BUSINESS SCHOOL SOUTH - ROOM A26
12:30 - 18:00

STUDENT PROGRAMME
GETTING YOUR MESSAGE ACROSS
Chair: Virgilio Ambriz Vilchis

12:45  Speed networking/coffee/sandwich
       Sam Host, Quantum Solutions

13:30  Introduction (Information on BSAS/grants available etc.)
       Eileen Wall, SRUC

13:40  Past President Prize winner
       Amanda Ward

13:50  Presenting to your supervisor
       Jamie Newbold, University of Aberystwyth

14:20  Presenting at academic conferences
       Michael Lee, Bristol University

15:10  Coffee Break

15:30  Networking with Industry
       Sam Host, Quantum Solutions

16:00  Getting the most out of Accreditation
       Colin Whittemore, BSAS

16:15  Presenting to a lay audience
       Caroline Stocks, Communications Director, BSAS

16:45  Presenting to industry
       Helen Warren, Alltech

17:15  Mini presentations by industry representatives and Industry Fayre

18:00  Finish

19:30  Dinner
20:30  Pub quiz
**BUSINESS SCHOOL SOUTH - THEATRE B52**

**NOVEL FEED INGREDIENTS**

Chair: Dr S Chikunya

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 11:00 | 1 Alternative feed ingredients - Overview from an end-users perspective with specific reference to bioethanol co-products  
        | P E V Williams                                                          |
| 11:30 | 2 Insect protein for animal feed?  
        | A Charlton, E Fitches                                                  |
| 12:00 | 3 Evaluation of novel feed ingredients for aquaculture to meet fish production, health and sustainability in the 21st Century  
        | S J Davies                                                             |
| 12:30-13:30 | Lunch - Atrium                                       |

**BUSINESS SCHOOL SOUTH - THEATRE B52**

**EMERGING AND RE-EMERGING DISEASES**

Chair: Dr S Athanasiadou

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 13:30 | 4 Emerging and re-emerging diseases of livestock in Europe  
        | M Beer                                                                  |
| 14:00 | 5 Emerging and re-emerging arboviral diseases in Europe: The emergence and control of Bluetongue in Northern Europe  
        | P Mertens                                                               |
| 14:30 | 6 Modelling climate-driven changes in the seasonality of *Fasciola hepatica*  
        | D Smith, H Rose, E Morgan, D Williams, J van Dijk                       |
| 14:45 | 7 Comparative proteome analysis of nasal secretion from healthy, malignant catarrhal fever (MCF) challenged and vaccinated cattle  
        | M F Ghazali, N N Jonsson, G C Russell, R J Burchmore, P D Eckersall    |
| 15:00 | 8 Retrospective profiling of the 2012 Schmallenberg virus incursion into Ireland  
        | R G O Neill, C Boland, P Ross                                           |
| 15:15 | Tea/Coffee                                                             |

**BUSINESS SCHOOL SOUTH - THEATRE B52**

**FEED EFFICIENCY**

Chair: Dr S Waters

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 16:00 | 9 Improving feed efficiency in dairy production systems - challenges and possibilities  
        | E E Connor                                                             |
| 16:30 | 10 Improvement of feed efficiency in pigs and poultry: current knowledge and future challenges  
        | H Gilbert                                                              |
| 17:00 | 11 Improving Feed Efficiency of Beef Cattle: Current state of the art and future challenges  
        | D A Kenny, C Fitzsimons, S M Waters, J Hyslop, M McGee                  |
| 19:30 | Reception and Conference Dinner - Atrium                                |
**Tuesday 29 April 2014**

**Business School South - Theatre B52**

10:30-12:30

**Improving Ewe Efficiency Through Better Feeding**

**Maximising the use of forage in ewe diets**

Chair: Dr J P Hanrahan

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30</td>
<td>12</td>
<td>L A Stubbings</td>
</tr>
<tr>
<td>11:00</td>
<td>13</td>
<td>P Frater, L Genever, J Vipond, R Jones</td>
</tr>
<tr>
<td>11:15</td>
<td>14</td>
<td>M Jones</td>
</tr>
<tr>
<td>11:30</td>
<td>15</td>
<td>H Wishart, N Lambe, C Morgan-Davies, A Waterhouse</td>
</tr>
<tr>
<td>11:45</td>
<td>16</td>
<td>A Mason, J C Sneddon</td>
</tr>
<tr>
<td>12:00</td>
<td>17</td>
<td>E Genever</td>
</tr>
</tbody>
</table>

