Bibliography of Publications about Endotheliotropic Herpes Virus (EEHV)

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1. Pursell T, Tan J, Peng R, Ling PD. Erratum to 'Generation and validation of new quantitative real time PCR assays to detect Elephant Endotheliotropic herpesviruses 1A, 1B, and 4' [J. Virol. Methods 237 (2016) 138-142]. *J Virol Methods* 2017; **240:** 85-86. e-pub ahead of print 2016/12/26; doi: 10.1016/j.jviromet.2016.12.005

2. Zong JC, Heaggans SY, Long SY, Latimer EM, Nofs SA, Bronson E *et al.* Detection of Quiescent Infections with Multiple Elephant Endotheliotropic Herpesviruses (EEHVs), Including EEHV2, EEHV3, EEHV6, and EEHV7, within Lymphoid Lung Nodules or Lung and Spleen Tissue Samples from Five Asymptomatic Adult African Elephants. *J Virol* 2016; **90**(6)**:** 3028-3043. doi: 10.1128/JVI.02936-15

3. Sripiboon S, Jackson B, Ditcham W, Holyoake C, Robertson I, Thitaram C *et al.* Molecular characterisation and genetic variation of Elephant Endotheliotropic Herpesvirus infection in captive young Asian elephants in Thailand. *Infect Genet Evol* 2016; **44:** 487-494. doi: 10.1016/j.meegid.2016.08.004

4. Seilern-Moy K, Darpel K, Steinbach F, Dastjerdi A. Distribution and load of elephant endotheliotropic herpesviruses in tissues from associated fatalities of Asian elephants. *Virus Res* 2016; **220:** 91-96. e-pub ahead of print 2016/04/23; doi: 10.1016/j.virusres.2016.04.012

5. Pursell T, Tan J, Peng R, Ling PD. Generation and validation of new quantitative real time PCR assays to detect Elephant Endotheliotropic herpesviruses 1A, 1B, and 4. *J Virol Methods* 2016. doi: 10.1016/j.jviromet.2016.08.010

6. Long SY, Latimer EM, Hayward GS. Review of Elephant Endotheliotropic Herpesviruses and Acute Hemorrhagic Disease. *Ilar j* 2016; **56**(3)**:** 283-296. e-pub ahead of print 2016/02/26; doi: 10.1093/ilar/ilv041

7. Ling PD, Long SY, Zong JC, Heaggans SY, Qin X, Hayward GS. Comparison of the Gene Coding Contents and Other Unusual Features of the GC-Rich and AT-Rich Branch Probosciviruses. *mSphere* 2016; **1**(3). e-pub ahead of print 2016/06/25; doi: 10.1128/mSphere.00091-16

8. Ling PD, Long SY, Fuery A, Peng RS, Heaggans SY, Qin X *et al.* Complete Genome Sequence of Elephant Endotheliotropic Herpesvirus 4, the First Example of a GC-Rich Branch Proboscivirus. *mSphere* 2016; **1**(3). doi: 10.1128/mSphere.00081-15

9. Kendall R, Howard L, Masters N, Grant R. The Impact of Elephant Endotheliotropic Herpesvirus on the Captive Asian Elephant (Elephas Maximus) Population of the United Kingdom and Ireland (1995-2013). *J Zoo Wildl Med* 2016; **47**(2)**:** 405-418. doi: 10.1638/2015-0217.1

10. Fuery A, Tan J, Peng R, Flanagan JP, Tocidlowski ME, Howard LL *et al.* CLINICAL INFECTION OF TWO CAPTIVE ASIAN ELEPHANTS (ELEPHAS MAXIMUS) WITH ELEPHANT ENDOTHELIOTROPIC HERPESVIRUS 1B. *J Zoo Wildl Med* 2016; **47**(1)**:** 319-324. e-pub ahead of print 2016/03/25; doi: 10.1638/2015-0074.1

