T.J., Keating, K.A., Chapman, P.L., Kimberling, C., Rhyan, J., Clarke, P.R. 2011. Shared Bacterial and Viral Respiratory Agents in Bighorn Sheep (*Ovis canadensis*), Domestic Sheep (*Ovis aries*), and Goats (*Capra hircus*) in Montana. *Veterinary Medicine International* 2011:Article ID162520.
- Miller D.S.**, Weiser, G.C., Ward, A.C., Drew, M.L., and P.L. Chapman. 2011. Domestic sheep (*Ovis aries*) Pasteurellaceae isolates from diagnostic submissions to the Caine Veterinary Teaching Center (1990-2004). *Veterinary Microbiology* 150(3-4):284-8.
- Weiser, G.C., **Miller, D.S.**, Drew, M.L., Rhyan, J.C., and A.C. Ward. 2008. Variation in *Pasteurella (Bibersteinia)* and *Mannheimia spp.* following transport and antibiotic treatment in free-ranging and captive Rocky Mountain bighorn sheep (*Ovis canadensis canadensis*). *Journal of Zoo and Wildlife Medicine* 40(1):117-25. Erratum in: *Journal of Zoo and Wildlife Medicine* 40(4):812.
- Miller, David S.** 2007. Biomedical evaluation of free-ranging ring-tailed lemurs (*Lemur catta*) in three habitats at the Beza Mahafaly Special Reserve, Madagascar. *Journal of Zoo and Wildlife Medicine* 38:201-16.
- Mama, K.R., Uhrig, S., **Miller, D.S.**, Harris, L., Syndergaard, M., Regnier, M., and J.C. Rhyan. 2007. Evaluation of two short-term anesthetic protocols in captive juvenile pronghorn (*Antilocapra americana*). *Journal of Zoo and Wildlife Medicine* 40:803-5.
- Miller, D.S.**, Eagle, R.P., Zabel, S., Rosychuk, R., and T.W. Campbell. 2006. Efficacy and safety of selamectin in the treatment of *Otodectes cynotis* infestation in domestic ferrets. *Veterinary Record* 159(22):748.
- de la Fuente, J., Atkinson, M.W., Hogg, J.T., **Miller, D.S.**, Naranjo, V., Almazán, C., Anderson, N., and K.M. Kocan. 2006. Genetic characterization of *Anaplasma ovis* strains from bighorn sheep in Montana. *Journal of Wildlife Diseases*. 42(2):381-5.
- Miller, D.S.**, Taton-Allen, G.F., and T.W. Campbell. 2004. Knemidokoptes in a Swainson's hawk, *Buteo swainsoni*. *Journal of Zoo and Wildlife Medicine* 35(3):400-2.
- Miller, D.S.**, Faulkner, C., and S. Patton. 2003. Detection of *Toxoplasma gondii* IgG antibodies in juvenile great grey kangaroos, *Macropus giganteus giganteus*. *Journal of Zoo and Wildlife Medicine* 34(2):189-93.
- Miller, D.S.** 2001. Review of oleoresin capsicum (pepper) sprays for self-defense against captive wildlife. *Zoo Biology* 20:389-398.

Scott B. Citino, DVM

http://vet.osu.edu/Curriculum_vitaem/scott-b-citino-dvm

Scott B. Citino graduated summa cum laude from The Ohio State University College of Veterinary Medicine in 1983 and went on to complete an internship in zoological medicine at the National Zoological Park in Washington, D.C. in 1984. After his internship, Dr. Citino served as staff veterinarian and head of the Department of Veterinary Sciences at the Miami Metrozoo in Florida. In 1990 Dr. Citino returned to the National Zoological Park as an associate veterinarian and hospital administrator. He became a diplomate of the American College of Zoological Medicine in 1991. Since 1993 he has held the position of staff veterinarian at the White Oak Conservation Center in Yulee, Florida. As part of his many responsibilities there he also serves as a clinical associate professor for the zoological program at the University of Florida, mentoring residents at the Conservation Center. In addition, he holds an adjunct clinical faculty position at the University of Miami College of Medicine's Department of Comparative Pathology.

Dr. Citino has a remarkable record of scientific inquiry and publication. His research interests include anesthesia, infectious and non-infectious disease, and reproductive physiology of captive and free-ranging wildlife. His Curriculum vitae features over 50 refereed reports and an additional 65 publications on a variety of zoological and wildlife topics.

Dr. Citino is an active contributor to his discipline, having served a number of leadership roles in the American College of Zoological Medicine and the American Association of Zoo Veterinarians as secretary, vice-president, and president. He is a reviewer for and associate editor of the Journal of Zoological and Wildlife Medicine. He serves on a number of scientific advisory boards including the International Rhino Foundation, the International Wildlife Institute, and the Morris Animal Foundation. In addition, Dr. Citino is the veterinary advisor for the Okapi and Cheetah Species Survival Plans.

Dr. Citino's exceptional career in zoological medicine was recognized in 2007 when he received the American Association of Zoo Veterinarian's Emil P. Dolensek Award for his exceptional contributions to the conservation, care, and understanding of zoo and free-ranging wildlife.

We have found no indication that Dr. Citino has worked with small birds or has used thoracic compression as a means of euthanasia.

Publications

- Citino, S.**, Bryant, B., Duncan, M., Fleming, G., Hofmeyr, M., Miller, E., Miller, M., Mylniczzenko, N., Paglia, D., and R. Radcliffe. 2012. IOD in rhinos--veterinary group report: report from the Clinical Medicine and Pathology Working Group of the International Workshop on Iron Overload Disorder in Browsing Rhinoceros (February 2011). *Journal of Zoo and Wildlife Medicine* 43(3 Suppl):S105-7.
- Quesada, R., **Citino, S.B.**, Easley, J.T., Hall, N., Brokken, M.T., and M.P. Brown. 2011. Surgical resolution of an avulsion fracture of the peroneus tertius origin in a giraffe (*Giraffa camelopardalis reticulata*). *Journal of Zoo and Wildlife Medicine* 42(2):348-50.

