

# Edinburgh Infectious Diseases publications in 2011

- 1. Adamson, W.E., E.C. McGregor, K. Kavanagh, J. McMenamin, S. McDonagh, P.J. Molyneaux, K.E. Templeton, and W.F. Carman. 2011a. Influenza A(H1N1)2009 antibody seroprevalence in Scotland following the 2010/11 influenza season. *Euro Surveill*. 16:19871.
- 2. Adamson, W.E., E.C. McGregor, K. Kavanagh, J. McMenamin, S. McDonagh, P.J. Molyneaux, K.E. Templeton, and W.F. Carman. 2011b. Population exposure to a novel influenza A virus over three waves of infection. *J Clin Virol*. 52:300-303.
- 3. Ahmed, H.A., E.T. MacLeod, G. Hide, S.C. Welburn, and K. Picozzi. 2011. The best practice for preparation of samples from FTA(R)cards for diagnosis of blood borne infections using African trypanosomes as a model system. *Parasit Vectors*. 4:68.
- 4. Ait-Ali, T., A.D. Wilson, W. Carre, D.G. Westcott, J.P. Frossard, M.A. Mellencamp, D. Mouzaki, O. Matika, D. Waddington, T.W. Drew, S.C. Bishop, and A.L. Archibald. 2011. Host inhibits replication of European porcine reproductive and respiratory syndrome virus in macrophages by altering differential regulation of type-I interferon transcriptional response. *Immunogenetics*. 63:437-448.
- 5. Alexander, K.A., M.K. Chang, E.R. Maylin, T. Kohler, R. Muller, A.C. Wu, N. Van Rooijen, M.J. Sweet, D.A. Hume, L.J. Raggatt, and A.R. Pettit. 2011. Osteal macrophages promote in vivo intramembranous bone healing in a mouse tibial injury model. *J Bone Miner Res*. 26:1517-1532.
- 6. Ali, M., P.M. Hocking, M. McKibbin, S. Finnegan, M. Shires, J.A. Poulter, K. Prescott, A. Booth, Y. Raashid, H. Jafri, J.B. Ruddle, D.A. Mackey, S.G. Jacobson, C. Toomes, D.H. Lester, D.W. Burt, W.J. Curry, and C.F. Inglehearn. 2011. Mpdz null allele in an avian model of retinal degeneration and mutations in human leber congenital amaurosis and retinitis pigmentosa. *Invest Ophthalmol Vis Sci*. 52:7432-7440.
- 7. Alikhan, M.A., C.V. Jones, T.M. Williams, A.G. Beckhouse, A.L. Fletcher, M.M. Kett, S. Sakkal, C.S. Samuel, R.G. Ramsay, J.A. Deane, C.A. Wells, M.H. Little, D.A. Hume, and S.D. Ricardo. 2011. Colony-stimulating factor-1 promotes kidney growth and repair via alteration of macrophage responses. *Am J Pathol*. 179:1243-1256.
- 8. Allebrandt, K.V., N. Amin, B. Muller-Myhsok, T. Esko, M. Teder-Laving, R.V. Azevedo, C. Hayward, J. van Mill, N. Vogelzangs, E.W. Green, S.A. Melville, P. Lichtner, H.E. Wichmann, B.A. Oostra, A.C. Janssens, H. Campbell, J.F. Wilson, A.A. Hicks, P.P. Pramstaller, Z. Dogas, I. Rudan, M. Merrow, B. Penninx, C.P. Kyriacou, A. Metspalu, C.M. van Duijn, T. Meitinger, and T. Roenneberg. 2011. A K(ATP) channel gene effect on sleep duration: from genome-wide association studies to function in Drosophila. *Mol Psychiatry*.
- 9. Allen, D.E., and T.J. Little. 2011. Identifying energy constraints to parasite resistance. *J Evol Biol*. 24:224-229.
- 10. Allen, J.E., and R.M. Maizels. 2011. Diversity and dialogue in immunity to helminths. *Nat Rev Immunol*. 11:375-388.
- 11. Allen, J.E., and T.A. Wynn. 2011. Evolution of Th2 immunity: a rapid repair response to tissue destructive pathogens. *PLoS Pathog*. 7:e1002003.
- 12. Alloatti, A., S. Gupta, M. Gualdron-Lopez, P.A. Nguewa, S.G. Altabe, G. Deumer, P. Wallemacq, P.A. Michels, and A.D. Uttaro. 2011. Stearoyl-CoA desaturase is an essential enzyme for the parasitic protist Trypanosoma brucei. *Biochem Biophys Res Commun*. 412:286-290.
- 13. Amorim, M.J., E.A. Bruce, E.K. Read, A. Foeglein, R. Mahen, A.D. Stuart, and P. Digard. 2011. A Rab11- and microtubule-dependent mechanism for cytoplasmic transport of influenza A virus viral RNA. *J Virol*. 85:4143-4156.
- 14. Anderson, N.E., J. Mubanga, E.M. Fevre, K. Picozzi, M.C. Eisler, R. Thomas, and S.C. Welburn. 2011. Characterisation of the wildlife reservoir community for human and animal trypanosomiasis in the Luangwa Valley, Zambia. *PLoS Negl Trop Dis.* 5:e1211.
- 15. Arico, E., D.M. Monque, G. D'Agostino, F. Moschella, M. Venditti, U. Kalinke, D.J. Allen, J.P. Stewart, A.A. Nash, F. Belardelli, and M. Ferrantini. 2011. MHV-68 producing mIFNalpha1 is severely attenuated in vivo and effectively protects mice against challenge with wt MHV-68. *Vaccine*. 29:3935-3944.
- 16. Arnot, D.E., and A.T. Jensen. 2011. Antigenic Variation and the Genetics and Epigenetics of the PfEMP1 Erythrocyte Surface Antigens in Plasmodium falciparum Malaria. *Adv Appl Microbiol*. 74:77-96.
- 17. Arnot, D.E., E. Ronander, and D.C. Bengtsson. 2011. The progression of the intra-erythrocytic cell cycle of Plasmodium falciparum and the role of the centriolar plaques in asynchronous mitotic division during schizogony. *Int J Parasitol*. 41:71-80.



- Leading infectious disease research and training
- 18. Athanasiadou, S., L.A. Jones, S.T. Burgess, I. Kyriazakis, A.D. Pemberton, J.G. Houdijk, and J.F. Huntley. 2011. Genome-wide transcriptomic analysis of intestinal tissue to assess the impact of nutrition and a secondary nematode challenge in lactating rats. PLoS One. 6:e20771.
- 19. Atkins, K.E., A.F. Read, N.J. Savill, K.G. Renz, S.W. Walkden-Brown, and M.E. Woolhouse. 2011. Modelling Marek's disease virus (MDV) infection: parameter estimates for mortality rate and infectiousness. BMC Vet Res. 7:70.
- 20. Avilan, L., M. Gualdron-Lopez, W. Quinones, L. Gonzalez-Gonzalez, V. Hannaert, P.A. Michels, and J.L. Concepcion. 2011. Enolase: a key player in the metabolism and a probable virulence factor of trypanosomatid parasites-perspectives for its use as a therapeutic target. *Enzyme Res.* 2011:932549.
- 21. Bahl, J., M.I. Nelson, K.H. Chan, R. Chen, D. Vijaykrishna, R.A. Halpin, T.B. Stockwell, X. Lin, D.E. Wentworth, E. Ghedin, Y. Guan, J.S. Peiris, S. Riley, A. Rambaut, E.C. Holmes, and G.J. Smith. 2011. Temporally structured metapopulation dynamics and persistence of influenza A H3N2 virus in humans. Proc Natl Acad Sci U S A. 108:19359-19364.
- 22. Bai, J., S.P. McAteer, E. Paxton, A. Mahajan, D.L. Gally, and J.J. Tree. 2011. Screening of an E. coli O157:H7 Bacterial Artificial Chromosome Library by Comparative Genomic Hybridization to Identify Genomic Regions Contributing to Growth in Bovine Gastrointestinal Mucus and Epithelial Cell Colonization. Front Microbiol.
- 23. Baillie, J.K., M.W. Barnett, K.R. Upton, D.J. Gerhardt, T.A. Richmond, F. De Sapio, P.M. Brennan, P. Rizzu, S. Smith, M. Fell, R.T. Talbot, S. Gustincich, T.C. Freeman, J.S. Mattick, D.A. Hume, P. Heutink, P. Carninci, J.A. Jeddeloh, and G.J. Faulkner. 2011. Somatic retrotransposition alters the genetic landscape of the human brain. Nature. 479:534-537.
- 24. Baker, R.H., S. Buschbaum, J.B. Matthews, I.J. McKendrick, T. Schnieder, C. Strube, and A.J. Nisbet. 2011. GTPcyclohydrolase and development in Teladorsagia circumcincta and Dictyocaulus viviparus (Nematoda: Strongylida). Exp Parasitol. 128:309-317.
- 25. Balu, S., L. Rothwell, and P. Kaiser. 2011. Production and characterisation of monoclonal antibodies specific for chicken interleukin-12. Vet Immunol Immunopathol. 140:140-146.
- 26. Bannoehr, J., N.L. Ben Zakour, M. Reglinski, N.F. Inglis, S. Prabhakaran, E. Fossum, D.G. Smith, G.J. Wilson, R.A. Cartwright, J. Haas, M. Hook, A.H. van den Broek, K.L. Thoday, and J.R. Fitzgerald. 2011. Genomic and surface proteomic analysis of the canine pathogen Staphylococcus pseudintermedius reveals proteins that mediate adherence to the extracellular matrix. Infect Immun. 79:3074-3086.
- 27. Barber, T.J., A.M. Geretti, J. Anderson, A. Schwenk, A.N. Phillips, L. Bansi, R. Gilson, T. Hill, J. Walsh, M. Fisher, M. Johnson, F. Post, P. Easterbrook, B. Gazzard, A. Palfreeman, C. Orkin, C. Leen, M. Gompels, D. Dunn, V. Delpech, D. Pillay, and C.A. Sabin. 2011. Outcomes in the first year after initiation of first-line HAART among heterosexual men and women in the UK CHIC Study. Antivir Ther. 16:805-814.
- 28. Barlow, P.G., P. Svoboda, A. Mackellar, A.A. Nash, I.A. York, J. Pohl, D.J. Davidson, and R.O. Donis. 2011. Antiviral activity and increased host defense against influenza infection elicited by the human cathelicidin LL-37. PLoS One. 6:e25333.
- 29. Barran, P.E. 2011. (Re)solution of a protein fold without solution. *Angew Chem Int Ed Engl.* 50:3120-3122.
- 30. Barran, P.E., H.L. Cole, S.M. Goldup, D.A. Leigh, P.R. McGonigal, M.D. Symes, J. Wu, and M. Zengerle. 2011. Active-Metal Template Synthesis of a Molecular Trefoil Knot. Angew Chem Int Ed Engl.
- 31. Beard, P.M., E. Munro, and A.G. Gow. 2011. A quadrigeminal dermoid cyst with concurrent necrotizing granulomatous leukoencephalomyelitis in a Yorkshire Terrier dog. J Vet Diagn Invest. 23:1075-1078.
- 32. Beatson, S.A., M. das Gracas de Luna, N.L. Bachmann, N.F. Alikhan, K.R. Hanks, M.J. Sullivan, B.A. Wee, A.C. Freitas-Almeida, P.A. Dos Santos, J.T. de Melo, D.J. Squire, A.F. Cunningham, J.R. Fitzgerald, and I.R. Henderson. 2011. Genome sequence of the emerging pathogen Aeromonas caviae. J Bacteriol. 193:1286-
- 33. Bell, K., and K. Oparka. 2011. Imaging plasmodesmata. *Protoplasma*. 248:9-25.
- 34. Ben Zakour, N.L., J. Bannoehr, A.H. van den Broek, K.L. Thoday, and J.R. Fitzgerald. 2011. Complete genome sequence of the canine pathogen Staphylococcus pseudintermedius. J Bacteriol. 193:2363-2364.
- 35. Benavides, J., S. Maley, Y. Pang, J. Palarea, S. Eaton, F. Katzer, E.A. Innes, D. Buxton, and F. Chianini. 2011. Development of lesions and tissue distribution of parasite in lambs orally infected with sporulated oocysts of Toxoplasma gondii. Vet Parasitol. 179:209-215.
- 36. Benjamin, L.A., P. Lewthwaite, R. Vasanthapuram, G. Zhao, C. Sharp, P. Simmonds, D. Wang, and T. Solomon. 2011. Human parvovirus 4 as potential cause of encephalitis in children, India. Emerg Infect Dis. 17:1484-1487.



- 37. Bennett, S., H. Harvala, J. Witteveldt, E.C. McWilliam Leitch, N. McLeish, K. Templeton, R. Gunson, W.F. Carman, and P. Simmonds. 2011. Rapid simultaneous detection of enterovirus and parechovirus RNAs in clinical samples by one-step real-time reverse transcription-PCR assay. J Clin Microbiol. 49:2620-2624.
- 38. Berepiki, A., A. Lichius, and N.D. Read. 2011. Actin organization and dynamics in filamentous fungi. Nat Rev Microbiol. 9:876-887.
- 39. Berezovskaya, Y., C.T. Armstrong, A.L. Boyle, M. Porrini, D.N. Woolfson, and P.E. Barran. 2011. Metal binding to a zinc-finger peptide: a comparison between solution and the gas phase. Chem Commun (Camb). 47:412-
- 40. Bermingham, M.L., S. Brotherstone, D.P. Berry, S.J. More, M. Good, A.R. Cromie, I.M. White, I.M. Higgins, M. Coffey, S.H. Downs, E.J. Glass, S.C. Bishop, A.P. Mitchell, R.S. Clifton-Hadley, and J.A. Woolliams. 2011. Evidence for genetic variance in resistance to tuberculosis in Great Britain and Irish Holstein-Friesian populations. BMC Proc. 5 Suppl 4:S15.
- 41. Bielejec, F., A. Rambaut, M.A. Suchard, and P. Lemey. 2011. SPREAD: spatial phylogenetic reconstruction of evolutionary dynamics. Bioinformatics. 27:2910-2912.
- 42. Biffani, S., S. Botti, S.C. Bishop, A. Stella, and E. Giuffra. 2011. Using SNP array data to test for host genetic and breed effects on Porcine Reproductive and Respiratory Syndrome Viremia. BMC Proc. 5 Suppl 4:S28.
- 43. Bishop, S.C., J.K. Lunney, M.H. Pinard-van der Laan, and C.G. Gay. 2011. Report from the second international symposium on animal genomics for animal health: critical needs, challenges and potential solutions. BMC Proc. 5 Suppl 4:S1.
- 44. Blackburn, E.A., and M.D. Walkinshaw. 2011. Targeting FKBP isoforms with small-molecule ligands. Curr Opin Pharmacol. 11:365-371.
- 45. Blanc, M., W.Y. Hsieh, K.A. Robertson, S. Watterson, G. Shui, P. Lacaze, M. Khondoker, P. Dickinson, G. Sing, S. Rodriguez-Martin, P. Phelan, T. Forster, B. Strobl, M. Muller, R. Riemersma, T. Osborne, M.R. Wenk, A. Angulo, and P. Ghazal. 2011. Host defense against viral infection involves interferon mediated downregulation of sterol biosynthesis. PLoS Biol. 9:e1000598.
- 46. Boeckel, J.N., V. Guarani, M. Koyanagi, T. Roexe, A. Lengeling, R.T. Schermuly, P. Gellert, T. Braun, A. Zeiher, and S. Dimmeler. 2011. Jumonji domain-containing protein 6 (Jmjd6) is required for angiogenic sprouting and regulates splicing of VEGF-receptor 1. Proc Natl Acad Sci U S A. 108:3276-3281.
- 47. Borger, J.G., J.M. Cardenas-Maestre, R. Zamoyska, and R.M. Sanchez-Martin. 2011. Novel strategy for microsphere-mediated DNA transfection. *Bioconjug Chem.* 22:1904-1908.
- 48. Borges, L.E., A.W. Horne, S.E. McDonald, J.L. Shaw, P.C. Lourenco, F. Petraglia, and H.O. Critchley. 2011. Attenuated tubal and endometrial urocortin 1 and corticotropin-releasing hormone receptor expression in ectopic pregnancy. Reprod Sci. 18:261-268.
- 49. Boros, A., P. Pankovics, P. Simmonds, and G. Reuter. 2011. Novel positive-sense, single-stranded RNA (+ssRNA) virus with di-cistronic genome from intestinal content of freshwater carp (Cyprinus carpio). PLoS One. 6:e29145.
- 50. Bourke, C.D., R.M. Maizels, and F. Mutapi. 2011. Acquired immune heterogeneity and its sources in human helminth infection. Parasitology. 138:139-159.
- 51. Bournazos, S., I. Bournazou, J.T. Murchison, W.A. Wallace, P. McFarlane, N. Hirani, A.J. Simpson, I. Dransfield, and S.P. Hart. 2011. Copy number variation of FCGR3B is associated with susceptibility to idiopathic pulmonary fibrosis. Respiration. 81:142-149.
- 52. Bowler, F.R., P.A. Reid, A.C. Boyd, J.J. Diaz-Mochon, and M. Bradley. 2011. Dynamic chemistry for enzymefree allele discrimination in genotyping by MALDI-TOF mass spectrometry. Anal Methods-Uk. 3:1656-1663.
- 53. Bradford, B.M., D.P. Sester, D.A. Hume, and N.A. Mabbott. 2011. Defining the anatomical localisation of subsets of the murine mononuclear phagocyte system using integrin alpha X (Itgax, CD11c) and colony stimulating factor 1 receptor (Csf1r, CD115) expression fails to discriminate dendritic cells from macrophages. *Immunobiology*. 216:1228-1237.
- 54. Brennand, A., M. Gualdron-Lopez, I. Coppens, D.J. Rigden, M.L. Ginger, and P.A. Michels. 2011. Autophagy in parasitic protists: unique features and drug targets. Mol Biochem Parasitol. 177:83-99.
- 55. Brhlikova, P., I. Harper, R. Jeffery, N. Rawal, M. Subedi, and M. Santhosh. 2011. Trust and the regulation of pharmaceuticals: South Asia in a globalised world. Global Health. 7:10.
- 56. Britton, C., B. Samarasinghe, and D.P. Knox. 2011. Ups and downs of RNA interference in parasitic nematodes. Exp Parasitol.
- 57. Brock, A.J., O. Matika, A.D. Wilson, J. Anderson, A.C. Morin, H.A. Finlayson, G. Reiner, H. Willems, S.C. Bishop, A.L. Archibald, and T. Ait-Ali. 2011. An intronic polymorphism in the porcine IRF7 gene is associated with