11. Fuery A, Browning GR, Tan J, Long S, Hayward GS, Cox SK *et al.* Clinical Infection of Captive Asian Elephants (Elephas Maximus) with Elephant Endotheliotropic Herpesvirus 4. *J Zoo Wildl Med* 2016; **47**(1)**:** 311-318. doi: 10.1638/2015-0072.1

12. Dastjerdi A, Seilern-Moy K, Darpel K, Steinbach F, Molenaar F. Surviving and fatal Elephant Endotheliotropic Herpesvirus-1A infections in juvenile Asian elephants - lessons learned and recommendations on anti-herpesviral therapy. *BMC Vet Res* 2016; **12**(1)**:** 178. doi: 10.1186/s12917-016-0806-5

13. van den Doel PB, Rodriguez Prieto V, van Rossum-Fikkert SE, Schaftenaar W, Latimer E, Howard L *et al.* A novel antigen capture ELISA for the specific detection of IgG antibodies to elephant endotheliotropic herpes virus. *Bmc Veterinary Research* 2015; **11**. doi: 10.1186/s12917-015-0522-6

14. van den Doel PB, Prieto VR, van Rossum-Fikkert SE, Schaftenaar W, Latimer E, Howard L *et al.* Erratum to: A novel antigen capture ELISA for the specific detection of IgG antibodies to elephant endotheliotropic herpes virus. *BMC Public Health* 2015; **15:** 851. e-pub ahead of print 2015/09/04; doi: 10.1186/s12889-015-2178-3

15. Ortega J, Corpa JM, Orden JA, Blanco J, Carbonell MD, Gerique AC *et al.* Acute death associated with Citrobacter freundii infection in an African elephant (Loxodonta africana). *Journal of Veterinary Diagnostic Investigation* 2015; **27**(5)**:** 632-636. doi: 10.1177/1040638715596034

16. Lertwatcharasarakul P, Sanyathitiseree P, Thongtip N, Charoenphan P, Boonyasart B, Maneewan N *et al.* Genetic Variant of Elephant Endotheliotropic Herpesvirus Detected from Captive Asian Elephants (Elephas maximus) in Thailand from 2007 to 2013. *Thai Journal of Veterinary Medicine* 2015; **45**(1)**:** 73-79.

17. Humphreys AF, Tan J, Peng R, Benton SM, Qin X, Worley KC *et al.* Generation and characterization of antibodies against Asian elephant (Elephas maximus) IgG, IgM, and IgA. *PLoS One* 2015; **10**(2)**:** e0116318. e-pub ahead of print 2015/02/07; doi: 10.1371/journal.pone.0116318

18. Bennett L, Dunham S, Yon L, Chapman S, Kenaghan M, Purdie L *et al.* Longitudinal study of Asian elephants, Elephas maximus, indicates intermittent shedding of elephant endotheliotropic herpesvirus 1 during pregnancy. *Vet Rec Open* 2015; **2**(1)**:** e000088. doi: 10.1136/vetreco-2014-000088

19. Zong JC, Latimer EM, Long SY, Richman LK, Heaggans SY, Hayward GS. Comparative genome analysis of four elephant endotheliotropic herpesviruses, EEHV3, EEHV4, EEHV5, and EEHV6, from cases of hemorrhagic disease or viremia. *J Virol* 2014; **88**(23)**:** 13547-13569. e-pub ahead of print 2014/09/19; doi: 10.1128/jvi.01675-14

20. Wilkie GS, Davison AJ, Kerr K, Stidworthy MF, Redrobe S, Steinbach F *et al.* First fatality associated with elephant endotheliotropic herpesvirus 5 in an Asian elephant: pathological findings and complete viral genome sequence. *Sci Rep* 2014; **4:** 6299. e-pub ahead of print 2014/09/10; doi: 10.1038/srep06299

21. Taniguchi M, Oba M, Okazaki S, Teshima Y, Shiina O, Kinjou T *et al.* Epidemiology of Elephant Endotheliotropic Herpesvirus 1 in Elephants in Japanese Zoos. *Journal of Japanese Association of Zoos and Aquariums* 2014; **55**(2)**:** 41-44.

