

PERSONAL INFORMATION

Keith Baptiste

WORK EXPERIENCE

September 2011–Present

Senior Scientific Assessor

Danish Medicines Agency (Lægemiddelstyrelsen) (Denmark)

- Assessment of safety & efficacy aspects of pharmaceutical marketing applications.
- Scientific advice for national issues and the European Medicines Agency.

December 2012–December 2018

Private Practice: Veterinary specialist in Large Animal Medicine

Faxe Dyrehospital (Denmark)

- Veterinary consultant on referral patients to the hospital.
- Consultant for practitioners for large animal internal medicine cases.

April 2005–September 2012

Associate Professor of Large Animal Internal Medicine (Lektor)

Faculty of Life Sciences, University of Copenhagen (Denmark)

- Senior clinician responsible for large animal internal medicine referral cases.
- Clinical teacher for 2nd, 3rd year and final year Veterinary students.
- Supervisor for Masters and Ph.D. students.

March 2002–March 2005

Lecturer of Veterinary Epidemiology & Public Health

Faculty of Veterinary Science, University of Liverpool, Leahurst (United Kingdom)

- Course co-leader for the 3rd year Veterinary Public Health (EAVE) course.
- Lecturer in 2nd year Epidemiology & 3rd year Veterinary Public Health courses.
- Epidemiology research projects in bacterial antimicrobial resistance.

July 1995–July 1999

Large Animal Internal Medicine Residency / Clinical Associate

Western College of Veterinary Medicine (Canada)

- Primary responsible for referral cases in large animal internal medicine.
- Caseload included equine, ruminants & exotics (Camelids, elk, deer & ratites).
- Clinical teacher for final year Veterinary students.

July 1994–July 1995

Large Animal Rotating Internship

Virginia-Maryland Regional College of Veterinary Medicine, (United States)

- Assistant for patient care of referral large animal cases.
- Caseload included equine, ruminants & exotics (Camelids & ratites).

January 1994–June 1994

Private Practitioner

Greenhills Veterinary Hospital (Australia)

Servicing clients with horses and small animals.

EDUCATION AND TRAINING

September 1999–February 2003

Doctor of Philosophy - PhD

The Royal Veterinary and Agricultural University (Denmark)

Thesis: Associations of Penicillin Resistant Staphylococcus and Beta-Lactam Drug usage in Danish

Dairy Cows

July 1995–July 1998

Masters of Science – MSc.

Western College of Veterinary Medicine (Canada)

Thesis: Investigations into a Cerebral Thermoregulatory Function for the Equine Guttural Pouch (Auditory Tube Diverticulum)

January 1989–November 1993

Bachelor of Veterinary Medicine and Surgery - BVMS

Murdoch University (Australia)

January 1988–November 1991

Bachelor of Science (Double major in Biology & Veterinary Biology) – BSc(Hons)

Murdoch University (Australia)

First Class Honours

Thesis: Functional Anatomy of the Equine Guttural Pouch (Auditory Tube Diverticulum)

ADDITIONAL INFORMATION**Expertise**

Regulatory affairs regarding safety and efficacy of antimicrobials

Scientific member for CVMP.

Clinical Large Animal Internal Medicine Specialist

Research background in internal medicine, functional anatomy, epidemiology, antimicrobials and antimicrobial resistance

Publications

International Peer Reviewed Scientific Journals

2019

1) Hansen S, Otten ND, Julie Fjeldborg J, Baptiste KE, Horohov DW (2019) Age-related dynamics of pro-inflammatory cytokines in equine bronchoalveolar lavage (BAL) fluid and peripheral blood from horses managed on pasture. *Experimental Gerontology* 124:110634. doi.org/10.1016/j.exger.2019.110634

2) van Duijkeren E, Schwarz C, Bouchard D, Catry B, Pomba C, Baptiste KE, Moreno MA, Rantala M, Ružauskas M, Sanders P, Teale C, Wester AL, Ignate K, Kunsagi Z & Jukes H (2019) The use of aminoglycosides in animals within the EU: development of resistance in animals and possible impact on human and animal health: a review. *Journal of Antimicrobial Chemotherapy* pii: dkz161. doi: 10.1093/jac/dkz161.

3) Hansen S, Fjeldborg J, Hansen AJ & Baptiste KE (2019) Reliability of cytological evaluation of mast cells from bronchoalveolar lavage fluid in horses: Intra-observer agreement and mast cell identification. *Equine Veterinary Education* doi.org/10.1111/eve.13112.

