

Mitchell Bush: Curriculum Vitae

Education

University of California, Davis, B.S. 1963, University of California, Davis, DVM 1965
(Highest Honors)

Angell Memorial Animal Hospital, Boston, MA 1965–1967

Positions Held

Johns Hopkins Medical School, Baltimore, MD:

Instructor, Surgery and Animal Medicine, 1967–1969

Assistant Professor, Department of Comparative Medicine, 1969–present

Assistant Professor, Department of Radiology, 1971–1993

Veterinarian, Baltimore Zoo, 1967–1972

National Zoological Park, Smithsonian Institution:

Veterinarian, Office of Animal Health, Washington, DC 1972–1975

Chief, Department of Animal Health, National Zoological Park, 1975–1994

Chief of Veterinary Services—Conservation and Research Center, Smithsonian Institution,
Front Royal, Virginia 1994–2007

Senior Veterinarian Emeritus—Center for Species Survival, Smithsonian Conservation
Biology Institute, National Zoological Park 2007–Ongoing

Veterinary Specialist—Zoological Parks Organization, Thailand 2007–2009

Adelaide Zoo—March 2011 Veterinarian; June 2012 Head of Veterinary Department

Visiting Scientist—Kruger National Park, South Africa

International Field Studies—Panama, Brazil, South Africa, Namibia, Tanzania, Kenya, Malawi,
India, and Australia

Awards

Emil Dolensek Award 1994

Alumni Achievement Award 2003 School of Veterinary Medicine,
University of California, Davis



Member

American Veterinary Medical Association
American Association of Zoo Veterinarians
Chairman, Research Committee 1978–79
Vice President 1983–84
President 1984–85
American College of Zoological Medicine
Charter Diplomat 1983
Emeritus Status 2008

Teaching Activities

Post-graduate clinical internship in zoological medicine (1974–present) 17 alumni;
supervise the training of graduate veterinarian in clinical aspect of zoological medicine;
training period 15 months–2 years
Pre-doctoral training of veterinary students (externs and preceptors) 1972–2007
International training in basic zoological medicine and zoo biology in the following countries:
Namibia, India, Malaysia, Thailand, Russia, Burma, Tanzania, and Papua New Guinea

Publications

- Bush, M.; Moore, J.; and Neeley, L. M.: “Sedation for transportation of a Lowland Gorilla.”
J. Amer. Vet. Med. Assoc. 159(5):546–548, 1971.
- Bush, M.; Lemkin, R.; and Moore, J. A.: “Prolapsed uterus in a pygmy hippopotamus.”
J. Amer. Vet. Med. Assoc. 161(6): 651, 1972.
- Bush, M.; Pieroni, D. R.; Goodman, D. G.; White, R. I.; Thomas, V.; and James, A. E.:
“Tetralogy of Fallot in cat.” *J. Amer. Vet. Med. Assoc.* 161(12):1679–1686, 1972.
- Zook, B. C.; Sauer, R. M.; Bush, M.; and Gray, C. W.: “Lead poisoning in zoo-dwelling
primates.” *Amer. J. Phys. Anthropol.* 38(2):415–424, 1973.
- Bush, M.; Montali, R. J.; Gray, C. W.; and Neeley, L. M.: “Caesarean section in a Bongo
antelope.” *J. Amer. Vet. Med. Assoc.* 163(6):552–553, 1973.
- Squire, R. A.; Bush, M.; Melby, E. C.; Neeley, L. M.; and Yarborough, B.: “Clinical and
pathologic study of canine lymphoma: Clinical staging, cell classification and therapy.”
J. Natl. Cancer Inst. 51(2):565–574, 1973.
- Bush, M.; Montali, R. J.; Neeley, L. M.; Gray, C. W.; and James, A. E.: “Pyometra with
peritonitis in a lioness (*Panthera leo*).” *J. Zoo Anim. Med.* 5(1):21–23, 1974.

