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Professional Preparation

Massey University, Palmerston North, New Zealand	B.Sc. 1996
Massey University, Palmerston North, New Zealand	M.Sc. 1999
University of Illinois, Urbana, Illinois	Ph.D. 2005

Appointments

2008-present	Assistant Professor, Department of Animal and Food Sciences, Texas Tech University, Lubbock, Texas
2007-2008	Visiting Assistant Professor, Department of Animal and Food Sciences, Texas Tech University, Lubbock, Texas
2005-2007	Postdoctoral Fellow, Department of Animal and Food Sciences, Texas Tech University, Lubbock, Texas

Research experience

2008-present	Assistant Professor, Department of Animal and Food Sciences, Texas Tech University, Lubbock, Texas
2007-2008	Visiting Assistant Professor, Department of Animal and Food Sciences, Texas Tech University, Lubbock, Texas
2006-2007	Postdoctoral Fellow, Department of Animal and Food Sciences, Texas Tech University, Lubbock, Texas
2002-2005	Research assistant, Department of Animal Sciences, University of Illinois at Urbana-Champaign, Urbana, Illinois
2000-2002	Technician, Mastitis research group, Dexcel Ltd, Hamilton, New Zealand
1999-2000	Technician, Technology and development group, HortResearch, Hamilton, New Zealand

Teaching experience

Classes:

2008	Contemporary issues in animal welfare, swine production, anatomy (supervisor)
2007	Swine production
2006	Topics in stress, behavior and welfare (online graduate course taught in collaboration with Dr. John McGlone at Texas Tech University and Dr. Janeen Salak-Johnson at the University of Illinois)

Guest Lectures:

2008	Introduction to Animal Science (Lectures in swine production)
2007	Undergraduate advanced physiology (lectures in immunology and the sensory system)
2006	Undergraduate anatomy and physiology (lectures in immunology)
2006	Swine production (lectures in New Zealand and Australian swine production)

Research

Awarded grants

- Methods to reduce the pain associated with castration (National Pork Board \$US 71,127)
- Space requirements of weaned pigs during transport (National Pork Board \$US 83,990)
- Is tail docking necessary and if so, how long should the tail be? (National Pork Board \$US 84,614)

- Long distance transport of breeding stock (National Pork Board \$US 117,000)

Refereed publications

- Sutherland MA**, McDonald A, McGlone JJ. 2008. Environmental, trailer, and gender effects on the percentage of dead and non-ambulatory pigs during transport. *Vet. Rec.* (in press).
- Sutherland MA**, Bryer PJ, Davis BL, McGlone JJ. 2008. Space requirements of weaned pigs during a 60 minute transport in summer. *J. Anim. Sci.* (in press).
- Sutherland MA**, Bryer PJ, Krebs N, McGlone JJ. 2008. Tail docking in pigs: acute physiological and behavioral responses. *Animal* 2: 292-297.
- Sutherland MA**, Erlandson K, Connor JF, Salak-Johnson JL, Matzat P, Smith JF, McGlone JJ. 2008. Health of non-ambulatory, non-injured pigs at processing. *Livestock Sci.* 116: 237-245.
- Rudine AC, **Sutherland MA**, Hulbert L, Morrow JL, McGlone JJ. 2007. Diverse production system and social status effects on pig immunity and behavior. *Livestock Sci.* 111: 86-95.
- Sutherland MA**, Niekamp SR, Johnson RW, Van Alstine WG, and Salak-Johnson JL. 2007. Heat and social rank impact behavior and physiology of PRRS-virus-infected pigs. *Physiol. Behav.* 90: 93-100.
- Niekamp SR, **Sutherland MA**, Dahl GE, and Salak-Johnson JL. 2007. Immune responses of piglets to weaning stress: Impacts of photoperiod. *J. Anim. Sci.* 85:93-100.
- Niekamp SR, **Sutherland MA**, Dahl GE, and Salak-Johnson JL. 2006. Photoperiod influences the immune status of multiparous gestating sows and their piglets. *J. Anim. Sci.* 84:2072-2082.
- Sutherland MA**, Niekamp SR, Rodriguez-Zas SL, and Salak-Johnson JL. 2006. Impacts of chronic stress and social status on various physiological and performance measures in pigs of different breeds. *J. Anim. Sci.* 84:588-596.
- Sutherland MA**, Rodriguez-Zas SL, Ellis M, and Salak-Johnson JL. 2005. Breed and age affect baseline immune traits, cortisol, and performance in growing pigs. *J. Anim. Sci.* 83:2087-2095.
- Sutherland MA**, Mellor DJ, Stafford KJ, Gregory NG, Bruce RA, and Ward RN. 2002. Cortisol responses to dehorning of calves given a 5-hour local anesthetic regimen plus phenylbutazone, ketoprofen or adrenocorticotrophic hormone prior to dehorning. *Res. Vet. Sci.* 73:115-123.
- Sutherland MA**, Mellor DJ, Stafford KJ, Gregory NG, Bruce RA, and Ward RN. 2002. Effect of local anesthetic combined with wound cauterisation on the cortisol response to dehorning in calves. *Aust. Vet. J.* 80:165-168.
- Sutherland MA**, Stafford KJ, Mellor DJ, Gregory NG, Bruce RA, and Ward RN. 2000. Acute cortisol responses and wound healing in lambs after ring castration plus docking with or without application of a castration clamp to the scrotum. *Aust. Vet. J.* 78:402-405.
- Sutherland MA**, Mellor DJ, Stafford KJ, Gregory NG, Bruce RA, Ward RN, and Todd SE. 1999. Acute cortisol responses of lambs to ring castration and docking after the injection of lignocaine into the scrotal neck or testes at the time of ring application. *Aust. Vet. J.* 77:738-741.