- Schmidt, D.A., Barbiers, R.B., Ellersieck, M.R., Ball, R.L., Koutsos, E.A., Griffin, M.E., Grobler, D., **Citino, S.B.**, and M. Bush. 2011. Serum chemistry comparisons between captive and free-ranging giraffes (*Giraffa camelopardalis*). *Journal of Zoo and Wildlife Medicine* 42(1):33-9.
- Borkowski, R., **Citino, S.**, Bush, M., Wollenman, P., and B. Irvine. 2009. Surgical castration of subadult giraffe (*Giraffa camelopardalis*). *Journal of Zoo and Wildlife Medicine* 40(4):786-90.
- Estrada, A.H., Gerlach, T.J., Schmidt, M.K., Siegal-Willott, J.L., Atkins, A.L., Van Gilder, J., **Citino, S.B.**, and L.R. Padilla. 2009. Cardiac evaluation of clinically healthy captive maned wolves (*Chrysocyon brachyurus*). *Journal of Zoo and Wildlife Medicine* 40(3):478-86.
- Evans, A., Atkins, A., and **S.B. Citino**. 2009. Tracheal stenosis in a blue-billed curassow (*Crax alberti*). *Journal of Zoo and Wildlife Medicine* 40(2):373-7.
- Adkesson, M.J., **Citino, S.B.**, Dennis, P.M., Fiorello, C.V., Lafortune, M. and R.A., Bennett. 2009. Medical and surgical management of otitis in captive bongo (*Tragelaphus eurycerus*). *Journal of Zoo and Wildlife Medicine* 40(2):332-43.
- Siegal-Willott, J., **Citino, S.B.**, Wade, S., Elder, L., Hayek, L.A., and W.R. Lance. 2009. Butorphanol, azaperone, and medetomidine anesthesia in free-ranging white-tailed deer (*Odocoileus virginianus*) using radio transmitter darts. *Journal of Wildlife Diseases* 45(2):468-80.
- Atkins, A., Wellehan, J.F. Jr., Childress, A.L., Archer, L.L., Fraser, W.A., and **S.B. Citino**. 2009. Characterization of an outbreak of astroviral diarrhea in a group of cheetahs (*Acinonyx jubatus*). *Veterinary Microbiology* 14:136(1-2):160-5.
- Fiorello, C.V., Beagley, J., and **S.B. Citino**. 2008. Antibiotic intravenous regional perfusion for successful resolution of distal limb infections: two cases. *Journal of Zoo and Wildlife Medicine* 39(3):438-44.
- VanderKlok, C.M., Penfold, L.M., Siegal-Willott, J., and **S.B. Citino**. 2008. Idiopathic infertility in two captive male gerenuk (*Litocranius walleri walleri*). *Journal of Zoo and Wildlife Medicine* 39(3):398-405.
- Myers, D.A., **Citino, S.**, and M.A. Mitchell. 2008. Electrocardiography of Grevy's zebras (*Equus grevyi*). *Journal of Zoo and Wildlife Medicine* 39(3):298-304.
- Cunningham, M.W., Brown, M.A., Shindle, D.B., Terrell, S.P., Hayes, K.A., Ferree, B.C., McBride, R.T., Blankenship, E.L., Jansen, D., **Citino, S.B.**, Roelke, M.E., Kiltie, R.A., Troyer J.L., and S.J. O'Brien. 2008. Epizootiology and management of feline leukemia virus in the Florida puma. *Journal of Wildlife Diseases* 44(3):537-52.
- Allender, M.C., Langan, J., and **S. Citino**. 2008. Investigation of aural bacterial and fungal flora following otitis in captive okapi (*Okapia johnstoni*). *Veterinary Dermatology* 19(2):95-100.
- Citino, S.B.** and M. Bush. 2007. Reference cardiopulmonary physiologic parameters for standing, unrestrained white rhinoceroses (*Ceratotherium simum*). *Journal of Zoo and Wildlife Medicine* 38(3):375-9.
- Penfold, L.M., Munson, L., Plotka, E., and **S.B. Citino**. 2007. Effect of progestins on serum hormones, semen production, and agonistic behavior in the gerenuk (*Litocranius walleri walleri*). *Zoo Biology* 26(4):245-57.
- Hackendahl, N.C. and **S.B. Citino**. 2005. Radiographic kidney measurements in captive cheetahs (*Acinonyx jubatus*). *Journal of Zoo and Wildlife Medicine* 36(2):321-2.

- Fleming, G.J., **Citino, S.B.**, and A. Petric. 2006. Glucosuria in captive okapi (*Okapia johnstoni*). *Journal of Zoo and Wildlife Medicine* 37(4):472-6.
- Lock, B.A., **Citino, S.B.**, and A. Pickup. 2005. Intrahepatic portosystemic venous shunt in a neonatal roan antelope (*Hippotragus equinus cottoni*). *Journal of Zoo and Wildlife Medicine* 36(3):546-9.
- Reid, H.L., Deem, S.L., and **S.B. Citino**. 2005. Extraosseous osteosarcoma in a maned wolf (*Chrysocyon brachyurus*). *Journal of Zoo and Wildlife Medicine* 36(3):523-6.
- Citino, S.B.**, and L. Munson. 2005. Efficacy and long-term outcome of gastritis therapy in cheetahs (*Acinonyx jubatus*). *Journal of Zoo and Wildlife Medicine* 36(3):401-16.
- Roth, T.L., Stoops, M.A., Atkinson, M.W., Blumer, E.S., Campbell, M.K., Cameron, K.N., **Citino, S.B.**, and A.K. Maas. 2005. Semen collection in rhinoceroses (*Rhinoceros unicornis*, *Diceros bicornis*, *Ceratotherium simum*) by electroejaculation with a uniquely designed probe. *Journal of Zoo and Wildlife Medicine* 36(4):617-27.
- Adin, D.B., Maisenbacher, H.W., Ojeda, N., Fiorello, C.V., Estrada, A.H., Prosek, R., and **S.B. Citino**. 2007. Cardiac evaluation of anesthetized Grevy's zebras (*Equus grevyi*). *American Journal of Veterinary Research* 68(2):148-52.
- Schmidt, D.A., Ball, R.L., Grobler, D., Ellersieck, M.R., Griffin, M.E., **Citino, S.B.**, and M. Bush. 2007. Serum concentrations of amino acids, fatty acids, lipoproteins, vitamins A and E, and minerals in apparently healthy, free-ranging southern giraffe (*Giraffa camelopardalis giraffe*). *Zoo Biology* 26(1):13-25.
- Kennedy, M.A., Moore, E., Wilkes, R.P., **Citino, S.B.**, and S.A. Kania SA. 2006. Analysis of genetic mutations in the 7a7b open reading frame of coronavirus of cheetahs (*Acinonyx jubatus*). *American Journal of Veterinary Research* 67(4):627-32.
- Esson, D.W., Wellehan, J.F., Lafortune, M., Valverde, A., and **S.B. Citino**. 2006. Surgical management of a malacic corneal ulcer in a greater one-horned Asian rhinoceros (*Rhinoceros unicornis*) using a free island tarsoconjunctival graft. *Veterinary Ophthalmology* 9(1):65-9.
- Penfold, L.M., Monfort, S., Wolfe, B.A., **Citino, S.B.**, and D.E. Wildt. 2005. Reproductive physiology and artificial insemination studies in wild and captive gerenuk (*Litocranius walleri walleri*). *Reproduction, Fertility, and Development* 17(7):707-14.
- Holder, E.H., **Citino, S.B.**, Businga, N., Cartier, L., and S.A. Brown. 2004. Measurement of glomerular filtration rate, renal plasma flow, and endogenous creatinine clearance in cheetahs (*Acinonyx jubatus jubatus*). *Journal of Zoo and Wildlife Medicine* 35(2):175-8.
- Chatfield, J., **Citino, S.**, Munson, L., and S. Konopka. 2004. Validation of the ¹³C-urea breath test for use in cheetahs (*Acinonyx jubatus*) with Helicobacter. *Journal of Zoo and Wildlife Medicine* 35(2):137-41.
- Eino, D., **Citino, S.B.**, and M. Thompson. 2003. Clinical challenge. Metastatic primary liver neoplasm causing spinal compression. *Journal of Zoo and Wildlife Medicine* 34(4):416-9.
- Schumacher, J., Snyder, P., **Citino, S.B.**, Bennett, R.A., and L.D. Dvorak. 2003. Radiographic and electrocardiographic evaluation of cardiac morphology and function in captive cheetahs (*Acinonyx jubatus*). *Journal of Zoo and Wildlife Medicine* 34(4):357-63.
- Kennedy, M., **Citino, S.**, McNabb, A.H., Moffatt, A.S., Gertz, K., and S. Kania. 2002. Detection of feline coronavirus in captive Felidae in the USA. *Journal of Veterinary Diagnostic Investigation* 14(6):520-2.
- Citino, S.B.**, Bush, M., Grobler, D., and W. Lance. 2002. Anesthesia of boma-captured Lichtenstein's hartebeest (*Sigmoceros lichtensteinii*) with a combination of