12:30-13:30  Lunch Atrium

**Business School South - Theatre B52**

13:30-15:30

**Improving Ewe Efficiency Through Better Feeding**

**Using supplements more efficiently**

Chair: Dr R Annett

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>17</td>
<td>J G M Houdijk, J E Vipond</td>
</tr>
<tr>
<td>13:45</td>
<td>18</td>
<td>R G Wilkinson, N Naylor, A M Mackenzie, S E Pattinson, J Donaldson</td>
</tr>
<tr>
<td>14:00</td>
<td>19</td>
<td>K A Phillips, K P A Wheeler</td>
</tr>
<tr>
<td>14:15</td>
<td>20</td>
<td>K P A Wheeler, C J Phythian, K A Phillips</td>
</tr>
<tr>
<td>14:30</td>
<td>21</td>
<td>K A Phillips, K P A Wheeler, H E Fuller</td>
</tr>
<tr>
<td>14:45</td>
<td>22</td>
<td>T W J Keady, J P Hanrahan</td>
</tr>
<tr>
<td>15:00</td>
<td>23</td>
<td>E Genever</td>
</tr>
<tr>
<td>15:30</td>
<td>24</td>
<td>Tea/Coffee</td>
</tr>
</tbody>
</table>

3
BUSINESS SCHOOL SOUTH - A25
16:00-17:35
SHEEP BREEDING AND NUTRITION
Chair: Dr J Conington

16:00  23  First-cross ewes from Scottish Blackface dams: an evaluation of progeny sired by three lowland breeds
        J P Hanrahan, T W J Keady

16:15  24  Effects of forage and breed types on the efficiency of utilisation of energy in hill replacement ewes
        Y G Zhao, R Annett, A Aubry, N E O’Connell, T Yan

16:30  25  Effects of breed and forage types on methane emission factors for lowland replacement ewes aged between 8 and 19 months
        A Aubry, R Annett, T Yan

16:45  26  Effect of starting date and length of lambing season on dairy sheep profitability in Greece - a simulation study
        G E Valergakis, S-A Termatzidou, S P Kechagia, P Kazana, Z Basdagianni

17:00  27  The effect of weaning system on the milk fatty acid profile of Chios sheep breed
        O Tzamaloukas, M Orford, D Miltiadou, C Papachristoforou

17:15  28  Effects of forage and breed types on the efficiency of utilisation of nitrogen in hill replacement ewes
        Y G Zhao, R Annett, A Aubry, N E O’Connell, T Yan

17:20  29  Effects of breed and forage types on methane emission factors for hill replacement ewes aged between 9 and 18 months
        A Aubry, R Annett, T Yan, A Uprichard

17:25  30  Benefit of by-pass based protein supplementation on periparturient ewe performance
        J G M Houdijk

17:30  31  The effect of iron supplementation on hepatic copper content of growing lambs
        S M Sefdeen, A M Mackenzie, R G Wilkinson