Other publications

- Sutherland MA**, Smith JS, McGlone JJ. 2006. Data suggests foot, leg problems vary by packing plant. *National Hog Farmer*, Dec 15th: 27-28.
- Sutherland MA** and McGlone JJ. 2006. Temperature, humidity can take a toll on market hogs in transit. *National Hog Farmer*, Dec 15th: 28-29.
- Sutherland MA** and Stafford KJ. 1997. The fifth freedom: ability to display normal patterns of behaviour. *Vetscript* 2, pg2.

Abstracts

- Sutherland MA**, Bryer PJ, Davis BL, McGlone JJ. 2008. Space requirements of weaned pigs during transportation in summer. *J. Anim. Sci.*

- Sutherland MA**, Bryer PJ, Krebs N, McGlone JJ. 2008. A multi-disciplinary approach to assess the effect of tail biting on pig welfare. Proceedings of the 4th International Workshop on the Assessment of Animal Welfare at Farm and Group Level, Ghent, Belgium.
- Bryer PJ, **Sutherland MA**, Davis BL, Smith JF, McGlone JJ. 2008. The effect of 30-hour transport at two space allowances on physiological measures of stress in breeding gilts. *J. Anim. Sci.*
- Davis BL, **Sutherland MA**, Bryer PJ, Smith JF, McGlone JJ. 2008. Comparison of domestic and feral pig physiology, immunity and growth. *J. Anim. Sci.*
- McGlone JJ, **Sutherland MA**, Loneragan GH, Brashears M. 2008. Beef cattle welfare in the context of sustainable production systems. Proceedings of the international symposium on beef cattle welfare, Manhattan, KS.
- Sutherland MA**, Bryer P, Krebs N, McGlone JJ. 2007. Endocrine, hematological and behavioral stress responses to tail docking in pigs. *Cell Stress Chaperones* 12: 5H_07_P.
- Sutherland MA**, Krebs N, Hulbert LE, Smith JS, McGlone JJ. 2007. Space requirements of weaned pigs during transportation. *J. Anim. Sci.* 85 (Supp1): 386.
- Krebs N, **Sutherland MA**, McGlone JJ. 2007. Reducing stress at the packing plant using prior training and conditioning to odors in finishing pigs. *J. Anim. Sci.* 85 (Supp1): 19.
- McGlone JJ, Hulbert LE, Krebs N, **Sutherland MA**, Dailey JW. 2007. Major pitfalls in animal welfare research. *J. Anim. Sci.* 85 (Supp1): 546.
- Sutherland MA**, Krebs N, McGlone JJ. 2007. The effect of space allowance on behavior of weaned pigs during transportation. Proceedings of the 41st International Congress of the ISAE, Merida, Mexico, pg 173.
- Krebs N, **Sutherland MA**, McGlone JJ. 2007. Can stress be decreased by exposure to odors or pheromones? Behavioral, immunological and physiological effects. Proceedings of the 41st International Congress of the ISAE, Merida, Mexico, pg 81.
- Hulbert LE, Krebs N, Dailey JW, **Sutherland MA**, McGlone JJ. 2007. Nursery pig preference to floor types. Proceedings of the 41st International Congress of the ISAE, Merida, Mexico, pg 206.
