

Centre for Animal Biotechnology, The University of Melbourne

Publication list

2007

- Yen H-H. and J-P. Y. Scheerlinck (2007). In vivo electroporation of a DNA vaccine and a cytokine gene adjuvant increases the efficacy of the DNA Vaccine. **Vaccine** [In Press, Dec 2006].
- Sutton P. (2007). Considering increased mouse stomach mass, when calculating prophylactic vaccine efficacy against *Helicobacter pylori*. **Helicobacter** (Accepted 18th Jan 2007).
- Sutton P, C Doidge, G Pinczower, J Wilson, S Harbour, A Swierczak and A Lee (2007). Effectiveness of vaccination with recombinant HpaA from *Helicobacter pylori* is influenced by host genetic background. **FEMS Immunology and Medical Microbiology** (Accepted 10th October 2006).

2006

- Billiards S.S., P.N. Nguyen, J-P. Scheerlinck, D.J. Phillips, B.J. Canny, D.W. Walker and J.J. Hirst (2006). Hypoxia Potentiates Endotoxin-Induced Allopregnanolone Concentrations in the Newborn Brain. **Biol Neonate** 90, 258-267.
- Goschnick M. W., L. M. Lau, J. L. Wee, Y. S. Liu, P. M. Hogarth, L. M. Robb, M. J. Hickey, M. D. Wright and D. E. Jackson (2006) Impaired "outside-in" integrin $\alpha\beta3$ signaling and thrombus stability in TSSC6-deficient mice. **Blood** 108, 1911-1918.
- Greenwood D. L., and J. W. Sentry. (2006) Murine experimental autoimmune gastritis models refractive to development of intrinsic factor autoantibodies, cobalamin deficiency, and pernicious anaemia. **Clinical Immunology** 122, 41-52.
- Koumoundouros E., R. J. Bischof, E. N. Meeusen, I. M. Mareels and K. J. Snibson (2006) Chronic airway disease: Deteriorating pulmonary function in sheep associated with repeated challenges of house dust mite. **Experimental Lung Research** 32, 321-330
- Skene C and P. Sutton (2006) Saponin-adjuvanted particulate vaccines for clinical use. **Methods** 40, 53-59
- Scheerlinck J-P. Y. and D. L. V. Greenwood (2006) Particulate Delivery Systems for Animal Vaccines. **Methods** 40, 118-124
- Snibson K. J., L. S. McMurtrie, R. J. Bischof, E. Koumoundouros, M. Cock and R. Harding (2006) Altered airway responsiveness in adult sheep born prematurely: Effects of allergen exposure. **Experimental Lung Research** 32, 215-228
- Mulley W.R., J.L. Wee, D. Christiansen, J. Milland, F.L. Ierino and M.S. Sandrin (2006) Lentiviral expression of CTLA4Ig inhibits primed xenogeneic lymphocyte proliferation and cytokine responses. **Xenotransplantation** 13, 248-252.
- Wee J.L. and D.E. Jackson. (2006) Phosphotyrosine signalling in platelets: Lessons for vascular thrombosis. **Current Drug Targets** 7, 1-9.

- Greenwood D.L. and Sentry JW. (2006) Gastritis in BALB/cCrSlc mice induced by immunization without adjuvant can be transferred to syngeneic nu/nu recipients. **Scandinavian Journal of Immunology**, 63:1, 50-58.
- Every A.L., D.R. Kramer, S.I. Mannering, A.M. Lew and L.C. Harrison (2006) Intranasal vaccination with proinsulin DNA induces regulatory CD4+ T cells that prevent experimental autoimmune diabetes. **Journal of Immunology** 176, 4608-15.
- Scheerlinck J-P. Y., S. Gekas, H-H. Yen, S. Edwards, M. Pearse, A. Coulter and P. Sutton (2006). Draining immune response following nasal delivery of an adjuvanted influenza vaccine. **Vaccine** 24, 3929-3936
- Duncan J. R., M. L. Cock, K. Suzuki, J-P. Y. Scheerlinck, R. Harding, S. M. Rees (2006). Systemic Bacterial endotoxin infusion causes brain injury in the ovine fetus in the absence of hypoxia. **Journal of the Society for Gynecological Investigation** 13, 87-96
- Briscoe T., J. Duncan, M. Cock, J. Choo, G. Rice, R. Harding, J-P. Y. Scheerlinck and S. Rees (2006) Activation of NF- κ B transcription factor in the preterm ovine brain and placenta after acute LPS-exposure. **Journal for Neuroscience Research** 83, 567-574
- Yen H-H., J-P. Y. Scheerlinck, S. Gekas and P. Sutton (2006) A Sheep Cannulation Model for Evaluation of Nasal Vaccine Delivery. **Methods** 38, 117-123
- Scheerlinck J-P. Y., S. Gloster, A. Gamvrellis, P. L. Mottram and M. Plebanski (2006). Systemic immune responses in sheep, induced by a novel nano-bead adjuvant. **Vaccine** 24, 1124-1131.
- Kennedy N. J., T. W. Spithill, J. Tennent, P. R. Wood and D. Piedrafita (2006) DNA vaccines in sheep: CTLA-4 mediated targeting and CpG motifs enhance immunogenicity in a DNA prime/protein boost strategy. **Vaccine** 24, 970-979.

2005

- Meeusen E.N., Balic A., Bowles V. (2005) Cells, cytokines and other molecules associated with rejection of gastrointestinal nematode parasites. **Veterinary Immunology and Immunopathology** 108:1-2, 121-125
- Wee J.L. and Jackson D.E. (2005) The Ig-ITIM superfamily member, PECAM-1 regulates the 'outside-in' signalling properties of integrin α IIb β 3 in platelets. **Blood** 106(12):3816-3823.
- de Veer M.J., Sledz C.A. and Williams B.R. (2005) Detection of foreign RNA: implications for RNAi. **Immunology and Cell Biology** 83:3, 224-228.
- Phillips D.J., Jones K.L., Clarke I. J., Scheerlinck J-P. Y., de Kretser D. M. (2005) Activin A: From sometime reproductive factor to genuine cytokine. **Veterinary Immunology and Immunopathology** 108:1-2, 23-27
- Scheerlinck J-P Y. and H-H. Yen (2005). Veterinary Applications of Cytokines. **Veterinary Immunology and Immunopathology** 108:1-2, 17-22
- Maddox J.F. (2005) A presentation of the differences between the sheep and goat genetic maps. **Genetics Selection Evolution** 37 (Suppl. 1), S1-S10.
- Huntley JF, van den Broek A, Machell J, Mackellar A, Pettit D, Meikle L, Barcham G, Meeusen EN, Smith D. The effect of immunosuppression with cyclosporin A on the development of sheep scab. **Veterinary Parasitology** 127:3-4, 323-332

- Snibson KJ, Bischof RJ, Slocombe RF, Meeusen EN. (2005) Airway remodelling and inflammation in sheep lungs after chronic airway challenge with house dust mite. **Clinical and Experimental Allergy** 35:2, 146-152
- Klebe S., D. J. Coster, P. J. Sykes, S. Swinburne, P. Hallsworth, J-P. Y. Scheerlinck, R. Krishnan, K. A. Williams (2005). Prolongation of sheep corneal allograft survival by transfer of the gene encoding ovine interleukin 12-p40 but not interleukin 4 to donor corneal endothelium. **Journal of Immunology** 175:4, 2219-2226

2004

- Rahman AN, Snibson KJ, Lee CS, Meeusen EN. (2004) Effects of implantation and early pregnancy on the expression of cytokines and vascular surface molecules in the sheep endometrium. **Journal of Reproductive Immunology** 64:1-2, 45-58
- Gray CA, Adelson DL, Bazer FW, Burghardt RC, Meeusen EN, Spencer TE. (2004) Discovery and characterization of an epithelial-specific galectin in the endometrium that forms crystals in the trophoctoderm. **Proceedings of the National Academy of Science U S A.** 101:21, 7982-7987
- Tallant T, Deb A, Kar N, Lupica J, de Veer MJ, DiDonato JA. (2004) Flagellin acting via TLR5 is the major activator of key signaling pathways leading to NF-kappa B and proinflammatory gene program activation in intestinal epithelial cells. **BMC Microbiology** 23:4, 33
- Sedgmen BJ, Meeusen EN, Lofthouse SA. (2004) Alternative routes of mucosal immunization in large animals. **Immunology and Cell Biology** 82:1, 10-6
- Premier R.R., Jacobs H.J., Lofthouse S.A., Sedgmen B.J., Meeusen E.N. (2004) Antibody isotype profiles in serum and circulating antibody-secreting cells following mucosal and peripheral immunisations of sheep. **Veterinary Immunology and Immunopathology** 98:1-2, 77-84
- Meeusen E. N. T., J-P. Y. Scheerlinck, S. Wattegedera and G. Entrican (2004) Advances in Mucosal Vaccination. **Animal Health Research Reviews** 5:2, 209-217
- Jones, K. L., D. M. de Kretser, I. J. Clarke, J-P. Y. Scheerlinck and D. J. Phillips (2004) Characterisation of the rapid release of activin A following acute lipopolysaccharide challenge in the ewe. **Journal of Endocrinology** 182:1, 69-80.
- Young A.R. and Meeusen E.N. (2004) Galectins in parasite infection and allergic inflammation. **Glycoconjugation Journal** 19(7-9):601-6
- Scheerlinck J-P. Y., J. Karlis, T. E. Tjelle, P. J. A. Presidente, I. Mathiesen and S. E. Newton (2004). In vivo electroporation improves immune responses to DNA vaccination in sheep. **Vaccine** 22:13-14, 1820-1825.