BUSINESS SCHOOL SOUTH - A25
18:00-19:00
BSAS AGM

19:30  Reception and Conference Dinner - Atrium
### PATHOLOGY AND FARM ANIMALS

**Chair:** Dr D Eckersall and Dr G Oikonomou

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30</td>
<td>32</td>
<td>Pathogenesis of Pestivirus infections</td>
<td>J Brownlie</td>
</tr>
<tr>
<td>11:00</td>
<td>33</td>
<td>The epithelial-endothelial barrier in influenza virus pathogenesis</td>
<td>K Short, J Kasper, C Kirkpatrick, E Veldhuis Kroeze, R Fouchier, T Kuiken</td>
</tr>
<tr>
<td>11:30</td>
<td>34</td>
<td>Host response to footrot in sheep</td>
<td>G Maboni, M Bexon, R Davenport, C Heawood, M Baker, K Baiker, L Green, S Tötemeyer</td>
</tr>
<tr>
<td>11:45</td>
<td>35</td>
<td>Investigating the bovine caruncular epithelial cell line as a model for <em>Listeria monocytogenes</em> invasion of reproductive tissues in ruminants</td>
<td>A Glanvill, S Totemeyer</td>
</tr>
<tr>
<td>12:00</td>
<td>36</td>
<td>Microbiota of cow’s milk; distinguishing healthy, sub-clinically and clinically diseased quarters</td>
<td>G Oikonomou, M L Bicalho, E Meira, R E Rossi, C Foditsch, V Machado, A G V Teixeira, C Santisteban, Y H Schukken, R C Bicalho</td>
</tr>
<tr>
<td>12:15</td>
<td>37</td>
<td>Veterinarians’ perceptions of mycotoxicosis and other silage-related diseases in ruminant livestock</td>
<td>S Roderick, P Ward, G Eales, S Rapson, M R F Lee, J M Wilkinson</td>
</tr>
<tr>
<td>12:20</td>
<td>38</td>
<td>Study of the milk metabolome profile to describe rumen function and diet utilization in dairy cows fed different types of carbohydrate and protein concentrations</td>
<td>A Belanche, C J Newbold, M Doreau, P Nozière, M Beckmann, J M Moorby</td>
</tr>
<tr>
<td>12:25</td>
<td>39</td>
<td>Potential use of Fourier transform infrared spectroscopy (FTIR) and flow infusion electrospray ionization mass spectroscopy (FIE-MS) as fast fingerprinting methods to predict efficiency of nitrogen utilization in cows fed different diets</td>
<td>A Belanche, C J Newbold, M Gorniak, P Lebzien, M Beckmann, Jon M Moorby</td>
</tr>
<tr>
<td>12:30</td>
<td>40</td>
<td>Responses in blood met-haemoglobin (Met-Hb) concentrations of steers during adaptation to inclusion of nitrate in the diet and subsequent long-term feeding of nitrate</td>
<td>J A Rooke, C-A Duthie, S Troy, C Broadbent, A Waterhouse, R Roehe</td>
</tr>
<tr>
<td>12:35</td>
<td></td>
<td>Lunch - Atrium</td>
<td></td>
</tr>
</tbody>
</table>
TUESDAY 29 APRIL 2014

14:15 44 Precaecal digestibility of phosphorus and crude protein of sesame seed meal supplemented with phytase in broilers using regression method  
H Majolagbe, E A Iyayi

14:30 45 Influence of pharmacological zinc oxide, phytase and phosphorus on weaned piglet growth performance and apparent faecal phosphorus digestibility  
C L Walk, P Wilcock, E Magowan

14:45 46 The effect of phytase on grower pig growth performance  
S Laird, I Kühn, S Jagger, H Miller

14:50 47 Energy metabolizability by finishing turkeys fed malted sorghum sprouts supplemented with enzyme or yeast  
F O Oke, A O Oso, A O Osofowora, O O Oduguwa, A V Jegede, A O Faiolu, K-H Südekum

14:55 48 Effect of enzyme and yeast supplementation on energy metabolisability by broiler finishers fed diets containing malted sorghum sprouts and wheat bran  
F O Oke, A O Faiolu, V A Jegede, O O Oduguwa, A O Oso, A O Osofowora, K-H Südekum

15:00 49 Effect of two different fibre sources on growth and immune function in layer pullets  
S M Hussein, J S Yokhana, T L Frankel

15:05 50 Use of thyme (Thymus vulgaris) essential oil or plants to control the poultry red mite (Dermanyssus gallinae) in domestic fowl  
E Jackson, D George, R Shiel, J Guy

15:10 51 Nutrient digestibility of diets based on wheat distillers dried grains with solubles supplemented with enzymes by broiler chickens  
N B Rano, A S Chaudhry, S A Edwards

15:15 52 The impact of enzyme inoculation on fermentation of ensiled maize cobs  
A T Kanengoni, R S Thomas, B D Nkosi, B Ndimba, M Chimonyo, K Dzama

15:20 Tea/Coffee

BUSINESS SCHOOL SOUTH - A24

15:45--17:55 COMPANION ANIMALS
Chair: Mr S Doherty

15:45 53 The health and welfare implications of selection, population structure and breeding in pedigree and other dogs  
D R Sargan

16:15 54 Five misconceptions about companion animals that affect welfare  
J W S Bradshaw

16:30 55 An investigation into relationships of horse and rider pelvic asymmetry  
L Browne, S J Charlton, J M Ellis, C Cunliffe

16:45 56 Inheritance patterns of primary closed angle glaucoma, an emerging disease in UK Border Collies  
L L Farrell, A Carlisle, K Summers