22. Stanton JJ, Nofs SA, Zachariah A, Kalaivannan N, Ling PD. Detection of elephant endotheliotropic herpesvirus infection among healthy Asian elephants (Elephas maximus) in South India. *J Wildl Dis* 2014; **50**(2)**:** 279-287. e-pub ahead of print 2014/02/04; doi: 10.7589/2012-09-236

23. Richman LK, Zong JC, Latimer EM, Lock J, Fleischer RC, Heaggans SY *et al.* Elephant endotheliotropic herpesviruses EEHV1A, EEHV1B, and EEHV2 from cases of hemorrhagic disease are highly diverged from other mammalian herpesviruses and may form a new subfamily. *J Virol* 2014; **88**(23)**:** 13523-13546. e-pub ahead of print 2014/09/19; doi: 10.1128/jvi.01673-14

24. Pellett PE. Trunkloads of viruses. *J Virol* 2014; **88**(23)**:** 13520-13522. e-pub ahead of print 2014/09/19; doi: 10.1128/jvi.02359-14

25. Furuse Y, Dastjerdi A, Seilern-Moy K, Steinbach F, Cullen BR. Analysis of viral microRNA expression by elephant endotheliotropic herpesvirus 1. *Virology* 2014; **454-455:** 102-108. e-pub ahead of print 2014/04/15; doi: 10.1016/j.virol.2014.02.009

26. Bouchard B, Xaymountry B, Thongtip N, Lertwatcharasarakul P, Wajjwalku W. First reported case of elephant endotheliotropic herpes virus infection in Laos. *J Zoo Wildl Med* 2014; **45**(3)**:** 704-707. e-pub ahead of print 2014/10/16; doi: 10.1638/2013-0264r1.1

27. Zachariah A, Zong JC, Long SY, Latimer EM, Heaggans SY, Richman LK *et al.* Fatal herpesvirus hemorrhagic disease in wild and orphan asian elephants in southern India. *J Wildl Dis* 2013; **49**(2)**:** 381-393. e-pub ahead of print 2013/04/10; doi: 10.7589/2012-07-193

28. Wilkie GS, Davison AJ, Watson M, Kerr K, Sanderson S, Bouts T *et al.* Complete genome sequences of elephant endotheliotropic herpesviruses 1A and 1B determined directly from fatal cases. *J Virol* 2013; **87**(12)**:** 6700-6712. doi: 10.1128/JVI.00655-13

29. Stanton JJ, Zong JC, Eng C, Howard L, Flanagan J, Stevens M *et al.* Kinetics of viral loads and genotypic analysis of elephant endotheliotropic herpesvirus-1 infection in captive Asian elephants (Elephas maximus). *J Zoo Wildl Med* 2013; **44**(1)**:** 42-54. e-pub ahead of print 2013/03/20; doi: 10.1638/1042-7260-44.1.42

30. Stanton JJ, Cray C, Rodriguez M, Arheart KL, Ling PD, Herron A. Acute phase protein expression during elephant endotheliotropic herpesvirus-1 viremia in Asian elephants (Elephas maximus). *J Zoo Wildl Med* 2013; **44**(3)**:** 605-612. doi: 10.1638/2012-0174R1.1

31. Sripiboon S, Tankaew P, Lungka G, Thitaram C. The occurrence of elephant endotheliotropic herpesvirus in captive Asian elephants (Elephas maximus): first case of EEHV4 in Asia. *J Zoo Wildl Med* 2013; **44**(1)**:** 100-104. doi: 10.1638/1042-7260-44.1.100

32. Ling PD, Reid JG, Qin X, Muzny DM, Gibbs R, Petrosino J *et al.* Complete Genome Sequence of Elephant Endotheliotropic Herpesvirus 1A. *Genome Announc* 2013; **1**(2)**:** e0010613. doi: 10.1128/genomeA.00106-13

33. Gall A, Palser A. An elephantine viral problem. *Nature reviews. Microbiology* 2013; **11**(8)**:** 512. e-pub ahead of print 2013/07/09; doi: 10.1038/nrmicro3075