2003

- Newton S. and Meeusen E.N.T. (2003). Progress and new technologies for developing vaccines against gastrointestinal nematode parasites of sheep. **Parasite Immunology** 25:5, 283-96
- Balic A, Bowles VM, Liu YS, Meeusen EN. (2003) Local immune responses in sensitized sheep following challenge infection with *Teladorsagia circumcincta*. **Parasite Immunology** 25:7, 375-81

- Sedgmen B.J., Lofthouse S.A. and Meeusen E.N. (2003) Optimization of an ovine antibody-secreting cell assay for detection of antigen-specific immunoglobulin production in peripheral blood leukocytes. **Immunology and Cell Biology** 81:4, 305-310
- Law RH, Smooker PM, Irving JA, Piedrafita D, Ponting R, Kennedy NJ, Whisstock JC, Pike RN, Spithill TW. (2003) Cloning and expression of the major secreted cathepsin B-like protein from juvenile *Fasciola hepatica* and analysis of immunogenicity following liver fluke infection. **Infection and Immunity** 71:12, 6921-32.
- Meeusen E. N. T. and Piedrafita D. (2003). Exploiting natural immunity to helminth parasites for the development of veterinary vaccines. **International Journal of Parasitology** 33:11, 1285-1290
- Barber S. and Alvinerie M. (2003). Comment on: A comparison of persistent anthelmintic efficacy of topical formulations of doramectin, eprinomectin, ivermectin and moxidectin against naturally acquired nematode infections of beef calves and problems associated with mechanical transfer (licking) of endectocides in cattle. **Veterinary Parasitology** 112:3, 255-257.
- DeSilva U., Franklin I.R., van Hest B., Maddox J.F. & Adelson D.L. (2003) Systematic screening of sheep skin cDNA libraries for microsatellite sequences. **Cytogenetic and Genome Research** 102, 79-84.
- Grigsby P.L., Hirst J.J., Scheerlinck J.-P.Y., Phillips D.J. and Jenkin G. (2003). Fetal responses to maternal and intra-amniotic lipopolysaccharide administration in sheep. **Biology of Reproduction** 68:5, 1695-1702.
- Tachedjian M., Boyle J.S., Lew A.M., Horvatic B., Scheerlinck J.-P.Y., Tennent J.M. and Andrew M.E. (2003). Gene gun immunization in a preclinical model is enhanced by B7 targeting. **Vaccine** 21:21-22, 2900-2905.
- Bischof R.J., Snibson K., Shaw R.J. and Meeusen E.N.T. (2003). Induction of allergic inflammation in the lungs of sensitized sheep after local challenge with house dust mite. **Clinical and Experimental Allergy** 33: 367-375.

2002

- Balic A., Bowles V.M. and Meeusen E.N.T. (2002). Mechanisms of immunity to *Haemonchus contortus* infection in sheep. **Parasite Immunology** 24:1 39-46.
- Snibson K.J. (2002). Hepatocellular kinetics and the expression of growth hormone (GH) in the livers and liver tumours of GH-transgenic mice. **Tissue and Cell** 34: 88-97.
- Sedgmen B.J., Lofthouse S. A., Scheerlinck J.-P.Y. and Meeusen E.N.T. (2002) Cellular and molecular characterisation of the ovine rectal mucosal environment. **Veterinary Immunology and Immunopathology** 86:3-4, 215-220.
- Mathy N.L., Mathy J.P., Lee R.P., Walker J., Lofthouse S. and Meeusen E.N.T. (2002). Pathological and immunological changes after challenge infection with *Pasteurella multocida* in naive and immunized calves. **Veterinary Immunology and Immunopathology** 85:3-4 179-88
- Lofthouse S. and Kemp J. (2002) Manipulating the immune response; applications in livestock breeding. **Journal of Reproductive Immunology** 57:1-2, 239-253
- Dunphy J.L., Barcham G.J., Bischof R.J., Young A., Nash A. and Meeusen E.N.T. (2002). Isolation and characterization of a novel eosinophil-specific galectin secreted into lung fluid in response to allergen-challenge. **Journal of Biological Chemistry** 277, 14916-14924.

- Lofthouse S. (2002). Immunological aspects of controlled antigen delivery. *Adv. Drug Deliv. Rev.* 54(6): 863-70
- Duncan J.R., Cock M.L., Scheerlinck J.-P.Y., Westcott K.T., McLean C., Harding R. and Rees S. M. (2002). White matter injury after repeated endotoxin exposure in the preterm ovine fetus. ***Pediatric Research*** 52, 1-9.
- Lofthouse S.A., M. Kajihara, S. Nagahara, A. Nash, G.J. Barcham, B. Sedgmen, M.R. Brandon and A. Sano (2002). Injectable silicone implants as vaccine delivery vehicles. ***Vaccine*** 20:13-14, 1725-1732
- Kemp JM, Kajihara M, Nagahara S, Sano A, Brandon M and Lofthouse S. (2002) Continuous antigen delivery from controlled release implants induces significant and anamnestic immune responses. *Vaccine* 20(7-8): 1089-98
- Nasar A., Rahman A., Meeusen E.N.T. and Lee C.S. (2002). Peri-partum changes in the intraepithelial lymphocyte population of sheep interplacentomal endometrium. ***American Journal of Reproductive Immunology*** 47:3 132-41.
- De Rose R., J. Tennent, P. McWaters, P.J. Chaplin, P.R. Wood, W. Kimpton, R. Cahill and J.-P.Y. Scheerlinck (2002). Efficacy of DNA vaccination by different routes of immunisation in sheep. ***Veterinary Immunology and Immunopathology*** 90:1-2, 55-63.
- Beh K.J., Hulme D. J., Callaghan M.J., Z. Leish, Lenane I., Windon R.G. and Maddox J.F. (2002). A genome scan for quantitative trait loci affecting resistance to *Trichostrongylus colubriformis* in sheep. ***Animal Genetics*** 33:2, :97-106.
- Rahman A.N., Meeusen E.N.T. and Lee C.S. (2002). Peri-partum changes in the intraepithelial lymphocyte population of sheep interplacentomal endometrium. ***American Journal of Reproductive Immunology*** 47:3, 132-141.
- Tatarczuch L., Bischof R.J., Philip C.J. and Lee C.S. (2002). Phagocytic capacity of leucocytes in sheep mammary secretions following weaning. ***Journal of Anatomy*** 201: 351-361.
- Diez-Tascón C., Maddox J. F., Dodds K. G. & Crawford A. M. (2002) Ovine T-cell receptor genes contain polymorphic microsatellites. ***Animal Genetics*** 33, 468-470.
- Maddox J.F., Franklin I.R., Bottema C.D.K., DeSilva U., Adelson D.L., Diez-Tascón C., Natrass G., Gill C., Webb G., Dodds K.G. & Vaiman D. (2002) An enhanced sheep linkage map comprising 240 gene and EST associated markers. ISAG 2002
- Maddox J.F. (2002). Linkage mapping of microsatellites associated with the glycosylation dependent cell adhesion molecule (GLYCAM1) and thyroid hormone receptor alpha chain (THRA) genes to ovine chromosomes 3 and 11. ***Animal Genetics*** 33:3, 240-
- Bischof R.J. and Meeusen E.N.T. (2002). Cellular kinetics of an allergic-type response in a sheep mammary gland model of inflammation. ***Clinical and Experimental Allergy*** 32: 619-626.