4) Hansen S, Klintoe K, Austevoll M, Baptiste KE & Fjeldborg J (2019) Equine airway inflammation in loose-housing management compared with pasture and conventional stabling. *Veterinary Record* 184(19):590 doi: 10.1136/vr.104580.

2018

5) Jensen J, Kyvsgaard NC, Battisti A & Baptiste KE (2018) Environmental and public health related risk of veterinary zinc in pig production - using Denmark as an example. *Environment International* 114:181–190. doi.org/10.1016/j.envint.2018.02.007

2017

6) Ahmed MO, Aghila E, Elamri S & Baptiste KE (2017) Molecular Investigation of Carbapenemase-producing Enterobacteriaceae Isolated from a Tripoli Hospital, Libya. *Libyan Journal of Medical Sciences* 1(3):80-82.

7) Ahmed MO, Baptiste KE, Daw MA, Elramalli AK, Abouzeed YM & Petersen A (2017) Spa typing and identification of pvl genes of methicillin-resistant *Staphylococcus aureus* isolated from a Libyan hospital in Tripoli. *Journal of Global Antimicrobial Resistance* 10:179-181.

8) Ahmed MO & Baptiste KE (2017) Vancomycin Resistance Enterococci: A Review of Antimicrobial

Resistance Mechanisms and Perspectives of Human and Animal Health. *Microbial Drug Resistance* doi.org/10.1089/mdr.2017.0147.

9) Baptiste KE & Kyvsgaard NC (2017) Do antimicrobial mass medications work? A systematic review and meta-analysis of randomized clinical trials investigating antimicrobial prophylaxis or metaphylaxis against naturally occurring Bovine Respiratory Disease. *Pathogens & Disease-FEMS* 75(7) doi.org/10.1093/femspd/ftx083. Editor's choice.

10) Pomba C, Rantala M, Greko C, Baptiste KE, Catry B, van Duijkeren E, Mateus A, Moreno MA, Pyörälä S, Ružauskas M, Sanders P, Teale C, Threlfall EJ, Kunsagi Z, Torren-Edo J, Jukes H & Törneke K (2017) The public health risk of antimicrobial resistance transfer from companion animals. *Journal of Antimicrobial Chemotherapy* 72(4):957-968.

2015

11) Catry B, Cavaleri M, Baptiste KE, Grave K, Grein K, Holm A, Jukes H, Liebana L, Navas AL, Mackay D, Magiorakos AP, Romo MAM, Moulin G, Madero CM, Constança M, Pomba MF, Powell M, Pyörälä S, Rantala M, Ružauskas M, Sanders P, Teale C, Threlfall EJ, Törneke K, van Duijkeren E & Torren-Edo J (2015) Use of colistin-containing products within the European Union and European Economic Area (EU/EEA): development of resistance in animals and possible impact on human and animal health. *International Journal of Antimicrobial Agents* 46(3):297-306.

12) Hansen S, Baptiste KE, Fjeldborg J & Horohov DW (2015) A review of the Equine age-related changes in the immune system: Comparisons between Human and Equine Aging, with Focus on Lung Specific Immune-aging. *Ageing Research Reviews* 20C:11-23.

2014

13) Hansen S, Baptiste KE, Fjeldborg J, Betancourt A & Horohov DW (2014) A comparison of pro-inflammatory cytokine mRNA expression in equine bronchoalveolar lavage (BAL) and peripheral blood. *Veterinary Immunology and Immunopathology* 158(3-4):238-243.

14) van Duijkeren E, Greko C, Pringle M, Baptiste K, Catry B, Jukes H, Moreno M, Pomba C, Pyörälä S, Rantala M, Ružauskas M, Sanders P, Teale C, Threlfall J, Torren-Edo J & Törneke K (2014) Pleuromutilins: use in food-producing animals in the European Union, development of resistance and impact on human and animal health. *Journal of Antimicrobial Chemotherapy* 69(8):2022-2031.

15) Pyörälä S, Baptiste KE, Catry B, van Duijkeren E, Greko C, Moreno M, Pomba C, Rantala M, Ružauskas M, Sanders P, Threlfall J, Torren-Edo J & Törneke K (2014) Macrolides and lincosamides in cattle and pigs: Use and development of antimicrobial resistance. *The Veterinary Journal* 200(2):230-239.