Publications continued

- Montali, R. J.; Bush, M.; Sauer, R. M.; Gray, C. W.; and Xanten, W. A.: "Spinal ataxia in Zebras: Comparison with the wobbler syndrome of horses." *Vet. Pathol.* 11:68–78, 1974.
- Bush, M., and Weeks, S.: "Sexing ratites." *Internat. Zoo Yrbk.* 14:141, 1971.
- Bush, M.; Sauer, R. M.; Gray, C. W.; Montali, R. J.; and James, A. E.: "Hypertrophic pulmonary osteoarthropathy in a lioness (*Panthera leo*)." *J. Amer. Vet. Radiol. Soc.* 15(2):84–90, 1974.
- Bush, M.; Heller, R. M.; Gray, C. W.; and James, A. E.: "Radiological practice in exotic animals." *Applied Radiol.* 3(5):23–27, 1974.
- Gray, C. W.; Bush, M.; and Beck, C. C.: "Clinical experience using CI-744 in chemical restraint and anesthesia of exotic specimens." *J. Zoo Anim. Med.* 5(4):12–21, 1974.
- Bush, M., and Gray, C. W.: "Dental prophylaxis in carnivores." *Internat. Zoo Yrbk.* XV, p. 223, 1975.
- Bush, M., and Teeple, E.: "Barbiturate toxicity in Lions." *J. Zoo Anim. Med.* 6(3):25, 1975.
- Bush, M., and James, A. E.: "Some considerations of practice of orthopedics in exotic animals." *J. Amer. Anim. Hosp. Assoc.* 11(5):587–594, 1975.
- Bush, M.; Seal, U. S.; Smith, E.; Lewis, M. D.; and Bush, M.: "Neonatal anemia and growth in Sable Antelope (*Hippotragus niger*)." Proceedings: XVIII International Symposium on Diseases of Zoo Animals, Innsbruck, Austria, pp. 361–379, 1979.
- Ensley, P. K., and Bush, M.: "Case report: Rectal mucosal prolapse in an Indian Rhinoceros (*Rhinoceros unicornis*)." *J. Zoo Anim. Med.* 7(2):22–25, 1976.
- Bush, M.; Heese, D. W.; Gray, C. W.; and James, A. E.: "Surgical repair of tusk injury (pulpectomy) in an adult, male Forest Elephant (*Loxodonta cyclotis*)." *J. Amer. Dental Assoc.* 93:371–375, 1976.
- Bush, M.; Ensley, P. K.; Mehren, K.; and Rapley, W.: "Immobilization of Giraffes with xylazine and etorphine hydrochloride." *J. Amer. Vet. Med. Assoc.* 169(9):884–885, 1976.
- Montali, R. J.; Bush, M.; Thoen, C. O.; and Smith, E.: "Tuberculosis in captive exotic birds." *J. Amer. Vet. Med. Assoc.* 169(9):920–927, 1976.
- Bush, M., and Koch, S. A.: "Surgical correlation of a bilateral lens luxation in an African Lion." *J. Amer. Vet. Med. Assoc.* 169(9):987–988, 1976.
- Bush, M.; Montali, R. J.; Brownstein, D.; James, A. E.; and Appel, M. J.: "Vaccine-induced canine distemper in a Lesser Panda." *J. Amer. Vet. Med. Assoc.* 169(9):959–960, 1976.
- Bush, M.; Montali, R. J.; Novak, G. R.; and James, A. E.: "The healing of avian fractures: A histological xeroradiographic study." *J. Amer. Anim. Hosp. Assoc.* 12(6):768–773, 1976.