2001

- Snibson J., Bhathal P. S. and Adams T. E. (2001). Overexpressed growth hormone (GH) synergistically promotes carcinogen-initiated liver tumour growth by promoting cellular proliferation in emerging hepatocellular neoplasms in female and male GH-transgenic mice. ***Liver*** 21: 149-58.

- Maddox J.F. (2001) Mapping the matrix metalloproteinase 9 (MMP9) gene and the BL1071 microsatellite to ovine chromosome 13 (OAR13). **Animal Genetics** 32, 329-331.
- Beh K.J., Callaghan M. J., Leish Z., Hulme D. J., Lenane I. & Maddox J. F. (2001) A genome scan for QTL affecting fleece and wool traits in Merino sheep. **Wool Technology and Sheep Breeding** 49, 88-97.
- Maddox J.F., Davies K.P., Crawford A.M., Hulme D.J., Vaiman D., Cribiu E.P., Freking B.A., Beh K.J., Cockett N.E., Kang N., Riffkin C.D., Drinkwater R., Moore S.S., Dodds K.G., Lumsden J.M., van Stijn T.C., Phua S.H., Adelson D.L., Burkin H.R., Broom J.E., Buitkamp J., Cambridge L., Cushwa W.T., Gerard E., Galloway S.M., Harrison B., Hawken R.J., Hiendleder S., Henry H.M., Medrano J.F., Paterson K.A., Schibler L., Stone R.T. & van Hest B. (2001) An enhanced linkage map of the sheep genome comprising more than 1000 loci. **Genome Research** 11, 1275-1289.
- Tellam R.L., Eisemann C.H., Vuocolo T., Casu R., Jarmey J., Bowles V. and Pearson R. (2001). Role of oligosaccharides in the immune response of sheep vaccinated with the *Lucilia cuprina* larval glycoprotein, peritrophin-95. **International Journal for Parasitology** 31: 798-809.
- White G.P., Meeusen E.N.T., Newton S.E. (2001). A single-chain variable region immunoglobulin library from the abomasal lymph node of sheep infected with the gastrointestinal nematode parasite *Haemonchus contortus*. **Veterinary Immunology and Immunopathology** 78:2 117-29.
- Dunphy J.L., Horvath A., Barcham G.J., Balic A., Bischof R.J. and Meeusen E.N.T. (2001). Isolation, characterisation and expression of mRNAs encoding the ovine CC chemokines, monocyte chemoattractant protein (MCP) -1α and -2 . **Veterinary Immunology and Immunopathology** 82, 153-164.
- Jungersen G., Eriksen L., Nansen P., Lind P., Rasmussen T. and Meeusen E.N.T. (2001). Regional immune responses with stage-specific antigen recognition profiles develop in lymph nodes of pigs following *Ascaris suum* larval migration. **Parasite Immunology** 23:4 185-94.
- Phillips D.J., Jones K.L., Scheerlinck J.-P.Y., Hedger M.P. and de Kretser D.M. (2001). Evidence for activin A and follistatin involvement in the systemic inflammatory response. **Molecular and Cellular Endocrinology** 180, 155-162.
- Meeusen E.N.T., Bischof R.J. and Lee C.S. (2001). Comparative T cell responses during pregnancy in large animals and humans. **American Journal of Reproductive Immunology** 46, 169-179.
- Scheerlinck J.-P. Y. (2001). Genetic adjuvants for DNA vaccines. **Vaccine** 19:17-19, 2647-2656.
- Sjölander A., Drane D., Maraskovsky E., Scheerlinck J.-P., Suhrbier A., Tennent J., Pearse M. (2001). Cellular immune responses to ISCOM™ Formulations in Animal and Primate Models. **Vaccine** 19:17-19, 2661-2665.

2000

- Balic A., Bowles V.M. and Meeusen E.N.T. (2000). Cellular profiles in abomasal tissues and lymph nodes during primary infection with *Haemonchus contortus* in sheep. **Veterinary Immunology and Immunopathology** 75(1-2):109-20.

- Young A.R., Mancuso N., Meeusen E.N.T. and Bowles V.M. (2000). Characterisation of proteases involved in egg hatch of the sheep blowfly, *Lucilia cuprina*. **International Journal for Parasitology** 30(8):925-32.
- Dunphy JL, Balic A, Barcham GJ, Horvath AJ, Nash AD, Meeusen EN. (2000). Isolation and Characterization of a Novel Inducible Mammalian Galectin. **Journal of Biological Chemistry** 275(41):32106-13
- Maddox JF, Andrews AE, Gill CA, Bottema CD. (2000). Linkage and physical mapping of the sheep perforin (PRF1) gene to OAR 25. **Animal Genetics** 31(3):231-2.
- Beh KJ, Riffkin CD, Davies KP, di Ienno KL, Maddox JF. (2000). Dinucleotide repeat polymorphism at the ovine McMA7, McMA10, McMA13, McMA16, McMA17, McMA27, McMA29, McMA42, McMA47 and McMA49 loci. **Animal Genetics** 31(3):228-9.
- Maddox JF, Riffkin CD, Beh KJ. (2000). Dinucleotide repeat polymorphism at the ovine McMA1, McMA2, McMA5, McMA8, McMA9, McMA11, McMA14, McMA20, McMA24, McMA26 loci. **Animal Genetics** 31(2):148-9.
- Maddox JF, Schibler L, Cribiu EP, Kang N, Davies KP, Vaiman D. (2000). Linkage mapping of goat ChirUCO, LSCV and SR-CRSP microsatellites in sheep. **Animal Genetics** 31(2):145.
- Maddox JF. (2000). Chromosomal assignments and polymorphism information content in sheep for 12 cattle microsatellites. **Animal Genetics** 31(2):144-5
- Greenhalgh CJ, Loukas A, Donald D, Nikolaou S, Newton SE. (2000). A family of galectins from *Haemonchus contortus*. **Molecular and Biochemical Parasitology** 107(1):117-21.
- Tatarczuch L., Philip C., Bischof R.J. & Lee C-S. (2000). Leucocyte phenotypes in involuting and fully involuted mammary glandular tissues and secretions of sheep. **Journal of Anatomy** 196: 313-326.
- Meeusen E.N.T and Balic A. (2000) Do eosinophils have a role in the killing of helminth parasites? **Parasitology Today**, 16: 95-101.
- Balic A., Bowles V.M. and E.N.T. Meeusen (2000). The immunobiology of gastrointestinal nematode infections in ruminants. **Advances in Parasitology**, 45: 182-248.

1999

- Adams TE (1999). Transcription from the P2 promoter of the growth hormone receptor gene involves members of the Sp transcription factor family. **Biochemical Journal**. 344 867-872.
- Davey HW, McLachlan MJ, Wilkins RJ, Hilton DJ, Adams TE. (1999). STAT5b mediates the GH-induced expression of SOCS-2 and SOCS-3 mRNA in the liver. **Molecular and Cellular Endocrinology** 158:111-6
- Baker L and TE Adams (1999). The human β -globin LCR and promoter can confer tissue-specific expression of a human CETP cDNA in transgenic rats. **Transgenics** 3: 81-96.
- Fox A & Meeusen, ENT (1999). Sheep perforin: identification and expression by $\gamma\delta$ -T cells from pregnant sheep uterine epithelium. **Veterinary Immunology and Immunopathology**. 68 293-296.
- Greenhalgh CJ, Beckham, SA & Newton, SE (1999). Galectins from sheep gastrointestinal nematode parasites are highly conserved. **Molecular and Biochemical Parasitology**. 98 285-289.