2013

16) Hansen S, Sun L, Baptiste KE, Fjeldborg J & Horohov DW (2013) Age-related changes in intracellular expression of IFN- γ and TNF- α in equine lymphocytes measured in bronchoalveolar lavage and peripheral blood. *Developmental & Comparative Immunology* 39(3):228-233.

17) Andersen UV, Haakansson IT, Roust T, Rhod M, Baptiste KE & Nielsen MK (2013) Developmental stage of strongyle eggs affects outcome variations of Real-Time PCR analysis. *Veterinary Parasitology* 191(1-2):191-196.

2012

18) Ahmed MO, Williams NJ, Clegg PD, van Velkinburgh JC, Baptiste KE & Bennett M (2012) Analysis of risk factors associated with antibiotic-resistant *E. coli*. *Microbial Drug Resistance* 18(2):161-167.

19) Damborg P, Marskar P, Baptiste KE & Guardabassi L (2012) Faecal shedding of CTX-M-producing *Escherichia coli* in horses receiving broad-spectrum antimicrobial prophylaxis after hospital admission. *Veterinary Microbiology* 154(3-4):298-304.

20) Winther L, Baptiste KE & Friis C (2012) Pharmacokinetics in pulmonary epithelial lining fluid and plasma of ampicillin and pivampicillin administered to horses. *Research in Veterinary Science* 92(1):111-115.

2011

21) Winther L, Baptiste KE & Friis C (2011) Antimicrobial disposition in pulmonary epithelial lining fluid of horses, Part III. Cefquinome. *Journal of Veterinary Pharmacology & Therapeutics* 34(5):482-486.

22) Winther L, Hansen SH, Baptiste KE & Friis C (2011) Antimicrobial disposition in pulmonary epithelial lining fluid of horses. Part II: Doxycycline. *Journal of Veterinary Pharmacology & Therapeutics* 34(3):285-289.

23) Winther L, Guardabassi L, Baptiste KE & Friis C (2011) Antimicrobial disposition in pulmonary epithelial lining fluid of horses. Part I: Sulfadiazine & trimethoprim. *Journal of Veterinary Pharmacology*

& Therapeutics 34(3):277-284.

2010

24) Nielsen MK, Baptiste KE, Tolliver SC, Collins SS & Lyons ET (2010) Analysis of multiyear studies in horses in Kentucky to ascertain whether counts of eggs and larvae per gram of feces are reliable indicators of numbers of strongyles and ascarids present. *Veterinary Parasitology* 174(1-2):77–84.

25) Ahmed MO, Clegg PD, Williams NJ, Baptiste KE & Bennett M (2010) Antimicrobial resistance in equine faecal *E. coli* isolates from North West England. *Annals of Clinical Microbiology & Antimicrobials* 9(12):1-7.

26) Kipar A, Meli ML, Baptiste KE, Bowker LJ & Lutz H (2010) Sites of feline coronavirus persistence in healthy cats. *Journal of General Virology* 91(Pt 7):1698-1707.

27) Beagley JC, Whitman KJ, Baptiste KE & Scherzer J (2010) Physiology and treatment of retained fetal membranes in cattle. *Journal of Veterinary Internal Medicine* 24(2):261–268. *JVIM Top 5 articles published in 2010.*

28) Winther L, Andersen RM, Baptiste KE, Aalbæk B & Guardabassi L (2010) Association of *Stenotrophomonas maltophilia* with lower airway diseases in horses: A retrospective case series. *Veterinary Journal* 186(3):358-363.

2009

29) Husted L, Sanchez LC, Baptiste KE & Olsen SN (2009) Effect of a feed/fast protocol on pH in the proximal equine stomach. *Equine Veterinary Journal* 41(7):658-662.

2008

30) Mäkinen PE, Archer DC, Baptiste KE, Malbon A, Proudman CJ & Kipar A (2008) Characterisation of the inflammatory reaction in equine idiopathic focal eosinophilic enteritis and diffuse eosinophilic enteritis. *Equine Veterinary Journal* 40(4):386-392.

31) Husted L, Sanchez LC, Olsen SN, Baptiste KE & Merritt AM (2008) Effect of paddock versus stall housing on 24-hour gastric pH within the proximal and ventral equine stomach. *Equine Veterinary Journal* 40(4):337-341.