- Leading infectious disease research and training
- better health and immunity of the host during Sarcocystis infection, and affects interferon signalling. Anim Genet. 42:386-394.
- 58. Brockhurst, M.A., N. Colegrave, and D.E. Rozen. 2011. Next-generation sequencing as a tool to study microbial evolution. Mol Ecol. 20:972-980.
- 59. Brown, J.K., and A.W. Horne. 2011. Laboratory models for studying ectopic pregnancy. Curr Opin Obstet Gynecol. 23:221-226.
- 60. Brown, R.J., P.J. Peters, C. Caron, M.P. Gonzalez-Perez, L. Stones, C. Ankghuambom, K. Pondei, C.P. McClure, G. Alemnji, S. Taylor, P.M. Sharp, P.R. Clapham, and J.K. Ball. 2011. Intercompartmental recombination of HIV-1 contributes to env intrahost diversity and modulates viral tropism and sensitivity to entry inhibitors. J Virol. 85:6024-6037.
- 61. Brown, S.P., and D.A. Levin. 2011. Social dilemmas among supergenes: intragenomic sexual conflict and a selfing solution in Oenothera. Evolution. 65:3360-3367.
- 62. Buchrieser, C., C. Rusniok, P. Garrido, T. Hain, M. Scortti, R. Lampidis, U. Karst, T. Chakraborty, P. Cossart, J. Kreft, J.A. Vazquez-Boland, W. Goebel, and P. Glaser. 2011. Complete genome sequence of the animal pathogen Listeria ivanovii, which provides insights into host specificities and evolution of the genus Listeria. J Bacteriol. 193:6787-6788.
- 63. Burgess, S.T., T.N. McNeilly, C.A. Watkins, A.J. Nisbet, and J.F. Huntley. 2011a. Host transcription factors in the immediate pro-inflammatory response to the parasitic mite Psoroptes ovis. PLoS One. 6:e24402.
- 64. Burgess, S.T., A.J. Nisbet, F. Kenyon, and J.F. Huntley. 2011b. Generation, analysis and functional annotation of expressed sequence tags from the ectoparasitic mite Psoroptes ovis. Parasit Vectors. 4:145.
- 65. Cavanagh, D.R., P.M. Dubois, A. Holtel, A. Kisser, O. Leroy, E. Locke, V.S. Moorthy, E.J. Remarque, and Y.P. Shi. 2011. Towards validated assays for key immunological outcomes in malaria vaccine development. Vaccine. 29:3093-3095.
- 66. Charleston, B., B.M. Bankowski, S. Gubbins, M.E. Chase-Topping, D. Schley, R. Howey, P.V. Barnett, D. Gibson, N.D. Juleff, and M.E. Woolhouse. 2011. Relationship between clinical signs and transmission of an infectious disease and the implications for control. Science. 332:726-729.
- 67. Chen, N., M.J. Xu, A.J. Nisbet, C.Q. Huang, R.Q. Lin, Z.G. Yuan, H.Q. Song, and X.Q. Zhu. 2011. Ascaris suum: RNAi mediated silencing of enolase gene expression in infective larvae. Exp Parasitol. 127:142-146.
- 68. Childs, D.Z., T.N. Coulson, J.M. Pemberton, T.H. Clutton-Brock, and M. Rees. 2011. Predicting trait values and measuring selection in complex life histories: reproductive allocation decisions in Soay sheep. Ecol Lett. 14:985-992.
- 69. Cho, W.S., R. Duffin, S.E. Howie, C.J. Scotton, W.A. Wallace, W. Macnee, M. Bradley, I.L. Megson, and K. Donaldson. 2011a. Progressive severe lung injury by zinc oxide nanoparticles; the role of Zn2+ dissolution inside lysosomes. Part Fibre Toxicol. 8:27.
- 70. Cho, W.S., R. Duffin, S.E.M. Howie, C.J. Scotton, W.A.H. Wallace, W. MacNee, M. Bradley, I.L. Megson, and K. Donaldson. 2011b. Progressive severe lung injury by zinc oxide nanoparticles; the role of Zn2+ dissolution inside lysosomes. Part Fibre Toxicol. 8.
- 71. Choi, Y.P., A. Groner, J.W. Ironside, and M.W. Head. 2011a. Comparison of the level, distribution and form of disease-associated prion protein in variant and sporadic Creutzfeldt-Jakob diseased brain using conformation-dependent immunoassay and Western blot. J Gen Virol. 92:727-732.
- 72. Choi, Y.P., A. Groner, J.W. Ironside, and M.W. Head. 2011b. Correlation of polydispersed prion protein and characteristic pathology in the thalamus in variant Creutzfeldt-Jakob disease: implication of small oligomeric species. Brain Pathol. 21:298-307.
- 73. Claessens, A., A. Ghumra, A.P. Gupta, S. Mok, Z. Bozdech, and J.A. Rowe. 2011. Design of a variant surface antigen-supplemented microarray chip for whole transcriptome analysis of multiple Plasmodium falciparum cytoadherent strains, and identification of strain-transcendent rif and stevor genes. Malar J. 10:180.
- 74. Clements, M.N., T.H. Clutton-Brock, F.E. Guinness, J.M. Pemberton, and L.E. Kruuk. 2011. Variances and covariances of phenological traits in a wild mammal population. Evolution. 65:788-801.
- 75. Collins, S. 2011. Competition limits adaptation and productivity in a photosynthetic alga at elevated CO2. Proc Biol Sci. 278:247-255.
- 76. Coltherd, J.C., S.A. Babayan, L. Bunger, I. Kyriazakis, J.E. Allen, and J.G. Houdijk. 2011. Interactive effects of protein nutrition, genetic growth potential and Heligmosomoides bakeri infection pressure on resilience and resistance in mice. Parasitology. 138:1305-1315.
- 77. Conlan, A.J., J.E. Line, K. Hiett, C. Coward, P.M. Van Diemen, M.P. Stevens, M.A. Jones, J.R. Gog, and D.J. Maskell. 2011. Transmission and dose-response experiments for social animals: a reappraisal of the colonization biology of Campylobacter jejuni in chickens. J R Soc Interface. 8:1720-1735.



- 78. Connelley, T., A.K. Storset, A. Pemberton, N. Machugh, J. Brown, H. Lund, and I.W. Morrison. 2011. NKp46 defines ovine cells that have characteristics corresponding to NK cells. *Vet Res.* 42:37.
- 79. Cowan, G.J., A.M. Creasey, K. Dhanasarnsombut, A.W. Thomas, E.J. Remarque, and D.R. Cavanagh. 2011. A malaria vaccine based on the polymorphic block 2 region of MSP-1 that elicits a broad serotype-spanning immune response. *PLoS One*. 6:e26616.
- 80. Cubillos-Zapata, C., E. Guzman, A. Turner, S.C. Gilbert, H. Prentice, J.C. Hope, and B. Charleston. 2011. Differential effects of viral vectors on migratory afferent lymph dendritic cells in vitro predict enhanced immunogenicity in vivo. *J Virol*. 85:9385-9394.
- 81. Culleton, R., C. Coban, F.Y. Zeyrek, P. Cravo, A. Kaneko, M. Randrianarivelojosia, V. Andrianaranjaka, S. Kano, A. Farnert, A.P. Arez, P.M. Sharp, R. Carter, and K. Tanabe. 2011a. The origins of African Plasmodium vivax; insights from mitochondrial genome sequencing. *PLoS One*. 6:e29137.
- 82. Culleton, R.L., M. Inoue, S.E. Reece, S. Cheesman, and R. Carter. 2011b. Strain-specific immunity induced by immunization with pre-erythrocytic stages of Plasmodium chabaudi. *Parasite Immunol*. 33:73-78.
- 83. Daga, S., J.G. Shepherd, J.G. Callaghan, R.K. Hung, D.K. Dawson, G.J. Padfield, S.Y. Hey, R.A. Cartwright, D.E. Newby, and J.R. Fitzgerald. 2011. Platelet receptor polymorphisms do not influence Staphylococcus aureusplatelet interactions or infective endocarditis. *Microbes Infect*. 13:216-225.
- 84. Dahlback, M., L.M. Jorgensen, M.A. Nielsen, T.M. Clausen, S.B. Ditlev, M. Resende, V.V. Pinto, D.E. Arnot, T.G. Theander, and A. Salanti. 2011. The chondroitin sulfate A-binding site of the VAR2CSA protein involves multiple N-terminal domains. *J Biol Chem.* 286:15908-15917.
- 85. Danial, J., J.A. Cepeda, F. Cameron, K. Cloy, D. Wishart, and K.E. Templeton. 2011a. Epidemiology and costs associated with norovirus outbreaks in NHS Lothian, Scotland 2007-2009. *J Hosp Infect*. 79:354-358.
- 86. Danial, J., M. Noel, K.E. Templeton, F. Cameron, F. Mathewson, M. Smith, and J.A. Cepeda. 2011b. Real-time evaluation of an optimized real-time PCR assay versus Brilliance chromogenic MRSA agar for the detection of meticillin-resistant Staphylococcus aureus from clinical specimens. *J Med Microbiol*. 60:323-328.
- 87. de las Heras, A., R.J. Cain, M.K. Bielecka, and J.A. Vazquez-Boland. 2011. Regulation of Listeria virulence: PrfA master and commander. *Curr Opin Microbiol*. 14:118-127.
- 88. de Mora, K., N. Joshi, B.L. Balint, F.B. Ward, A. Elfick, and C.E. French. 2011. A pH-based biosensor for detection of arsenic in drinking water. *Anal Bioanal Chem*. 400:1031-1039.
- 89. Decaestecker, E., P. Labbe, K. Ellegaard, J.E. Allen, and T.J. Little. 2011. Candidate innate immune system gene expression in the ecological model Daphnia. *Dev Comp Immunol*. 35:1068-1077.
- 90. Dhaliwal, K., L. Alexander, G. Escher, A. Unciti-Broceta, M. Jansen, N. Mcdonald, J.M. Cardenas-Maestre, R. Sanchez-Martin, J. Simpson, C. Haslett, and M. Bradley. 2011. Multi-modal molecular imaging approaches to detect primary cells in preclinical models. *Faraday Discuss*. 149:107-114.
- 91. Di Fonzo, M.M., F. Pelletier, T.H. Clutton-Brock, J.M. Pemberton, and T. Coulson. 2011. The population growth consequences of variation in individual heterozygosity. *PLoS One*. 6:e19667.
- 92. Diaz, A., C. Casaravilla, J.E. Allen, R.B. Sim, and A.M. Ferreira. 2011. Understanding the laminated layer of larval Echinococcus II: immunology. *Trends Parasitol*. 27:264-273.
- 93. Dicker, A.J., M. Nath, R. Yaga, A.J. Nisbet, F.A. Lainson, J.S. Gilleard, and P.J. Skuce. 2011a. Teladorsagia circumcincta: the transcriptomic response of a multi-drug-resistant isolate to ivermectin exposure in vitro. *Exp Parasitol*. 127:351-356.
- 94. Dicker, A.J., A.J. Nisbet, and P.J. Skuce. 2011b. Gene expression changes in a P-glycoprotein (Tci-pgp-9) putatively associated with ivermectin resistance in Teladorsagia circumcincta. *Int J Parasitol*. 41:935-942.
- 95. Doeschl-Wilson, A.B., R. Davidson, J. Conington, T. Roughsedge, M.R. Hutchings, and B. Villanueva. 2011. Implications of host genetic variation on the risk and prevalence of infectious diseases transmitted through the environment. *Genetics*. 188:683-693.
- 96. Dounin, V., A. Constantinof, H. Schulze, T.T. Bachmann, and K. Kerman. 2011. Electrochemical detection of interaction between Thioflavin T and acetylcholinesterase. *Analyst*. 136:1234-1238.
- 97. Douradinha, B., K.D. Augustijn, S.G. Moore, J. Ramesar, M.M. Mota, A.P. Waters, C.J. Janse, and J. Thompson. 2011. Plasmodium Cysteine Repeat Modular Proteins 3 and 4 are essential for malaria parasite transmission from the mosquito to the host. *Malar J.* 10:71.
- 98. Duncan, W.C., J.L. Shaw, S. Burgess, S.E. McDonald, H.O. Critchley, and A.W. Horne. 2011. Ectopic pregnancy as a model to identify endometrial genes and signaling pathways important in decidualization and regulated by local trophoblast. *PLoS One*. 6:e23595.
- 99. Dunn, I.C., I.R. Paton, A.K. Clelland, S. Sebastian, E.J. Johnson, L. McTeir, D. Windsor, A. Sherman, H. Sang, D.W. Burt, C. Tickle, and M.G. Davey. 2011. The chicken polydactyly (Po) locus causes allelic imbalance and ectopic expression of Shh during limb development. *Dev Dyn*. 240:1163-1172.



- Leading infectious disease research and training
- 100. Dunsmore, C.J., K.J. Malone, K.R. Bailey, M.A. Wear, H. Florance, S. Shirran, P.E. Barran, A.P. Page, M.D. Walkinshaw, and N.J. Turner. 2011. Design and synthesis of conformationally constrained cyclophilin inhibitors showing a cyclosporin-A phenotype in C. elegans. *Chembiochem*. 12:802-810.
- 101. Duszenko, M., M.L. Ginger, A. Brennand, M. Gualdron-Lopez, M.I. Colombo, G.H. Coombs, I. Coppens, B. Jayabalasingham, G. Langsley, S.L. de Castro, R. Menna-Barreto, J.C. Mottram, M. Navarro, D.J. Rigden, P.S. Romano, V. Stoka, B. Turk, and P.A. Michels. 2011. Autophagy in protists. *Autophagy*. 7:127-158.
- 102. Dvir, E., J.P. Schoeman, S.J. Clift, T.N. McNeilly, and R.J. Mellanby. 2011. Immunohistochemical characterization of lymphocyte and myeloid cell infiltrates in spirocercosis-induced oesophageal nodules. *Parasite Immunol*. 33:545-553.
- 103. Eckert, S.E., F. Dziva, R.R. Chaudhuri, G.C. Langridge, D.J. Turner, D.J. Pickard, D.J. Maskell, N.R. Thomson, and M.P. Stevens. 2011. Retrospective application of transposon-directed insertion site sequencing to a library of signature-tagged mini-Tn5Km2 mutants of Escherichia coli O157:H7 screened in cattle. *J Bacteriol*. 193:1771-1776.
- 104.Edwards, C.J., M.A. Suchard, P. Lemey, J.J. Welch, I. Barnes, T.L. Fulton, R. Barnett, T.C. O'Connell, P. Coxon, N. Monaghan, C.E. Valdiosera, E.D. Lorenzen, E. Willerslev, G.F. Baryshnikov, A. Rambaut, M.G. Thomas, D.G. Bradley, and B. Shapiro. 2011. Ancient hybridization and an Irish origin for the modern polar bear matriline. *Curr Biol.* 21:1251-1258.
- 105. Ember, S.W., H. Schulze, A.J. Ross, J. Luby, M. Khondoker, G. Giraud, J.G. Terry, I. Ciani, C. Tlili, J. Crain, A.J. Walton, A.R. Mount, P. Ghazal, T.T. Bachmann, and C.J. Campbell. 2011. Fast DNA and protein microarray tests for the diagnosis of hepatitis C virus infection on a single platform. *Anal Bioanal Chem.* 401:2549-2559.
- 106.Emery, L.R., and P.M. Sharp. 2011. Impact of translational selection on codon usage bias in the archaeon Methanococcus maripaludis. *Biol Lett.* 7:131-135.
- 107. Engel, P., N. Perez-Carmona, M.M. Alba, K. Robertson, P. Ghazal, and A. Angulo. 2011. Human cytomegalovirus UL7, a homologue of the SLAM-family receptor CD229, impairs cytokine production. *Immunol Cell Biol*. 89:753-766.
- 108. Evans, B.A., A. Hamouda, S.A. Abbasi, F.A. Khan, and S.G. Amyes. 2011. High prevalence of unrelated multidrug-resistant Acinetobacter baumannii isolates in Pakistani military hospitals. *Int J Antimicrob Agents*. 37:580-581.
- 109. Fagan, R.P., C. Janoir, A. Collignon, P. Mastrantonio, I.R. Poxton, and N.F. Fairweather. 2011. A proposed nomenclature for cell wall proteins of Clostridium difficile. *J Med Microbiol*. 60:1225-1228.
- 110. Fairbairn, L., R. Kapetanovic, D.P. Sester, and D.A. Hume. 2011. The mononuclear phagocyte system of the pig as a model for understanding human innate immunity and disease. *J Leukoc Biol.* 89:855-871.
- 111. Faria, N.R., M.A. Suchard, A. Rambaut, and P. Lemey. 2011. Toward a quantitative understanding of viral phylogeography. *Curr Opin Virol*. 1:423-429.
- 112. Ferrari, S., F. Morandi, D. Motiejunas, E. Nerini, S. Henrich, R. Luciani, A. Venturelli, S. Lazzari, S. Calo, S. Gupta, V. Hannaert, P.A. Michels, R.C. Wade, and M.P. Costi. 2011. Virtual screening identification of nonfolate compounds, including a CNS drug, as antiparasitic agents inhibiting pteridine reductase. *J Med Chem.* 54:211-221.
- 113. Fitch, P.M., S.E. Howie, and W.A. Wallace. 2011. Oxidative damage and TGF-beta differentially induce lung epithelial cell sonic hedgehog and tenascin-C expression: implications for the regulation of lung remodelling in idiopathic interstitial lung disease. *Int J Exp Pathol*. 92:8-17.
- 114. Florance, H.V., A.P. Stopford, J.M. Kalapothakis, B.J. McCullough, A. Bretherick, and P.E. Barran. 2011. Evidence for alpha-helices in the gas phase: a case study using Melittin from honey bee venom. *Analyst*. 136:3446-3452.
- 115. Foeglein, A., E.M. Loucaides, M. Mura, H.M. Wise, W.S. Barclay, and P. Digard. 2011. Influence of PB2 host-range determinants on the intranuclear mobility of the influenza A virus polymerase. *J Gen Virol*. 92:1650-1661.
- 116.Fraser-Pitt, D.J., P. Cameron, T.N. McNeilly, A. Boyd, E.D. Manson, and D.G. Smith. 2011. Phosphorylation of the epidermal growth factor receptor (EGFR) is essential for interleukin-8 release from intestinal epithelial cells in response to challenge with Escherichia coli O157: H7 flagellin. *Microbiology*. 157:2339-2347.
- 117. Friedel, C.C., and J. Haas. 2011. Virus-host interactomes and global models of virus-infected cells. *Trends Microbiol*. 19:501-508.
- 118. Fuad, F.A., L.A. Fothergill-Gilmore, M.W. Nowicki, L.J. Eades, H.P. Morgan, I.W. McNae, P.A. Michels, and M.D. Walkinshaw. 2011. Phosphoglycerate mutase from Trypanosoma brucei is hyperactivated by cobalt in vitro, but not in vivo. *Metallomics*. 3:1310-1317.