thiafentanil, medetomidine, and ketamine. *Journal of Wildlife Diseases* 38(2):457-62.

Mark Drew, DVM, Diplomat ACZM

Mark L. Drew, DVM, is a wildlife veterinarian who has been employed by the Idaho Department of Fish and Game since 1999. From 1993 to 1999, Dr. Drew was an associate professor at Texas A & M University. He obtained his veterinary degree in 1987 from the University of Minnesota and earned an MSc. in zoology and animal biology in 1984 from the University of Alberta. We have been unable to locate a *Curriculum vitae* for Dr. Drew. We have located the following publications, none of which evidence experience in field ornithology or the use of thoracic compression as a means of euthanasia:

- Miller, D.S., Weiser, G.C., Ward, A.C. S., **Drew, M.L.**, and P.L. Chapman. 2012. *Pasteurellaceae* isolated from bighorn sheep (*Ovis canadensis*) from Idaho, Oregon, and Wyoming. American Journal of Veterinary Research 73 (7):1024-1028.
- Weiser, B.C., Miller, D.S., **Drew, M.L.**, Rhyan, J.C., and A.C.S. Ward. 2009. Variation in *Pasteurella* (Bibersteinia) and *Mannheimia spp* Following Transport and Antibiotic Treatment in Free-Ranging and Captive Rocky Mountain Bighorn Sheep (*Ovis canadensis canadensis*). Journal of Zoo and Wildlife Medicine 40(1):117-125.
- Drew, M. L.** 2008. Retroviral Infections, in Infectious Diseases of Wild Birds (eds N. J. Thomas, D. B. Hunter and C. T. Atkinson), Blackwell Publishing Professional, Ames, Iowa, USA.
- Drew, M.L.**, Joyner, K., and R. Lobingier. 1993. Laboratory reference intervals for a group of captive Thick-billed Parrots (*Rhyncoppita pachyrhyncha*). Journal of the Association of Avian Veterinarians 7(1):35-38.
- Drew, M.L.**, D.A. Jessup, A.A. Burr, and C.E. Franti. 1992. Serologic survey for brucellosis in feral swine, wild ruminants, and black bear of California, 1977 to 1989. Journal of Wildlife Diseases 28(3):255-363.
- Drew, M.L.**, and W.M. Samuel. 1985. Factors affecting transmission of larval winter ticks, *Dermacentor albipictus* (Packard), to moose, *Alces alces L.*, in Alberta, Canada

Julie [sic] Goldstein

Note: It would appear that Dr. Goldstein's name was misspelled in the AVMA Guidelines. It appears that her name is spelled Juli Goldstein.

Dr. Goldstein is an Assistant Research Professor at Florida Atlantic University. She has been actively involved in the marine mammal field for the last 7 years. She has completed extensive training courses and veterinary externships that focused exclusively on the husbandry, care, assessment, and medical treatment of stranded and captive marine mammals. She is a graduate and now serves as an instructor for the MARVET veterinary training program. In addition she has trained at many marine facilities including the Marine Mammal Center in Sausalito, California, Dolphin Quest Hawaii and Oahu, as well as the Shedd Aquarium in Chicago, Illinois. She has been an active member of the Harbor Branch's Marine Mammal Research and Conservation group since 2003 and serves as an on-call veterinarian for the National Marine Fisheries (NMFS) Southeast Stranding Network. Dr. Goldstein has also provided specialized veterinary services for the last 5 years of the Indian River Lagoon Live Dolphin Health and Risk Assessment Project, and has published in several peer-reviewed journals on research data related to the health of marine mammals. She currently serves as the on-site clinical veterinarian, Assistant Research Professor, and attending clinical veterinarian for the HBOI/FAU Institutional Animal Care and Use Committee. Her research interests are Clinical marine mammal and aquatic medicine, cardiomyopathy in pygmy and dwarf sperm Whales, and aquatic animal diagnostic ultrasound.

Dr. Barry Hartup

Dr. Hartup is the Director of Veterinary Services at the International Crane Foundation and a clinical instructor in exotic animal medicine and surgery at the School of Veterinary Medicine at the University of Wisconsin-Madison. He joined the International Crane Foundation (ICF) in 2000, but his experience with ICF started in 1986 as an aviculture intern prior to becoming a veterinarian. Working at ICF has helped to fulfill his professional interests in veterinary medicine, animal population health and epidemiology, and conservation of endangered species. Dr. Hartup has a M.S. degree in Conservation Biology and a Doctor of Veterinary Medicine degree from the University of Wisconsin-Madison, and a Ph.D. in Wildlife Health from Cornell University.

Dr. Hartup was kind enough to provide a copy of his Curriculum vitae, which is excerpted here:

Doctor of Philosophy, Cornell University 2000, Wildlife Diseases and Epidemiology
Doctor of Veterinary Medicine, University of Wisconsin-Madison 1993
Master of Science, University of Wisconsin-Madison 1989, Conservation Biology
Bachelor of Science, University of Wisconsin-Madison 1985, Zoology

Work Experience

2000-Present Director of Veterinary Services, International Crane Foundation, Baraboo, WI & Clinical Instructor, Department of Surgical Sciences, School of Veterinary Medicine, University of Wisconsin, Madison, WI.

1996-99 Associate Veterinarian, New York River Otter Project, Inc., Rochester, NY.