32) Moran JAM, Stephen J, Baptiste KE & Lepage OM (2008) A surgical approach to the lateral compartment of the equine guttural pouch in the standing horse-Modification of the forgotten Garm technique. *Veterinary Journal* 177(2):260–265.

2007

33) Bagcigil AF, Moodley A, Baptiste KE, Jensen VF & Guardabassi L (2007) Occurrence, species distribution, antimicrobial resistance and clonality of methicillin- and erythromycin-resistant staphylococci in the nasal cavity of domestic animals. *Veterinary Microbiology* 121(3-4):307-315.

2006

34) Moodley A, Stegger M, Bagcigil AF, Baptiste KE, Loeffler A, Lloyd D, Williams N, Leonard N, Abbott Y, Skov RL & Guardabassi L (2006) spa typing of methicillin-resistant *Staphylococcus aureus* isolated from domestic animals and veterinary staff in the UK and Ireland. *Journal of Antimicrobial Chemotherapy* 58(6):1118-23.

35) Kipar A, Baptiste KE, Barth A & Reinacher M (2006) Natural FCoV infection: Cats with FIP exhibit significantly higher viral loads than healthy infected cats. *Journal of Feline Medicine & Surgery* 8(1):69-72.

2005

36) Baptiste KE, Williams K, Williams NJ, Wattret A, Clegg PD, Dawson S, Corkill JE, O'Neill T & Hart CA (2005) Methicillin-resistant staphylococci in companion animals. *Emerging Infectious Diseases* 11(12):1942-1944.

37) Kipar A, Baptiste K, Meli ML, Barth A, Knietzsch M, Reinacher M & Lutz H (2005) Age-related dynamics of constitutive cytokine transcription levels of feline monocytes. *Experimental Gerontology* 40(3):243–248.

2004

38) Baptiste KE – Guest Editorial (2004) The mystery of guttural pouch mycosis: The paradox of advancing knowledge of a rare disease. *The Veterinary Journal* 168(1):1–2.

39) Carmalt JL & Baptiste KE (2004) Atypical guttural pouch mycosis in three horses. *Pferdeheilkunde* 20(6):542-548.

2002

40) Jensen NE, Baptiste KE, Madsen F & Khorrooshi MH (2002) Can intubation harm the brain in critical care situations? A new simple technique may provide a method for controlling brain

temperature. *Medical Hypotheses* 58(3):229-231.

2001

41) Carmalt J, Baptiste K & Blakley B (2001) Suspect copper toxicity in an alpaca. *Canadian Veterinary Journal* 42(7):554-6.

42) Gray H, Card C, Baptiste KE & Naylor JM (2001) Laminitis in a mature elk hind (*Cervus elaphus*). *Canadian Veterinary Journal* 42(2):133-134.

2000

43) Baptiste KE, Naylor JM, Bailey J, Barber EM, Post K & Thornhill J (2000) A function for guttural pouches in the horse. *Nature* 403(6768):382-383.

44) Baptiste KE & Grahn BH (2000) Equine orbital neoplasia: A review of 10 cases (1983-1998). *Canadian Veterinary Journal* 41(4):291-295.

45) Stephen JO, Baptiste KE & Townsend HGG (2000) Clinical and pathologic findings in donkeys with hypothermia: 10 cases (1988-1998). *The Journal of the American Veterinary Medical Association* 216(5):725-729.

46) Carmalt JL, Baptiste KE & Naylor JM (2000) Hypnatremia in neonatal elk calves: 30 cases (1988-1998). *The Journal of the American Veterinary Medical Association* 216(1):68-70.

1999

47) MacDonald DG, Fretz PB, Baptiste KE & Hamilton DL (1999) Anatomic, radiographic and physiologic comparisons of the internal carotid and maxillary artery in the horse. *The Veterinary Journal* 158(3):182-189.

48) Smyth DA, Baptiste KE, Cruz AM & Naylor JM (1999) Primary distension of the guttural pouch lateral compartment secondary to empyema. *Canadian Veterinary Journal* 40(11):802-4.

49) Carmalt JL, Baptiste KE & Chirino-Trejo M (1999) *Actinobacillus lignieresii* infection in two horses. *The Journal of the American Veterinary Medical Association* 215(6):826-828.

1998

50) Baptiste KE (1998) A preliminary study on the role of equine guttural pouches in selective brain-cooling. *The Veterinary Journal* 155(2):139-148.