34. Atkins L, Zong JC, Tan J, Mejia A, Heaggans SY, Nofs SA *et al.* Elephant endotheliotropic herpesvirus 5, a newly recognized elephant herpesvirus associated with clinical and subclinical infections in captive Asian elephants (Elephas maximus). *J Zoo Wildl Med* 2013; **44**(1)**:** 136-143. doi: 10.1638/1042-7260-44.1.136

35. Stanton JJ, Nofs SA, Peng R, Hayward GS, Ling PD. Development and validation of quantitative real-time polymerase chain reaction assays to detect elephant endotheliotropic herpesviruses-2, 3, 4, 5, and 6. *J Virol Methods* 2012; **186**(1-2)**:** 73-77. doi: 10.1016/j.jviromet.2012.07.024

36. Sariya L, Chatsirivech J, Suksai P, Wiriyarat W, Songjaeng A, Tangsudjai S *et al.* Development of a SYBR Green I-based real-time PCR for detection of elephant endotheliotropic herpesvirus 1 infection in Asian elephants (Elephas maximus). *J Virol Methods* 2012; **185**(1)**:** 160-165. doi: 10.1016/j.jviromet.2012.06.005

37. Hardman K, Dastjerdi A, Gurrala R, Routh A, Banks M, Steinbach F *et al.* Detection of elephant endotheliotropic herpesvirus type 1 in asymptomatic elephants using TaqMan real-time PCR. *Vet Rec* 2012; **170**(8)**:** 205. doi: 10.1136/vr.100270

38. Denk D, Stidworthy MF, Redrobe S, Latimer E, Hayward GS, Cracknell J *et al.* Fatal elephant endotheliotropic herpesvirus type 5 infection in a captive Asian elephant. *Vet Rec* 2012; **171**(15)**:** 380-381. doi: 10.1136/vr.e6833

39. Brock AP, Isaza R, Hunter RP, Richman LK, Montali RJ, Schmitt DL *et al.* Estimates of the pharmacokinetics of famciclovir and its active metabolite penciclovir in young Asian elephants (Elephas maximus). *Am J Vet Res* 2012; **73**(12)**:** 1996-2000. e-pub ahead of print 2012/11/28; doi: 10.2460/ajvr.73.12.1996

40. Stanton JJ, Zong JC, Latimer E, Tan J, Herron A, Hayward GS *et al.* Detection of pathogenic elephant endotheliotropic herpesvirus in routine trunk washes from healthy adult Asian elephants (Elephas maximus) by use of a real-time quantitative polymerase chain reaction assay. *American Journal of Veterinary Research* 2011; **71**(8)**:** 925-933.

41. Nolen RS. Herpesvirus claims another elephant as search for answers continues. *J Am Vet Med Assoc* 2011; **239**(2)**:** 166-168. e-pub ahead of print 2011/09/02;

42. Masters NJ, Stidworthy MF, Everest DJ, Dastjerdi A, Baulmer S. Detection of EGHV-5 in a self-limiting papilloma-like lesion in the trunk of an Asian elephant (Elephas maximus). *Vet Rec* 2011; **169**(8)**:** 209. doi: 10.1136/vr.d4226

43. Latimer E, Zong JC, Heaggans SY, Richman LK, Hayward GS. Detection and evaluation of novel herpesviruses in routine and pathological samples from Asian and African elephants: identification of two new probosciviruses (EEHV5 and EEHV6) and two new gammaherpesviruses (EGHV3B and EGHV5). *Vet Microbiol* 2011; **147**(1-2)**:** 28-41. e-pub ahead of print 2010/06/29; doi: 10.1016/j.vetmic.2010.05.042

44. With few resources, researchers work to contain fatal elephant virus. *Am J Vet Res* 2011; **72**(8)**:** 1006. e-pub ahead of print 2011/09/15;

45. Analysis of species and strain differences among elephant endotheliotropic herpesviruses by gene subtyping: absence of epidemiological connections among 20 cases of EEHV1 associated with acute hemorrhagic disease in captive Asian elephants. *Proceedings 2010 IEF Symposium*, 2010.