1993-96 Staff Veterinarian, Willowbrook Wildlife Center, Forest Preserve District of DuPage County, IL

1991 Veterinary Research Fellow, Willowbrook Wildlife Foundation, Glen Ellyn, IL

1984-92 Research Assistant, Harlow Primate Laboratory, University of Wisconsin, Madison, WI

Teaching Experience

2000-Present Lecturer, University of Wisconsin, Madison, WI. Courses: Diseases of Wildlife; Exotic Animal Restraint & Anesthesia; Special Species Health; Wildlife Management Techniques; Mentor, Zoological Medicine Residency program, University of Wisconsin, Madison, WI & Veterinary Preceptor program, International Crane Foundation, Baraboo, WI.

1996-99 Lecturer, Cornell University, Ithaca, NY. Courses: Veterinary Aspects of Captive Wildlife Management; Avian Medicine and Surgery.

1993-96 Mentor, Veterinary Preceptor and Veterinary Technician Fellowship programs,

Willowbrook Wildlife Center, Forest Preserve District of DuPage County, IL

1987-90 Graduate Teaching Assistant, University of Wisconsin, Madison, WI.
Courses: Organismal Biology; Introductory Biology; The Environment: Social Perspectives.

Publications

- Keller, D. and **B. K. Hartup**. Reintroduction Medicine: Whooping Cranes in Wisconsin. Zoo Biology, manuscript under review.
- Churgin, S. M., Steinberg, H., Ravi, M. and **B. K. Hartup**. Sternal osteosarcoma in a blue crane (*Anthropoides paradiseus*). Journal of Zoo and Wildlife Medicine, manuscript under review.
- Bauer, K. L., E. S. Dierenfeld, and **B. K. Hartup**. Evaluation of a nutraceutical joint supplement in cranes. Proceedings of the North American Crane Workshop, 12, manuscript under review.
- Hartup, B. K.** and A. Gutwillig. Seasonal fecal corticosterone measurements in Wisconsin sandhill cranes. Proceedings of the North American Crane Workshop, 12, abstract under review.
- Kelman, A. and **B. K. Hartup**. Tylosin tartrate promotes resolution of insect bite hypersensitivity reactions in captive cranes. Proceedings of the North American Crane Workshop, 12, abstract under review.
- Hartup, B. K.**, editor. 2010. Proceedings of the eleventh North American crane workshop. North American Crane Working Group, Laurel, Maryland, USA.
- Mauer, J., B. Reichenberg, C. Kelley, and **B. K. Hartup**. 2010. The effects of anticoagulant choice and sample processing time on hematologic values of juvenile whooping cranes. Proceedings of the North American Crane Workshop, 11: 105-109.
- Hartup, B. K.**, J. N. Niemuth, B. Fitzpatrick, M. Fox, and C. Kelley. 2010. Morbidity and mortality of captive whooping cranes at the International Crane Foundation: 1976-2008. Proceedings of the North American Crane Workshop, 11: 183-185.
- Hartman, S. B. Reichenberg, J. Fanke, A. Lacey, and **B. K. Hartup**. 2010. Endoparasites of greater sandhill cranes in south central Wisconsin. Proceedings of the North American Crane Workshop, 11: 186-188.
- Letoutchaia, J. N., K. Maguire, and **B. K. Hartup**. 2010. Causes of embryonic death in captive whooping cranes. Proceedings of the North American Crane Workshop, 11: 192 (abstract).
- Sim, R. R. and **B. K. Hartup**. 2010. A retrospective serological survey for infectious bursal disease virus in free-ranging sandhill cranes in south-central Wisconsin. Proceedings of the North American Crane Workshop, 11: 193 (abstract).
- Hartup, B. K.**, M. G. Spalding, N. J. Thomas, G. A. Cole, and Y. J. Kim. 2010. Thirty years of mortality assessment in whooping crane reintroductions: Patterns and implications. Proceedings of the North American Crane Workshop, 11: 204 (abstract).
- Schwarz, T., M. E. Pinkerton, C. Kelley, and **B. K. Hartup**. 2009. Computed tomographic features of respiratory anatomy and pathology of the whooping crane (*Grus americana*). Vet Radiol Ultrasound 50: 452 (abstract).
- Cole, G. A., N. J. Thomas, M. Spalding, R. Stroud, R. Urbanek, and **B. K. Hartup**. 2009. Postmortem evaluation of reintroduced migratory whooping cranes in eastern North America. Journal of Wildlife Diseases 45(1): 29-40.

- Hartup, B. K.** 2008. Surveillance for West Nile virus at the International Crane Foundation 2000-2004. Proceedings of the North American Crane Workshop 10: 111-114.
- Hartup, B. K.** and H. S. Sellers. 2008. Serological survey for Infectious Bursal Disease Virus Exposure in Captive Cranes. Proceedings of the North American Crane Workshop 10: 173-174 (abstract).
- Kelley, C. and **B. K. Hartup**. 2008. Risk factors associated with developmental limb abnormalities in captive whooping cranes. Proceedings of the North American Crane Workshop 10: 119-124.
- Hansen, C. H., **B. K. Hartup**, O. D. Gonzalez, D. E. Lyman, and H. Steinberg. 2008. West Nile encephalitis in a captive Florida sandhill crane. Proceedings of the North American Crane Workshop 10: 115-118.
- Spalding, M., H. S. Sellers, **B. K. Hartup** and G. H. Olsen. 2008. A wasting syndrome in released whooping cranes in Florida associated with infectious bursal disease titers. Proceedings of the North American Crane Workshop 10: 176 (abstract).
- Sample, S., G. Cole, G., J. Paul-Murphy, **B. K. Hartup**, V. Clyde, H. J. Seeherman, and S. Schaefer. 2008. Clinical use of a recombinant human bone morphogenic protein-2 in a whooping crane (*Grus americana*). Veterinary Surgery 37: 552-557.
- Hartup, B. K.**, A. Oberc, B. Stott-Messick, A. K. Davis, and E. C. H. Swarthout. 2008. Blood parasites of house finches (*Carpodacus mexicanus*) from Georgia and New York. Journal of Wildlife Diseases 44(2): 469-474.
- Hartup, B. K.** and C. A. Schroeder. 2006. Protein electrophoresis in cranes with presumed insect bite hypersensitivity. Veterinary Clinical Pathology 35(2): 226-230.
- Hartup, B.**, J. Langenberg, G. Olsen, M. Spalding and K. Miller. 2006. Health management for the re-introduction of eastern migratory whooping cranes (*Grus americana*). Wildlife Rehabilitation 23:13-16.
- Hartup, B. K.**, N. M. Czekala, G. H. Olsen and J. A. Langenberg. 2005. Fecal corticoid monitoring in whooping cranes trained to follow ultralight aircraft. Proceedings of the North American Crane Workshop 9: 247 (abstract).
- Hayes, M. A., **B. K. Hartup**, J. M. Pittman and J. A. Barzen. 2005. Capture of sandhill cranes using alpha-chloralose. Proceedings of the North American Crane Workshop 9: 248 (abstract).
- Hartup, B. K.**, C. Kelley, Li F., and Chinese Assoc. of Zool. Gardens. 2005. China Captive Crane Health Survey 2004. In: Crane Research in China. Wang Qi-Shan and Li Feng-Shan eds. Yunnan Education Publishing House, Kunming, P. R. China. Pp. 169-178.
- Hanley, C. S., N. J. Thomas, J. Paul-Murphy and **B. K. Hartup**. 2005. Exertional myopathy in whooping cranes (*Grus americana*) with prognostic guidelines. Journal of Zoo and Wildlife Medicine 36:489-497.
- Dhondt, A. A., S. Altizer, E. G. Cooch, A. K. Davis, A. Dobson, M. J. L. Driscoll, **B. K. Hartup**, D. M. Hawley, W. M. Hochachka, P. R. Hosseini, C. S. Jennelle, G. V. Kollias, D. H. Ley, E. C. H. Swarthout and K. V. Sydenstricker. 2005. Dynamics of a novel pathogen in an avian host: Mycoplasmal conjunctivitis in house finches. Acta Tropica 94: 77-93.
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- Hartup, B. K.** 2000. The Epidemiology of Mycoplasmal Conjunctivitis in House Finches (*Carpodacus mexicanus*). PhD dissertation, Cornell University. 120 p.
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- Woodyatt, K. and **B. K. Hartup**. 1995. Post-release movements and behaviors of captive-reared raccoons (*Procyon lotor*). *Wildlife Rehabilitation* 13:183-194.
- Hartup, B. K.** 1994. Frostbite injury in wildlife: Recognition and therapy. *Wildlife Rehabilitation* 12:29-33.
- Hartup, B. K.** 1994. Community conservation in Belize: Demography, resource use and attitudes of participating landowners. *Biological Conservation* 69:235-241.
- Hartup, B. K.** and R. H. Horwich. 1994. Early parental care and chick development in a cross-fostering trial with white-naped (*Grus vipio*) and greater sandhill (*Grus canadensis tabida*) cranes. *Bird Behaviour* 10: 21-27.
- Hartup, B. K.** 1989. An Alternative Conservation Model for Tropical Areas: The Community Baboon Sanctuary in Belize. M.Sc. thesis, University of Wisconsin-Madison. 163 p.