17:00 57 Quantification of acute phase proteins in interstitial fluid from equine body and limb wounds by the use of mass spectrometry  
L Bundgaard, S Jacobsen, M A Sørensen, R J Beynon, V M Harman, L J Petersen, E W Deutsch, E Bendixen
**TUESDAY 29 APRIL 2014**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:15</td>
<td>58</td>
<td>The validation of a novel protocol for the culture of equine endometrial epithelial and stromal cells</td>
<td>A Ross, D Nash, J Paddison</td>
</tr>
<tr>
<td>17:30</td>
<td>59</td>
<td>Any investigation into the relationship of pelvic misalignment on forelimb hoof size</td>
<td>A Ireson, S J Charlton, J M Ellis, C Cunliffe</td>
</tr>
<tr>
<td>17:35</td>
<td>60</td>
<td>The effect of live yeast supplementation on the canine hindgut microbial population in a continuous culture fermentation</td>
<td>K M Huson, E Pinloche, T J Wilkinson, C J Newbold</td>
</tr>
<tr>
<td>17:40</td>
<td>61</td>
<td>A preliminary study to investigate the range of motion of the proximal limb joints and relationships to British Veterinary Association/Kennel Club (BVA/KC) hip score in dogs</td>
<td>S J Charlton, J M Ellis, C Cunliffe</td>
</tr>
<tr>
<td>17:45</td>
<td>62</td>
<td>Breed-specific results from surveys of three pedigree dog breeds - Otterhounds, Manchester terriers and Hungarian wirehaired vizslas</td>
<td>V J Adams, K M Evans, J Sampson</td>
</tr>
<tr>
<td>17:50</td>
<td>63</td>
<td>Demonstrating the value of carrying out randomised clinical trials in small animal practice: the example on the use of medetomidine and/or butorphanol as preanaesthetic agents</td>
<td>V J Adams, N Girard, K Maddern, E A Leece</td>
</tr>
</tbody>
</table>

**BUSINESS SCHOOL SOUTH - A25**  
**18:00-19:00**  
**BSAS AGM**

19:30  Reception and Conference Dinner - Atrium

**BUSINESS SCHOOL SOUTH - A26**  
**10:30-12:35**  
**ADVANCES IN EQUINE SCIENCE**  
Chair: Dr D Nash

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30</td>
<td>64</td>
<td>Updates on equine grass sickness</td>
<td>B McGorum</td>
</tr>
<tr>
<td>11:00</td>
<td>65</td>
<td>The usefulness and limitations of metformin as a medical aid alongside dietary management in laminitis-prone horses and ponies</td>
<td>A E Durham</td>
</tr>
<tr>
<td>11:30</td>
<td>66</td>
<td>The effects of a high-starch or high-fibre diet on normal equine behaviour</td>
<td>L Bulmer, S McBride, J Murray</td>
</tr>
<tr>
<td>11:45</td>
<td>67</td>
<td>Post-transcriptional gene regulation in ageing equine cartilage and chondrocytes</td>
<td>R B Fentem, M J Peffers, P D Clegg</td>
</tr>
<tr>
<td>12:00</td>
<td>68</td>
<td>The date of return to cyclicity in seasonally anoestrous mares is independent of the endogenous circannual rhythm and is dependent only upon daylength which itself is dependent upon latitude</td>
<td>J Newcombe</td>
</tr>
<tr>
<td>12:15</td>
<td>69</td>
<td>Causes of maternal and neonatal mortality within the equine breeding industry within a 43 year period</td>
<td>R Murray, C Brigden</td>
</tr>
</tbody>
</table>
TUESDAY 29 APRIL 2014

12:20  70 The effect of mare age and reproductive status on embryo recovery rate and the quality of embryos recovered
       A Twigg-Flesner, A Newman, E Davies

12:25  71 Maternal cortisol levels in Primiparous and Multiparous Thoroughbred mares during abrupt pasture weaning
       A Twigg-Flesner, H Stephenson, E Davies

12:30  72 The use of eye blink rate and changes in behaviour as potential early indicators of pituitary pars intermedia dysfunction in the horse
       B Stephenson, A Hemmings, M Moore-Colyer

12:35-13:30 Lunch - Atrium

BUSINESS SCHOOL SOUTH - A26
13:30-14:50

EQUINE EXERCISE AND PERFORMANCE
Chair: Dr R Weller

13:30  73 Is there an association between hindlimb lameness and saddle slip in the horse?
       S Dyson, L Greve

14:00  74 An investigation of exercise-induced changes in equine back shape
       L Greve, S Dyson