- Greenhalgh CJ, Loukas, A & Newton, SE (1999). The organization of a galectin gene from *Teladorsagia circumcincta*. **Molecular and Biochemical Parasitology**. 101 199-206.
- Greenhalgh CJ & Newton, SE (1999). Recombinant expression of a galectin from the sheep gastrointestinal parasite *Teladorsagia circumcincta*: its use in isolating Galectin-Glycoconjugates. **Protein Expression and Purification**. 16 152-159.
- Hawken RJ, Maccarone, P, Toder, R, Marshall Graves, JA & Maddox, JF (1999). Isolation and characterization of marsupial IL5 genes. **Immunogenetics**. 49 942-948.
- Jacobs HJ, Wiltshire, C, Ashman, K & Meeusen, ENT (1999). Vaccination against the gastrointestinal nematode, *Haemonchus contortus*, using a purified larval surface antigen. **Vaccine**. 17 362-368.
- Jungersen G, Eriksen, L, Roepstorff, A, Lin, P, Meeusen, ENT, Rasmussen, T & Nansen, P (1999). Experimental *Ascaris suum* infection in the pig: protective memory response after three immunizations and effect of intestinal adult worm population. **Parasite Immunology**. 21 619-630.
- Maddox JF (1999). Single strand conformational polymorphisms in the second exons of the ovine DMB, DYA and DYB genes. **Animal Genetics**. 30 382-405.
- Maddox JF, Davies, KP & Hawken, RJ (1999). A five allele single strand conformational polymorphism in the third intron of the ovine CD3D gene. **Animal Genetics**. 30 316-317.
- Maddox JF, Hawken, RJ, Matthew, P & Davies, KP (1999). Single strand conformational polymorphisms (SSCPs) in the ovine IL1A and IL6 genes. **Animal Genetics**. 30 317-318.
- Meeusen ENT (1999). Immunology of helminth infections, with special reference to immunopathology. **Veterinary Parasitology**. 84 259-273.
- Meeusen ENT & Maddox, JF (1999). Progress and expectations for helminth vaccines. **Advances in Veterinary Medicine**. 41 241-256.
- Snibson KJ, Bhathal, PS, Hardy, CL, Brandon, MR & Adams, TE (1999). High, persistent hepatocellular proliferation and apoptosis precede hepatocarcinogenesis in growth hormone transgenic mice. **Liver**. 19 242-252.
- Young AR, Mancuso, N & Bowles, VM (1999). Biochemical aspects of egg hatch in endo- and ectoparasites: potential for rational drug design. **International Journal for Parasitology** 29 861-867.

1998.

- Broad TE, Hill DF, Maddox JF, Montgomery GW & Nicholas FW (1998) – The sheep gene map. **ILAR Journal** 39, 160-170.
- Adams TE, Hansen JA, Starr R, Nicola NA, Hilton DJ, Billestrup N. (1998). Growth hormone preferentially induces the rapid, transient expression of SOCS-3, a novel inhibitor of cytokine receptor signaling. **Journal of Biological Chemistry** 273(3):1285-7
- M Cardamone, R Lee, J Lucas, D Birks, M O'Donoghue, SA Lofthouse & MR Brandon (1998) – Sustained release delivery systems and their application for endoparasite control in animals. **Journal of Controlled Release** 51:73-83.
- Cornish EC, Beckham SA & Maddox JF (1998) – Southern hybridization revisited; probe/target DNA interaction is affected by the choice of hybridization buffer. **Biotechniques** 28, 948-954.

- Premier RR & ENT Meeusen (1998) – Lymphocyte surface marker & cytokine expression in peripheral & mucosal lymph nodes. **Immunology**, 94: 363-368.
- Rainbird MA, Macmillan D & ENT Meeusen (1998) – Eosinophil-mediated killing of *Haemonchus contortus* larvae: effect of eosinophil activation & role of antibody, complement & interleukin-5. **Parasite Immunology**, 20: 93-103.
- Fox A, Lee CS, Brandon MR & ENT Meeusen (1998) – Effects of pregnancy on lymphocytes within sheep uterine interplacentomal epithelium. **American Journal of Reproductive Immunology**, 40(4):295-302.
- Meeusen ENT (1998) – Differential migration of Th1 & Th2 cells - implications for vaccine & infection studies. **Veterinary Immunology & Immunopathology**, 63:157-166.
- White GP, Roche P, Brandon MR, Newton SE & ENT Meeusen (1998) – Cloning & characterisation of sheep (*Ovis aries*) immunoglobulin α chain. **Immunogenetics**, 48:359-362.
- Snibson KJ, Maddox JF, Fabb SA & Brandon MR (1998) – Allelic variation of ovine MHC class II DQA1 & DQA2 genes. **Animal Genetics** 29, 356-362.

1997.

- Drinkwater, R., Harrison, B., Davies, K.P. and Maddox, J.F. (1997). Ovine anonymous dinucleotide repeat polymorphism at the CSR264, CSR269, CSR270, CSR287, CSR2108, CSR2138 and CSR2164 Loci. **Animal Genetics**. 28: 70-71.
- Iakovenko AR, Sverdlova PS, Antonov AV, Adams TE, Rubtsov PM. (1997). Cloning of the GC-rich 5'-noncoded exon and putative promotor of the gene for human growth hormone receptor. **Dokl Akad Nauk.** (russian) 356(5):704-7
- Elhay, M., Barcham, G.J., Cameron, A., Andrews, A.E. and Nash A.D. (1997). Recombinant ovine interleukin-1 β as an adjuvant for multivalent bacterial vaccines. **Cytokines in Veterinary Medicine**. V.E.C.J. Schijns and M.C. Horzinek (Eds) Chapter 8: 101-125.
- Snibson, K.J. and Adams, T.E. (1997). Methylation of transgenes, In; **Transgenic animals : generation and use**". pp 237-243. Harwood Academic Publishers, Amsterdam, The Netherlands.
- McLaren, R., Rogers, G., Davies, K.P., Maddox, J.F. and Montgomery, G.W. (1997). Linkage mapping of wool keratin and keratin-associated protein genes in sheep. **Mammalian Genome**. 8: 938-940.
- Townsend, W.L., Gorrell, M.D. and Mayer, R. (1997). Langerhans cells in the development of skin cancer: a qualitative and quantitative comparison of cell markers in normal, acanthotic and neoplastic ovine skin. **Pathology**. 29: 42-50.
- Cardamone, M., Lofthouse, S.A., Lucas, J.C., Lee, R.P., O'Donoghue, M. and Brandon, M.R. (1997). *In vitro* testing of a pulsatile delivery system and its *in vivo* application for immunisation against tetanus toxoid. **Journal of Controlled Release**. 47: 205-219.
- Davies, K.P. and Maddox, J.F. (1997). Genetic linkage mapping of three anonymous ovine EST microsatellites: KD101, KD103 and KD721. **Animal Genetics**. 28 (in press)
- Tellam, R. and Bowles, V.M. (1997). Control of blowfly strike in sheep: Current strategies and future prospects. Invited review. **International Journal for Parasitology**. 27: 261-273.

- Hardy, C.L., Bhathal, P.S., Snibson, K.J. and Adams, T.E. (1997). Comparison of intrahepatic lymphocytes from normal and growth hormone transgenic mice with chronic hepatitis and liver cancer. **Immunology**. 90: 412-420.
- Mathy, N.L., Walker, J., and Lee, R.P. (1997). Characterization of cytokine profiles and double-positive lymphocyte subpopulations in normal bovine lungs. **American Journal of Veterinary Research**. 58 (9): 969-975.
- Hanrahan, C.F., Kimpton, W.G., Howard, C.J., Parsons, K.R., Brandon, M.R., Andrews, A.E. and Nash, A.D. (1997). Cellular requirements for the activation and proliferation of ruminant $\gamma\delta$ cells. **Journal of Immunology** 159: 4287-4294.
- Newton, S.E., Monti, J.R., Greenhalgh, C.J., Ashman, K. and Meeusen, E.N.T. (1997). cDNA cloning of galectins from third stage larvae of the parasitic nematode *Teladorsagia circumcincta*. **Molecular and Biochemical Parasitology**. 86: 143-153.
- Fleming, S.B., McCaugham, C., Andrews, A.E., Nash, A.D. and Mercer, A. (1997). A homologue of interleukin 10 is encoded by the poxvirus orf virus. **Journal of Virology**. 71 (6): 4857-4861.
- Young, A., Mancuso, N., Meeusen, E.N.T. and Bowles, V.M. (1997). Proteases released by *Lucilia cuprina* during egg hatch. **Insect Biochem Mol Biol** 27: 1017-1026.

1996.