46. Stanton JJ, Zong JC, Latimer E, Tan J, Herron A, Hayward GS *et al.* Detection of pathogenic elephant endotheliotropic herpesvirus in routine trunk washes from healthy adult Asian elephants (Elephas maximus) by use of a real-time quantitative polymerase chain reaction assay. *Am J Vet Res* 2010; **71**(8)**:** 925-933. doi: 10.2460/ajvr.71.8.925

47. Schaftenaar W, Reid C, Martina B, Fickel J, Osterhaus ADME. Nonfatal clinical presentation of elephant endotheliotropic herpes virus discovered in a group of captive Asian elephants (Elephas maximus). *J. Zoo Wildl. Med* 2010; **41:** 626-632.

48. Lueders I, Drews B, Niemuller C, Gray C, Rich P, Fickel J *et al.* Ultrasonographically documented early pregnancy loss in an Asian elephant (Elephas maximus). *Reprod Fertil Dev* 2010; **22**(7)**:** 1159-1165. e-pub ahead of print 2010/08/28; doi: 10.1071/rd09305

49. Lueders I, Drews B, Niemuller C, Gray C, Rich P, Fickel J *et al.* Ultrasonographically documented early pregnancy loss in an Asian elephant (Elephas maximus). *Reprod Fertil Dev* 2010; **22**(7)**:** 1159-1165. doi: 10.1071/RD09305

50. Garner MM, Helmick K, Ochsenreiter J, Richman LK, Latimer E, Wise AG *et al.* Clinico-pathologic features of fatal disease attributed to new variants of endotheliotropic herpesviruses in two Asian elephants (Elephas maximus)119. *Vet. Pathol* 2009; **46**(1)**:** 97-104. doi: 46/1/97 [pii];10.1354/vp.46-1-97 [doi]

51. Pathogenesis and molecular epidemiology of fatal elephant endotheliotropic disease associated with the expanding Proboscivirus genus of the betaherpesvirinae. *Proceedings 2007 IEF Symposium*, 2008.

52. Wellehan JFX, Johnson AJ, Childress AL, Harr KE, Isaza R. Six novel gammaherpesviruses of Afrotheria provide insight into the early divergence of the Gammaherpesvirinae. *Veterinary Microbiology* 2008; **127:** 249-257.

53. Daily clinical examinations in a herd of captive asian elephants. *Proc American Associaton of Zoo Veterinarians and Assoc of Reptile and Amphibian Veterinarians*; 11/10/2008, 2008.

54. Use of luteinizing hormone ELISAs in breeding elephants. *Proc American Associaton of Zoo Veterinarians and Assoc of Reptile and Amphibian Veterinarians*; 11/10/2008, 2008.

55. Pharmacokinetics of enrofloxacin in African elephants (Loxodonta africana) after a single rectal dose. *Proc American Associaton of Zoo Veterinarians and Assoc of Reptile and Amphibian Veterinarians*; 11/10/2008, 2008.

56. Evaluation of acute phase proteins for diagnosis of inflammation in Asian elephants (Elephas maximus). *Proc American Associaton of Zoo Veterinarians and Assoc of Reptile and Amphibian Veterinarians*; 11/10/2008, 2008.

57. Wellehan JF, Johnson AJ, Childress AL, Harr KE, Isaza R. Six novel gammaherpesviruses of Afrotheria provide insight into the early divergence of the Gammaherpesvirinae. *Vet Microbiol* 2007; **2007 Aug 19; [Epub ahead of print]**.

58. Loss of a young Asian elephant to a newly discovered herpesvirus: An historical review of husbandry and behaviour prior to death. *International Elephant Conservation and Research Symposium*, 2007.

59. Elephant Endotheliotrophic Herpes Virus (EEHV) in the United Kingdom: An update with the development of the national EEHV management programme. *Proceedings of 43rd International Symposium on Diseases of Zoo and Wild Animals, IZW, Edinburgh, 16-20th May.*, 2007.