Dr. Gregory Lewbart

According to Dr. Lewbart's website:

I am a veterinarian and professor of aquatic animal medicine at the North Carolina State University College of Veterinary Medicine (NCSU-Curriculum vitaeM) where I have taught since 1993. I graduated from Gettysburg College in 1981 with a B.A. in biology, received an M.S. in biology with a concentration in marine biology from Northeastern University in 1985, and graduated from the University of Pennsylvania School of Veterinary Medicine in 1988. I worked for a large importer and wholesaler of tropical fishes for over 4 years before joining the faculty at the NCSU-Curriculum vitaeM. I'm a diplomate of the American College of Zoological Medicine and was named "2007 Exotic DVM of the Year" by the Zoological Medicine Network/ Exotic DVM Magazine.

I'm an author on over 100 popular and scientific articles about invertebrates, fishes, amphibians and reptiles and speak nationally and internationally on these subjects. I have also authored or co-authored 20-plus book chapters on aquatic animal diseases and treatment and have edited or co-edited four veterinary books: Self Assessment Colour Review of Ornamental Fish (Manson Publishing and ISU Press, 1998); Invertebrate Medicine (Blackwell Publishing, 2006; 2012); Rapid Review of Exotic Animal Medicine and Husbandry (Manson Publishing, 2008).

I've written two novels, Ivory Hunters (1996) and Pavilion Key (2000), Krieger Publishing, Malabar, Florida. Both stories are scientific mysteries that raise important issues about wildlife conservation and man's exploitation of the environment. I had the opportunity to explore southwestern Florida, where my novels are set, while living and working in Naples for several years. My wife Diane Deresienski (also a veterinarian) and I live in downtown Raleigh with our assorted pets.

Dr. Douglas Mader, MS, DVM, DIPLOMATE, ABVP (CA)

We were unable to find any publications or other information to suggest that Dr. Mader has experience in field biology, has worked with birds except in the context of a small animal practice that sees pet birds, or in the use of thoracic compression.

According to his website, Dr. Mader has special interests in:

Internal Medicine

Endoscopy, Ultrasound

Soft Tissue, Orthopedic and Laser Surgery

Exotic Animal Medicine

Wildlife

Dr. Mader received a Master's degree in Animal Behavior in 1982 and Doctor of Veterinary Medicine degree from the University of California, Davis in 1986. After graduation, Dr. Mader completed a residency in Primate and Zoo animal medicine. During his veterinary and residency training, Dr. Mader's areas of special interest were in the pharmacology of antibiotics in exotic pets. While living in Southern California, he owned a small animal/exotic practice for nine years.

Dr. Mader is the consulting veterinarian for the Key West Aquarium, the Marathon Sea Turtle Hospital, The Key West Butterfly Conservancy, the Theater of the Sea and the Monroe County (Sheriff Animal Farm) Zoo. Dr. Mader is an internationally acclaimed expert in Exotic Animal Medicine and travels over 50,000 miles every year teaching at Veterinary Conferences, Veterinary Schools and Specialty courses. Dr. Mader is also on the review/advisory boards for several scientific journals. He has published hundreds articles in scientific and veterinary journals, national magazines, newspapers, book chapters and is the author/editor of the Saunder's publication Reptile Medicine and Surgery. Dr. Mader is a Fellow in the Royal Society of Medicine. Currently, Dr. Mader is the Immediate Past-President of the prestigious North American Veterinary Conference, the world's largest veterinary continuing education conference.

Dr. Patrick J. Morris, DVM, Dipl. ACZM

Dr. Morris is the director of veterinary services at the San Diego Zoo. As such, he no doubt has experience with a very wide range of wildlife in captivity. We have been unable to find his Curriculum vitae and so have no direct information to suggest that he has had experience in field biology or with thoracic compression.

A search for publications reveals no research to small birds, euthanasia of small birds, or thoracic compression.

Morris, Patrick J. 2008. Repair of horn and frontal bone avulsion in a forest buffalo (*Syncerus caffer nanus*) with a polymethylmethacrylate dressing. *Journal of Zoo and Wildlife Medicine* 39:99-102.

Howard L.L., Kearns, K.S., Clippinger, T.L., Larsen, R.S., **Morris P.J.** 2004. Chemical immobilization of rhebok (*Pelea capreolus*) with carfentanil-xylazine or etorphine-xylazine. *Journal of Zoo and Wildlife Medicine* 35:312-9.

Sutherland-Smith, M., Campos, J.M., Cramer, C., Thorstadt, C., Toone, W., Morris, P.J. 2004. Immobilization of Chacoan peccaries (*Catagonus wagneri*) using medetomidine, Telazol, and ketamine. *Journal of Wildlife Disease* 40:731-6.