- Meeusen E.N.T, Premier R.R. and Brandon M.R. (1996). Tissue-specific migration of lymphocytes: a key role for Th1 and Th2 cells? **Immunology Today** 17: 421-424.
- Mathy, N. L., Lee, R. P., & Walker, J. (1996). Removal of RT-PCR inhibitors from RNA extracts of tissues. **Bio Techniques**. 21:770-774.
- Meeusen E. (1996). Rational design of nematode vaccines, natural antigens. *International Journal for Parasitology* 26: 813-818..
- Nash, A.D., Egan, P.J., Kimpton, W., Elhay, M.J. and Bowles, V.M. (1996). Local cell traffic and cytokine production associated with ectoparasite infection. **Veterinary Immunology and Immunopathology** 54: 269-279.
- Gatford, K.L., Adams, T.E., Hosking, B.J. and Egan, A.R. (1996). Lack of sexual dimorphism in growth hormone receptor expression in growing lambs Dom. **Animal Endocrinology** (submitted).
- Egan PJ. Kimpton W., Seow HF. Bowles VM. Brandon MR. Nash AD. (1996). Inflammation induced changes in the phenotype and cytokine profile of cells migrating through the skin and afferent lymph. **Immunology** 89:539-546.
- Bischof R.J., Lee R., C-S. Lee and Meeusen E. (1996). Dynamic changes in the lymphocyte subpopulations of pig uterine lymph nodes. **Veterinary Immunology and Immunopathology** 51: 315-324.
- Premier, R., Jacobs, H.J., Brandon, M.R. & Meeusen, E.N.T. (1996). Distribution of antigen specific memory T cells in lymph nodes after immunization at peripheral tissue sites. **Immunology and Cell Biology** 74 :265-273.
- Young A, Meeusen E.N.T. and Bowles V.M. (1996). Characterisation of ES products involved in wound initiation by *Lucilia cuprina* larvae. **International Journal for Parasitology** 26: 245-252.

- Greenhalgh C.J., Jacobs H.J. and Meeusen E.N.T. (1996). An in vivo mammary infusion model for tissue migration of leukocytes during inflammation. **Immunology and Cell Biology** 74 497-503.
- Walker, J., Lee, R., Mathy, N., Doughty S. and Conlon, J. (1996). Restricted B cell responses to microbial challenge of the respiratory tract. **Veterinary Immunology and Immunopathology** 54: 197-204.
- Lee, R.P, Doughty S.W., Ashman, K. and Walker J. (1996). Purification of hydrophobic integral membrane proteins from Mycoplasma hyopneumonia by reversed-phase high performance liquid chromatography. **Journal of Chromatography** 737: 273-279.
- Nash, A.D., Andrews, A.E., Martin, H.M., Colditz, I., Wood, P.R. and Seow, H.F. (1996). Methods for detection and assay of ovine cytokines. In **'The Immunology Methods Manual'**: I. Lefkowitz (Ed). Academic Press. London, (In Press).
- Schwenderman, S., Cardamone, M., Brandon, M.R., Klibanor and Langer, R. (1996). "Stability of proteins and their delivery from biodegradable polymer microspheres". In **"Microspheres/Microparticles - Characterisation and Pharmaceutical Application"** (S. Cohen and H. Bernstein, Eds.) Marcel Dekker Inc. N.Y. (1-49).
- Bowles, V.M., Meeusen, E.N.T., Young, A.R., Nash, A.D., Andrews, A.E. & Brandon, M.R. (1996) Vaccination of sheep against larvae of the sheep blowfly (*Lucilia cuprina*). **Vaccine** 14: 1347-1352.
- Raleigh, J.R., Brandon, M.R. & Meeusen, E. (1996) Stage-specific expression of surface molecules by the larval stages of *Haemonchus contortus*. **Parasite Immunology** 18: 125-132.
- Nash, A.D., Egan, P.J., Kimpton, W., Elhay, M.J. and Bowles, V.M. (1996) Local cell traffic and cytokine production associated with ectoparasite infection. **Veterinary Immunology and Immunopathology** 54: 269-279.
- Tkalcevic, J., Brandon, M.R. & Meeusen, E.N.T. (1996) *Fasciola hepatica*: Rapid switching of stage-specific antigens after infection. **Parasite Immunology** 18: 139-147.
- Raleigh, J.M. & Meeusen, E.N.T. (1996) Developmental expression of *Haemonchus contortus* antigens. **International Journal for Parasitology** 26: 673-675..
- Lofthouse, S.A., Andrews, A.E., Elhay, M.J., Bowles, V.M., Meeusen, E. and Nash, A.D. (1996) Cytokines as adjuvants for ruminant vaccines. **International Journal for Parasitology** 26: 835-842.
- Schwaiger F.-W., Maddox J., Ballingall K., Buitkamp J., Crawford A., Dutia B.M., Epplen J.T., Ferguson E.D., Groth D., Hopkins J., Rhind S.M., Sargan D., Wetherall J. & Wright H. (1996) The ovine major histocompatibility complex. In **"The major histocompatibility complex of domestic animal species"**, eds. Schook L. and Lamont S. (eds.) CRC Press, Boca Raton, 121-176
- Beh K.J. & Maddox J.F. (1996) Prospects for selection of sheep resistant to gastrointestinal parasites. **Int. J. Parasitol.**, 26: 879-897.
- Hulme D.J., Davies K.P., Beh K.J. & Maddox J.F. (1996) Ovine dinucleotide repeat polymorphism at the McM218, McM150 and McM138 loci. **Animal Genetics** 27: 57.
- Davies K.P., Maddox J.F., Harrison B. & Drinkwater R. (1996) Ovine dinucleotide repeat polymorphism at seven loci. **Animal Genetics**. 27: 287-288.

- Drinkwater R., Harrison B., Davies K.P. & Maddox J.F. (1996) Ovine dinucleotide repeat polymorphism at seven loci. **Animal Genetics**, in press.
- Davies K.P., Maddox J.F., Hulme D. & Beh K. (1996) Ovine dinucleotide repeat polymorphism at four anonymous loci. **Animal Genetics**. 27: 382-383.
- Davies K.P., Maddox J.F., Harrison B. & Drinkwater R. (1996) Ovine dinucleotide repeat polymorphism at eight anonymous loci. **Animal Genetics**. 27: 381-382.
- Hawken R.J., Broom M.F., van Stijn T.C., Lumsden J.M., Broad T.E. & Maddox J.F. (1996) Mapping the ovine genes encoding IL3, IL4, IL5 and CSF2 to sheep chromosome 5q13-q15 by FISH. **Mammalian Genome**, 7: 858-859.
- Hawken R.J. & Maddox J.F. (1996) An ovine dinucleotide polymorphism at the RJH1 locus. **Animal Genetics** 27: 219-220.

1995.

- Newton, S.E. (1995). Progress on Vaccination Against *Haemonchus contortus*. **International Journal for Parasitology**, 25: 1281-1289.
- Adams, T.E. (1995). A second promoter differentially regulates ovine growth hormone receptor messenger ribonucleic acid expression in a tissue-specific manner. **Molecular and Cellular Endocrinology** 108: 23-33.
- Gorrell, M.D., Townsend, W.L. and Ladds, P.W. (1995). The distribution of lymphocyte subpopulations in normal and acanthotic ovine skin. **Veterinary Immunology and Immunopathology** 44: 151-167.
- Andresen, E., Broad, T.E., Brown, S., Cooper, D.W., Distasio, L., Dolling, C.H.S., Fleet, M., Hill, D.F., Lauvergne, J.J., Lundie, R.S., Maddox, J., Nicholas, F.W., Rae, A.L., Renieri, C., Sponenberg, D.P. and Tucker, E.M. (1995). Revised guidelines for gene nomenclature in ruminants 1993. **Genetics Selection Evolution** 27: 89-93.
- Verhagen, A.M., Kimpton, W. and Nash, A.D. (1995). Recirculation of cytolytic T cells from a single lymph node during an immune response to allogeneic leukocytes. **Transplantation** 59 (3): 432-435.
- Meeusen, E. (1995). Rational design of nematode vaccines, natural antigen. **International Journal for Parasitology** 26: 813-818.
- Lofthouse, S.A., Andrews, A.E. and Nash, A.D. (1995). Parameters related to the application of recombinant ovine interleukin-1 β as an adjuvant. **Vaccine** 13(14): 1277-1287.
- Davies, K.P., Maddox, J.F., Harrison, B. and Drinkwater, R. (1995). Ovine dinucleotide repeat polymorphism at the CSR226 and CSR232 loci. **Animal Genetics** 26: 372.
- Wilson, M., Brandon, M.R. and Walker, J. (1995). Molecular and biochemical characterisation of a protective 40 kilodalton antigen from *Corynebacterium pseudotuberculosis*. **Infection and Immunity** 63: 206-211.
- Snibson, K., Woodcock, D., Orian, J., Brandon, M.R. and Adams, T.E. (1995). Methylation and expression of metallothionein promoter ovine growth hormone fusion gene (MToGH1) in transgenic mice. **Transgenic Research** 4: 114-122.
- Townsend, W.L., Gorrell, M.D. and Ladds, P.W. (1995). Major histocompatibility complex antigens in normal, acanthotic and neoplastic ovine skin: An association between tumor

invasiveness and low level MHC class I expression. **Veterinary Immunology and Immunopathology** 45: 237-252.