Publications *continued*

- Bush, M.; Hughes, J. L.; Ensley, P. K.; and James, A. E.: "Fracture repair in exotics using internal fixation." *J. Amer. Anim. Hosp. Assoc.* 12(6):746–753, 1976.
- Bush, M.: "External fixation of avian fractures." *J. Amer. Vet. Med. Assoc.* 171(9):943–946, 1977.
- Bush, M.; Custer, R.; Smeller, J. M.; and Bush, L. M.: "Physiologic measures of nonhuman primates during physical restraint and chemical immobilization." *J. Amer. Vet. Med. Assoc.* 171(9):866–869, 1977.
- Kennedy, S.; Crisler, J. P.; Smith, E. E.; and Bush, M.: "Lead poisoning in Sandhill Cranes." *J. Amer. Vet. Med. Assoc.* 171(9):955–958, 1977.
- Bush, M.; Custer, R.; Smeller, J.; Bush, L. M.; Seal, U. S.; and Barton, R.: "The acid-base status of Lions, (*Panthera leo*), immobilized with four drug combinations." *J. Wildl. Dis.* 14:102–109, 1978.
- Bush, M.; Smeller, J. M.; Charache, P.; and Arthur, R.: "Biological half-life of gentamicin in Gopher Snakes." *Amer. J. Vet. Res.* 39(1):171–173, 1978.
- Bush, M.; Wildt, D. E.; Kennedy, S.; and Seager, S. W. J.: "Laparoscopy in zoological medicine." *J. Amer. Vet. Med. Assoc.* 173(9):1081–1087, 1978.
- Bush, M., and Bovee, K. C.: "Cystinuria in a maned wolf." *J. Amer. Vet. Med. Assoc.* 173(9):1159–1162, 1978.
- Bush, M., and Kennedy, S.: "Ventriculostomy for removal of foreign bodies from Sarus Cranes." *J. Amer. Vet. Med. Assoc.* 173(9):1107–1110, 1978.
- Kennedy, S.; Montali, R. J.; James, A. E.; and Bush, M.: "Bone lesions in three Tree Kangaroos." *J. Amer. Vet. Med. Assoc.* 173(9):1094–1098, 1978.
- Bush, M.; Kennedy, S.; Wildt, D. E.; and Seager, S. W. J.: "Sexing birds by laparoscopy." *Internat. Zoo Yrbk.* 18: 197–199, 1978.
- Bush, M.; Montali, R. J.; Thoen, C. O.; Smith, E. E.; Peratino, W. S.; and Johnson, D. W.: "Avian tuberculosis—status of ante mortem diagnostic procedures." *Proceedings: First International Birds in Captivity Symposium*, pp. 185–195, 1978.
- Montali, R. J.; Bush, M.; and Smeller, J. M.: "The pathology of nephrotoxicity of gentamicin in snakes. A model for reptilian gout." *Vet. Pathol.* 16(1):108–115, 1979.
- Bush, M., and Gilroy, B. A.: "A bleeding technique from non-palpable vessels in anesthetized Two-toed Sloths (*Choloepus didactylus*)—plus hematologic data." *J. Zoo Anim. Med.* 10(1):26–27, 1979.
- Custer, R. S.; Bush, M.; and Carpenter, J. W.: "Pharmacokinetics of gentamicin in blood plasma of quail, pheasants, and cranes." *Amer. J. Vet. Res.* 40(6):892–895, 1979.