- 119. Garvey, L., A. Winston, J. Walsh, F. Post, K. Porter, B. Gazzard, M. Fisher, C. Leen, D. Pillay, T. Hill, M. Johnson, R. Gilson, J. Anderson, P. Easterbrook, L. Bansi, C. Orkin, J. Ainsworth, A. Palfreeman, M. Gompels, A.N. Phillips, and C.A. Sabin. 2011a. Antiretroviral therapy CNS penetration and HIV-1-associated CNS disease. *Neurology*. 76:693-700.
- 120. Garvey, L., A. Winston, J. Walsh, F. Post, K. Porter, B. Gazzard, M. Fisher, C. Leen, D. Pillay, T. Hill, M. Johnson, R. Gilson, J. Anderson, P. Easterbrook, L. Bansi, C. Orkin, J. Ainsworth, A.N. Phillips, and C.A. Sabin. 2011b. HIV-associated central nervous system diseases in the recent combination antiretroviral therapy era. *Eur J Neurol*. 18:527-534.
- 121. Gaunt, E.R., H. Harvala, C. McIntyre, K.E. Templeton, and P. Simmonds. 2011a. Disease burden of the most commonly detected respiratory viruses in hospitalized patients calculated using the disability adjusted life year (DALY) model. *J Clin Virol*. 52:215-221.
- 122. Gaunt, E.R., R.R. Jansen, Y. Poovorawan, K.E. Templeton, G.L. Toms, and P. Simmonds. 2011b. Molecular epidemiology and evolution of human respiratory syncytial virus and human metapneumovirus. *PLoS One*. 6:e17427.
- 123. Genini, S., B. Badaoui, G. Sclep, S.C. Bishop, D. Waddington, M.H. Pinard van der Laan, C. Klopp, C. Cabau, H.M. Seyfert, W. Petzl, K. Jensen, E.J. Glass, A. de Greeff, H.E. Smith, M.A. Smits, I. Olsaker, G.M. Boman, G. Pisoni, P. Moroni, B. Castiglioni, P. Cremonesi, M. Del Corvo, E. Foulon, G. Foucras, R. Rupp, and E. Giuffra. 2011. Strengthening insights into host responses to mastitis infection in ruminants by combining heterogeneous microarray data sources. *BMC Genomics*. 12:225.
- 124. Ghazal, P., S. Watterson, K. Robertson, and D.C. Kluth. 2011. The in silico macrophage: toward a better understanding of inflammatory disease. *Genome Med*. 3:4.
- 125. Ghumra, A., P. Khunrae, R. Ataide, A. Raza, S.J. Rogerson, M.K. Higgins, and J.A. Rowe. 2011. Immunisation with recombinant PfEMP1 domains elicits functional rosette-inhibiting and phagocytosis-inducing antibodies to Plasmodium falciparum. *PLoS One*. 6:e16414.
- 126. Giaccone, G., T. Arzberger, I. Alafuzoff, S. Al-Sarraj, H. Budka, C. Duyckaerts, P. Falkai, I. Ferrer, J.W. Ironside, G.G. Kovacs, D. Meyronet, P. Parchi, E. Patsouris, T. Revesz, P. Riederer, A. Rozemuller, A. Schmitt, B. Winblad, and H. Kretzschmar. 2011. New lexicon and criteria for the diagnosis of Alzheimer's disease. *Lancet Neurol*. 10:298-299; author reply 300-291.
- 127. Giannecchini, S., H.M. Wise, P. Digard, V. Clausi, E. Del Poggetto, L. Vesco, S. Puzelli, I. Donatelli, and A. Azzi. 2011. Packaging signals in the 5'-ends of influenza virus PA, PB1, and PB2 genes as potential targets to develop nucleic-acid based antiviral molecules. *Antiviral Res.* 92:64-72.
- 128. Gibbons, M.A., A.C. MacKinnon, P. Ramachandran, K. Dhaliwal, R. Duffin, A.T. Phythian-Adams, N. van Rooijen, C. Haslett, S.E. Howie, A.J. Simpson, N. Hirani, J. Gauldie, J.P. Iredale, T. Sethi, and S.J. Forbes. 2011. Ly6Chi monocytes direct alternatively activated profibrotic macrophage regulation of lung fibrosis. *Am J Respir Crit Care Med*. 184:569-581.
- 129. Giraud, G., R. Pethig, H. Schulze, G. Henihan, J.G. Terry, A. Menachery, I. Ciani, D. Corrigan, C.J. Campbell, A.R. Mount, P. Ghazal, A.J. Walton, J. Crain, and T.T. Bachmann. 2011. Dielectrophoretic manipulation of ribosomal RNA. *Biomicrofluidics*. 5:24116.
- 130. Girling, S.J., R. Pizzi, A. Cox, and P.M. Beard. 2011. Fatal cowpox virus infection in two squirrel monkeys (Saimiri sciureus). *Vet Rec.* 169:156.
- 131.Goh, Y.C., C.T. Yap, B.H. Huang, A.D. Cronshaw, B.P. Leung, P.B. Lai, S.P. Hart, I. Dransfield, and J.A. Ross. 2011. Heat-shock protein 60 translocates to the surface of apoptotic cells and differentiated megakaryocytes and stimulates phagocytosis. *Cell Mol Life Sci.* 68:1581-1592.
- 132. Goodall, L., and C. Leen. 2011. Late diagnosis of HIV: could this be avoided? Scott Med J. 56:84-86.
- 133. Gossner, A., A. Peers, V. Venturina, and J. Hopkins. 2011a. Expressed gene sequences of two variants of sheep interleukin-25. *Vet Immunol Immunopathol*. 139:319-323.
- 134. Gossner, A., S. Roupaka, J. Foster, N. Hunter, and J. Hopkins. 2011b. Transcriptional profiling of peripheral lymphoid tissue reveals genes and networks linked to SSBP/1 scrapie pathology in sheep. *Vet Microbiol*. 153:218-228.
- 135. Gossner, A.G., J.D. Foster, J.K. Fazakerley, N. Hunter, and J. Hopkins. 2011c. Gene expression analysis in distinct regions of the central nervous system during the development of SSBP/1 sheep scrapie. *Vet Microbiol*. 147:42-48.
- 136. Graham, J.F., D. Kurian, S. Agarwal, L. Toovey, L. Hunt, L. Kirby, T.J. Pinheiro, S.J. Banner, and A.C. Gill. 2011. Na+/K+-ATPase is present in scrapie-associated fibrils, modulates PrP misfolding in vitro and links PrP function and dysfunction. *PLoS One*. 6:e26813.



- 137. Greatorex, J.S., P. Digard, M.D. Curran, R. Moynihan, H. Wensley, T. Wreghitt, H. Varsani, F. Garcia, J. Enstone, and J.S. Nguyen-Van-Tam. 2011. Survival of influenza A(H1N1) on materials found in households: implications for infection control. *PLoS One*. 6:e27932.
- 138. Griffiths, H.H., I.J. Whitehouse, H. Baybutt, D. Brown, K.A. Kellett, C.D. Jackson, A.J. Turner, P. Piccardo, J.C. Manson, and N.M. Hooper. 2011. Prion protein interacts with BACE1 protein and differentially regulates its activity toward wild type and Swedish mutant amyloid precursor protein. *J Biol Chem.* 286:33489-33500.
- 139. Guinane, C.M., J.R. Penades, and J.R. Fitzgerald. 2011. The role of horizontal gene transfer in Staphylococcus aureus host adaptation. *Virulence*. 2:241-243.
- 140. Gunaratne, P.H., Y.C. Lin, A.L. Benham, J. Drnevich, C. Coarfa, J.B. Tennakoon, C.J. Creighton, J.H. Kim, A. Milosavljevic, M. Watson, S. Griffiths-Jones, and D.F. Clayton. 2011. Song exposure regulates known and novel microRNAs in the zebra finch auditory forebrain. *BMC Genomics*. 12:277.
- 141.Gunn-Moore, D.A., S.E. McFarland, J.I. Brewer, T.R. Crawshaw, R.S. Clifton-Hadley, M. Kovalik, and D.J. Shaw. 2011a. Mycobacterial disease in cats in Great Britain: I. Culture results, geographical distribution and clinical presentation of 339 cases. *J Feline Med Surg*. 13:934-944.
- 142.Gunn-Moore, D.A., S.E. McFarland, A. Schock, J.I. Brewer, T.R. Crawshaw, R.S. Clifton-Hadley, and D.J. Shaw. 2011b. Mycobacterial disease in a population of 339 cats in Great Britain: II. Histopathology of 225 cases, and treatment and outcome of 184 cases. *J Feline Med Surg*. 13:945-952.
- 143. Gupta, S., A.T. Cordeiro, and P.A. Michels. 2011a. Glucose-6-phosphate dehydrogenase is the target for the trypanocidal action of human steroids. *Mol Biochem Parasitol*. 176:112-115.
- 144. Gupta, S., M. Igoillo-Esteve, P.A. Michels, and A.T. Cordeiro. 2011b. Glucose-6-phosphate dehydrogenase of trypanosomatids: characterization, target validation, and drug discovery. *Mol Biol Int*. 2011:135701.
- 145. Haanstra, J.R., E.J. Kerkhoven, A. van Tuijl, M. Blits, M. Wurst, R. van Nuland, M.A. Albert, P.A. Michels, J. Bouwman, C. Clayton, H.V. Westerhoff, and B.M. Bakker. 2011. A domino effect in drug action: from metabolic assault towards parasite differentiation. *Mol Microbiol*. 79:94-108.
- 146. Hadfield, J.D., A.J. Wilson, and L.E. Kruuk. 2011. Cryptic evolution: does environmental deterioration have a genetic basis? *Genetics*. 187:1099-1113.
- 147. Hamouda, A., J. Findlay, L. Al Hassan, and S.G. Amyes. 2011a. Epidemiology of Acinetobacter baumannii of animal origin. *Int J Antimicrob Agents*. 38:314-318.
- 148. Hamouda, A., J. Findlay, and S.G. Amyes. 2011b. Carbapenems: do they have a future? *J Med Microbiol*. 60:1229-1230.
- 149. Handel, I.G., C.B.B.M. de, J.F. Forbes, and M.E. Woolhouse. 2011. Risk-targeted selection of agricultural holdings for post-epidemic surveillance: estimation of efficiency gains. *PLoS One*. 6:e20064.
- 150. Hansen, A., L. McMillan, A. Morrison, J. Petrik, and M. Bradley. 2011. Polymers for the rapid and effective activation and aggregation of platelets. *Biomaterials*. 32:7034-7041.
- 151. Harrison, A., P. Lemey, M. Hurles, C. Moyes, S. Horn, J. Pryor, J. Malani, M. Supuri, A. Masta, B. Teriboriki, T. Toatu, D. Penny, A. Rambaut, and B. Shapiro. 2011. Genomic analysis of hepatitis B virus reveals antigen state and genotype as sources of evolutionary rate variation. *Viruses*. 3:83-101.
- 152. Harvala, H., N. McLeish, J. Kondracka, C.L. McIntyre, E.C. McWilliam Leitch, K. Templeton, and P. Simmonds. 2011a. Comparison of human parechovirus and enterovirus detection frequencies in cerebrospinal fluid samples collected over a 5-year period in edinburgh: HPeV type 3 identified as the most common picornavirus type. *J Med Virol*. 83:889-896.
- 153. Harvala, H., C.P. Sharp, E.M. Ngole, E. Delaporte, M. Peeters, and P. Simmonds. 2011b. Detection and genetic characterization of enteroviruses circulating among wild populations of chimpanzees in Cameroon: relationship with human and simian enteroviruses. *J Virol*. 85:4480-4486.
- 154. Harvey, P.C., M. Watson, S. Hulme, M.A. Jones, M. Lovell, A. Berchieri, Jr., J. Young, N. Bumstead, and P. Barrow. 2011a. Salmonella enterica serovar typhimurium colonizing the lumen of the chicken intestine grows slowly and upregulates a unique set of virulence and metabolism genes. *Infect Immun*. 79:4105-4121.
- 155. Harvey, S.R., C.E. Macphee, and P.E. Barran. 2011b. Ion mobility mass spectrometry for peptide analysis. *Methods*. 54:454-461.
- 156. Hay, D.C., S. Pernagallo, J.J. Diaz-Mochon, C.N. Medine, S. Greenhough, Z. Hannoun, J. Schrader, J.R. Black, J. Fletcher, D. Dalgetty, A.I. Thompson, P.N. Newsome, S.J. Forbes, J.A. Ross, M. Bradley, and J.P. Iredale. 2011. Unbiased screening of polymer libraries to define novel substrates for functional hepatocytes with inducible drug metabolism. *Stem Cell Res.* 6:92-102.
- 157. Hayward, A.D., A.J. Wilson, J.G. Pilkington, T.H. Clutton-Brock, J.M. Pemberton, and L.E. Kruuk. 2011. Natural selection on a measure of parasite resistance varies across ages and environmental conditions in a wild mammal. *J Evol Biol*. 24:1664-1676.



- 158. Heath, C.A., S.A. Cooper, K. Murray, A. Lowman, C. Henry, M.A. MacLeod, G. Stewart, M. Zeidler, J.M. McKenzie, R.S. Knight, and R.G. Will. 2011. Diagnosing variant Creutzfeldt-Jakob disease: a retrospective analysis of the first 150 cases in the UK. *J Neurol Neurosurg Psychiatry*. 82:646-651.
- 159. Heinlein, M., A. Schulz, and K. Oparka. 2011. Special issue: Plasmodesmata. Protoplasma. 248:1.
- 160. Henderson, P., J.E. van Limbergen, J. Schwarze, and D.C. Wilson. 2011. Function of the intestinal epithelium and its dysregulation in inflammatory bowel disease. *Inflamm Bowel Dis.* 17:382-395.
- 161. Hewitson, J.P., K.J. Filbey, J.R. Grainger, A.A. Dowle, M. Pearson, J. Murray, Y. Harcus, and R.M. Maizels. 2011a. Heligmosomoides polygyrus elicits a dominant nonprotective antibody response directed against restricted glycan and peptide epitopes. *J Immunol*. 187:4764-4777.
- 162. Hewitson, J.P., Y. Harcus, J. Murray, M. van Agtmaal, K.J. Filbey, J.R. Grainger, S. Bridgett, M.L. Blaxter, P.D. Ashton, D.A. Ashford, R.S. Curwen, R.A. Wilson, A.A. Dowle, and R.M. Maizels. 2011b. Proteomic analysis of secretory products from the model gastrointestinal nematode Heligmosomoides polygyrus reveals dominance of venom allergen-like (VAL) proteins. *J Proteomics*. 74:1573-1594.
- 163. Higon, M., G. Cowan, N. Nausch, D. Cavanagh, A. Oleaga, R. Toledo, J.R. Stothard, O. Antunez, A. Marcilla, R. Burchmore, and F. Mutapi. 2011. Screening trematodes for novel intervention targets: a proteomic and immunological comparison of Schistosoma haematobium, Schistosoma bovis and Echinostoma caproni. *Parasitology*. 138:1607-1619.
- 164. Holmes, M.A., and R.N. Zadoks. 2011. Methicillin resistant S. aureus in human and bovine mastitis. *J Mammary Gland Biol Neoplasia*. 16:373-382.
- 165. Hope, J.C., M.L. Thom, M. McAulay, E. Mead, H.M. Vordermeier, D. Clifford, R.G. Hewinson, and B. Villarreal-Ramos. 2011. Identification of surrogates and correlates of protection in protective immunity against Mycobacterium bovis infection induced in neonatal calves by vaccination with M. bovis BCG Pasteur and M. bovis BCG Danish. *Clin Vaccine Immunol*. 18:373-379.
- 166. Horne, A.W., R. McBride, and F.C. Denison. 2011a. Normally rising hCG does not predict live birth in women presenting with pain and bleeding in early pregnancy. *Eur J Obstet Gynecol Reprod Biol*. 156:120-121.
- 167. Horne, A.W., J.L. Shaw, A. Murdoch, S.E. McDonald, A.R. Williams, H.N. Jabbour, W.C. Duncan, and H.O. Critchley. 2011b. Placental growth factor: a promising diagnostic biomarker for tubal ectopic pregnancy. *J Clin Endocrinol Metab*. 96:E104-108.
- 168. Hotchkiss, E.J., J.C. Hodgson, F.A. Lainson, and R.N. Zadoks. 2011a. Multilocus sequence typing of a global collection of Pasteurella multocida isolates from cattle and other host species demonstrates niche association. *BMC Microbiol*. 11:115.
- 169. Hotchkiss, E.J., J.C. Hodgson, E. Schmitt-van de Leemput, M.P. Dagleish, and R.N. Zadoks. 2011b. Molecular epidemiology of Pasteurella multocida in dairy and beef calves. *Vet Microbiol*. 151:329-335.
- 170. Howie, S.E. 2011. Go girls! Efficient female innate immunity. Blood. 118:5718-5719.
- 171. Howie, S.E., P.J. Horner, and A.W. Horne. 2011a. Chlamydia trachomatis infection during pregnancy: known unknowns. *Discov Med*. 12:57-64.
- 172. Howie, S.E., P.J. Horner, A.W. Horne, and G. Entrican. 2011b. Immunity and vaccines against sexually transmitted Chlamydia trachomatis infection. *Curr Opin Infect Dis*. 24:56-61.
- 173. Hsin, K.Y., H.P. Morgan, S.R. Shave, A.C. Hinton, P. Taylor, and M.D. Walkinshaw. 2011. EDULISS: a small-molecule database with data-mining and pharmacophore searching capabilities. *Nucleic Acids Res.* 39:D1042-1048.
- 174. Huang, Y., N.D. Temperley, L. Ren, J. Smith, N. Li, and D.W. Burt. 2011. Molecular evolution of the vertebrate TLR1 gene family--a complex history of gene duplication, gene conversion, positive selection and coevolution. *BMC Evol Biol.* 11:149.
- 175. Huffman, J.E., A. Knezevic, V. Vitart, J. Kattla, B. Adamczyk, M. Novokmet, W. Igl, M. Pucic, L. Zgaga, A. Johannson, I. Redzic, O. Gornik, T. Zemunik, O. Polasek, I. Kolcic, M. Pehlic, C.A.M. Koeleman, S. Campbell, S.H. Wild, N.D. Hastie, H. Campbell, U. Gyllensten, M. Wuhrer, J.F. Wilson, C. Hayward, I. Rudan, P.M. Rudd, A.F. Wright, and G. Lauc. 2011. Polymorphisms in B3GAT1, SLC9A9 and MGAT5 are associated with variation within the human plasma N-glycome of 3533 European adults. *Hum Mol Genet*. 20:5000-5011.
- 176. Hughes, R.A., J.A. Sterne, J. Walsh, L. Bansi, R. Gilson, C. Orkin, T. Hill, J. Ainsworth, J. Anderson, M. Gompels, D. Dunn, M.A. Johnson, A.N. Phillips, D. Pillay, C. Leen, P. Easterbrook, B. Gazzard, M. Fisher, and C.A. Sabin. 2011. Long-term trends in CD4 cell counts and impact of viral failure in individuals starting antiretroviral therapy: UK Collaborative HIV Cohort (CHIC) study. *HIV Med*. 12:583-593.
- 177. Hume, D.A. 2011a. Applications of myeloid-specific promoters in transgenic mice support in vivo imaging and functional genomics but do not support the concept of distinct macrophage and dendritic cell lineages or roles in immunity. *J Leukoc Biol*. 89:525-538.