- Ashman, K., Mather, J., Wiltshire, C., Jacobs, H.J. and Meeusen, E.N.T. (1995). Isolation of a larval glycoprotein from *Haemonchus contortus* and its possible role in evading host immunity. **Molecular and Biochemical Parasitology** 70: 175-179.
- Rosella, G., Zajac, J.D., Baker, L., Kaczmarczyk, S.J., Andrikopoulos, S., Adams, T.E. and Proietto, J. (1995). Impaired glucose tolerance and increased weight gain in transgenic rats overexpressing a non-insulin responsive phosphoenolpyruvate carboxykinase gene. **Molecular Endocrinology** 9(10): 1396-1404.
- Lofthouse, S.A., Andrews, A.E., Nash, A.D. and Bowles, V.M. (1995). Humoral and cellular responses induced by intradermally administered cytokine and conventional adjuvants. **Vaccine** 13: 1131-1137.
- Jacobs, H.J., Ashman, K. and Meeusen, E.N.T. (1995). Humoral and cellular responses following local immunisation with a surface antigen of the gastrointestinal parasite *Haemonchus contortus*. **Veterinary Immunology and Immunopathology** 48: 323-332.
- Tkalcevic, J., Ashman, K. and Meeusen, E. (1995). *Fasciola hepatica*: Rapid identification of newly excysted juvenile proteins. **Biochemical and Biophysical Research Communications** 213(1): 167-174.
- Bischof, R.J., Lee, R., Lee, C.-S. and Meeusen, E. (1995). Dynamic changes in the lymphocyte subpopulations of pig uterine lymph nodes. **Veterinary Immunology and Immunopathology** 51: 315-324.
- Adams, T.E. (1995). Differential expression of growth hormone receptor messenger RNA from a second promoter. **Molecular and Cellular Endocrinology** 108: 23-33.
- Cardamone, M., Puri, N.K. and Brandon, M.R. (1995). Comparing the refolding and reoxidation of recombinant porcine growth hormone from a urea denatured state and from *Escherichia coli* inclusion bodies. **Biochemistry** 34: 5773-5794.
- Barcham, G.J., Andrews, A.E. and Nash, A.D. (1995). Cloning and expression of a cDNA encoding ovine interleukin 7. **Gene** 154: 265-269.
- Martin, H.M., Nash, A.D. and Andrews, A.E. (1995). Cloning and characterisation of an ovine interleukin-10-encoding cDNA. **Gene** 159: 187-191.
- Bowles, V.M., Brandon, M.R. and Meeusen, E.N.T. (1995). Characterisation of local antibody responses to the gastrointestinal parasite *Haemonchus contortus*. **Immunology** 84: 669-674.
- Meeusen, E., Lee, C.S., Rickard, M.D. and Brandon, M.R. (1995). Cellular responses during liverfluke infection in sheep and its evasion by the parasite. **Parasite Immunology** 17: 37-45.
- Bischof, R.J., Brandon, M.R. and Lee, C.S. (1995). Cellular immune responses in the pig uterus during pregnancy. **Journal of Reproductive Immunology** 29: 161-178.
- Crawford, A.M., Dodds, K.G., Pierson, C.A., Ede, A.J., Montgomery, G.W., Garmonsway, H.G., Beattie, A.E., Davies, K., Maddox, J.F., Kappes, S.W., Stone, R.T., Nguyen, T.C., Penty, J.M., Lord, E.A., Broom, J.E., Buitkamp, J., Schwaiger, W., Epplen, J.T., Matthew, P., Matthews, M.E., Hulme, D.J., Beh, K.J., McGraw, R.A. and Beattie, C.W. (1995). An autosomal genetic linkage map of the sheep genome. **Genetics** 140: 703-724.

1994.

- Meeusen, E. and Brandon, M.R. (1994). The use of antibody-secreting cell probes to reveal tissue-restricted immune responses during infection. **European Journal of Immunology** 24: 469-447.
- Walker, I.D., Glew, M.D., O'Keefe, M.A., Metcalfe, S.A., Clevers, H.C., Wijngaard, P.L.J., Adams, T.E. and Hein, W.R. (1994). The T19 family in sheep: isolation and characterisation of multiple T19 genomic recombinant clones and preliminary enumeration of T19-like genes. **Immunology** 83: 517-523.
- Maddox, J.F., Snibson, K.J., Ballingall, K.T. and Fabb, S.A. (1994). The ovine DQA1 and DQA2 genes are both highly polymorphic. **Animal Genetics** 25 Suppl: 20.
- Bowles, V.M., Meeusen, E.N.T., Chandler, K., Verhagen, A., Nash, A.D. and Brandon, M.R. (1994). The immune response of sheep infected with larvae of the sheep blowfly *Lucilia cuprina* monitored via efferent lymph. **Veterinary Immunology and Immunopathology** 40: 341-352.
- Bischof, R., Brandon, M.R. and Lee, C.S. (1994). Studies on the distribution of immune cells in the uteri of prepubertal and cycling gilts. **Journal of Reproductive Immunology** 26: 111-129.
- Cherny, R., Stokes, T.M., Merei, J., Lom, L., Brandon, M.R. and Williams, R.L. (1994). Strategies for the isolation of bovine embryonic stem cells. **Reproduction Fertility and Development** 6: 569-575.
- Binns, R.M., Bischof, R., Carr, M., Davis, W.C., Licence, S.T., Misfeldt, M. and Pospisil, R. (1994). Report on the behaviour of monoclonal antibodies in the 1st International Pig CD Workshop identifying the null cell families. **Veterinary Immunology and Immunopathology** 43:279-287
- Andrews, A., Lofthouse, S., Bowles, V., Brandon, M. and Nash, A. (1994). Production and in vivo use of recombinant ovine IL-1 β as an immunological adjuvant. **Vaccine** 12: 14-22.
- Egan, P.J., Andrews, A.E., Barcham, G.J., Brandon, M.R. and Nash, A.D. (1994). Production and application of monoclonal antibodies to ovine interleukin-1 α and interleukin-1 β . **Veterinary Immunology and Immunopathology** 41: 241-257.
- Davies, K.P. and Maddox, J.F. (1994). Ovine dinucleotide repeat polymorphism at the Lysozyme (LYZ) locus. **Animal Genetics** 25: 204.
- O'Mahoney, J.V. and Adams, T.E. (1994). Optimisation of experimental variables influencing reporter gene expression in hepatoma cells following calcium phosphate transfection. **DNA Cell Biol.** 13: 1227-1232.
- Wooding, F.B.P, Morgan, G., Brandon, M.R. and Camous, S. (1994). Membrane dynamics during migration of placental cells through trophodermal tight junctions in sheep and goats. **Cell & Tissue Research** 276: 387-397.
- Riley, C.B. and Elhay, M.J. (1994). Lectin Histochemistry. In: **Laboratory Histopathology: A Complete Reference**. Woods and Ellis (ed.). Churchill Livingstone, London.
- Bischof, R.J., Lee, C.S. and Meeusen, E.N.T. (1994). Inflammatory response in the pig uterus induced by seminal plasma. **Journal of Reproductive Immunology** 26: 131-146.