60. Education as a tool for disease management: Elephant Endotheliotropic Herpes Virus Case Study in the UK. *Proceedings of AAZV*, 2007.

61. The toenail "abscess" in elephants: treatment options including cryotherapy and pathologic similarities with equine proliferative pododermatitis (canker). *2006 Proceedings American Association of Zoo Veterinarians*, 2006.

62. Identification of two novel herpesviruses associated with ocular inflammation in Asian elephants (Elephas maximus). *2006 Proceedings American Association of Zoo Veterinarians*, 2006.

63. Reid CE, Hildebrandt TB, Marx N, Hunt M, Thy N, Reynes JM *et al.* Endotheliotropic elephant herpes virus (EEHV) infection. The first PCR-confirmed fatal case in Asia 436. *Vet. Q* 2006; **28**(2)**:** 61-64.

64. Ultrasonographic assessment and ultrasound-guided biopsy of the retropharyngeal lymph nodes in elephants. *2006 Proceedings American Association of Zoo Veterinarians*, 2006.

65. Ehlers B, Dural G, Marschall M, Schregel V, Goltz M, Hentschke J. Endotheliotropic elephant herpesvirus, the first betaherpesvirus with a thymidine kinase gene 411. *J. Gen. Virol* 2006; **87**(Pt 10)**:** 2781-2789. doi: 87/10/2781 [pii];10.1099/vir.0.81977-0 [doi]

66. Hildebrandt TB, Hermes R, Ratanakorn P, Rietschel W, Fickel J, Frey R *et al.* Ultrasonographic assessment and ultrasound-guided biopsy of the retropharyngeal lymph nodes in Asian elephants (Elephas maximus) 552. *Vet. Rec* 2005; **157**(18)**:** 544-548. doi: 157/18/544 [pii]

67. Famciclovir pharmacokinetics in young Asian elephants (Elephas maximus). *Proc. American Assoc. of Zoo Veterinarians*, 2003.

68. Fickel J, Liekfeldt D, Richman LK, Streich WJ, Hildebrandt TB, Pitra C. Comparison of glycoprotein B (gB) variants of the elephant endotheliotropic herpesvirus (EEHV) isolated from Asian elephants (Elephas maximus). *Vet Microbiol* 2003; **91**(1)**:** 11-21.

69. Successful treatment of a subadult Asian elephant bull (Elephas maximus) infected with elephant herpes virus. *Proc. of the International Symposium for diseases of Zoo and Wildlife Animals (Rotterdam)*, 2001.

70. Ryan SJ, Thompson SD. Disease risk and inter-institutional transfer of specimens in cooperative breeding programs: Herpes and the elephant species survival plans. *Zoo Biology* 2001; **20:** 89-101.

71. Richman LK, Montali RJ. Elephant herpesvirus infections. In: Williams ES, Barker IK (eds). *Infectious Diseases of Wild Mammals, 3rd edition*. Iowa State University Press: Ames, Iowa, USA, 2001, pp 170-178.

72. Elephant Health Problems and Management in Cambodia, Lao and Thailand. *A Research Update on Elephants and Rhinos; Proceedings of the International Elephant and Rhino Research Symposium, Vienna, June 7-11, 2001*; 2001. Schuling Verlag, 2001.

73. Management Aspects of Herpesvirus Infections and Tuberculosis in Elephants. *A Research Update on Elephants and Rhinos; Proceedings of the International Elephant and Rhino Research Symposium, Vienna, June 7-11, 2001*; 2001. Schuling Verlag, 2001.

74. Kirk Baer C, Wilmette MW (eds). Survey on presence of the endotheliotropic elephant herpesvirus (EEHV) in Thai camp elephants. *Proceedings American Association of Zoo Veterinarians, American Association of Wildlife Veterinarians, Association of Reptilian and Amphibian Veterinarians and the National Association of Zoo and Wildlife Veterinarians Joint Conference 2001*; Orlando, Florida, USA September 18-23, 2001. American Association of Zoo Veterinarians, 2001.