1997

51) Baptiste KE (1997) Functional anatomy observations of the pharyngeal orifice of the equine guttural pouch (Auditory Tube Diverticulum). *The Veterinary Journal* 153(3):311-319.

52) Wobeser G, Baptiste K, Clark EG & Deyo AW (1997) Type C botulism in cattle in association with botulism die-off in waterfowl in Saskatchewan. *Canadian Veterinary Journal* 38(12):782.

53) Baptiste KE, Pyle L, Robertson J, Pierson B, Larsen C & Warthen K (1997) Dissecting aortic aneurysm causing right ventricular arteriovenous shunt in a mature ostrich (*Struthio camelus*). *Journal of Avian Medicine & Surgery* 11(3):194-200

54) Porzio P, Render JA & Baptiste KE (1997) Exertional rhabdomyolysis in an adult Siberian Husky. *Journal of Veterinary Emergency & Critical Care* 7(1):43-48.

1996

55) Baptiste KE, Holladay SM & Freeman L (1996) Alterations in equine guttural pouch morphology with head position: Observations using a new technique for producing accurate casts. *Anatomical Record* 246(4):579-584.

56) Baptiste KE, Moll HD & Robertson J (1996) Three horses with neoplasia including growth in the guttural pouch. *Canadian Veterinary Journal* 37(8):499-501.

57) Baptiste KE, Pleasant RS, Jones JC, Sponeberg DP, Sysel A & Dobson DJ (1996) Paranasal sinus osteoma in an American Miniature horse: Computed tomographic evaluation & surgical management. *Equine Practice* 18(9):14-19.

1994

58) Baptiste KE & Cake MH (1994) Lipid analysis of lavage samples from the equine guttural pouch (Auditory Tube Diverticulum). *Annals of Otology, Rhinology & Laryngology* 103(5 Pt 1):383-388.

BOOK CHAPTERS:

1) Baptiste KE & Pokludová L (2019) Chapter IV: Mass Medications, Off-label use, Treatment Guidelines. In: *Antimicrobials in Livestock* vol. 1 & 2. Springer Publishing.

2) Baptiste KE & Černý T (2019) Chapter XII: Antimicrobial use in Horses. In: *Antimicrobials in Livestock* vol. 1 & 2. Springer Publishing.

- 3) Ahmed MO, Williams NJ, Clegg PD, Baptiste KE & Bennett M (2012) Chapter 17: Antibiotic Resistance Patterns in Faecal E. coli: A Longitudinal Cohort-Control Study of Hospitalized Horses. In: Antibiotic Resistant Bacteria - A Continuous Challenge in the New Millennium. InTech Inc. Pages 419-430. ISBN: 978-953-51-0472-8 (<http://www.intechopen.com/books/antibiotic-resistant-bacteria-a-continuous-challenge-in-the-new-millennium>).
- 4) Ahmed MO, Clegg PD, Williams NJ, Baptiste KE & Bennett M (2011) Vancomycin resistant enterococci (VRE) in equine-faecal samples. In: Science and Technology against Microbial Pathogens. Research, Development and Evaluation. World Scientific Publishing Company Pt Ltd. Pages 357-362. ISBN-13: 978-981-4354-85-1.
- 5) Baptiste KE (2009) Disorders of guttural pouches. In: The Art of Equine Medicine. (DVD-Audiovisual Text) Vet Visions Inc. ISBN 978-0-9687212-6-1.
- 6) Weese JS, Baptiste KE, Båverud V & Toutain PL (2008) Chapter 10: Guidelines for antimicrobial use in horses. In: Guide to Antimicrobial Use in Animals. Blackwell Publishing Ltd. ISBN 978-1-4051-5079-8.

Projects

Memberships

- 2018-present Joint FAO/WHO International Expert group member on Foodborne Antimicrobial Resistance (AMR), under the auspices of the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO)
- 2012-present European Union Committee for Medicinal Products for Veterinary Use (CVMP)
Co-opted member with expertise in Antimicrobials and Antimicrobial resistance
European Medicines Agency (EMA), London, United Kingdom
- 2011-present European Medicines Agency - Antimicrobials Working Party (AWP) under the CVMP
- 2005-present Diplomate of the American College of Veterinary Internal Medicine (ACVIM)
- 2006-present Diplomate of the European College of Equine Internal Medicine - ECEIM De facto Specialist and Founding Diplomate
- 2003-present Member of the Royal College of Veterinary Surgeons (MRCVS)

Other Relevant Information