- Walker, J., Jackson, H., Wilson, M., Eggleton, D., Meeusen, E.N.T. and Brandon, M.R. (1994). Identification of a novel antigen from *Corynebacterium pseudotuberculosis* that protects sheep against caseous lymphadenitis. **Infection and Immunity** 62: 2562-2567.
- O'Mahoney, J.V., Brandon, M.R. and Adams, T.E. (1994). Identification of a liver-specific promoter for the ovine growth hormone receptor. **Molecular Cellular Endocrinology** 101: 129-139.
- Mountford, P.M., Brandon, M.R. and Adams, T.E. (1994). Expression and characterisation of biologically active ovine follicle stimulating hormone from mammalian cell lines. **Journal of Molecular Endocrinology** 12: 71-83.
- Verhagen, A.M., Kimpton, W.G. and Nash, A.D. (1994). Development of a sandwich immunoassay for the detection of soluble ovine IL-2R α chain. **Veterinary Immunology and Immunopathology** 42: 287-300.
- Buchanan, F., Adams, L., Littlejohn, R., Maddox, J. and Crawford, A. (1994). Determination of evolutionary relationships among sheep breeds using microsatellites. **Genomics** 22: 397-403.
- Elhay, M.J., Hanrahan, C.F., Bowles, V.M., Seow, H.-F., Andrews, A.E. and Nash, A.D. (1994). Cytokine mRNA expression in skin in response to ectoparasite infection. **Parasite Immunology** 16: 451-461.
- Egan, P.J., Rothel, J.S., Andrews, A.E., Seow, H.-F., Wood, P.R. and Nash, A.D. (1994). Characterisation of monoclonal antibodies to ovine tumor necrosis factor- α and development of a sensitive immunoassay. **Veterinary Immunology and Immunopathology** 41: 259-274.
- van Oorschoot, R.A.H., Maddox, J.F., Adams, L.J. and Fabb, S.A. (1994). Characterisation and evolution of ovine MHC class II DQB sequence polymorphism. **Animal Genetics** 25: 417-424.
- Meeusen, E. and Brandon, M.R. (1994). Antibody secreting cells as specific probes for antigen identification. **Journal of Immunological Methods** 172: 71-76.
- Cardamone, M., Puri, N.K., Sawyer, W.H., Capon, R.J. and Brandon, M.R. (1994). A spectroscopic and equilibrium binding analysis of cationic detergent-protein interactions using soluble and insoluble recombinant porcine growth hormone. **Biochim. Biophys. Acta** 1206: 71-82.
- Hawken, R.J., Davies, K.P. and Maddox, J.F. (1994). A polymorphic tetranucleotide repeat in the ovine metallothionein II gene. **Animal Genetics** 25: 366.
- Matthew, P. and Maddox, J.F. (1994). A polymorphic dinucleotide repeat microsatellite detected in the ovine interleukin 2 receptor alpha (IL2RA, CD25) gene. **Animal Genetics** 25: 200.
- Crawford, A.M., Dodds, K.G., Ede, A.J., Pierson, C.A., Garmonsway, H.G., Beattie, A.E., Nguyen, T.C., Maddox, J.F., Lord, A.E., Kappes, S.W., Schwaiger, F.W., Epplen, J.T., Matthews, M., Montgomery, G.W. and Beattie, C.W. (1994). A genetic linkage map of the sheep genome. **Animal Genetics** 25 Suppl: 46.
- Adams, L.J. and Maddox, J.F. (1994). A dinucleotide repeat polymorphism in the ovine insulin-like growth factor-I gene 5' flanking region. **Animal Genetics** 25: 61.
- Hawken, R.J., Davies, K.P. and Maddox, J.F. (1994). A dinucleotide repeat in the ovine interleukin 3 gene of limited polymorphism. **Animal Genetics** 25: 286.

- Lunney-JK; Walker-K; Goldman-T; Aasted-B; Bianchi-A; Binns-R; Licence-S; Bischof-R; Brandon-M; Blecha-F; et-al (1994) Overview of the First International Workshop to Define Swine Leukocyte Cluster of Differentiation (CD) Antigens. **Veterinary Immunology and Immunopathology** 43: 193-206

1993.

- Grain, F., Nain, M.-C., Labonne, M.-P., Lantier, F., Lepochier, P., Gebuhrer, L., Asso, J., Maddox, J. and Betuel, H. (1993). Restriction fragment length polymorphism of DQB and DRB class II genes of the ovine major histocompatibility complex. **Animal Genetics** 24: 377-384.
- Nash, A.D., Lofthouse, S.A., Barcham, G.J., Jacobs, H.J., Ashman, K., Meeusen, E.N.T., Brandon, M.R. and Andrews, A.E. (1993). Recombinant cytokines as immunological adjuvants. **Immunology and Cell Biology** 71: 367-379.
- Gill, H.S., Watson, D.L. and Brandon, M.R. (1993). Monoclonal antibody to CD4+ T cells abrogates genetic resistance to gastrointestinal nematodes in sheep. **Immunology** 78: 43-49.
- Andrews, A.E., Barcham, G.J., Ashman, K., Meeusen, E.N.T., Brandon, M.R. and Nash, A.D. (1993). Molecular cloning and characterisation of an ovine IL-6 cDNA. **Immunology and Cell Biology** 71: 341-348.
- Mann, G.B., Fowlers, K.J., Gabriel, S., Nice, E.C., Williams, R.L. and Dunn, A.R. (1993). Mice with a null mutation of the TFF α gene have abnormal skin architecture and frequently develop corneal inflammation. **Cell** 73: 249-261.
- Riley, C.B. and Elhay, M.J. (1993). Lectin Histochemistry. In: **Laboratory Histopathology: A Complete Reference**. Woods and Ellis (ed.). Churchill Livingstone, London.
- Fabb, S.A., Maddox, J.F., Gogolin-Ewens, K.J., Baker, L., Wu, M.-J. and Brandon, M.R. (1993). Isolation, characterisation and evolution of ovine MHC class II DRA and DQA genes. **Animal Genetics** 24: 249-255.
- Fabb, S.A., Gogolin-Ewens, K.G. and Maddox, J.F. (1993). Isolation and nucleotide sequence of sheep CD5. **Immunogenetics** 38: 241.
- Cardamone, M., Ashman, K., Brandon, M.R. and Puri, N.K. (1993). Identification of cysteine-containing peptides during peptide mapping of recombinant proteins. **Peptide Research** 6: 242-248.
- Tiong, G., Gill, H., Lofthouse, S. and Puri, N. (1993). Comparison of conventional adjuvants and "adjuvant free" monoclonal antibody targeting for stimulating antibody responses against a conjugate of LHRH and avidin. **Vaccine** 11: 425-430.
- Verhagen, A.M., Brandon, M.R. and Nash, A.D. (1993). Characterisation of the ovine interleukin-2 receptor- α chain: differential induction on precultured $\alpha\beta$ and $\gamma\delta$ T cells. **Immunology** 79: 471-478.
- Atkinson, Y.H., Gogolin-Ewens, K.J., Hounsell, E.F., Davies, M.J., Brandon, M.R. and Seemark, R.F. (1993). Characterisation of placentation-specific binucleate cells specific glycoproteins possessing a novel carbohydrate: evidence for a new family of pregnancy associated molecules. **Journal of Biological Chemistry** 268: 26679-26685.

- Meeusen, E., Fox, A., Brandon, M.R. and Lee, C.S. (1993). Activation of uterine intraepithelial $\gamma\delta$ T cell receptor positive lymphocytes during pregnancy. **European Journal of Immunology** 23: 1112-1117.
- Bischof, R.J., Meeusen, E.N.T., Hughes, P.E., Brandon, M.R. and Lee, C.S. (1993). A role for the local uterine immune system in porcine reproduction. **Australian Association of Pig Veterinarians**, Upjohn Pty Ltd pp 25-29.

1992.

- Grooby, W.L., Carter, J.K., Rao, M.M., Dewan, P., Seymour, A.E., Brandon, M.R. and Russ, G.R. (1992). Use of an anti-LFA-1 antibody in renal allograft rejection in sheep. **Transplantation Proceedings** 24: 2304.
- Turnbull, I.F., Bowles, V.M., Wiltshire, C.J., Brandon, M.R. and Meeusen, E.N.T. (1992). Systemic immunisation of sheep with surface antigens from *Haemonchus contortus* larvae. **International Journal for Parasitology** 22: 537-540.
- Ashman, K., Gausepohl, H. and Meager, A. (1992). Synthetic peptides as an analytical tool for studying ligand and acceptor binding. **Journal of Protein Chemistry** 11: 423-424.
- Cardamone, M. and Puri, N.K. (1992). Spectrofluorimetric assessment of the surface hydrophobicity of proteins. **Biochemical Journal** 282: 593-598.
- Puri, N.K., Crivelli, E., Cardamone, M., Fiddes, R., Bertolini, J., Ninham, B. and Brandon, M.R. (1992). Solubilisation of growth hormone and other recombinant proteins from *Escherichia coli* inclusion bodies by using a cationic surfactant. **Biochemical Journal** 285: 871-879.
- Parsons, Y.M., Cooper, D.W., Piper, L.R. and Adams, T.E. (1992). Restriction fragment length polymorphisms at the ovine locus for growth hormone. **Animal Genetics** 23: 571.
- Mountford, P.S., Brandon, M.R. and Adams, T.E. (1992). Removal of 3' untranslated sequences dramatically enhances transient expression of ovine follicle stimulating hormone β gene messenger ribonucleic acid. **Journal of Neuroendocrinology** 4: 655-658.
- Lee, C.S., Meeusen, E., Gogolin-Ewens, K. and Brandon, M.R. (1992). Quantitative and qualitative changes in the intraepithelial lymphocyte population in the uterus of non-pregnant and pregnant sheep. **American Journal of Reproductive Immunology** 28: 90-96.
- Adams, T.E., McIntosh, B., Brandon, M.R., Wordsworth, P. and Puri, N.K. (1992). Production of methionyl-minus ovine growth hormone in *Escherichia coli* and one-step purification. **Gene** 122: 371-375.
- Gorrell, M.D., Brandon, M.R., Sheffer, D., Adams, R.J. and Narayan, O. (1992). Ovine lentivirus is macrophagetropic and does not replicate productively in T lymphocytes. **Journal of Virology** 66: 2679-2688.
- Verhagen A.M., Andrews A.E., Brandon M.R. and Nash A.D. (1992). Molecular cloning, expression and characterisation of the ovine IL-2R α chain. **Immunology** 76: 1-9.
- Lee, C.S., Meeusen, E. and Brandon, M.R. (1992). Local immunity in the mammary gland. **Veterinary Immunology and Immunopathology** 32: 1-11.
- Gill, H.S., Watson, D.L. and Brandon, M.R. (1992). In vivo inhibition by a monoclonal antibody to CD4+ T cells of humoral and cellular immunity in sheep. **Immunology** 77: 38-42.