- 178. Hume, D.A. 2011b. EMDS special issue: Systems biology of macrophages and dentritic cells in health and disease. Editorial. Immunobiology. 216:1163.
- 179. Husby, A., M.E. Visser, and L.E. Kruuk. 2011. Speeding up microevolution: the effects of increasing temperature on selection and genetic variance in a wild bird population. PLoS Biol. 9:e1000585.
- 180. Igoillo-Esteve, M., M. Mazet, G. Deumer, P. Wallemacq, and P.A. Michels. 2011. Glycosomal ABC transporters of Trypanosoma brucei: characterisation of their expression, topology and substrate specificity. Int J Parasitol. 41:429-438.
- 181. Imai, N., N. Rujeni, N. Nausch, C.D. Bourke, L.J. Appleby, G. Cowan, R. Gwisai, N. Midzi, D. Cavanagh, T. Mduluza, D. Taylor, and F. Mutapi. 2011. Exposure, infection, systemic cytokine levels and antibody responses in young children concurrently exposed to schistosomiasis and malaria. Parasitology. 138:1519-1533.
- 182. Imhof, I., and P. Simmonds. 2011. Genotype differences in susceptibility and resistance development of hepatitis C virus to protease inhibitors telaprevir (VX-950) and danoprevir (ITMN-191). Hepatology. 53:1090-
- 183. Innes, E.A., P.M. Bartley, M. Rocchi, J. Benavidas-Silvan, A. Burrells, E. Hotchkiss, F. Chianini, G. Canton, and F. Katzer. 2011a. Developing vaccines to control protozoan parasites in ruminants: dead or alive? Vet Parasitol. 180:155-163.
- 184. Innes, E.A., J.B. Rose, N. Cook, S.J. Hadfield, K.G. Pollock, L. Robertson, J. Kusel, and M. Doenhoff. 2011b. BSP remembers Professor Huw Smith. Trends Parasitol. 27:371-372.
- 185. Isern, E., M. Gustems, M. Messerle, E. Borst, P. Ghazal, and A. Angulo. 2011. The activator protein 1 binding motifs within the human cytomegalovirus major immediate-early enhancer are functionally redundant and act in a cooperative manner with the NF-{kappa}B sites during acute infection. J Virol. 85:1732-1746.
- 186. Jansen, C., W. Voet, M.W. Head, P. Parchi, H. Yull, A. Verrips, P. Wesseling, J. Meulstee, F. Baas, W.A. van Gool, J.W. Ironside, and A.J. Rozemuller. 2011. A novel seven-octapeptide repeat insertion in the prion protein gene (PRNP) in a Dutch pedigree with Gerstmann-Straussler-Scheinker disease phenotype: comparison with similar cases from the literature. Acta Neuropathol. 121:59-68.
- 187. Jarvis, L.M., K. Mulligan, T.H. Dunsford, K. McGowan, and J. Petrik. 2011. Suitability of an automated nucleic acid extractor (easyMAG) for use with hepatitis C virus and human immunodeficiency virus type 1 nucleic acid amplification testing. J Virol Methods. 171:364-368.
- 188. Jenkins, S.J., D. Ruckerl, P.C. Cook, L.H. Jones, F.D. Finkelman, N. van Rooijen, A.S. MacDonald, and J.E. Allen. 2011. Local macrophage proliferation, rather than recruitment from the blood, is a signature of TH2 inflammation. Science. 332:1284-1288.
- 189. Jin, Y., X. Ren, W. Wang, L. Ke, E. Ning, L. Du, and J. Bradshaw. 2011. A 5-fluorouracil-loaded pH-responsive dendrimer nanocarrier for tumor targeting. Int J Pharm. 420:378-384.
- 190. Johannessen, I., L. Bieleski, G. Urquhart, S.L. Watson, P. Wingate, T. Haque, and D.H. Crawford. 2011. Epstein-Barr virus, B cell lymphoproliferative disease, and SCID mice: modeling T cell immunotherapy in vivo. J Med Virol. 83:1585-1596.
- 191. Johnston, S.E., J.C. McEwan, N.K. Pickering, J.W. Kijas, D. Beraldi, J.G. Pilkington, J.M. Pemberton, and J. Slate. 2011. Genome-wide association mapping identifies the genetic basis of discrete and quantitative variation in sexual weaponry in a wild sheep population. Mol Ecol. 20:2555-2566.
- 192. Jones, L.A., J.G. Houdijk, P. Sakkas, A.D. Bruce, M. Mitchell, D.P. Knox, and I. Kyriazakis. 2011a. Dissecting the impact of protein versus energy host nutrition on the expression of immunity to gastrointestinal parasites during lactation. Int J Parasitol. 41:711-719.
- 193. Jones, M., A.H. Peden, M.W. Head, and J.W. Ironside. 2011b. The application of in vitro cell-free conversion systems to human prion diseases. Acta Neuropathol. 121:135-143.
- 194. Jorda, R., L. Havlicek, I.W. McNae, M.D. Walkinshaw, J. Voller, A. Sturc, J. Navratilova, M. Kuzma, M. Mistrik, J. Bartek, M. Strnad, and V. Krystof. 2011a. Pyrazolo[4,3-d]pyrimidine bioisostere of roscovitine: evaluation of a novel selective inhibitor of cyclin-dependent kinases with antiproliferative activity. J Med Chem. 54:2980-2993.
- 195. Jorda, R., N. Sacerdoti-Sierra, J. Voller, L. Havlicek, K. Kracalikova, M.W. Nowicki, A. Nasereddin, V. Krystof, M. Strnad, M.D. Walkinshaw, and C.L. Jaffe. 2011b. Anti-leishmanial activity of disubstituted purines and related pyrazolo[4,3-d]pyrimidines. *Bioorg Med Chem Lett*. 21:4233-4237.
- 196. Jurneczko, E., and P.E. Barran. 2011. How useful is ion mobility mass spectrometry for structural biology? The relationship between protein crystal structures and their collision cross sections in the gas phase. Analyst. 136:20-28.



- 197. Kaczanowski, S., M. Sajid, and S.E. Reece. 2011. Evolution of apoptosis-like programmed cell death in unicellular protozoan parasites. *Parasit Vectors*. 4:44.
- 198. Kapoor, A., P. Simmonds, E.J. Dubovi, N. Qaisar, J.A. Henriquez, J. Medina, S. Shields, and W.I. Lipkin. 2011a. Characterization of a canine homolog of human Aichivirus. *J Virol*. 85:11520-11525.
- 199. Kapoor, A., P. Simmonds, G. Gerold, N. Qaisar, K. Jain, J.A. Henriquez, C. Firth, D.L. Hirschberg, C.M. Rice, S. Shields, and W.I. Lipkin. 2011b. Characterization of a canine homolog of hepatitis C virus. *Proc Natl Acad Sci U S A*. 108:11608-11613.
- 200. Kaski, D.N., C. Pennington, J. Beck, M. Poulter, J. Uphill, M.T. Bishop, J.M. Linehan, C. O'Malley, J.D. Wadsworth, S. Joiner, R.S. Knight, J.W. Ironside, S. Brandner, J. Collinge, and S. Mead. 2011. Inherited prion disease with 4-octapeptide repeat insertion: disease requires the interaction of multiple genetic risk factors. *Brain*. 134:1829-1838.
- 201. Katzer, F., F. Brulisauer, E. Collantes-Fernandez, P.M. Bartley, A. Burrells, G. Gunn, S.W. Maley, C. Cousens, and E.A. Innes. 2011. Increased Toxoplasma gondii positivity relative to age in 125 Scottish sheep flocks; evidence of frequent acquired infection. *Vet Res.* 42:121.
- 202. Knight, P.A., S.E. Griffith, A.D. Pemberton, J.M. Pate, L. Guarneri, K. Anderson, R.T. Talbot, S. Smith, D. Waddington, M. Fell, A.L. Archibald, S.T. Burgess, D.W. Smith, H.R. Miller, and I.W. Morrison. 2011. Novel gene expression responses in the ovine abomasal mucosa to infection with the gastric nematode Teladorsagia circumcincta. *Vet Res.* 42:78.
- 203. Knox, D. 2011. Proteases in blood-feeding nematodes and their potential as vaccine candidates. *Adv Exp Med Biol*. 712:155-176.
- 204. Kovalik, M., I. Taszkun, Z. Pomorski, M. Kozak, D. Pomorska, M. Szczepanik, P. Wilkolek, L. Palenik, D.J. Shaw, A.H. van den Broek, and K.L. Thoday. 2011a. Evaluation of a human generic formulation of ciclosporin in the treatment of canine atopic dermatitis with in vitro assessment of the functional capacity of phagocytic cells. *Vet Rec.* 168:537.
- 205. Kovalik, M., K.L. Thoday, I.G. Handel, B.M. Bronsvoort, H. Evans, A.H. van den Broek, and R.J. Mellanby. 2011b. Ciclosporin A therapy is associated with disturbances in glucose metabolism in dogs with atopic dermatitis. *Vet Dermatol*. 22:173-180.
- 206. Krejciova, Z., S. Pells, E. Cancellotti, P. Freile, M. Bishop, K. Samuel, G.R. Barclay, J.W. Ironside, J.C. Manson, M.L. Turner, P. De Sousa, and M.W. Head. 2011. Human embryonic stem cells rapidly take up and then clear exogenous human and animal prions in vitro. *J Pathol*. 223:635-645.
- 207. Kropp, K.A., K.A. Robertson, G. Sing, S. Rodriguez-Martin, M. Blanc, P. Lacaze, M.F. Hassim, M.R. Khondoker, A. Busche, P. Dickinson, T. Forster, B. Strobl, M. Mueller, S. Jonjic, A. Angulo, and P. Ghazal. 2011. Reversible inhibition of murine cytomegalovirus replication by gamma interferon (IFN-gamma) in primary macrophages involves a primed type I IFN-signaling subnetwork for full establishment of an immediate-early antiviral state. *J Virol*. 85:10286-10299.
- 208. Kujala, P., C.R. Raymond, M. Romeijn, S.F. Godsave, S.I. van Kasteren, H. Wille, S.B. Prusiner, N.A. Mabbott, and P.J. Peters. 2011. Prion uptake in the gut: identification of the first uptake and replication sites. *PLoS Pathog*. 7:e1002449.
- 209. Kwong, L.S., R. Parsons, R. Patterson, T.J. Coffey, L. Thonur, J.S. Chang, G. Russell, D. Haig, D. Werling, and J.C. Hope. 2011. Characterisation of antibodies to bovine Toll-like receptor (TLR)-2 and cross-reactivity with ovine TLR2. *Vet Immunol Immunopathol*. 139:313-318.
- 210.Lacaze, P., T. Forster, A. Ross, L.E. Kerr, E. Salvo-Chirnside, V.J. Lisnic, G.H. Lopez-Campos, J.J. Garcia-Ramirez, M. Messerle, J. Trgovcich, A. Angulo, and P. Ghazal. 2011. Temporal profiling of the coding and noncoding murine cytomegalovirus transcriptomes. *J Virol*. 85:6065-6076.
- 211. Lahtinen, A., P. Kivela, L. Hedman, A. Kumar, A. Kantele, M. Lappalainen, K. Liitsola, M. Ristola, E. Delwart, C. Sharp, P. Simmonds, M. Soderlund-Venermo, and K. Hedman. 2011. Serodiagnosis of primary infections with human parvovirus 4, Finland. *Emerg Infect Dis.* 17:79-82.
- 212. Lane, J.E., L.E. Kruuk, A. Charmantier, J.O. Murie, D.W. Coltman, M. Buoro, S. Raveh, and F.S. Dobson. 2011. A quantitative genetic analysis of hibernation emergence date in a wild population of Columbian ground squirrels. *J Evol Biol*. 24:1949-1959.
- 213. Laurenson, Y.C., S.C. Bishop, and I. Kyriazakis. 2011. In silico exploration of the mechanisms that underlie parasite-induced anorexia in sheep. *Br J Nutr.* 106:1023-1039.
- 214.Lazar Adler, N.R., J.M. Stevens, M.P. Stevens, and E.E. Galyov. 2011. Autotransporters and Their Role in the Virulence of Burkholderia pseudomallei and Burkholderia mallei. *Front Microbiol*. 2:151.



- 215.Le Marechal, C., D. Hernandez, J. Schrenzel, S. Even, N. Berkova, R. Thiery, E. Vautor, J.R. Fitzgerald, P. Francois, and Y. Le Loir. 2011a. Genome sequences of two Staphylococcus aureus ovine strains that induce severe (strain O11) and mild (strain O46) mastitis. *J Bacteriol*. 193:2353-2354.
- 216.Le Marechal, C., N. Seyffert, J. Jardin, D. Hernandez, G. Jan, L. Rault, V. Azevedo, P. Francois, J. Schrenzel, M. van de Guchte, S. Even, N. Berkova, R. Thiery, J.R. Fitzgerald, E. Vautor, and Y. Le Loir. 2011b. Molecular basis of virulence in Staphylococcus aureus mastitis. *PLoS One*. 6:e27354.
- 217.Leaver, M.J., J.B. Taggart, L. Villeneuve, J.E. Bron, D.R. Guy, S.C. Bishop, R.D. Houston, O. Matika, and D.R. Tocher. 2011. Heritability and mechanisms of n-3 long chain polyunsaturated fatty acid deposition in the flesh of Atlantic salmon. *Comp Biochem Physiol Part D Genomics Proteomics*. 6:62-69.
- 218.Leech, M.D., A. Carrillo-Vico, R.S. Liblau, and S.M. Anderton. 2011. Recognition of a high affinity MHC class I-restricted epitope of myelin oligodendrocyte glycoprotein by CD8(+) T cells derived from autoantigen-deficient mice. *Front Immunol*. 2:17.
- 219.Leigh Brown, A.J., S.J. Lycett, L. Weinert, G.J. Hughes, E. Fearnhill, and D.T. Dunn. 2011. Transmission network parameters estimated from HIV sequences for a nationwide epidemic. *J Infect Dis.* 204:1463-1469.
- 220.Liberska, A., A. Lilienkampf, A. Unciti-Broceta, and M. Bradley. 2011. Solid-phase synthesis of arginine-based double-tailed cationic lipopeptides: potent nucleic acid carriers. *Chem Commun (Camb)*. 47:12774-12776.
- 221.Lichius, A., A. Berepiki, and N.D. Read. 2011. Form follows function -- the versatile fungal cytoskeleton. *Fungal Biol.* 115:518-540.
- 222.Lieber, D., and J. Haas. 2011. Viruses and microRNAs: a toolbox for systematic analysis. *Wiley Interdiscip Rev RNA*. 2:787-801.
- 223.Longdon, B., J.D. Hadfield, C.L. Webster, D.J. Obbard, and F.M. Jiggins. 2011a. Host phylogeny determines viral persistence and replication in novel hosts. *PLoS Pathog*. 7:e1002260.
- 224.Longdon, B., L. Wilfert, D.J. Obbard, and F.M. Jiggins. 2011b. Rhabdoviruses in two species of Drosophila: vertical transmission and a recent sweep. *Genetics*. 188:141-150.
- 225.Longdon, B., L. Wilfert, J. Osei-Poku, H. Cagney, D.J. Obbard, and F.M. Jiggins. 2011c. Host-switching by a vertically transmitted rhabdovirus in Drosophila. *Biol Lett.* 7:747-750.
- 226.Lopes, B.S., A. Hamouda, J. Findlay, and S.G. Amyes. 2011. Effect of frameshift mutagen acriflavine on control of resistance genes in Acinetobacter baumannii. *J Med Microbiol*. 60:211-215.
- 227.Lord, K.M., and N.D. Read. 2011. Perithecium morphogenesis in Sordaria macrospora. *Fungal Genet Biol.* 48:388-399.
- 228.Lowther, J., G. Charmier, M.C. Raman, H. Ikushiro, H. Hayashi, and D.J. Campopiano. 2011. Role of a conserved arginine residue during catalysis in serine palmitoyltransferase. *FEBS Lett.* 585:1729-1734.
- 229.Lu, J.P., A. Knezevic, Y.X. Wang, I. Rudan, H. Campbell, Z.K. Zou, J. Lan, Q.X. Lai, J.J. Wu, Y. He, M.S. Song, L. Zhang, G. Lauc, and W. Wang. 2011a. Screening Novel Biomarkers for Metabolic Syndrome by Profiling Human Plasma N-Glycans in Chinese Han and Croatian Populations. *J Proteome Res.* 10:4959-4969.
- 230.Lu, Z.H., A. di Domenico, S.H. Wright, P.A. Knight, C.B. Whitelaw, and A.D. Pemberton. 2011b. Strain-specific copy number variation in the intelectin locus on the 129 mouse chromosome 1. *BMC Genomics*. 12:110.
- 231.Mabbott, N.A., J. Kenneth Baillie, A. Kobayashi, D.S. Donaldson, H. Ohmori, S.O. Yoon, A.S. Freedman, T.C. Freeman, and K.M. Summers. 2011. Expression of mesenchyme-specific gene signatures by follicular dendritic cells: insights from the meta-analysis of microarray data from multiple mouse cell populations. *Immunology*. 133:482-498.
- 232.MacArthur, I., V.R. Parreira, D. Lepp, L.M. Mutharia, J.A. Vazquez-Boland, and J.F. Prescott. 2011. The sensor kinase MprB is required for Rhodococcus equi virulence. *Vet Microbiol*. 147:133-141.
- 233. MacGregor, P., N.J. Savill, D. Hall, and K.R. Matthews. 2011. Transmission stages dominate trypanosome within-host dynamics during chronic infections. *Cell Host Microbe*. 9:310-318.
- 234. Maciejewski, M., N. Tjandra, and P.N. Barlow. 2011. Estimation of interdomain flexibility of N-terminus of factor H using residual dipolar couplings. *Biochemistry*. 50:8138-8149.
- 235. Mackay, G.A., R.S. Knight, and J.W. Ironside. 2011. The molecular epidemiology of variant CJD. *Int J Mol Epidemiol Genet*. 2:217-227.
- 236. Mackenzie, K.J., S.M. Anderton, and J. Schwarze. 2011. Peptide immunotherapy for childhood allergy addressing translational challenges. *Clin Transl Allergy*. 1:13.
- 237. MacLullich, A.M., B.T. Edelshain, R.J. Hall, A. de Vries, S.E. Howie, A. Pearson, S.D. Middleton, F. Gillies, I.R. Armstrong, T.O. White, C. Cunningham, S.E. de Rooij, and B.C. van Munster. 2011. Cerebrospinal fluid interleukin-8 levels are higher in people with hip fracture with perioperative delirium than in controls. *J Am Geriatr Soc.* 59:1151-1153.