Publications *continued*

- Platz, C. C. Jr.; Seager, S. W. J.; and Bush, M.: "Collection and analysis of semen from a Black Rhinoceros." *J. Amer. Vet. Med. Assoc.* 175(9):1002–1004, 1979.
- Bush, M.; Seager, S. W. J.; and Wildt, D. E.: *Laparoscopy in zoo mammals. Animal Laparoscopy.* Harrison, R. M., and Wildt, D. E. (eds.), Williams & Wilkins Co., Baltimore, MD. Chapter 10, pp. 169–182, 1980.
- Bush, M.: *Antibiotic therapy in reptiles. Current Veterinary Therapy VII Small Animal Practice.* Kirk, R. W. (ed.), W.B. Saunders Co., Philadelphia, PA. pp. 647–649, 1980.
- Bush, M.; Custer, R. S.; and Smith, E. E.: "Use of dissociative anesthetics for the immobilization of captive bears: Blood gas, hematology and biochemistry values." *J. Wildl. Dis.* 16(4):481–489, 1980.
- Bush, M.; Montali, R. J.; Kleiman, D. G.; Randolph, J.; Abramowitz, M. D.; and Evans, R. F.: "Diagnosis and repair of familial diaphragmatic defects in Golden Lion Tamarins." *J. Amer. Vet. Med. Assoc.* 177(9):858–862, 1980.
- Cambre, R. C.; Green, D. E.; Smith, E. E.; Montali, R. J.; and Bush, M.: "Salmonellosis and Arizonosis in the reptile collection at the National Zoological Park." *J. Amer. Vet. Med. Assoc.* 177(9):800–803, 1980.
- Bush, M.; Custer, R. S.; and Whitla, J. C.: "Hematology and serum chemistry profiles for Giraffes (*Giraffa camelopardalis*): Variations with sex, age and restraint." *J. Zoo Anim. Med.* 11(4):122–129, 1980.
- Bovee, K. C.; Bush, M.; Dietz, J.; Jezyk, P.; and Segal, S.: "Cystinuria in the Maned Wolf of South America." *Science.* 212:919–920, 1981.
- Bush, M.; Locke, D.; Neal, L. A.; and Carpenter, J. W.: "Pharmacokinetics of cephalothin and cephalexin in selected avian species." *Amer. J. Vet. Res.* 42(6):1014–1017, 1981.
- Bush, M.; Povey, R. C.; and Koonse, H.: "Antibody response to an inactivated vaccine for rhinotracheitis, caliciviral disease, and panleukopenia in nondomestic felids." *J. Amer. Vet. Med. Assoc.* 179(11):1203–1205, 1981.
- Mann, P. C.; Bush, M.; Janssen, D. L.; Frank, E. S.; and Montali, R. J.: "Clinicopathologic correlations of tuberculosis in large zoo mammals." *J. Amer. Vet. Med. Assoc.* 179(11): 1123–1129, 1981.
- Bush, M.; Locke, D.; Neal, L. A.; and Carpenter, J. W.: "Gentamicin tissue concentration in various avian species following recommended dosage therapy." *Amer. J. Vet. Res.* 42(12):2114–2116, 1981.
- Wildt, D. E.; Chakraborty, P. K.; Cambre, R. C.; Howard, J. G.; and Bush, M.: "Laparoscopic evaluation of the reproductive organs and abdominal cavity content of the Lowland Gorilla." *Amer. J. Primatol.* 2:29–42, 1982.