Howard, L.L., Turner, L.M., Stalis, I.H., **Morris, P.J.** 2005. Serum gamma-glutamyltransferase as a prognostic indicator of neonatal viability in nondomestic ruminants. *Journal of Zoo and Wildlife Medicine* 36(2):239-44.

Greenberg, M.J., Janssen, D.L., Jamieson, S.W., Rothman, A., Frankville, D.D., Cooper, S.D., Kriett, J.M., Adsit, P.K., Shima, A.L., **Morris, P.J.**, Sutherland-Smith, M. 1999. Surgical repair of an atrial septal defect in a juvenile Sumatran orangutan (*Pongo pygmaeus sumatraensis*). *Journal of Zoo and Wildlife Medicine* 30(2):256-61.

Bird Working Group

Dr. Cheryl Greenacre, Chair
Dr. Laurel Degernes
Dr. Laurie Hess
Dr. Kemba Marshall
Dr. James Morrisey
Dr. Joanne Paul-Murphy

Dr. Cheryl Greenacre, Chair

<http://www.vet.utk.edu/faculty/greenacre.php>

Dr. Greenacre's credentials evidence no experience working in field conditions and no research into or experience with thoracic compression.

Associate Professor of Avian & Zoological Medicine
Department of Small Animal Clinical Sciences
College of Veterinary Medicine
The University of Tennessee

Education

DVM - University of Georgia, 1991
Avian and Zoological Internship and Residency - UGA
Microsurgical Training and Certification - Emory University, Atlanta

Board Certification

American Board of Veterinary Practitioners - Avian Practice Specialty

Clinical Interests

microsurgery, neoplasia, infectious diseases

Research Interests

Avian thyroid diseases and testing
Rabbit Encephalitozoon cuniculi infections and treatment

Professional Societies

Association of Avian Veterinarians (Veterinary School Liaison)
American Association of Reptilian and Amphibian Veterinarians
American Veterinary Medical Association
Georgia and California Veterinary Medical Associations
American Board of Veterinary Practitioners
Society of Microsurgical Specialists
American Association of Veterinary Clinicians
Phi Zeta

Publications

- Lyons, J.A., Newman, S.J., **Greenacre, C.B.**, and J. Dunlap. 2012. A Gastric Neuroendocrine Carcinoma Expressing Somatostatin in a Bearded Dragon (*Pogona vitticeps*). Journal of Veterinary Diagnostic Investigation 22:316-320.
- Bemis, D.A., **Greenacre, C.B.**, Bryant, M.J., R.D. Jones, and S.A. Kania. 2011. Isolation of a variant *Porphyromonas sp* from polymicrobial infections in central bearded dragons (*Pogona vitticeps*)" Journal of Veterinary Diagnostic Investigation 23.1: 99-104.
- Egger, C.M., Souza, M.J., **Greenacre, C.B.**, Cox, S.K., and B.W. Rohrbach. 2009. Effect of intravenous administration of tramadol hydrochloride on the minimum alveolar concentration of isoflurane in rabbits. American Journal of Veterinary Research 70.8: 945-949.
- Klaphake, E., Fecteau, K., deWit, M., **Greenacre, C.**, Grizzle, J., M.P., Zagaya, N., L. Kim Abney, L.K., and J. Oliver. 2009. Effects of leuprolide acetate on selected blood and fecal sex hormones in Hispaniolan Amazon parrots (*Amazona ventrais*). Journal of Avian Medicine and Surgery 23.4: 253-262.
- Yarbrough, J., **Greenacre, C.**, Souza, M.J., and S.K. Cox. 2009. LC determination of tramadol, M1, M2, M4, and M5 in plasma. Chromatographia 71.5/6:523-527.
- Greenacre, C.**, Flatland, B., Souza, M.J., and M. M. Fry. 2008. Comparison of avian biochemical test results with Abaxis VetScan and Hitachi 911 analyzers. Journal of Avian Medicine and Surgery 22.4: 291-299.
- Souza, M.J. Newman, S.J., **Greenacre, C.B.**, Avenell, J.S., Wall, J.S., Phillips, J.C., Fry, M.M., Donnell, R.L., and G B. Daniel. 2008. Diffuse intestinal T-cell lymphosarcoma in a yellow-naped Amazon parrot (*Amazona ochrocephala auropalliata*). Journal of veterinary diagnostic investigation 20.5: 656-660.
- Souza, M.J., **Greenacre, C.**, and S. Cox. 2008. Pharmacokinetics of orally administered tramadol in domestic rabbits (*Oryctolagus cuniculus*). American Journal of Veterinary Research 69.8: 979-982.
- Keller, R.L, Hendrix, D., and **C. Greenacre**. 2007. Shope fibroma virus keratitis and spontaneous cataracts in a domestic rabbit. 2007. Veterinary Ophthalmology 10.3: 190-195.
- Klaphake, E., Schumacher, J., **Greenacre, C.**, Jones, M.P., and N. Zagaya. 2006. Comparative anesthetic and cardiopulmonary effects of pre- versus postoperative butorphanol administration in Hispaniolan Amazon parrots (*Amazona ventralis*) anesthetized with sevoflurane" Journal of Avian Medicine and Surgery 20.1: 2-7.
- Greenacre, C.**, Takle, G., Schumacher, J., Klaphake, E.K., and R.C. Harvey. 2006. Comparative antinociception of morphine, butorphanol, and buprenorphine versus saline in the green iguana (*Iguana iguana*) using electrostimulation" Journal of Herpetological Medicine and Surgery 16.3 : 88-92.
- Greenacre, C.B.** and A.L. Witzel. 2004. Physiologic responses of Amazon parrots (*Amazona* species) to manual restraint" Journal of Avian Medicine and Surgery 18.1: 19-22.
- Greenacre, C.B.**, Lusby A. 2004. Increases in temperature and heart rate during brief restraint of Amazon parrots. Journal of Avian Medicine and Surgery.
- Greenacre, C.B.**, 2003. Anaphylactic reactions associated with distemper and rabies vaccination of domestic ferrets. Journal of the American Veterinary Medical Association.
- Wilson H. and **Greenacre, C.B.** 2003. Suspected pseudohypoparathyroidism in a domestic ferret. Journal of the American Veterinary Medical Association 222(8):1093-6.
- Greenacre, C.B.**, Young, D., Behrend, E.N., Wilson G.H. 2001. Validation of a novel high

sensitivity radioimmunoassay procedure for measurement of total thyroxine concentration in psittacine birds and snakes. *American Journal of Veterinary Research* 62(11):1750-4.

Ritchie, B.W., Vaughn, S.B., Leger, J.S., Rich, G.A., Rupiper, D.J., Forgey, G., **Greenacre, C.B.**, Latimer, K.S., et al. Use of an inactivated virus vaccine to control polyoma virus outbreaks in nine flocks of psittacine birds. 1998. *Journal of the American Veterinary Medical Association* 212(5):685-90.