- 238. Macmillan, D., M. De Cecco, N.L. Reynolds, L.F. Santos, P.E. Barran, and J.R. Dorin. 2011. Synthesis of cyclic peptides through an intramolecular amide bond rearrangement. Chembiochem. 12:2133-2136.
- 239. Mahajan, A., and D. Gally. 2011. Escherichia coli and the mucosal immune system. Expert Rev Clin Immunol. 7:743-745.
- 240. Maizels, R.M., and J.E. Allen. 2011. Immunology. Eosinophils forestall obesity. Science. 332:186-187.
- 241. Maizels, R.M., J.P. Hewitson, and W.C. Gause. 2011a. Heligmosomoides polygyrus: one species still. *Trends* Parasitol. 27:100-101.
- 242. Maizels, R.M., J.P. Hewitson, J. Murray, Y.M. Harcus, B. Dayer, K.J. Filbey, J.R. Grainger, H.J. McSorley, L.A. Reynolds, and K.A. Smith. 2011b. Immune modulation and modulators in Heligmosomoides polygyrus infection. Exp Parasitol.
- 243. Maizels, R.M., and K.A. Smith. 2011. Regulatory T cells in infection. Adv Immunol. 112:73-136.
- 244. Makita, K., E.M. Fevre, C. Waiswa, M.C. Eisler, M. Thrusfield, and S.C. Welburn. 2011a. Herd prevalence of bovine brucellosis and analysis of risk factors in cattle in urban and peri-urban areas of the Kampala economic zone, Uganda. BMC Vet Res. 7:60.
- 245. Makita, K., E.M. Fevre, C. Waiswa, W. Kaboyo, M.C. Eisler, and S.C. Welburn. 2011b. Evidence-based identification of the most important livestock related zoonotic diseases in Kampala, Uganda. J Vet Med Sci. 73:991-1000.
- 246. Makita, K., E.M. Fevre, C. Waiswa, W. Kaboyo, M.C. Eisler, and S.C. Welburn. 2011c. Spatial epidemiology of hospital-diagnosed brucellosis in Kampala, Uganda. Int J Health Geogr. 10:52.
- 247. Malik, S.I., A. Hussain, B.W. Yun, S.H. Spoel, and G.J. Loake. 2011. GSNOR-mediated de-nitrosylation in the plant defence response. Plant Sci. 181:540-544.
- 248. Malterer, G., L. Dolken, and J. Haas. 2011. The miRNA-targetome of KSHV and EBV in human B-cells. RNA Biol. 8:30-34.
- 249. Manley, N.R., E.R. Richie, C.C. Blackburn, B.G. Condie, and J. Sage. 2011. Structure and function of the thymic microenvironment. Front Biosci. 16:2461-2477.
- 250. Martinelli, A., G. Henriques, P. Cravo, and P. Hunt. 2011. Whole genome re-sequencing identifies a mutation in an ABC transporter (mdr2) in a Plasmodium chabaudi clone with altered susceptibility to antifolate drugs. Int J Parasitol. 41:165-171.
- 251. Masri, A.Y., N.R. Lambe, J.M. Macfarlane, S. Brotherstone, W. Haresign, and L. Bunger. 2011. Evaluating the effects of a single copy of a mutation in the myostatin gene (c.\*1232G>A) on carcass traits in crossbred lambs. Meat Sci. 87:412-418.
- 252. Matika, O., R. Pong-Wong, J.A. Woolliams, and S.C. Bishop. 2011. Confirmation of two quantitative trait loci regions for nematode resistance in commercial British terminal sire breeds. Animal. 5:1149-1156.
- 253. Matthews, E., J.A. Miller, M.R. MacLeod, J. Ironside, G. Ambler, R. Labrum, R. Sud, J.L. Holton, and M.G. Hanna. 2011. Sodium and chloride channelopathies with myositis: coincidence or connection? Muscle Nerve. 44:283-288.
- 254. Matthews, J.B. 2011a. Facing the threat of equine parasitic disease. Equine Vet J. 43:126-132.
- 255. Matthews, K.R. 2011b. Controlling and coordinating development in vector-transmitted parasites. Science. 331:1149-1153.
- 256. May, M., M. Gompels, V. Delpech, K. Porter, F. Post, M. Johnson, D. Dunn, A. Palfreeman, R. Gilson, B. Gazzard, T. Hill, J. Walsh, M. Fisher, C. Orkin, J. Ainsworth, L. Bansi, A. Phillips, C. Leen, M. Nelson, J. Anderson, and C. Sabin. 2011. Impact of late diagnosis and treatment on life expectancy in people with HIV-1: UK Collaborative HIV Cohort (UK CHIC) Study. Bmj. 343:d6016.
- 257. Mazet, M., R.K. Harijan, T.R. Kiema, A.M. Haapalainen, P. Morand, J. Morales, F. Bringaud, R.K. Wierenga, and P.A. Michels. 2011. The characterization and evolutionary relationships of a trypanosomal thiolase. Int J Parasitol. 41:1273-1283.
- 258.Mc Ginty, S.E., D.J. Rankin, and S.P. Brown. 2011. Horizontal gene transfer and the evolution of bacterial cooperation. Evolution. 65:21-32.
- 259. McAdam, P.R., A. Holmes, K.E. Templeton, and J.R. Fitzgerald. 2011. Adaptive evolution of Staphylococcus aureus during chronic endobronchial infection of a cystic fibrosis patient. PLoS One. 6:e24301.
- 260. McAllister, H.C., A.J. Nisbet, P.J. Skuce, and D.P. Knox. 2011. Using lectins to identify hidden antigens in Fasciola hepatica. *J Helminthol*:1-7.
- 261. McArthur, C.L., D.J. Bartley, D.J. Shaw, and J.B. Matthews. 2011. Assessment of ivermectin efficacy against gastrointestinal nematodes in cattle on four Scottish farms. Vet Rec. 169:658.



- 262. McCulloch, L., K.L. Brown, B.M. Bradford, J. Hopkins, M. Bailey, K. Rajewsky, J.C. Manson, and N.A. Mabbott. 2011. Follicular dendritic cell-specific prion protein (PrP) expression alone is sufficient to sustain prion infection in the spleen. PLoS Pathog. 7:e1002402.
- 263. McCutcheon, S., A.R. Alejo Blanco, E.F. Houston, C. de Wolf, B.C. Tan, A. Smith, M.H. Groschup, N. Hunter, V.S. Hornsey, I.R. MacGregor, C.V. Prowse, M. Turner, and J.C. Manson. 2011. All clinically-relevant blood components transmit prion disease following a single blood transfusion: a sheep model of vCJD. PLoS One. 6:e23169.
- 264. McFadden, N., D. Bailey, G. Carrara, A. Benson, Y. Chaudhry, A. Shortland, J. Heeney, F. Yarovinsky, P. Simmonds, A. Macdonald, and I. Goodfellow. 2011. Norovirus regulation of the innate immune response and apoptosis occurs via the product of the alternative open reading frame 4. PLoS Pathog. 7:e1002413.
- 265. McLachlan, G., H. Davidson, E. Holder, L.A. Davies, I.A. Pringle, S.G. Sumner-Jones, A. Baker, P. Tennant, C. Gordon, C. Vrettou, R. Blundell, L. Hyndman, B. Stevenson, A. Wilson, A. Doherty, D.J. Shaw, R.L. Coles, H. Painter, S.H. Cheng, R.K. Scheule, J.C. Davies, J.A. Innes, S.C. Hyde, U. Griesenbach, E.W. Alton, A.C. Boyd, D.J. Porteous, D.R. Gill, and D.D. Collie. 2011. Pre-clinical evaluation of three non-viral gene transfer agents for cystic fibrosis after aerosol delivery to the ovine lung. Gene Ther. 18:996-1005.
- 266. McLeish, N.J., P. Simmonds, C. Robertson, I. Handel, M. McGilchrist, B.K. Singh, S. Kerr, M.E. Chase-Topping, K. Sinka, M. Bronsvoort, D.J. Porteous, W. Carman, J. McMenamin, A. Leigh-Brown, and M.E. Woolhouse. 2011. Sero-prevalence and incidence of A/H1N1 2009 influenza infection in Scotland in winter 2009-2010. PLoS One. 6:e20358.
- 267. Mellanby, R.J., I.G. Handel, D.N. Clements, B.M. Bronsvoort, A. Lengeling, and J.P. Schoeman. 2011a. Breed and sex risk factors for canine babesiosis in South Africa. J Vet Intern Med. 25:1186-1189.
- 268. Mellanby, R.J., S.M. Rhind, C. Bell, D.J. Shaw, J. Gifford, D. Fennell, C. Manser, D.P. Spratt, M.J. Wright, S. Zago, and N.P. Hudson. 2011b. Perceptions of clients and veterinarians on what attributes constitute 'a good vet'. Vet Rec. 168:616.
- 269. Meyer, C., F. Grey, C.N. Kreklywich, T.F. Andoh, R.S. Tirabassi, S.L. Orloff, and D.N. Streblow. 2011. Cytomegalovirus MicroRNA Expression Is Tissue Specific and Is Associated with Persistence. J Virol. 85:378-389.
- 270. Michels, P.A., and L. Avilan. 2011. The NAD+ metabolism of Leishmania, notably the enzyme nicotinamidase involved in NAD+ salvage, offers prospects for development of anti-parasite chemotherapy. Mol Microbiol. 82:4-8.
- 271. Mideo, N., W.A. Nelson, S.E. Reece, A.S. Bell, A.F. Read, and T. Day. 2011a. Bridging scales in the evolution of infectious disease life histories: application. Evolution. 65:3298-3310.
- 272. Mideo, N., N.J. Savill, W. Chadwick, P. Schneider, A.F. Read, T. Day, and S.E. Reece. 2011b. Causes of variation in malaria infection dynamics: insights from theory and data. Am Nat. 178:E174-188.
- 273. Midzi, N., S. Mtapuri-Zinyowera, M.P. Mapingure, N.H. Paul, D. Sangweme, G. Hlerema, M.J. Mutsaka, F. Tongogara, G. Makware, V. Chadukura, K.C. Brouwer, F. Mutapi, N. Kumar, and T. Mduluza. 2011a. Knowledge attitudes and practices of grade three primary schoolchildren in relation to schistosomiasis, soil transmitted helminthiasis and malaria in Zimbabwe. BMC Infect Dis. 11:169.
- 274. Midzi, N., S. Mtapuri-Zinyowera, D. Sangweme, N.H. Paul, G. Makware, M.P. Mapingure, K.C. Brouwer, J. Mudzori, G. Hlerema, V. Chadukura, F. Mutapi, N. Kumar, and T. Mduluza. 2011b. Efficacy of integrated school based de-worming and prompt malaria treatment on helminths -Plasmodium falciparum co-infections: A 33 months follow up study. BMC Int Health Hum Rights. 11:9.
- 275. Mills, J.M., J. Harper, D. Broomfield, and K.E. Templeton. 2011. Rapid testing for respiratory syncytial virus in a paediatric emergency department: benefits for infection control and bed management. J Hosp Infect. 77:248-251.
- 276. Milot, E., F.M. Mayer, D.H. Nussey, M. Boisvert, F. Pelletier, and D. Reale. 2011. Evidence for evolution in response to natural selection in a contemporary human population. Proc Natl Acad Sci U S A. 108:17040-
- 277. Miranda-Casoluengo, R., A.A. Miranda-Casoluengo, E.P. O'Connell, R.J. Fahey, C.A. Boland, J.A. Vazquez-Boland, and W.G. Meijer. 2011. The vapA co-expressed virulence plasmid gene vcgB (orf10) of the intracellular actinomycete Rhodococcus equi. Microbiology. 157:2357-2368.
- 278. Mitchell, K.M., F. Mutapi, N.J. Savill, and M.E. Woolhouse. 2011. Explaining observed infection and antibody age-profiles in populations with urogenital schistosomiasis. PLoS Comput Biol. 7:e1002237.
- 279. Molesworth, A.M., J. Mackenzie, D. Everington, R.S. Knight, and R.G. Will. 2011. Sporadic Creutzfeldt-Jakob disease and risk of blood transfusion in the United Kingdom. Transfusion. 51:1872-1873; author reply 1873-1874.



- 280. Moore, E.E., J.A. Danielewski, S.M. Garland, J. Tan, M.A. Quinn, M.P. Stevens, and S.N. Tabrizi. 2011a. Clearance of human papillomavirus in women treated for cervical dysplasia. *Obstet Gynecol*. 117:101-108.
- 281. Moore, J.W., G.J. Loake, and S.H. Spoel. 2011b. Transcription dynamics in plant immunity. *Plant Cell*. 23:2809-2820.
- 282. Morgan, H.P., J. Jiang, A.P. Herbert, D. Kavanagh, D. Uhrin, P.N. Barlow, and J.P. Hannan. 2011a. Crystallographic determination of the disease-associated T1184R variant of complement regulator factor H. *Acta Crystallogr D Biol Crystallogr*. 67:593-600.
- 283. Morgan, H.P., I.W. McNae, M.W. Nowicki, W. Zhong, P.A. Michels, D.S. Auld, L.A. Fothergill-Gilmore, and M.D. Walkinshaw. 2011b. The trypanocidal drug suramin and other trypan blue mimetics are inhibitors of pyruvate kinases and bind to the adenosine site. *J Biol Chem.* 286:31232-31240.
- 284.Morgan, H.P., C.Q. Schmidt, M. Guariento, B.S. Blaum, D. Gillespie, A.P. Herbert, D. Kavanagh, H.D. Mertens, D.I. Svergun, C.M. Johansson, D. Uhrin, P.N. Barlow, and J.P. Hannan. 2011c. Structural basis for engagement by complement factor H of C3b on a self surface. *Nat Struct Mol Biol.* 18:463-470.
- 285.Morris, A.C., M. Brittan, T.S. Wilkinson, D.F. McAuley, J. Antonelli, C. McCulloch, L.C. Barr, N.A. McDonald, K. Dhaliwal, R.O. Jones, A. Mackellar, C. Haslett, A.W. Hay, D.G. Swann, N. Anderson, I.F. Laurenson, D.J. Davidson, A.G. Rossi, T.S. Walsh, and A.J. Simpson. 2011. C5a-mediated neutrophil dysfunction is RhoAdependent and predicts infection in critically ill patients. *Blood*. 117:5178-5188.
- 286. Mott, G.A., R. Wilson, A. Fernando, A. Robinson, P. MacGregor, D. Kennedy, D. Schaap, J.B. Matthews, and K.R. Matthews. 2011. Targeting cattle-borne zoonoses and cattle pathogens using a novel trypanosomatid-based delivery system. *PLoS Pathog*. 7:e1002340.
- 287. Mou, C., F. Pitel, D. Gourichon, F. Vignoles, A. Tzika, P. Tato, L. Yu, D.W. Burt, B. Bed'hom, M. Tixier-Boichard, K.J. Painter, and D.J. Headon. 2011. Cryptic patterning of avian skin confers a developmental facility for loss of neck feathering. *PLoS Biol.* 9:e1001028.
- 288. Muellner, P., R.N. Zadoks, A.M. Perez, S.E. Spencer, Y.H. Schukken, and N.P. French. 2011. The integration of molecular tools into veterinary and spatial epidemiology. *Spat Spatiotemporal Epidemiol*. 2:159-171.
- 289. Murray, K., J. Peters, L. Stellitano, A.M. Winstone, C. Verity, and R.G. Will. 2011. Is there evidence of vertical transmission of variant Creutzfeldt-Jakob disease? *J Neurol Neurosurg Psychiatry*. 82:729-731.
- 290. Mutapi, F. 2011. Improving diagnosis of urogenital schistosome infection. *Expert Rev Anti Infect Ther*. 9:863-865.
- 291. Mutapi, F., C. Bourke, Y. Harcus, N. Midzi, T. Mduluza, C.M. Turner, R. Burchmore, and R.M. Maizels. 2011a. Differential recognition patterns of Schistosoma haematobium adult worm antigens by the human antibodies IgA, IgE, IgG1 and IgG4. *Parasite Immunol*. 33:181-192.
- 292. Mutapi, F., N. Imai, N. Nausch, C.D. Bourke, N. Rujeni, K.M. Mitchell, N. Midzi, M.E. Woolhouse, R.M. Maizels, and T. Mduluza. 2011b. Schistosome infection intensity is inversely related to auto-reactive antibody levels. *PLoS One*. 6:e19149.
- 293. Mutapi, F., N. Rujeni, C. Bourke, K. Mitchell, L. Appleby, N. Nausch, N. Midzi, and T. Mduluza. 2011c. Schistosoma haematobium treatment in 1-5 year old children: safety and efficacy of the antihelminthic drug praziquantel. *PLoS Negl Trop Dis*. 5:e1143.
- 294. Nair, H., W.A. Brooks, M. Katz, A. Roca, J.A. Berkley, S.A. Madhi, J.M. Simmerman, A. Gordon, M. Sato, S. Howie, A. Krishnan, M. Ope, K.A. Lindblade, P. Carosone-Link, M. Lucero, W. Ochieng, L. Kamimoto, E. Dueger, N. Bhat, S. Vong, E. Theodoratou, M. Chittaganpitch, O. Chimah, A. Balmaseda, P. Buchy, E. Harris, V. Evans, M. Katayose, B. Gaur, C. O'Callaghan-Gordo, D. Goswami, W. Arvelo, M. Venter, T. Briese, R. Tokarz, M.A. Widdowson, A.W. Mounts, R.F. Breiman, D.R. Feikin, K.P. Klugman, S.J. Olsen, B.D. Gessner, P.F. Wright, I. Rudan, S. Broor, E.A.F. Simoes, and H. Campbell. 2011. Global burden of respiratory infections due to seasonal influenza in young children: a systematic review and meta-analysis. *Lancet*. 378:1917-1930.
- 295. Natesan, S.K., A. Black, K.R. Matthews, J.C. Mottram, and M.C. Field. 2011. Trypanosoma brucei brucei: endocytic recycling is important for mouse infectivity. *Exp Parasitol*. 127:777-783.
- 296. Nausch, N., N. Midzi, T. Mduluza, R.M. Maizels, and F. Mutapi. 2011. Regulatory and activated T cells in human Schistosoma haematobium infections. *PLoS One*. 6:e16860.
- 297. Nelson, M., D. Dockrell, S. Edwards, B. Angus, S. Barton, N. Beeching, C. Bergin, M. Boffito, R. Breen, J. Cartledge, S. Clarke, M. Fisher, A. Freedman, B. Gazzard, A. Grant, J. Greig, R. Jones, S. Khoo, C. Leen, M. Lipman, H. Manji, R. Miller, S. Mitchell, E. Ong, A. Pozniak, M. Schmid, M. Shiew, M. Singer, E. Wilkins, I. Williams, C. Wood, and R. Weston. 2011a. British HIV Association and British Infection Association guidelines for the treatment of opportunistic infection in HIV-seropositive individuals 2011. HIV Med. 12 Suppl 2:1-140.