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- Randolph, J.; Bush, M.; Abramowitz, M.; Kleiman, D.; and Montali, R. J.: "Surgical correction of familial diaphragmatic hernia of Morgagni in the Golden Lion Tamarin." *J. Pediatric Surg.* 16(3):396–400, 1981.
- Bush, M.; Custer, R. S.; Whitla, J. C.; and Smith, E. E.: "Hematologic values of captive Golden Lion Tamarins (*Leontopithecus rosalia*): Variations with sex, age, and health status." *Lab. Anim. Sci.* 32(3):294–297, 1982.
- Janssen, D. L., and Bush, M.: "The microcomputer as an aid to medical records management in a zoological park." *J. Amer. Vet. Med. Assoc.* 181(11):1381–1384, 1982.
- Janssen, D. L.; Bartz, C. R.; Bush, M.; Marchwicki, R. H.; Grate, S. J.; and Montali, R. J.: "Parvovirus enteritis in vaccinated juvenile Bush Dogs." *J. Amer. Vet. Med. Assoc.* 181(11):1225–1227, 1982.
- Platz, C. C. Jr.; Wildt, D. E.; Howard, J. G.; and Bush, M.: "Electroejaculation and semen analysis and freezing in the Giant Panda (*Ailuropoda melanoleuca*)." *J. Reprod. Fertil.* 67:9–12, 1983.
- O'Brien, S. J.; Wildt, D. E.; Goldman, D.; Merrill, C. R.; and Bush, M.: "The Cheetah is depauperate in genetic variation." *Science.* 221(4609):459–462, 1983.
- Wildt, D. E.; Bush, M.; Howard, J. G.; O'Brien, S. J.; Meltzer, D.; van Dyk, A.; Ebedes, H.; and Brand, D. J.: "Unique seminal quality in the South African Cheetah and a comparative evaluation in the domestic cat." *Biol. Reprod.* 29:1019–1025, 1983.
- Bush, M.: "External fixation to repair long bone fractures in larger birds. Current Veterinary Therapy." *Small Animal Practice.* Kirk, R. W. (ed.), W.B. Saunders Co., Philadelphia, PA, 1983.
- Wood, J. R.; Wood, F. E.; Critchley, K. H.; Wildt, D. E.; and Bush, M.: "Laparoscopy of the Green Sea Turtle, (*Chelonia mydas*)." *Br. J. Herpetol.* 6:323–327, 1983.
- Teare, J. A., and Bush, M.: "Toxicity and Efficacy of Ivermectin in Chelonians." *J. Amer. Vet. Med. Assoc.* 183(11):1195–1197, 1984.
- Howard, J. G.; Bush, M.; de Vos, V.; and Wildt, D. E.: "Electroejaculation, semen characteristics and serum testosterone concentrations of free-ranging African Elephants (*Loxodonta africana*)." *J. Reprod. Fertil.* 72:187–195, 1984.
- Bush, M.; Montali, R. J.; Phillips, L. G.; Citino, S. B.; Bock, G.; and Ruley, E. J.: "Anemia and renal failure in a Giant Panda." *J. Amer. Vet. Med. Assoc.* 185(11):1435–1437, 1984.
- Citino, S. B.; Bush, M.; and Phillips, L. G.: "Dystocia and fatal hyperthermic episode in a Giraffe." *J. Amer. Vet. Med. Assoc.* 185(11):1440–1442, 1984.
- O'Brien, S. J.; Nash, W. G.; Wildt, D. E.; Bush, M.; and Benveniste, R. E.: "A molecular solution to the riddle of the Giant Panda's phylogeny." *Nature* 317:140–144, 1985.