Stiles J., Didier, E., Ritchie, B., **Greenacre C.B.**, et al. Encephalitozoon cuniculi in the lens of a rabbit with phacoclastic uveitis: confirmation and treatment. 1997. *Veterinary Comparative Ophthalmology* 7(4):233-8.

Dr. Laurel Degernes, DVM, MPH, Dipl. ABVP

Dr. Degernes has worked with wild birds but apparently only raptors, waterfowl, and seabirds – all too large for which thoracic compression would be appropriate. She has also worked in field conditions, but apparently only at a stationary field site where the logistics were organized and supported by a large federal agency effort. The field site had large weatherports to serve as surgical suites and had solar energy. One of her papers describes this situation in some detail and goes on to say, “I vividly recall a conversation that I had with Dan concerning veterinarians working with wildlife biologists, and how there have been strained relationships in the past when egos got in the way of the 2 groups working together as a united team. Basically, the clear message was that each group has important contributions to bring to a project, none of which are more or less important to the overall success. In other words, veterinarians and biologists each have their areas of expertise, and veterinarians should not presume that they know more than biologists about a particular species.” It appears that Dr. Degernes has no experience with the more common conditions of remote field work, has not worked with small birds in such conditions, and has apparently had no reason to use thoracic compression as a means of euthanasia.

Education

DVM, University of Minnesota, 1981
MPH in Epidemiology, University of North Carolina,
Chapel Hill, 2005

Specialty

Companion and wild avian medicine, surgery, and epidemiology.

Professional Experience & Qualifications

Diplomate, American Board of Veterinary Practitioners, Avian Practice 1993, recertified 2002
Associate Professor, Dept. of Clinical Sciences, Curriculum vitaeM-NCSU, 1999-present
Assistant Professor, Dept. of Clinical Sciences, Curriculum vitaeM-NCSU, 1992-1999
Residency, Exotic and Wild Avian Medicine, North Carolina State University, 1990-1992
Staff Veterinarian, The Raptor Center, University of Minnesota, 1986-1990
Internship, Raptor Medicine and Surgery, The Raptor Center, University of Minnesota, 1985-86
Private practice in Minnesota 1981-85

Research Area

My research interests include epidemiologic investigation of companion and wild avian diseases and clinical research in avian critical care management and surgery.

Selected Publications

- Degernes, L.A.** 2008. Anesthesia for companion birds. *Compendium on Continuing Education for the Practicing Veterinarian* 30(10):E1-11.
- Degernes, L.A.** 2008. Waterfowl toxicology: a review. In: LaBonde J., ed. *Veterinary Clinics of North America: Exotic Animal Practice*. Philadelphia: Elsevier Saunders 11(2):283-300.
- Degernes, L.A.** 2007. Veterinary contributions to wildlife biology: participation in avian field studies in Alaska. *Journal of Avian Medicine and Surgery* 21(1):63-68.

- Degernes, L.**, Heilman, S., Trogdon, M., Jordan, M., Davison, M., Kraege, D., Correa, M., and Cowen, P. 2006. Epidemiologic investigation of lead poisoning in trumpeter and tundra swans in Washington State USA, 2000-2002. *Journal of Wildlife Diseases* 42(2):345-358.
- Degernes, L.A.**, Nettifee-Osborne, J. 2006. A model for teaching raptor medicine in the veterinary curriculum. *Journal of Veterinary Medical Education* 33(3):365-372.
- Souza, M.J., **L.A.** 2005. Mortality Due to Aspergillosis in Wild Swans in Northwest Washington State, 2000-2002. *Journal of Avian Medicine and Surgery* 19(2): 98-106.
- Souza, M.J., Fields, E.L., **Degernes, L.A.** 2004. Thoracic and Pelvic Limb Fracture and Luxation Management in Raptors: a Five Year Retrospective Study. *Journal of Wildlife Rehabilitation* 27 (3-4): 5-13.
- Degernes, L.A.**, Harms, C.A., Golet, G.H., Mulcahy, D.M. 2002. Anesthesia and liver biopsy techniques for Pigeon Guillemots (*Cepphus columba*) suspected of exposure to crude oil in marine environments. *Journal of Avian Medicine and Surgery* 16 (4):291-99.
- Degernes, L.**, Kittelson, S., Linck, M., Manthey, P. 2002. Survival and reproductive success of trumpeter swans after treatment for lead poisoning. *Waterbirds* 25 (Special Publication 1):368-374.
- Edling, T.M., **Degernes, L.A.**, Flammer, K., Horne, W.A. 2001. Capnographic monitoring of anesthetized African grey parrots receiving intermittent positive pressure ventilation. *Journal of the American Veterinary Medical Association* 219(12):1714-1718.
- Degernes, L.A.**, Feduccia, A. 2001. Tenectomy of the supracoracoideus muscle to deflight pigeons (*Columba livia*) and cockatiels (*Nymphicus hollandicus*). *Journal of Avian Medicine and Surgery* 15(1):10-16.
- Degernes, L.A.**, Crosier, M.L., Harrison, L.D., Dennis, P.M., Diaz, D.E. 1999. Autologous, homologous, and heterologous red blood cell transfusions in cockatiels (*Nymphicus hollandicus*). *Journal of Avian Medicine and Surgery* 13(1):2-9.
- Degernes, L.A.**, Harrison, L.D., Smith, D.W., Newton, H., Ross, C.E., Diaz, D.E. 1999. Homologous and heterologous red blood cell transfusions within the genus *Aratinga*. *Journal of Avian Medicine and Surgery* 13(1):10-14.
- Degernes, L.A.**, S.C. Roe, C.F. Abrams. 1998. Holding power of different pin designs and pin insertion methods in avian cortical bone. *Veterinary Surgery* 27:301-306.

Laurie Hess, DVM

We have been unable to find a Curriculum vitae for Dr. Hess, but the narrative description of her education and experience are such that it appears that she is a practitioner specializing in the care of pets. It would appear that she has no experience working with wild birds in field conditions and has had no occasion to use thoracic compression as a means of euthanasia.

<http://www.lauriehessdvm.com/about-dr-hess/>

Dr. Hess is board-certified by the American Board of Veterinary Practitioners in avian (bird) practice. She served as the President of the Association of Avian Veterinarians from 2009-2010 and treasurer from 2012-2013. She is also an active member of the Association of Exotic Mammal Veterinarians and the Association of Reptilian and Amphibian Veterinarians. After graduating summa cum laude, Phi Beta Kappa from Yale University, Dr. Hess received her veterinary medical degree from Tufts. She then completed a one-year internship and a two-year residency in avian and exotic pet medicine and surgery at the world-renowned Animal Medical Center in New York City. At the Animal Medical Center, she was a staff member on the Avian & Exotic Pet Service for more than a decade and ultimately served as head of this service. Dr. Hess has lectured both nationally and internationally about exotic pet care and has published numerous articles and book chapters on birds and other exotic species. She is especially interested in exotic pet nutrition. In the late 1990's, she completed groundbreaking nutrition research on the importance of pelleted diets in birds. She presented these findings both in Europe and in the U.S. and later published the research in 2002.