75. Fickel J, Richman LK, Montali R, Schaftenaar W, Goritz F, Hildebrandt TB *et al.* A variant of the endotheliotropic herpesvirus in Asian elephants (Elephas maximus) in European zoos. *Veterinary Microbiology* 2001; **82**(2)**:** 103-109.

76. Ehlers B, Burkhardt S, Goltz M, Bergmann V, Ochs A, Weiler H *et al.* Genetic and ultrastructural characterization of a European isolate of the fatal endotheliotropic elephant herpesvirus. *J Gen Virol* 2001; **82 (Pt 3):** 475-482.

77. Schmitt DL, Hardy DA, Montali RJ, Richman LK, Lindsay WA, Isaza R *et al.* Use of famciclovir for the treatment of endotheliotrophic herpesvirus infections in Asian elephants (Elephas maximus). *Journal of Zoo and Wildlife Medicine* 2000; **31**(4)**:** 518-522.

78. Richman LK, Montali RJ, Hayward GS. Review of a newly recognized disease of elephants caused by endotheliotropic herpesviruses. *Zoo Biology* 2000; **19**(5)**:** 383-392.

79. Richman LK, Montali RJ, Cambre RC, Schmitt D, Hardy D, Bengis RG *et al.* Clinical and pathological findings of a newly recognized disease of elephants caused by endotheliotropic herpesviruses. *Journal of Wildlife Diseases* 2000; **36**(1)**:** 1-12.

80. Hildebrandt TB, Hermes R, Pratt NC, Fritsch G, Blottner S, Schmitt DL *et al.* Ultrasonography of the urogenital tract in elephants (Loxodonta africana and Elephas maximus): an important tool for assessing male reproductive function. *Zoo Biology* 2000; **19**(5)**:** 333-345.

81. Survey on the occurrence of the endotheliotropic elephant herpesvirus (EEHV) in Asian (Elephas maximus) and African (Loxodonta africana) elephants in Europen zoos. *European Association of Zoo and Wildlife Veterinarians Third Scientific Meeting, Paris, France, May 31-June 4, 2000.*, 2000.

82. Brown JL. *Special Issue on elephant biology* 2000; **19**(5)**:** 1-184.

83. Status of a new, fatal herpesvirus disease in elephants in North America and Europe. Verhandlangsbericht des 39 International Symposium uben Erkrankungen der Zoo und Wildtiere, Wien. 39:17-21. *Verh.ber Erkrg. Zootiere 39*, 1999.

84. Richman LK, Montali RJ, Garber RL, Kennedy MA, Lehnhardt J, Hildebrandt T *et al.* Novel endotheliotropic herpesviruses fatal for Asian and African elephants. *Science* 1999; **283**(5405)**:** 1171-1176.

85. Clinical and pathologic aspects of a fatal herpesvirus disease in Asian (Elephas maximus) and African (Loxodonta africana) elephants. *Proceedings of the American Association of Zoo Veterinarians*; 10/9/1999 Colombus OH, 1999.

86. Mikota SK. Diseases of the Elephant: A Review. *Verh. ber. Erkrg. Zootiere* 1999; **39:** 1-15.

87. Ferber D. Virus suspect identified in elephant deaths. *Science* 1999; **283**(5405)**:** 1093-1094.

88. Burkhardt S, Hentschke J, Weiler H, Ehlers B, Ochs A, Walter J *et al.* Elephant herpes virus - a problem for breeding and housing of elephants. In: *Berliner und Munchener Tierarztliche Wochenschrift Elefantenherpesvirus - ein Problem fur die Zucht und Haltung von Elefanten*, 1999. pp 174-179.

89. Schmitt DL, Hardy DA. Use of famciclovir for the treatment of herpesvirus in an Asian elephant. *Journal of the Elephant Managers' Association* 1998; **9:** 103-104.