Publications *continued*

- Bush, M.; Montali, R. J.; Phillips, L. G.; Alvarado, T. P.; and Ravich, W. J.: "Acute hemorrhagic enteritis in a male Giant Panda." *Bongo*. Proceedings: International Symposium on the Giant Panda, 1984. Berlin 10, pp. 153–158, 1985.
- Bush, M.; Montali, R. J.; Phillips, L. G.; Citino, S. B.; Boch, G.; and Ruley, E. J.: "Anemia and renal failure in a Giant Panda (*Ailuropoda melanoleuca*)." *Bongo*. Proceedings: International Symposium on the Giant Panda, 1984. Berlin 10, pp. 139–152, 1985.
- O'Brien, S. J.; Roelke, M. E.; Marker, L.; Newman, A.; Winkler, C. W.; Meltzer, D.; Colly, L.; Everman, J.; Bush, M.; and Wildt, D. E.: "Genetic basis for species vulnerability in the Cheetah." *Science* 227:1428–1434, 1985.
- Bush, M.: "Laparoscopy and surgery." In: *Zoo and Wild Animal Medicine, 2nd ed.*, Murray E. Fowler (ed.), W.B. Saunders Co., Philadelphia, PA, pp. 254–261, 1986.
- O'Brien, S. J.; Wildt, D. E.; and Bush, M.: "The Cheetah in genetic peril." *Sci. Amer.* 254:84–92, 1986.
- Caro, T. M.; Holt, M. E.; FitzGibbon, C. D.; Bush, M.; Hawkey, C. M.; and Kock, R. A.: "Health of adult free-living Cheetahs." *Journal of Zoology* 212:573–584, 1987.
- Bush, M.; Phillips, L. G.; and Montali, R. J.: "Clinical management of captive Tigers." In: *Tigers of the World: The Biology, Biopolitics, Management and Conservation of an Endangered Species*, Tilson, R. L., and Seal, U. S. (eds.), Noyes Publications, Park Ridge, pp. 171–204, 1987.
- Seal, U. S., and Bush, M.: "Capture and Chemical Immobilization of Cervids." In: *Biology and Management of Cervidae*, Smithsonian Institution Press, pp. 480–504, 1987.
- Montali, R. J.; Bartz, C. R.; and Bush, M.: "Parvoviruses." In: *Virus Infections of Carnivores*, Appel, (ed.), Elsevier Science Publishers B.V., Amsterdam, pp. 419–428, 1987.
- Bush, M., and de Vos, V.: "Observations on field immobilization of free-ranging Giraffe (*Giraffa camelopardalis*) using carfentanil and xylazine." *J. Zoo Anim. Med.* 18:135–140, 1987.
- Montali, R. J.; Bush, M.; Phillips, L. G.; Bastien, M. H.; Giron, J. T.; Villares, M. C.; Torraca, L. M.; Steuer, A.; Delcampo, D.; Chiknas, S.; Papadopoulos, N.; and Knight, J. A.: "Neonatal Mortality in the Giant Panda (*Ailuropoda melanoleuca*)." *Giant Panda*. Proceedings of the second International Symposium on Giant Panda. Asakura, S., and Nakagawa, S. (eds.), Tokyo Zoological Society, pp. 83–94, 1987.
- Bush, M.; Montali, R. J.; Phillips, L. G.; and Holobaugh, P. A.: "Bovine tuberculosis in a Bactrian Camel herd: Clinical, therapeutic, and pathologic findings." *J. Zoo Wild. Med.* 21(2):171–179, 1990.



Publications *continued*

- Banish, L. D.; Bush, M.; Montali R. J.; and Sacks, D.: "Shigellosis in a zoological collection of primates." *J. Zoo and Wildlife Med.* 21 (3); 302–309, 1990.
- Bush, M.; Graves, J. A. M.; O'Brien, S. J.; and Wildt, D. E.: "Dissociative anesthesia in free-ranging male Koalas and selected marsupials in captivity." *Australian Vet. J.* 67 (12):449–451, 1990.
- Howard, J. G.; Bush, M.; Morton, C.; Morton, F.; Wentzel, K.; and Wildt, D. E.: "Comparative semen cryopreservation in ferrets (*Mustela putorius furo*) and pregnancies after laparoscopic intrauterine insemination with frozen-thawed spermatozoa." *J. Reprodu. Fert.* 92, pp. 109–118, 1991.
- Howard, J. G.; Donoghue, A. M.; Barone, M. A.; Goodrowe, K. L.; Blumer, E. S.; Snodgrass, K.; Starnes, D.; Tucker, M.; Bush, M.; and Wildt, D. E.: "Successful induction of ovarian activity and laparoscopic intrauterine artificial insemination in the Cheetah (*Acinonyx jubatus*)." *J. Zoo and Wildlife Med.* 23(3):288–300, 1992.
- Bush, M.: "An update on antibiotic therapy in reptiles." In: *Current Veterinary Therapy XI*, W.B. Saunders Co., Philadelphia, PA, 1992.
- Wildt, D. E.; Brown, J. L.; Bush, M.; Barone, M. A.; Cooper, K. A.; Grisham, J.; and Howard, J. G.: "Reproductive status of Cheetahs (*Acinonyx jubatus*) in North American zoos: The benefits of physiological surveys for strategic planning." *Zoo Biology* 12:45–80, 1993.
- Bush, M.; Beck, B. B.; and Montali, R. J.: "Medical considerations of reintroduction." In: *Zoo and Wild Animal Medicine: Current Therapy 3*. Fowler, M. E. (ed.), W.B. Saunders Co., Philadelphia, PA, pp. 24–26, 1993.
- Bush, M.: "Anesthesia of high risk animals: Giraffe." In: *Zoo and Wild Animal Medicine: Current Therapy 3*. Fowler, M. E. (ed.), W.B. Saunders Co., Philadelphia, PA, pp. 545–547, 1993.
- Bush, M., and Montali, R. J.: "Medical management of Giant Pandas." In: *Zoo and Wild Animal Medicine: Current Therapy 3*. Fowler, M. E. (ed.), W.B. Saunders Co., Philadelphia, PA, pp. 404–408, 1993.
- Banish, L. D.; Sims, R.; Sacks, D.; and Montali, R. J.: "Clearance of *Shigella flexneri* carriers in a zoologic collection of primates." *J. Am. Vet. Assoc.* 203: 133–136, 1993.
- Monfort, S. L.; Asher, G. W.; Wildt, G. E.; Wood, T. C.; Schiewe, M. C.; Williamson, L. R.; Bush, M.; and Rall, W. F.: "Successful intrauterine insemination of Eld's Deer (*Cervus eldi thamin*) with frozen-thawed spermatozoa." *J. Reprod. Fert.* 99: 459–465, 1993.