Dr. Hess has been a guest exotic pet expert on Animal Planet's exotic pet series "Little Pets 101" and "Peculiar Pets 101." She has also appeared on Animal Planet in Drs. Foster and Smith's TV series, "Faithful Friends," and has been a guest on the "Martha Stewart Show" discussing the importance of educating yourself about exotic pets before you get one. Dr. Hess has also appeared on CBS TV's morning show, "The Doctors," where she discussed exotic pets for people with allergies, as well as on Fox TV's "Inside Edition," where she talked about bird behavior. In addition, Dr. Hess has been a guest on "Pet Keeping with Marc Morrone," the WPIX Morning News in New York City, and FOX TV's morning show, "Good Day NY," where she highlighted the benefits of exotic animals as pets. Dr. Hess has been a featured veterinarian on the popular CBS TV news magazine show, "48 Hours," and she appeared weekly for several years as the "Exotic Pet Vet" on the New York/New Jersey/Connecticut cable station, Regional News Network (RNN) TV. Dr. Hess currently talks about bird health on her monthly radio show, "Bird's Eye View," on www.petliferadio.com and makes guest appearances regularly on radio stations throughout the U.S. and Canada discussing exotic pet issues. Dr. Hess has written several articles about exotic pets in syndicated columns nationwide and in well-known exotic pet magazines such as Bird Talk, Birds USA, and Critters Magazine. She also blogs regularly about exotic pet topics on well-known pet websites, including www.birdchannel.com, and www.petconnection.com. She is a senior editor of the Journal of Avian Medicine and Surgery, as well as a guest editor of the Journal of Exotic Pet Medicine, Veterinary Clinics of North America (Exotic Animal Series) and Exotic DVM Magazine. She also has been published in internationally recognized veterinary journals including the Journal of

the American Veterinary Medical Association and Veterinary Record. In 2010, Dr. Hess founded the Veterinary Center for Birds & Exotics (www.avianexoticsvet.com) in Bedford Hills, NY, where she treats only birds and other exotic pets such as ferrets, rabbits, guinea pigs, chinchillas, small rodents, reptiles, amphibians, and less commonly seen exotic species, including sugar gliders, hedgehogs, pot-bellied pigs, wallabies, kinkajous, and fennec foxes (no cats or dogs). The Veterinary Center is the only Animal Hospital Association of America-accredited bird and exotic specialty hospital in NY and only 1 of 3 in the U.S. At the Veterinary Center, Dr. Hess provides full medical, surgical, and dental care for exotic pets, as well as boarding and nutritional and behavioral counseling, in a specialized hospital that is as unique as the species she treats.

Dr. Kemba Marshall

We have been unable to locate a Curriculum vitae for Dr. Marshall. It appears that she is an advisor to the PetSmart retail pet store chain, which states on its website that “For questions on birds or small pets, Dr. Kemba is our expert. She’s board certified in avian medicine and also oversees care for the small pets we sell including hamsters, gerbils and guinea pigs. Besides being our expert on all things that fly or burrow, Dr Kemba is a pet parent to a variety of fish.” We have found no evidence that Dr. Marshall has experience with wild birds in a field setting or with thoracic compression.

publications

James Morrisey, DVM

We could find no evidence that Dr. Morrisey has experience working with wild birds in the field setting or that he has experience with or has conducted research into thoracic compression.

<http://www.vet.cornell.edu/faculty/Morrisey/>

Education and Training

New York State College of Veterinary Medicine, Cornell University, Ithaca, NY DVM, 1992

Internship, Kansas State University, Manhattan, KS, 1994-95

Residency, Animal Medical Center, New York, NY, 1995-97

Board Certification

American Board of Veterinary Practitioners (Avian Practice)

Research/Clinical Interests

Avian Transfusion Medicine

Coagulation Parameters

Infectious Diseases of Rabbits

Selected Publications

Morrisey, J. K., Murphy, J. P., Darien, B. Standardization of Prothrombin Times in Two Psittacine Species. *J. Avian Med Surg. J Av Med Surg* 17(2) 2003. pp 72-74.

Morrisey, J. K. Transfusion Medicine in Exotic Species. In: Schalm's Veterinary Hematology 5th Ed., Feldman B. F., Zinkl J. G., Jain N. C. (eds.) In press.

Morrisey, J. K. Gastrointestinal diseases of Psittacines. *Seminars in Avian Exotic Pet Med.* Vol 8(2), pp. 66-74, 1999.

Ivey E. I., **Morrisey, J. K.** Physical Examination and Preventative Medicine in the Domestic Ferret. In: Orcutt, C. J. (ed). *Veterinary Clinics of North America, Exotic Practice.* April 1999. pp. 471-494.

Morrisey, J. K., Ramer, J. Ferrets: Clinical Pathology and Sample Collection. In: Reavill, D. R. (ed). *Veterinary Clinics of North America, Exotic Practice.* September 1999, pp. 553-564.

Carpenter J. W., Mashima T. Y., Rupiper D. J. (eds.) **Morrisey, J. K.** (Contributing Author) Exotic Animal Formulary. W. B. Saunders. **Morrisey, J. K.** and R. A. Bennett. Avian soft tissue surgery. In: *Current Techniques in Small Animal Surgery*, 4th Ed., J. Bojrab (ed). pp. 747-753, 1998.

Morrisey, J. K. Diseases of the avian upper respiratory tract. *Seminars in Avian and Exotic Anim. Med.* Vol 6(4), pp.195-200, 1997.

Morrisey, J. K. Avian emergency medicine and critical care. In: Hoefler, H. (ed). *Practical Avian Medicine.* pp. 53-57, 1997.

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Dr. Paul-Murphy received her veterinary degree from Cornell University in 1982, she completed a residency in Zoological Medicine at University of California, Davis and became board certified in zoological medicine. She was Chief of Service at UC Davis from 1985-1987, then became Director of Veterinary Services at the California Primate Research Center until 1991. She was responsible for starting the first Zoological Medicine Service at the University of Wisconsin School of Veterinary Medicine and was the Chief of Service at UW from 1992-2008. She returned to UC Davis in 2008 as a Professor in the Companion Avian and Exotic Pet Medicine Program. Dr. Paul-Murphy has experience in medicine and surgery with zoological collections and companion exotic animals, wildlife rehabilitation and conservation medicine. She has a special interest in imaging techniques and analgesia of birds, reptiles, fish and exotic small mammals.

Representative publications (these comprise probably no more than two-thirds of Dr. Paul-Murphy's publications)

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