- Gogolin-Ewens, K.J., Maddox, J.F., Fabb, S.A. and Brandon, M.R. (1992). Genetic markers for the selection of parasite resistance in livestock. In: **Animal parasite control by utilising biotechnology**. Yong, W.K. (ed.). CRC Press, Boca Raton, FL. pp 407-447.
- Fiddes, R.J., Brandon, M.R. and Adams, T.E. (1992). Functional expression of a transfected ovine growth hormone receptor in Chinese hamster ovary cells. **Molecular and Cellular Endocrinology** 86: 37-47.
- Ballingall, K.T., Wright, H., Redmond, J., Dutia, B.M., Hopkins, J., Lang, J., Deverson, E.V., Howard, J.C., Puri, N. and Haig, D. (1992). Expression and characterisation of ovine MHC class II (OLA-DR) genes. **Animal Genetics** 23: 363-375.
- Nash, A.D., Brandon, M.R. and Bello, P.A. (1992). Effects of tumour necrosis factor- α on growth hormone and interleukin 6 mRNA in ovine pituitary cells. **Journal of Molecular and Cellular Endocrinology** 84: 31-37.
- Nash, A.D., Barcham, G.J., Andrews, A.E. and Brandon, M.R. (1992). Characterisation of ovine alveolar macrophages. Regulation of surface antigen expression and cytokine production. **Veterinary Immunology and Immunopathology** 31: 77-94.
- Markham, P.F., Glew, M.D., Brandon, M.R., Walker, I.D. and Whithear, K.G. (1992). Characterisation of a major hemagglutinin protein from *Mycoplasma gallisepticum*. **Infection and Immunity** 60: 3885-3891.
- Bowles, V.M., Grey, S.T. and Brandon, M.R. (1992). Cellular immune responses in the skin of sheep infected with larvae of the sheep blowfly. **Veterinary Parasitology** 44: 151-162.
- Puri, N.K. and Cardamone, M. (1992). A relationship between the starting secondary structure of recombinant porcine growth hormone solubilised from inclusion bodies and the yield of native (monomeric) protein after in vitro refolding. **FEBS LETTS** 305: 177-180.

1991.

- Keech, C.L. and Brandon, M.R. (1991). Workshop findings on the ovine homologue of CD5. **Veterinary Immunology and Immunopathology** 27: 103-107.
- Scott, P.C., Maddox, J.F., Gogolin-Ewens, K. and Brandon, M.R. (1991). The nucleotide sequence of ovine MHC Class II B genes: DQB and DRB. **Immunogenetics** 34: 80-87.
- Scott, P.C., Gogolin-Ewens, K.J., Adams, T.E. and Brandon, M.R. (1991). Nucleotide sequence, polymorphism and evolution of ovine MHC Class II DQA genes. **Immunogenetics** 34: 69-79.
- Gogolin-Ewens, K.J., Meeusen, E.N.T., Scott, P.C., Adams, T.E. and Brandon, M.R. (1991). Molecular genetics of parasite resistance. In "**Breeding for Disease Resistance in Sheep**" (eds. C.D. Gray and R.R. Woolaston). Australian Wool Corporation, Melbourne pp 121-129.
- Nash, A.D., Barcham, G.J., Brandon, M.R. and Andrews, A.E. (1991). Molecular cloning, expression and characterisation of ovine TNF α . **Immunology and Cell Biology** 69: 273-283.
- Andrews, A.E., Barcham, G.J., Brandon, M.R. and Nash, A.D. (1991). Molecular cloning and characterisation of ovine IL-1 α and IL-1 β . **Immunology** 74: 453-460.
- Walker, J., Jackson, H., Brandon, M.R. and Meeusen, E. (1991). Lymphocyte subpopulations in pyogranulomas of caseous lymphadenitis. **Clinical and Experimental Immunology** 86: 13-18.

- Orian, J.M., Mackay, I.R., Tamakoshi, K., Lee, C.S. and Brandon, M.R. (1991). Hepatocellular carcinoma in mice with ovine growth hormone transgene. In "**Viral Hepatitis - 1990**" (eds. B. Hollinger, S.M. Lemon and S. Margolis), Williams and Wilkins, Baltimore, MD, 589-592.
- Orian, J.M., Snibson, K., Stevenson, J.L., Brandon, M.R. and Herington, A.C. (1991). Elevation of growth hormone and prolactin receptors in transgenic mice expressing ovine growth hormone. **Endocrinology** 128: 1238-1246.
- Meeusen, E., Lee, C.S. and Brandon, M.R. (1991). Differential migration of T and B cells during an acute inflammatory response. **European Journal of Immunology** 21: 2269-2272.
- O'Mahoney, J.V., Brandon, M.R. and Adams, T.E. (1991). Developmental and tissue-specific regulation of ovine insulin-like growth factor II (IGF-11) mRNA expression. **Molecular and Cellular Endocrinology** 78: 87-96.

1990.

- Adams, T.E. (1990). Tolerance to self-antigens in transgenic mice. **Molecular Biology and Medicine** 7: 341-357.
- Adams, T.E., Baker, L., Fiddes, R.J. and Brandon, M.R. (1990). The sheep growth hormone receptor: Molecular cloning and ontogeny of mRNA expression in the liver. **Molecular and Cellular Endocrinology** 73: 135-145.
- Loudovaris, T., Brandon, M.R. and Fahey, K.J. (1990). The major histocompatibility complex and genetic control of antibody response to synthetic antigens in chickens. **Avian Pathology** 19: 101-117.
- Loudovaris, T., Brandon, M.R. and Fahey, K.J. (1990). The major histocompatibility complex and genetic control of antibody response to sheep red blood cells in chickens. **Avian Pathology** 19: 89-99.
- Lee, C.S., Ralph, M.M., Gogolin-Ewens, K.J. and Brandon, M.R. (1990). Monoclonal antibody (SBU-1 and SBU-3) identification of cells dissociated from the sheep placentomal trophoblast. **Journal of Histochemistry and Cytochemistry** 38: 649-652.
- Gogolin-Ewens, K., Meeusen, E., Scott, P.C., Adams, T.E. and Brandon, M.R. (1990). Genetic selection for disease resistance and traits of economic importance in animal production. **Revue Scientifique et Technique, Office International des Epizooties** 9: 865-896.
- Low, B.G., Hansen, P.J., Drost, M. and Gogolin-Ewens, K.J. (1990). Expression of major histocompatibility antigens in bovine placenta. **Journal of Reproduction and Fertility** 90: 235-243.
- Meeusen, E., Barcham, G.J., Gorrell, M.D., Rickard, M.D. and Brandon, M.R. (1990). Cysticercosis: Cellular immune responses during primary and secondary infection. **Parasite Immunology** 12: 403-418.
- York, J.J., Sonza, S., Brandon, M.R. and Fahey, K.J. (1990). Antigens of infectious laryngotracheitis Herpesvirus defined by monoclonal antibodies. **Archives of Virology** 115: 147-162.

- Orian, J.M., Tamakoshi, K., Mackay, I.R. and Brandon, M.R. (1990). A new murine model for hepatocellular carcinoma: metallothionein-ovine growth hormone transgenic mice. **Journal of the National Cancer Institute** 82: 393-398.
- Egan P.J., and Nash A.D. Differential synthesis, cellular localisation and secretion of Interleukin – 1 α and Interleukin –1 β from ovine macrophages. **Veterinary Immunology & Immunopathology**. 55: 163-174.