- 298. Nelson, M.I., P. Lemey, Y. Tan, A. Vincent, T.T. Lam, S. Detmer, C. Viboud, M.A. Suchard, A. Rambaut, E.C. Holmes, and M. Gramer. 2011b. Spatial dynamics of human-origin H1 influenza A virus in North American swine. PLoS Pathog. 7:e1002077.
- 299. Ni Cheallaigh, C., J. Keane, E.C. Lavelle, J.C. Hope, and J. Harris. 2011. Autophagy in the immune response to tuberculosis: clinical perspectives. Clin Exp Immunol. 164:291-300.
- 300.Ni Choileain, S., and A.L. Astier. 2011. CD46 plasticity and its inflammatory bias in multiple sclerosis. Arch Immunol Ther Exp (Warsz). 59:49-59.
- 301. Ni Choileain, S., N.J. Weyand, C. Neumann, J. Thomas, M. So, and A.L. Astier. 2011. The dynamic processing of CD46 intracellular domains provides a molecular rheostat for T cell activation. PLoS One. 6:e16287.
- 302. Nisbet, A.J., D.S. Zarlenga, D.P. Knox, L.I. Meikle, L.A. Wildblood, and J.B. Matthews. 2011. A calciumactivated apyrase from Teladorsagia circumcincta: an excretory/secretory antigen capable of modulating host immune responses? Parasite Immunol. 33:236-243.
- 303. Nowell, C.S., N. Bredenkamp, S. Tetelin, X. Jin, C. Tischner, H. Vaidya, J.M. Sheridan, F.H. Stenhouse, R. Heussen, A.J. Smith, and C.C. Blackburn. 2011. Foxn1 regulates lineage progression in cortical and medullary thymic epithelial cells but is dispensable for medullary sublineage divergence. PLoS Genet. 7:e1002348.
- 304. Nunn, F.G., S.T. Burgess, G. Innocent, A.J. Nisbet, P. Bates, and J.F. Huntley. 2011. Development of a serodiagnostic test for sheep scab using recombinant protein Pso o 2. Mol Cell Probes. 25:212-218.
- 305. Nussey, D.H., T. Coulson, D. Delorme, T.H. Clutton-Brock, J.M. Pemberton, M. Festa-Bianchet, and J.M. Gaillard. 2011. Patterns of body mass senescence and selective disappearance differ among three species of free-living ungulates. Ecology. 92:1936-1947.
- 306. O'Donnell, A.J., P. Schneider, H.G. McWatters, and S.E. Reece. 2011. Fitness costs of disrupting circadian rhythms in malaria parasites. Proc Biol Sci. 278:2429-2436.
- 307. O'Leary, M.C., K. Sinka, C. Robertson, K. Cuschieri, R. Lyman, M. Lacey, A. Potts, H.A. Cubie, and M. Donaghy. 2011. HPV type-specific prevalence using a urine assay in unvaccinated male and female 11- to 18-year olds in Scotland. Br J Cancer. 104:1221-1226.
- 308. Obbard, D.J., F.M. Jiggins, N.J. Bradshaw, and T.J. Little. 2011. Recent and recurrent selective sweeps of the antiviral RNAi gene Argonaute-2 in three species of Drosophila. Mol Biol Evol. 28:1043-1056.
- 309. Oddsdottir, C., S.C. Riley, R. Leask, D.J. Shaw, C. Aurich, F. Palm, A.L. Fowden, S.W. Ricketts, and E.D. Watson. 2011. Dynamics of activities of matrix metalloproteinases-9 and -2, and the tissue inhibitors of MMPs in fetal fluid compartments during gestation and at parturition in the mare. Theriogenology. 75:1130-1138.
- 310.Okello, A.L., E.P. Gibbs, A. Vandersmissen, and S.C. Welburn. 2011. One Health and the neglected zoonoses: turning rhetoric into reality. Vet Rec. 169:281-285.
- 311.Ott, M., G. Tascher, S. Hassdenteufel, R. Zimmermann, J. Haas, and S.M. Bailer. 2011. Functional characterization of the essential tail anchor of the herpes simplex virus type 1 nuclear egress protein pUL34. J Gen Virol. 92:2734-2745.
- 312. Pal, S., M. Zeidler, J.W. Ironside, and A. Zeman. 2011. 31st Advanced Clinical Neurology Course, Edinburgh 2009: progressive cognitive impairment, behavioural change and upper motor neuron signs in a 57-year-old woman. Pract Neurol. 11:71-80.
- 313. Palin, K., H. Campbell, A.F. Wright, J.F. Wilson, and R. Durbin. 2011. Identity-by-descent-based phasing and imputation in founder populations using graphical models. Genet Epidemiol. 35:853-860.
- 314. Patrick, S., K.L. Jobling, D. O'Connor, Z. Thacker, D.T. Dryden, and G.W. Blakely. 2011. A unique homologue of the eukaryotic protein-modifier ubiquitin present in the bacterium Bacteroides fragilis, a predominant resident of the human gastrointestinal tract. Microbiology. 157:3071-3078.
- 315. Pechtl, I.C., D. Kavanagh, N. McIntosh, C.L. Harris, and P.N. Barlow. 2011a. Disease-associated N-terminal complement factor H mutations perturb cofactor and decay-accelerating activities. J Biol Chem. 286:11082-
- 316. Pechtl, I.C., R.K. Neely, D.T. Dryden, A.C. Jones, and P.N. Barlow. 2011b. Use of time-resolved FRET to validate crystal structure of complement regulatory complex between C3b and factor H (N terminus). Protein Sci. 20:2102-2112.
- 317. Pedersen, A.B., and S.A. Babayan. 2011. Wild immunology. Mol Ecol. 20:872-880.
- 318. Pemberton, J.M., D. Beraldi, B.H. Craig, and J. Hopkins. 2011. Digital gene expression analysis of gastrointestinal helminth resistance in Scottish blackface lambs. Mol Ecol. 20:910-919.
- 319. Petrik, J., J. Coste, and C. Fournier-Wirth. 2011. Advances in transfusion medicine in the first decade of the 21st century: Advances in miniaturized technologies. Transfus Apher Sci. 45:45-51.



- 320.Petsch, B., A. Muller-Schiffmann, A. Lehle, E. Zirdum, I. Prikulis, F. Kuhn, A.J. Raeber, J.W. Ironside, C. Korth, and L. Stitz. 2011. Biological effects and use of PrPSc- and PrP-specific antibodies generated by immunization with purified full-length native mouse prions. *J Virol*. 85:4538-4546.
- 321.Pfefferle, S., J. Schopf, M. Kogl, C.C. Friedel, M.A. Muller, J. Carbajo-Lozoya, T. Stellberger, E. von Dall'Armi, P. Herzog, S. Kallies, D. Niemeyer, V. Ditt, T. Kuri, R. Zust, K. Pumpor, R. Hilgenfeld, F. Schwarz, R. Zimmer, I. Steffen, F. Weber, V. Thiel, G. Herrler, H.J. Thiel, C. Schwegmann-Wessels, S. Pohlmann, J. Haas, C. Drosten, and A. von Brunn. 2011. The SARS-coronavirus-host interactome: identification of cyclophilins as target for pan-coronavirus inhibitors. *PLoS Pathog*. 7:e1002331.
- 322. Plinston, C., P. Hart, A. Chong, N. Hunter, J. Foster, P. Piccardo, J.C. Manson, and R.M. Barron. 2011. Increased susceptibility of human-PrP transgenic mice to bovine spongiform encephalopathy infection following passage in sheep. *J Virol*. 85:1174-1181.
- 323. Podisi, B.K., S.A. Knott, I.C. Dunn, A.S. Law, D.W. Burt, and P.M. Hocking. 2011. Overlap of quantitative trait loci for early growth rate, and for body weight and age at onset of sexual maturity in chickens. *Reproduction*. 141:381-389.
- 324.Pollitt, L.C., P. MacGregor, K. Matthews, and S.E. Reece. 2011a. Malaria and trypanosome transmission: different parasites, same rules? *Trends Parasitol*. 27:197-203.
- 325. Pollitt, L.C., N. Mideo, D.R. Drew, P. Schneider, N. Colegrave, and S.E. Reece. 2011b. Competition and the evolution of reproductive restraint in malaria parasites. *Am Nat.* 177:358-367.
- 326. Poore, L.A., K.L. Lambert, D.J. Shaw, and M.P. Weaver. 2011. Comparison of three methods of injecting the proximal interphalangeal joint in horses. *Vet Rec.* 168:302.
- 327. Popovic, M., J. Bella, V. Zlatev, V. Hodnik, G. Anderluh, P.N. Barlow, A. Pintar, and S. Pongor. 2011. The interaction of Jagged-1 cytoplasmic tail with afadin PDZ domain is local, folding-independent, and tuned by phosphorylation. *J Mol Recognit*. 24:245-253.
- 328. Pucic, M., A. Knezevic, J. Vidic, B. Adamczyk, M. Novokmet, O. Polasek, O. Gornik, S. Supraha-Goreta, M.R. Wormald, I. Redzic, H. Campbell, A. Wright, N.D. Hastie, J.F. Wilson, I. Rudan, M. Wuhrer, P.M. Rudd, D. Josic, and G. Lauc. 2011. High Throughput Isolation and Glycosylation Analysis of IgG-Variability and Heritability of the IgG Glycome in Three Isolated Human Populations. *Molecular & Cellular Proteomics*. 10.
- 329. Raghwani, J., A. Rambaut, E.C. Holmes, V.T. Hang, T.T. Hien, J. Farrar, B. Wills, N.J. Lennon, B.W. Birren, M.R. Henn, and C.P. Simmons. 2011. Endemic dengue associated with the co-circulation of multiple viral lineages and localized density-dependent transmission. *PLoS Pathog*. 7:e1002064.
- 330. Ramiro, R.S., J. Alpedrinha, L. Carter, A. Gardner, and S.E. Reece. 2011. Sex and death: the effects of innate immune factors on the sexual reproduction of malaria parasites. *PLoS Pathog*. 7:e1001309.
- 331.Rankin, D.J., E.P. Rocha, and S.P. Brown. 2011. What traits are carried on mobile genetic elements, and why? *Heredity (Edinb)*. 106:1-10.
- 332. Rayner, J.C., W. Liu, M. Peeters, P.M. Sharp, and B.H. Hahn. 2011. A plethora of Plasmodium species in wild apes: a source of human infection? *Trends Parasitol*. 27:222-229.
- 333.Read, N.D. 2011. Exocytosis and growth do not occur only at hyphal tips. Mol Microbiol. 81:4-7.
- 334. Reece, S.E., L.C. Pollitt, N. Colegrave, and A. Gardner. 2011. The meaning of death: evolution and ecology of apoptosis in protozoan parasites. *PLoS Pathog*. 7:e1002320.
- 335. Reed, D.L., R.W. Currier, S.F. Walton, M. Conrad, S.A. Sullivan, J.M. Carlton, T.D. Read, A. Severini, S. Tyler, R. Eberle, W.E. Johnson, G. Silvestri, I.N. Clarke, T. Lagergard, S.A. Lukehart, M. Unemo, W.M. Shafer, R.P. Beasley, T. Bergstrom, P. Norberg, A.J. Davison, P.M. Sharp, B.H. Hahn, and J. Blomberg. 2011. The evolution of infectious agents in relation to sex in animals and humans: brief discussions of some individual organisms. *Ann N Y Acad Sci.* 1230:74-107.
- 336.Rhind, S.M., S. Baillie, T. Kinnison, D.J. Shaw, C.E. Bell, R.J. Mellanby, J. Hammond, N.P. Hudson, R.E. Whittington, and R. Donnelly. 2011. The transition into veterinary practice: opinions of recent graduates and final year students. *BMC Med Educ.* 11:64.
- 337.Richards, V.P., P. Lang, P.D. Bitar, T. Lefebure, Y.H. Schukken, R.N. Zadoks, and M.J. Stanhope. 2011. Comparative genomics and the role of lateral gene transfer in the evolution of bovine adapted Streptococcus agalactiae. *Infect Genet Evol.* 11:1263-1275.
- 338.Richardson, E.J., B. Limaye, H. Inamdar, A. Datta, K.S. Manjari, G.D. Pullinger, N.R. Thomson, R.R. Joshi, M. Watson, and M.P. Stevens. 2011. Genome sequences of Salmonella enterica serovar typhimurium, Choleraesuis, Dublin, and Gallinarum strains of well- defined virulence in food-producing animals. *J Bacteriol*. 193:3162-3163.
- 339. Robert, C., X. Lu, A. Law, T.C. Freeman, and D.A. Hume. 2011. Macrophages.com: an on-line community resource for innate immunity research. *Immunobiology*. 216:1203-1211.