- McGlone JJ, **Sutherland MA**. 2007. Towards sustainable livestock production systems. Proceedings of the 7th Congress of the European Society for Agricultural and Food Ethics, Vienna, Austria, pp 223-228.
- Shome GP, Hulbert LE, Krebs N, **Sutherland MA**, Watchell M, McGlone JJ. 2007. Effect of forced swimming exercise stress on allergic pulmonary inflammation in mice. *J. Allergy and Clin. Immunol.* 119 (Supp): S292.
- Sutherland MA**, McDonald A, McGlone JJ. 2006. Factors influencing the percentage of dead and fatigued pigs during transport. Proceedings of the 19th IPVS Congress, Copenhagen, Denmark, vol 2, pp 609.
- McGlone JJ, Erlandson K, Connor JF, Salak-Johnson JL, **Sutherland MA**, Matzat P. 2006. Health of non-ambulatory, non-injured pigs at processing. Proceedings of the 19th IPVS Congress, Copenhagen, Denmark, vol 2, pg 617.
- Sutherland MA**, Niekamp SR, Van Alstine WG, and Salak-Johnson JL. 2005. Effects of stress on performance and the immune response in pigs infected with porcine reproductive and respiratory syndrome virus. *J. Anim. Sci.* 83 (supp 1):245
- Niekamp SR, **Sutherland MA**, and Salak-Johnson JL. 2005. Effects of weaning age on pig immune response to mixing stress. *J. Anim. Sci.* 83 (supp 1):352
- Niekamp SR, **Sutherland MA**, and Salak-Johnson JL. 200. Long-term effects of weaning age on immune function in pigs. 83 (supp 1):350
- Niekamp SR, **Sutherland MA**, Dahl GE, and Salak-Johnson J L. 2005. Effects of photoperiod on immune function at three different weaning ages. *J. Anim. Sci.* 83 (supp 1):218
- Salak -Johnson JL, **Sutherland MA**, Horseman MJ, Rodriguez-Zas SL, and Niekamp SR. 2005. Effects of space on individual-and group-kept sows: behavior and immune status. *J. Anim. Sci.* 83 (supp 1):347
- Sutherland MA**, Niekamp SR, Rodriguez-Zas SL, and Salak-Johnson JL. 2004. Effects of stress

and genotype on immune and cortisol measures in pigs. J. Anim. Sci. 82 (supp 1):458.

Niekamp SR, **Sutherland MA**, Dahl GE, Auchtung TL, and Salak-Johnson J L. 2004. Effects of photoperiod on the immune function of multiparous gestating sows. J. Anim. Sci. 82 (supp 1):82.

Niekamp SR, **Sutherland MA**, Dahl GE, and Salak-Johnson JL. 2004. Effects of photoperiod on immune function in 7 and 21 day old piglets. J. Anim. Sci. 82 (supp 1):82.

Sutherland MA, Ellis M, and Salak-Johnson JL. 2003. Breed effects on immune and endocrine profile in growing pigs. J. Anim. Sci. 81 (supp 1):144.

Professional Memberships

American Society of Animal Science, 2002-present
International Society for Applied Ethology, 2007-present

Committee Membership

Animal care and use committee (Texas Tech University), 2007-present