90. Bhat MN, Manickam R, Kumanan K. Serological evidence of bovine herpesviruses 1 and 2 in Asian elephants. *Journal of Wildlife Diseases* 1997; **33**(4)**:** 919-920.

91. Barnard BJH. Antibodies against some viruses of domestic animals in southern African wild animals. *Onderstepoort Journal of Veterinary Research* 1997; **64**(2)**:** 95-110.

92. Endothelial inclusion body disease: a newly recognized fatal herpes-like infection in Asian elephants. *Proceedings American Association of Zoo Veterinarians*, 1996.

93. Cambre RC, Buick WW. Special challenges of maintaining wild animals in captivity in North America. *Rev Sci Tech* 1996; **15**(1)**:** 251-266.

94. Ossent P, Guscetti F, Metzler AE, Lang EM, Rubel A, Hauser B. Acute and fatal herpesvirus infection in a young Asian elephant (*Elephas maximus*). *Vet. Pathol* 1990; **27:** 131-133.

95. Metzler AE, Ossent P, Guscetti F, Rubel A, Lang EM. Serological evidence of herpesvirus infection in captive Asian elephants (Elephas maximus). *J. Wildl. Dis* 1990; **26**(1)**:** 41-49.

96. Dermatomycosis in two African elephants. *Erkrankungen der Zootiere. Verhandlungsbericht des 31. Internationalen Symposiums uber die Erkrankungen der Zoo- und Wildtiere, Dortmund 1989*. Akademie Verlag, 1989.

97. Hegel GV, Hanichen T, Mahnel H, Wiesner H. Warts (papilloma/sarcoid) in elephant. In: *Erkr. Zootiere Warzen (Papillome/Sarkoide) beim Elefanten*, 1989. pp 201-205.

98. Pilaski J, Hentscheke J, Sinn D, Francke R, Rosenbruch M, Olberding P *et al.* Two virus diseases of different aetiology in Asian elephant (Elephas maximus) in samll traveling circus. In: *Erkr. Zootiere Swei Viruserkrankungen unterschiedlicher Atiologie bei Asiatischen Elefanten (Elephas maximus) in einem kleinen Wanderzirkus*, 1988. pp 263-269.

99. Pilaski J, Rosenbruch M, Gelderblom H, Olberding P, Hagenbeck C. Herpes virus infectionin an Asian elephant (*Elephas maximus*). In: *Erkr. Zootiere Eine Herpesvirus-Infektion bei einem Asiatischen Elefanten (Elephas maximus)*, 1987. pp 179-184.

100. Jacobson ER, Sundberg JP, Gaskin JM, Kollias GV, O'Banion MK. Cutaneous papillomas associated with a herpesvirus-like infection in a herd of captive African elephants. *J. Am. Vet. Med. Assoc* 1986; **189**(9)**:** 1075-1078.

101. Plowright W. Herpesvirus of wild ungulates, including malignant catarrhal fever virus. In: Davis JW, Karstad LH, Trainer DO (eds). *Infectious diseases of wild mammals*, 2 edn. Iowa State University Press: Ames, Iowa, 1981.

102. McCully RM, Basson PA, Pienaar JG, Erasmus BJ, Young E. Herpes nodules in the lung of the African elephant [*Loxodonta africana* (Blumenbach, 1797)]. *Onderstepoort J. Vet. Res* 1971; **38**(4)**:** 225-236.

103. Erasmus BJ, McCully RM, Pienaar JG, Young E, Pieterse LM, Els HJ. The isolation of a herpes virus from the African elephant [*Loxodonta africana* (Blumenbach, 1797)]. In, 1971.

104. Basson PA, McCully RM, de Vos V, Young E, Kruger SP. Some parasitic and other natural diseases of the African elephant in the Kruger National Park. *Onderstepoort J. Vet. Res* 1971; **38**(4)**:** 239-254.

105. McCully RM, Basson PA, Pienaar JG, Erasmus BJ, Young E, Pieterse LM. Herpes nodules in elephants. *J. S. Afr. Vet. Med. Assoc* 1969; **40:** 422.