- Leading infectious disease research and training
- 340. Roberts, T.L., J.A. Dunn, M.J. Sweet, D.A. Hume, and K.J. Stacey. 2011. The immunostimulatory activity of phosphorothioate CpG oligonucleotides is affected by distal sequence changes. Mol Immunol. 48:1027-1034.
- 341. Rocchi, M.S., P.M. Bartley, N.F. Inglis, E. Collantes-Fernandez, G. Entrican, F. Katzer, and E.A. Innes. 2011a. Selection of Neospora caninum antigens stimulating bovine CD4+ve T cell responses through immunopotency screening and proteomic approaches. Vet Res. 42:91.
- 342. Rocchi, M.S., S.R. Wattegedera, D. Frew, G. Entrican, J.F. Huntley, and T.N. McNeilly. 2011b. Identification of CD4+CD25 high Foxp3+ T cells in ovine peripheral blood. Vet Immunol Immunopathol. 144:172-177.
- 343. Rocha, R.A., P.A. Bricarello, M.B. Silva, J.G. Houdijk, F.A. Almeida, D.F. Cardia, and A.F. Amarante. 2011. Influence of protein supplementation during late pregnancy and lactation on the resistance of Santa Ines and Ile de France ewes to Haemonchus contortus. Vet Parasitol. 181:229-238.
- 344. Rogers, G.B., L.R. Hoffman, M.W. Johnson, N. Mayer-Hamblett, J. Schwarze, M.P. Carroll, and K.D. Bruce. 2011. Using bacterial biomarkers to identify early indicators of cystic fibrosis pulmonary exacerbation onset. Expert Rev Mol Diagn. 11:197-206.
- 345. Rosbottom, A., H. Gibney, P. Kaiser, C. Hartley, R.F. Smith, R. Robinson, A. Kipar, and D.J. Williams. 2011. Up regulation of the maternal immune response in the placenta of cattle naturally infected with Neospora caninum. PLoS One. 6:e15799.
- 346. Rout, P.K., K.K. Chauhan, O. Matika, and S.C. Bishop. 2011. Exploring the genetic resistance to natural gastrointestinal nematode infection in Indian goats. Vet Parasitol. 180:315-322.
- 347. Rudan, I., S. El Arifeen, Z.A. Bhutta, R.E. Black, A. Brooks, K.Y. Chan, M. Chopra, T. Duke, D. Marsh, A. Pio, E.A. Simoes, G. Tamburlini, E. Theodoratou, M.W. Weber, C.G. Whitney, H. Campbell, and S.A. Qazi. 2011. Setting research priorities to reduce global mortality from childhood pneumonia by 2015. PLoS Med. 8:e1001099.
- 348. Rudicell, R.S., A.K. Piel, F. Stewart, D.L. Moore, G.H. Learn, Y. Li, J. Takehisa, L. Pintea, G.M. Shaw, J. Moore, P.M. Sharp, and B.H. Hahn. 2011. High prevalence of simian immunodeficiency virus infection in a community of savanna chimpanzees. J Virol. 85:9918-9928.
- 349. Sakkas, P., J.G. Houdijk, L.A. Jones, D.P. Knox, and I. Kyriazakis. 2011. Dietary protein and energy supplies differentially affect resistance to parasites in lactating mammals. Br J Nutr. 106:1207-1215.
- 350. Salmond, R.J., A. Filby, N. Pirinen, A.I. Magee, and R. Zamoyska. 2011. Mislocalization of Lck impairs thymocyte differentiation and can promote development of thymomas. Blood. 117:108-117.
- 351.Salmond, R.J., and R. Zamoyska. 2011. The influence of mTOR on T helper cell differentiation and dendritic cell function. Eur J Immunol. 41:2137-2141.
- 352. Samarasinghe, B., D.P. Knox, and C. Britton. 2011. Factors affecting susceptibility to RNA interference in Haemonchus contortus and in vivo silencing of an H11 aminopeptidase gene. Int J Parasitol. 41:51-59.
- 353. Sampimon, O.C., T.J. Lam, D.J. Mevius, Y.H. Schukken, and R.N. Zadoks. 2011. Antimicrobial susceptibility of coagulase-negative staphylococci isolated from bovine milk samples. Vet Microbiol. 150:173-179.
- 354. Sanchez-Juan, P., M.T. Bishop, E.A. Croes, R.S. Knight, R.G. Will, C.M. van Duijn, and J.C. Manson. 2011. A polymorphism in the regulatory region of PRNP is associated with increased risk of sporadic Creutzfeldt-Jakob disease. BMC Med Genet. 12:73.
- 355. Sander, A.F., A. Salanti, T. Lavstsen, M.A. Nielsen, T.G. Theander, R.G. Leke, Y.Y. Lo, N. Bobbili, D.E. Arnot, and D.W. Taylor. 2011. Positive selection of Plasmodium falciparum parasites with multiple var2csa-type PfEMP1 genes during the course of infection in pregnant women. J Infect Dis. 203:1679-1685.
- 356. Sanghera, N., B.E. Correia, J.R. Correia, C. Ludwig, S. Agarwal, H.K. Nakamura, K. Kuwata, E. Samain, A.C. Gill, B.B. Bonev, and T.J. Pinheiro. 2011. Deciphering the molecular details for the binding of the prion protein to main ganglioside GM1 of neuronal membranes. Chem Biol. 18:1422-1431.
- 357. Sargison, N.D. 2011. Pharmaceutical control of endoparasitic helminth infections in sheep. Vet Clin North Am Food Anim Pract. 27:139-156.
- 358. Sargison, N.D., F. Jackson, and J.S. Gilleard. 2011. Effects of age and immune suppression of sheep on fecundity, hatching and larval feeding of different strains of Haemonchus contortus. Vet J. 189:296-301.
- 359. Sargison, N.D., and P.R. Scott. 2011a. Anthelmintic resistance: potential benefits of 'over-diagnosis'. Vet Rec. 168:646-647.
- 360. Sargison, N.D., and P.R. Scott. 2011b. Diagnosis and economic consequences of triclabendazole resistance in Fasciola hepatica in a sheep flock in south-east Scotland. Vet Rec. 168:159.
- 361. Sargison, N.D., and P.R. Scott. 2011c. Metaphylactic gamithromycin treatment for the management of lameness in ewes putatively caused by Bacteroides melaninogenicus. Vet Rec. 169:556.
- 362. Savill, N.J., and G. Thierry. 2011. Electrophysiological evidence for impaired attentional engagement with phonologically acceptable misspellings in developmental dyslexia. Front Psychol. 2:139.



- 363. Schmidt, C.Q., F.C. Slingsby, A. Richards, and P.N. Barlow. 2011. Production of biologically active complement factor H in therapeutically useful quantities. *Protein Expr Purif.* 76:254-263.
- 364. Schukken, Y.H., G.J. Bennett, M.J. Zurakowski, H.L. Sharkey, B.J. Rauch, M.J. Thomas, B. Ceglowski, R.L. Saltman, N. Belomestnykh, and R.N. Zadoks. 2011a. Randomized clinical trial to evaluate the efficacy of a 5-day ceftiofur hydrochloride intramammary treatment on nonsevere gram-negative clinical mastitis. *J Dairy Sci.* 94:6203-6215.
- 365. Schukken, Y.H., J. Gunther, J. Fitzpatrick, M.C. Fontaine, L. Goetze, O. Holst, J. Leigh, W. Petzl, H.J. Schuberth, A. Sipka, D.G. Smith, R. Quesnell, J. Watts, R. Yancey, H. Zerbe, A. Gurjar, R.N. Zadoks, and H.M. Seyfert. 2011b. Host-response patterns of intramammary infections in dairy cows. *Vet Immunol Immunopathol*. 144:270-289.
- 366. Schulze, H., A.J. Ross, S.W. Ember, J. Luby, M. Khondoker, G. Giraud, I. Ciani, C. Tlili, D. Papale, J.G. Terry, A.R. Mount, A.J. Walton, J. Crain, P. Ghazal, T.T. Bachmann, and C.J. Campbell. 2011. Peptide-tags for enhanced DNA microarray performance. *Faraday Discuss*. 149:201-210; discussion 227-245.
- 367. Schwarze, J., and K.J. Mackenzie. 2011. Neosensitization to allergens after resolution of allergic airways inflammation: a new role for airway dendritic cells. *Am J Respir Crit Care Med*. 184:283-284.
- 368. Sears, B.F., J.R. Rohr, J.E. Allen, and L.B. Martin. 2011. The economy of inflammation: when is less more? *Trends Parasitol*. 27:382-387.
- 369. Shan, T., L. Li, P. Simmonds, C. Wang, A. Moeser, and E. Delwart. 2011. The fecal virome of pigs on a high-density farm. *J Virol*. 85:11697-11708.
- 370. Shapiro, B., S.Y. Ho, A.J. Drummond, M.A. Suchard, O.G. Pybus, and A. Rambaut. 2011. A Bayesian phylogenetic method to estimate unknown sequence ages. *Mol Biol Evol*. 28:879-887.
- 371.Sharp, P.M., and B.H. Hahn. 2011. Origins of HIV and the AIDS Pandemic. *Cold Spring Harb Perspect Med*. 1:a006841.
- 372.Sharp, P.M., W. Liu, G.H. Learn, J.C. Rayner, M. Peeters, and B.H. Hahn. 2011. Source of the human malaria parasite Plasmodium falciparum. *Proc Natl Acad Sci U S A*. 108:E744-745.
- 373. Sharp, P.M., and P. Simmonds. 2011. Evaluating the evidence for virus/host co-evolution. *Curr Opin Virol*. 1:436-441.
- 374. Shaw, J.L., P. Fitch, J. Cartwright, G. Entrican, J. Schwarze, H.O. Critchley, and A.W. Horne. 2011a. Lymphoid and myeloid cell populations in the non-pregnant human Fallopian tube and in ectopic pregnancy. *J Reprod Immunol*. 89:84-91.
- 375. Shaw, J.L., G.S. Wills, K.F. Lee, P.J. Horner, M.O. McClure, V.M. Abrahams, N. Wheelhouse, H.N. Jabbour, H.O. Critchley, G. Entrican, and A.W. Horne. 2011b. Chlamydia trachomatis infection increases fallopian tube PROKR2 via TLR2 and NFkappaB activation resulting in a microenvironment predisposed to ectopic pregnancy. *Am J Pathol.* 178:253-260.
- 376. Sherwood, K., M. Head, R. Walker, C. Smith, J.W. Ironside, and J.K. Fazakerley. 2011a. A new index of agonal state for neurological disease. *Neuropathol Appl Neurobiol*. 37:672-675.
- 377. Sherwood, K.R., M.W. Head, R. Walker, C. Smith, J.W. Ironside, and J.K. Fazakerley. 2011b. RNA integrity in post mortem human variant Creutzfeldt-Jakob disease (vCJD) and control brain tissue. *Neuropathol Appl Neurobiol*. 37:633-642.
- 378. Sibilano, R., G. Gri, B. Frossi, C. Tripodo, R. Suzuki, J. Rivera, A.S. MacDonald, and C.E. Pucillo. 2011. Technical advance: soluble OX40 molecule mimics regulatory T cell modulatory activity on FcepsilonRI-dependent mast cell degranulation. *J Leukoc Biol*. 90:831-838.
- 379. Simarro, P.P., G. Cecchi, J.R. Franco, M. Paone, E.M. Fevre, A. Diarra, J.A. Postigo, R.C. Mattioli, and J.G. Jannin. 2011. Risk for human African trypanosomiasis, Central Africa, 2000-2009. *Emerg Infect Dis.* 17:2322-2324.
- 380. Simmonds, P., and E. Domingo. 2011. Virus evolution. *Curr Opin Virol*. 1:410-412.
- 381.Simmons, R., C. Sharp, S. Sims, H. Kloverpris, P. Goulder, P. Simmonds, P. Bowness, and P. Klenerman. 2011. High frequency, sustained T cell responses to PARV4 suggest viral persistence in vivo. *J Infect Dis.* 203:1378-1387.
- 382. Singh, K., A.W. Confer, J.C. Hope, T. Rizzi, J.H. Wyckoff, 3rd, H.Y. Weng, and J.W. Ritchey. 2011. Cytotoxicity and cytokine production by bovine alveolar macrophages challenged with wild type and leukotoxin-deficient Mannheimia haemolytica. *Vet J.* 188:221-227.
- 383. Sitthidet, C., S. Korbsrisate, A.N. Layton, T.R. Field, M.P. Stevens, and J.M. Stevens. 2011. Identification of motifs of Burkholderia pseudomallei BimA required for intracellular motility, actin binding, and actin polymerization. *J Bacteriol*. 193:1901-1910.



- 384.Siu, R.W., R. Fragkoudis, P. Simmonds, C.L. Donald, M.E. Chase-Topping, G. Barry, G. Attarzadeh-Yazdi, J. Rodriguez-Andres, A.A. Nash, A. Merits, J.K. Fazakerley, and A. Kohl. 2011. Antiviral RNA interference responses induced by Semliki Forest virus infection of mosquito cells: characterization, origin, and frequency-dependent functions of virus-derived small interfering RNAs. *J Virol*. 85:2907-2917.
- 385. Sivakumaran, S., F. Agakov, E. Theodoratou, J.G. Prendergast, L. Zgaga, T. Manolio, I. Rudan, P. McKeigue, J.F. Wilson, and H. Campbell. 2011. Abundant Pleiotropy in Human Complex Diseases and Traits. *Am J Hum Genet*. 89:607-618.
- 386. Sivalingam, V.N., W.C. Duncan, E. Kirk, L.A. Shephard, and A.W. Horne. 2011. Diagnosis and management of ectopic pregnancy. *J Fam Plann Reprod Health Care*. 37:231-240.
- 387.Smith, J., J.R. Sadeyen, I.R. Paton, P.M. Hocking, N. Salmon, M. Fife, V. Nair, D.W. Burt, and P. Kaiser. 2011a. Systems analysis of immune responses in Marek's disease virus-infected chickens identifies a gene involved in susceptibility and highlights a possible novel pathogenicity mechanism. *J Virol*. 85:11146-11158.
- 388. Smith, K.A., K. Hochweller, G.J. Hammerling, L. Boon, A.S. MacDonald, and R.M. Maizels. 2011b. Chronic helminth infection promotes immune regulation in vivo through dominance of CD11cloCD103- dendritic cells. *J Immunol.* 186:7098-7109.
- 389. Smith, K.A., and R.M. Maizels. 2011a. Addendum: Defeating sepsis by misleading MyD88. *Nat Immunol*. 12:804.
- 390.Smith, K.A., and R.M. Maizels. 2011b. Defeating sepsis by misleading MyD88. Nat Immunol. 12:284-286.
- 391.Smith, P.H., J.M. Mwangi, Y.A. Afrane, G. Yan, D.J. Obbard, L.C. Ranford-Cartwright, and T.J. Little. 2011c. Alternative splicing of the Anopheles gambiae Dscam gene in diverse Plasmodium falciparum infections. *Malar J.* 10:156.
- 392. Soriano, V., D. Grint, A. d'Arminio Monforte, A. Horban, C. Leen, E. Poveda, F. Antunes, S. de Wit, J. Lundgren, J. Rockstroh, and L. Peters. 2011. Hepatitis delta in HIV-infected individuals in Europe. *Aids*. 25:1987-1992.
- 393. Specht, S., M.D. Taylor, M.A. Hoeve, J.E. Allen, R. Lang, and A. Hoerauf. 2011. Over expression of IL-10 by macrophages overcomes resistance to murine filariasis. *Exp Parasitol*.
- 394. Spence, P.J., D. Cunningham, W. Jarra, J. Lawton, J. Langhorne, and J. Thompson. 2011. Transformation of the rodent malaria parasite Plasmodium chabaudi. *Nat Protoc.* 6:553-561.
- 395. Spoel, S.H., and G.J. Loake. 2011. Redox-based protein modifications: the missing link in plant immune signalling. *Curr Opin Plant Biol*. 14:358-364.
- 396. Stapleton, J.T., S. Foung, A.S. Muerhoff, J. Bukh, and P. Simmonds. 2011. The GB viruses: a review and proposed classification of GBV-A, GBV-C (HGV), and GBV-D in genus Pegivirus within the family Flaviviridae. *J Gen Virol*. 92:233-246.
- 397.Stjernman, M., and T.J. Little. 2011. Genetic variation for maternal effects on parasite susceptibility. *J Evol Biol*. 24:2357-2363.
- 398.Stolle, E., L. Wilfert, R. Schmid-Hempel, P. Schmid-Hempel, M. Kube, R. Reinhardt, and R.F. Moritz. 2011. A second generation genetic map of the bumblebee Bombus terrestris (Linnaeus, 1758) reveals slow genome and chromosome evolution in the Apidae. *BMC Genomics*. 12:48.
- 399.Stothard, J.R., J.C. Sousa-Figueiredo, M. Betson, H.K. Green, E.Y. Seto, A. Garba, M. Sacko, F. Mutapi, S. Vaz Nery, M.A. Amin, M. Mutumba-Nakalembe, A. Navaratnam, A. Fenwick, N.B. Kabatereine, A.F. Gabrielli, and A. Montresor. 2011. Closing the praziquantel treatment gap: new steps in epidemiological monitoring and control of schistosomiasis in African infants and preschool-aged children. *Parasitology*. 138:1593-1606.
- 400. Stratford, C.H., B.C. McGorum, K.J. Pickles, and J.B. Matthews. 2011. An update on cyathostomins: anthelmintic resistance and diagnostic tools. *Equine Vet J Suppl*:133-139.
- 401. Suffert, G., G. Malterer, J. Hausser, J. Viiliainen, A. Fender, M. Contrant, T. Ivacevic, V. Benes, F. Gros, O. Voinnet, M. Zavolan, P.M. Ojala, J.G. Haas, and S. Pfeffer. 2011. Kaposi's sarcoma herpesvirus microRNAs target caspase 3 and regulate apoptosis. *PLoS Pathog*. 7:e1002405.
- 402.Sun, X., E.M. Gilroy, A. Chini, P.L. Nurmberg, I. Hein, C. Lacomme, P.R. Birch, A. Hussain, B.W. Yun, and G.J. Loake. 2011. ADS1 encodes a MATE-transporter that negatively regulates plant disease resistance. *New Phytol*. 192:471-482.
- 403. Suparak, S., V. Muangsombut, D. Riyapa, J.M. Stevens, M.P. Stevens, G. Lertmemongkolchai, and S. Korbsrisate. 2011. Burkholderia pseudomallei-induced cell fusion in U937 macrophages can be inhibited by monoclonal antibodies against host cell surface molecules. *Microbes Infect*. 13:1006-1011.
- 404. Supre, K., F. Haesebrouck, R.N. Zadoks, M. Vaneechoutte, S. Piepers, and S. De Vliegher. 2011. Some coagulase-negative Staphylococcus species affect udder health more than others. *J Dairy Sci.* 94:2329-2340.
- 405. Surakka, I., A. Isaacs, L.C. Karssen, P.P.P. Laurila, R.P.S. Middelberg, E. Tikkanen, J.S. Ried, C. Lamina, M. Mangino, W. Igl, J.J. Hottenga, V. Lagou, P. van der Harst, I.M. Leach, T. Esko, Z. Kutalik, N.W. Wainwright,



M.V. Struchalin, A.P. Sarin, A.J. Kangas, J.S. Viikari, M. Perola, T. Rantanen, A.K. Petersen, P. Soininen, A. Johansson, N. Soranzo, A.C. Heath, T. Papamarkou, I. Prokopenko, A. Tonjes, F. Kronenberg, A. Doring, F. Rivadeneira, G.W. Montgomery, J.B. Whitfield, M. Kahonen, T. Lehtimaki, N.B. Freimer, G. Willemsen, E.J.C. de Geus, A. Palotie, M.S. Sandhu, D.M. Waterworth, A. Metspalu, M. Stumvoll, A.G. Uitterlinden, A. Jula, G. Navis, C. Wijmenga, B.H.R. Wolffenbuttel, M.R. Taskinen, M. Ala-Korpela, J. Kaprio, K.O. Kyvik, D.I. Boomsma, N.L. Pedersen, U. Gyllensten, J.F. Wilson, I. Rudan, H. Campbell, P.P. Pramstaller, T.D. Spector, J.C.M. Witteman, J.G. Eriksson, V. Salomaa, B.A. Oostra, O.T. Raitakari, H.E. Wichmann, C. Gieger, M.R. Jarvelin, N.G. Martin, A. Hofman, M.I. McCarthy, L. Peltonen, C.M. van Duijn, Y.S. Aulchenko, S. Ripatti, and E. Consortium. 2011. A Genome-Wide Screen for Interactions Reveals a New Locus on 4p15 Modifying the Effect of Waist-to-Hip Ratio on Total Cholesterol. *PLoS Genet*. 7.