Publications *continued*

- Montali, R. J.; Bush, M.; Hess, J.; Ballou, J. D.; Kleiman, D. G.; and Beck, B. B.: "Ex Situ diseases and their control for reintroduction of the endangered lion tamarin species (*Leontopithecus spp.*)" *Verh. Ber. Wrkrg. Zootiere* 37:93–98, 1995.
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- Bush, M.: "Methods of capture, handling, and anesthesia." In: *Wild Mammals in Captivity*. Kleiman, D. G.; Allen, M. E.; Thompson, K. V.; Lumpkin, S.; and Harris, H. (eds.), University of Chicago Press, pp. 25–40, 1996.
- Murray, S.; Bush, M.; and Tell, L.: "Medical management of post partum problems in an Asian Elephant cow (*Elephas Maximus*) and calf." *J. Zoo and Wildl. Med.* 27 (2) pp. 255–258, 1996.
- Bush, M.; Raath, J. P.; deVos, V.; and Stoskopf, M. K.: "Serum Oxytetracycline levels in free-ranging, male African Elephants (*Loxodonta africana*) injected with long-acting formulation." *J. Zoo and Wildlife Med.* 27(3) pp. 382–385, 1996.
- Bush, M.; Beck, B. B.; Dietz, J.; Baker, A.; James, A. E. Jr.; Pissinatti, A.; Phillips, L. G.; and Montali, R. J.: "Radiographic evaluation of diaphragmatic defects in Golden Lion Tamarins (*Leontopithecus rosalia rosalia*): implications for reintroduction." *J. Zoo and Wildlife Med.* 27(3) pp. 346–357, 1996.
- Bush, M.: "A technique for endotracheal intubation of non-domestic bovids and cervids." *J. Zoo and Wildlife Med.* 27(3) pp. 378–381, 1996.
- Bush, M.; Raath, C.; Phillips, L. G.; and Lance, W.: "Immobilization of Free-ranging Giraffe (*Giraffa camelopardalis*) using medetomidine and ketamine." Proceedings: American Association of Zoo Veterinarians, Houston, TX, pp. 276–277, 1997.
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- Bush, M., and R. J. Montali: "Medical Management of Tree Kangaroos." In: *Zoo and Wild Animal Medicine: Current Therapy 4*. Fowler, M., and Miller, E. (eds.), pp. 337–343, 1998.



Publications *continued*

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- Montali, R. J.; Bush, M.; Cromie, R.; Holland, S. M.; Maslow, J. N.; Worley, M.; Witebsky, F. G.; and Phillips, T. M.: "Primary *Mycobacterium avium* Complex infections correlated with lowered cellular immune reactivity in Matschie's Tree Kangaroos (*Dendrolagus matschiei*)." *Journal of Infectious Diseases*. 178: 1719–1725, 1998.
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