- 406. Sutherland, T.E., O.A. Andersen, M. Betou, I.M. Eggleston, R.M. Maizels, D. van Aalten, and J.E. Allen. 2011. Analyzing airway inflammation with chemical biology: dissection of acidic mammalian chitinase function with a selective drug-like inhibitor. *Chem Biol.* 18:569-579.
- 407. Svensen, N., J.J. Diaz-Mochon, and M. Bradley. 2011a. Encoded peptide libraries and the discovery of new cell binding ligands. *Chem Commun (Camb)*. 47:7638-7640.
- 408. Svensen, N., J.J. Diaz-Mochon, and M. Bradley. 2011b. Microarray Generation of Thousand-Member Oligonucleotide Libraries. *PLoS One*. 6.
- 409. Tahoun, A., G. Siszler, K. Spears, S. McAteer, J. Tree, E. Paxton, T.L. Gillespie, I. Martinez-Argudo, M.A. Jepson, D.J. Shaw, M. Koegl, J. Haas, D.L. Gally, and A. Mahajan. 2011. Comparative analysis of EspF variants in inhibition of Escherichia coli phagocytosis by macrophages and inhibition of E. coli translocation through human- and bovine-derived M cells. *Infect Immun*. 79:4716-4729.
- 410. Takatsuka, M., M. Osada-Oka, E.F. Satoh, K. Kitadokoro, Y. Nishiuchi, M. Niki, M. Inoue, K. Iwai, T. Arakawa, Y. Shimoji, H. Ogura, K. Kobayashi, A. Rambukkana, and S. Matsumoto. 2011. A histone-like protein of mycobacteria possesses ferritin superfamily protein-like activity and protects against DNA damage by Fenton reaction. *PLoS One*. 6:e20985.
- 411. Tham, W.H., C.Q. Schmidt, R.E. Hauhart, M. Guariento, P.B. Tetteh-Quarcoo, S. Lopaticki, J.P. Atkinson, P.N. Barlow, and A.F. Cowman. 2011. Plasmodium falciparum uses a key functional site in complement receptor type-1 for invasion of human erythrocytes. *Blood*. 118:1923-1933.
- 412. Theodoratou, E., J.S.F. Zhang, I. Kolcic, A.M. Davis, S. Bhopal, H. Nair, K.Y. Chan, L. Liu, H. Johnson, I. Rudan, and H. Campbell. 2011. Estimating Pneumonia Deaths of Post-Neonatal Children in Countries of Low or No Death Certification in 2008. *PLoS One*. 6.
- 413. Thielbeer, F., S.V. Chankeshwara, and M. Bradley. 2011a. Polymerizable Fluorescein Derivatives: Synthesis of Fluorescent Particles and Their Cellular Uptake. *Biomacromolecules*. 12:4386-4391.
- 414. Thielbeer, F., K. Donaldson, and M. Bradley. 2011b. Zeta Potential Mediated Reaction Monitoring on Nano and Microparticles. *Bioconjug Chem.* 22:144-150.
- 415. Thogersen, R.L., A.A. Holder, A.V. Hill, D.E. Arnot, E.B. Imoukhuede, and O. Leroy. 2011. Comparative decline in funding of European Commission malaria vaccine projects: what next for the European scientists working in this field? *Malar J.* 10:255.
- 416.Thom, K., A. Cleland, M. Salakova, D. Candotti, and J. Petrik. 2011. Prevalence and genetic heterogeneity of SEN virus genotypes D and H in blood donors from Central and Western Europe and West Africa. *Transfus Med*. 21:42-50.
- 417. Thomas, J.A., C. Pope, D. Wojtacha, A.J. Robson, T.T. Gordon-Walker, S. Hartland, P. Ramachandran, M. Van Deemter, D.A. Hume, J.P. Iredale, and S.J. Forbes. 2011. Macrophage therapy for murine liver fibrosis recruits host effector cells improving fibrosis, regeneration, and function. *Hepatology*. 53:2003-2015.
- 418. Tidbury, H.J., A.B. Pedersen, and M. Boots. 2011. Within and transgenerational immune priming in an insect to a DNA virus. *Proc Biol Sci.* 278:871-876.
- 419. Tildesley, M.J., V.V. Volkova, and M.E. Woolhouse. 2011. Potential for epidemic take-off from the primary outbreak farm via livestock movements. *BMC Vet Res.* 7:76.
- 420. Tippayawat, P., M. Pinsiri, D. Rinchai, D. Riyapa, A. Romphruk, Y.H. Gan, R.L. Houghton, P.L. Felgner, R.W. Titball, M.P. Stevens, E.E. Galyov, G.J. Bancroft, and G. Lertmemongkolchai. 2011. Burkholderia pseudomallei proteins presented by monocyte-derived dendritic cells stimulate human memory T cells in vitro. *Infect Immun*. 79:305-313.
- 421. Tirabassi, R., L. Hook, I. Landais, F. Grey, H. Meyers, H. Hewitt, and J. Nelson. 2011. Human Cytomegalovirus US7 Is Regulated Synergistically by Two Virally Encoded MicroRNAs and by Two Distinct Mechanisms. *J Virol*. 85:11938-11944.



- 422. Toh, H., V.K. Sharma, K. Oshima, S. Kondo, M. Hattori, F.B. Ward, A. Free, and T.D. Taylor. 2011. Complete genome sequences of Arcobacter butzleri ED-1 and Arcobacter sp. strain L, both isolated from a microbial fuel cell. J Bacteriol. 193:6411-6412.
- 423. Towner, K.J., B. Evans, L. Villa, K. Levi, A. Hamouda, S.G. Amyes, and A. Carattoli. 2011. Distribution of intrinsic plasmid replicase genes and their association with carbapenem-hydrolyzing class D beta-lactamase genes in European clinical isolates of Acinetobacter baumannii. Antimicrob Agents Chemother. 55:2154-2159.
- 424. Tree, J.J., A.J. Roe, A. Flockhart, S.P. McAteer, X. Xu, D. Shaw, A. Mahajan, S.A. Beatson, A. Best, S. Lotz, M.J. Woodward, R. La Ragione, K.C. Murphy, J.M. Leong, and D.L. Gally. 2011. Transcriptional regulators of the GAD acid stress island are carried by effector protein-encoding prophages and indirectly control type III secretion in enterohemorrhagic Escherichia coli O157:H7. Mol Microbiol. 80:1349-1365.
- 425. Tsun, A., I. Qureshi, J.C. Stinchcombe, M.R. Jenkins, M. de la Roche, J. Kleczkowska, R. Zamoyska, and G.M. Griffiths. 2011. Centrosome docking at the immunological synapse is controlled by Lck signaling. J Cell Biol. 192:663-674.
- 426. Unciti-Broceta, A., L. Moggio, K. Dhaliwal, L. Pidgeon, K. Finlayson, C. Haslett, and M. Bradley. 2011. Safe and efficient in vitro and in vivo gene delivery: tripodal cationic lipids with programmed biodegradability. J Mater Chem. 21:2154-2158.
- 427. Urraca del Junco, C.I., D.J. Shaw, M.P. Weaver, and T. Schwarz. 2011. The value of radiographic screening for metallic particles in the equine foot and size of related artifacts on low-field MRI. Vet Radiol Ultrasound.
- 428. Vale, P.F., A.J. Wilson, A. Best, M. Boots, and T.J. Little. 2011. Epidemiological, evolutionary, and coevolutionary implications of context-dependent parasitism. Am Nat. 177:510-521.
- 429. Valles-Miret, M., and M. Bradley. 2011. A generic small-molecule microarray immobilization strategy. Tetrahedron Lett. 52:6819-6822.
- 430.van der Werf, N., S.A. Redpath, A.T. Phythian-Adams, M. Azuma, J.E. Allen, R.M. Maizels, A.S. Macdonald, and M.D. Taylor. 2011. Th2 responses to helminth parasites can be therapeutically enhanced by, but are not dependent upon, GITR-GITR ligand costimulation in vivo. J Immunol. 187:1411-1420.
- 431.van Zuylen, W.J., V. Garceau, A. Idris, K. Schroder, K.M. Irvine, J.E. Lattin, D.A. Ovchinnikov, A.C. Perkins, A.D. Cook, J.A. Hamilton, P.J. Hertzog, K.J. Stacey, S. Kellie, D.A. Hume, and M.J. Sweet. 2011. Macrophage activation and differentiation signals regulate schlafen-4 gene expression: evidence for Schlafen-4 as a modulator of myelopoiesis. PLoS One. 6:e15723.
- 432. Vohra, P., and I.R. Poxton. 2011a. Comparison of toxin and spore production in clinically relevant strains of Clostridium difficile. Microbiology. 157:1343-1353.
- 433. Vohra, P., and I.R. Poxton. 2011b. Efficacy of decontaminants and disinfectants against Clostridium difficile. J Med Microbiol. 60:1218-1224.
- 434. Volkova, V.V., P.R. Bessell, M.E. Woolhouse, and N.J. Savill. 2011. Evaluation of risks of foot-and-mouth disease in Scotland to assist with decision making during the 2007 outbreak in the UK. Vet Rec. 169:124.
- 435.von Wissmann, B., N. Machila, K. Picozzi, E.M. Fevre, C.B.B.M. de, I.G. Handel, and S.C. Welburn. 2011. Factors associated with acquisition of human infective and animal infective trypanosome infections in domestic livestock in Western Kenya. PLoS Negl Trop Dis. 5:e941.
- 436. Wadsworth, J.D., I. Dalmau-Mena, S. Joiner, J.M. Linehan, C. O'Malley, C. Powell, S. Brandner, E.A. Asante, J.W. Ironside, D.A. Hilton, and J. Collinge. 2011. Effect of fixation on brain and lymphoreticular vCJD prions and bioassay of key positive specimens from a retrospective vCJD prevalence study. J Pathol. 223:511-518.
- 437. Walker, A.R. 2011. Eradication and control of livestock ticks: biological, economic and social perspectives. Parasitology. 138:945-959.
- 438. Walker, R.G., G. Thomson, K. Malone, M.W. Nowicki, E. Brown, D.G. Blake, N.J. Turner, M.D. Walkinshaw, K.M. Grant, and J.C. Mottram. 2011. High throughput screens yield small molecule inhibitors of Leishmania CRK3:CYC6 cyclin-dependent kinase. PLoS Negl Trop Dis. 5:e1033.
- 439. Walling, C.A., D.H. Nussey, A. Morris, T.H. Clutton-Brock, L.E. Kruuk, and J.M. Pemberton. 2011. Inbreeding depression in red deer calves. BMC Evol Biol. 11:318.
- 440. Wang, D., C.E. Zetterstrom, M. Gabrielsen, K.S. Beckham, J.J. Tree, S.E. Macdonald, O. Byron, T.J. Mitchell, D.L. Gally, P. Herzyk, A. Mahajan, H. Uvell, R. Burchmore, B.O. Smith, M. Elofsson, and A.J. Roe. 2011. Identification of bacterial target proteins for the salicylidene acylhydrazide class of virulence-blocking compounds. J Biol Chem. 286:29922-29931.
- 441. Wastling, S.L., K. Picozzi, C. Wamboga, V.O.N.W. B, C. Amongi-Accup, N.A. Wardrop, J.R. Stothard, A. Kakembo, and S.C. Welburn. 2011. Latent Trypanosoma brucei gambiense foci in Uganda: a silent epidemic in children and adults? Parasitology. 138:1480-1487.



- 442. Wastling, S.L., and S.C. Welburn. 2011. Diagnosis of human sleeping sickness: sense and sensitivity. *Trends Parasitol*. 27:394-402.
- 443. Waters, L., M. Fisher, J. Anderson, C. Wood, V. Delpech, T. Hill, J. Walsh, C. Orkin, L. Bansi, M. Gompels, A. Phillips, M. Johnson, R. Gilson, P. Easterbrook, C. Leen, K. Porter, B. Gazzard, and C. Sabin. 2011a. Responses to highly active antiretroviral therapy and clinical events in patients with a low CD4 cell count: late presenters vs. late starters. *HIV Med.* 12:289-298.
- 444. Waters, W.R., M.V. Palmer, T.C. Thacker, W.C. Davis, S. Sreevatsan, P. Coussens, K.G. Meade, J.C. Hope, and D.M. Estes. 2011b. Tuberculosis immunity: opportunities from studies with cattle. *Clin Dev Immunol*. 2011:768542.
- 445. Watson, E.K., R. O'Brien, C. Campbell, D. Weller, R.D. Neal, C. Wilkinson, P.W. Rose, and P.C.F.-U.S. Grp. 2011. Views of health professionals on the role of primary care in the follow-up of men with prostate cancer. *Fam Pract*. 28:647-654.
- 446. Whyte, C.S., E.T. Bishop, D. Ruckerl, S. Gaspar-Pereira, R.N. Barker, J.E. Allen, A.J. Rees, and H.M. Wilson. 2011. Suppressor of cytokine signaling (SOCS)1 is a key determinant of differential macrophage activation and function. *J Leukoc Biol*. 90:845-854.
- 447. Widdison, S., M. Watson, and T.J. Coffey. 2011. Early response of bovine alveolar macrophages to infection with live and heat-killed Mycobacterium bovis. *Dev Comp Immunol*. 35:580-591.
- 448. Wilfert, L., B. Longdon, A.G. Ferreira, F. Bayer, and F.M. Jiggins. 2011. Trypanosomatids are common and diverse parasites of Drosophila. *Parasitology*:1-8.
- 449. Wilson, A.J., M.B. Morrissey, M.J. Adams, C.A. Walling, F.E. Guinness, J.M. Pemberton, T.H. Clutton-Brock, and L.E. Kruuk. 2011a. Indirect genetics effects and evolutionary constraint: an analysis of social dominance in red deer, Cervus elaphus. *J Evol Biol*. 24:772-783.
- 450. Wilson, G.J., K.S. Seo, R.A. Cartwright, T. Connelley, O.N. Chuang-Smith, J.A. Merriman, C.M. Guinane, J.Y. Park, G.A. Bohach, P.M. Schlievert, W.I. Morrison, and J.R. Fitzgerald. 2011b. A novel core genome-encoded superantigen contributes to lethality of community-associated MRSA necrotizing pneumonia. *PLoS Pathog*. 7:e1002271.
- 451.Wise, H.M., C. Barbezange, B.W. Jagger, R.M. Dalton, J.R. Gog, M.D. Curran, J.K. Taubenberger, E.C. Anderson, and P. Digard. 2011. Overlapping signals for translational regulation and packaging of influenza A virus segment 2. *Nucleic Acids Res.* 39:7775-7790.
- 452. Witusik-Perkowska, M., P. Rieske, K. Hulas-Bigoszewska, M. Zakrzewska, R. Stawski, D. Kulczycka-Wojdala, M. Bienkowski, E. Stoczynska-Fidelus, S.M. Gresner, S. Piaskowski, D.J. Jaskolski, W. Papierz, K. Zakrzewski, M. Kolasa, J.W. Ironside, and P.P. Liberski. 2011. Glioblastoma-derived spheroid cultures as an experimental model for analysis of EGFR anomalies. *J Neurooncol*. 102:395-407.
- 453. Wong Sak Hoi, J., C. Lamarre, R. Beau, I. Meneau, A. Berepiki, A. Barre, E. Mellado, N.D. Read, and J.P. Latge. 2011. A novel family of dehydrin-like proteins is involved in stress response in the human fungal pathogen Aspergillus fumigatus. *Mol Biol Cell*. 22:1896-1906.
- 454. Wu, Z., T. Hu, and P. Kaiser. 2011. Chicken CCR6 and CCR7 are markers for immature and mature dendritic cells respectively. *Dev Comp Immunol*. 35:563-567.
- 455. Wu, Z., and P. Kaiser. 2011. Antigen presenting cells in a non-mammalian model system, the chicken. *Immunobiology*. 216:1177-1183.
- 456. Yahaya, B., A. Baker, P. Tennant, S.H. Smith, D.J. Shaw, G. McLachlan, and D.D. Collie. 2011. Analysis of airway epithelial regeneration and repair following endobronchial brush biopsy in sheep. *Exp Lung Res.* 37:519-535.
- 457. Yokoyama, T., A. Takeuchi, M. Yamamoto, T. Kitamoto, J.W. Ironside, and M. Morita. 2011. Heparin enhances the cell-protein misfolding cyclic amplification efficiency of variant Creutzfeldt-Jakob disease. *Neurosci Lett*. 498:119-123.
- 458. Younes, A., A. Hamouda, and S.G. Amyes. 2011a. First report of a novel extended-spectrum beta-lactamase KOXY-2 producing Klebsiella oxytoca that hydrolyses cefotaxime and ceftazidime. *J Chemother*. 23:127-130.
- 459. Younes, A., A. Hamouda, J. Dave, and S.G. Amyes. 2011b. Prevalence of transferable blaCTX-M-15 from hospital- and community-acquired Klebsiella pneumoniae isolates in Scotland. *J Antimicrob Chemother*. 66:313-318.
- 460.Yun, B.W., A. Feechan, M. Yin, N.B. Saidi, T. Le Bihan, M. Yu, J.W. Moore, J.G. Kang, E. Kwon, S.H. Spoel, J.A. Pallas, and G.J. Loake. 2011. S-nitrosylation of NADPH oxidase regulates cell death in plant immunity. *Nature*. 478:264-268.
- 461. Yusop, R.M., A. Unciti-Broceta, E.M.V. Johansson, R.M. Sanchez-Martin, and M. Bradley. 2011. Palladium-mediated intracellular chemistry. *Nat Chem.* 3:239-243.



- 462.Zadoks, R.N., H.M. Griffiths, M.A. Munoz, C. Ahlstrom, G.J. Bennett, E. Thomas, and Y.H. Schukken. 2011a. Sources of Klebsiella and Raoultella species on dairy farms: be careful where you walk. *J Dairy Sci.* 94:1045-1051
- 463.Zadoks, R.N., J.R. Middleton, S. McDougall, J. Katholm, and Y.H. Schukken. 2011b. Molecular epidemiology of mastitis pathogens of dairy cattle and comparative relevance to humans. *J Mammary Gland Biol Neoplasia*. 16:357-372.
- 464.Zarlenga, D.S., A.J. Nisbet, L.C. Gasbarre, and W.M. Garrett. 2011. A calcium-activated nucleotidase secreted from Ostertagia ostertagi 4th-stage larvae is a member of the novel salivary apyrases present in blood-feeding arthropods. *Parasitology*. 138:333-343.
- 465.Zhang, X.S., and M.E. Woolhouse. 2011. Escherichia coli O157 infection on Scottish cattle farms: dynamics and control. *J R Soc Interface*. 8:1051-1058.