14:05  75 Assessment of variation in movement symmetry measures in horses between trials, days and weeks based on inertial measurement units
       I Walker, T Pfau, J Perkins, R Carruthers, E Olsen

14:20  76 The effects of chiropractic treatment on the range of motion of the carpus and tarsus of horses
       J Guest, S J Charlton, S A Hedderly, C Cunliffe

14:35  77 Evaluation of horse fitness for excercies: the use of logit-log function as a model horse post-exercise heart rate recovery
       F Mata

15:00  Tea/coffee

BUSINESS SCHOOL SOUTH - A26
16:00-17:35

RUMEN AND GUT METABOLISM
Chair: Dr A Chaudhry

16:00  78 Assessment of the effects of fifteen compounds from essential oil extracts on the metabolism of polyunsaturated fatty acids by rumen microorganisms in vitro
       P O Eburu, S Chikunya

16:15  79 Effect of silage additive (tannin or inoculate) on protein degradability of legume and grass silages
       V Taha, J Huntington, R Wilkinson, D Davies

16:30  80 Evaluation of faecal NIRS for describing differences in digestibility from feed restriction and realimentation
       J M Bowen, K Keogh, D A Kenny, S M Waters, R Sanderson, S J Lister, R J Dewhurst
TUESDAY 29 APRIL 2014

16:45  81  A review of the impact of increased dietary starch concentration or addition of oils, fats, tannins or saponins in the diet on enteric methane emissions
J McBride, S J Morrison, T Yan, A W Gordon

17:00  82  Soluble lipopolysaccharide concentrations in caecal digesta but not ruminal digesta correlate with inflammation of rumen wall tissue at slaughter in commercial beef cattle at risk of SARA
C A McCartney, R C Cernat, H H C Koh-Tan, E M Strachan, T J Snelling, C D Harvey, N N Jonsson, R J Wallace

17:15  83  Potential use of tea leaves to reduce rumen ammonia and methane productions
D Ramdani, A S Chaudhry, C J Seal

17:20  84  The effects of whole clove bud oil or its three principal constituent components on the biohydrogenation of polyunsaturated fatty acids by rumen microorganisms in vitro
F Gilman, Sifelani Chikunya

17:25  85  Neutral Detergent Fiber (NDF), Acid Detergent Fiber (ADF) and Acid Detergent Lignin (ADL) digestibility coefficient of WAD ewe fed selected Nigeria indigenous forage species
L A Omoniyi, O A Isah, B J Adebayo, R A Olournaments, R M Akinbode, F O Oke, C F I Onwuka

17:30  86  Effects of bacterial and enzyme inoculation on the fermentation and aerobic stability of potato hash silage
B D Nkosi, T F Mutavhatsindi, J J Baloyi, R Meeske, M T Langa, I B Groenewald

17:35  87  Effect of Thapra Stylo silage treated with dried maoo pomace (DMP) on feed intake and nutrient digestibility in goats
S Bureenok, K Vasupen, B Saenmahayak, C Yuangklang

EXCHANGE BUILDING - LT 2
11:00-12:35
GENOMICS AND GENETICS
Chair: Dr E Wall

11:00  88  Accounting for herd movement characteristics in carcase trait genetic evaluations of commercial beef cattle
S Wilkinson, F Morgante, M P Coffey, R Mrode, K Moore

11:15  89  Effect of feed restriction and subsequent compensatory growth on the transcriptional profile of hepatic tissue in Holstein Friesian bulls
K Keogh, D A Kenny, A K Kelly, P Cormican, S M Waters

11:30  90  The effect of feed restriction and realimentation on the transcriptome of bovine jejunal epithelium
E O’Shea, S M Waters, A K Kelly, P Cormican, K Keogh, D A Kenny

11:45  91  Differential gene expression of LIM domain proteins in two divergent growing muscles of broiler chicken (Ross 308 genotype)
C Olomu, J Brameld, T Parr, J Wiseman

12:00  92  Environmental sensitivity of Texel sheep estimated using reaction norms
A McLaren, S Brotherstone, N R Lambe, J Conington, R Mrode, L Bunger

12:15  93  Testing new options for selecting sheep that are more resistant to internal parasites
J Conington, N Lambe, R Shaw, S Cleland, L Bunger

12:30  94  Effect of residual feed intake phenotype on the expression of genes regulating oxidative phosphorylation in the liver and muscle of beef cattle
H Marks, D A Kenny, M McGee, C Fitzsimons, S Waters

12:35-13:30  Lunch - Atrium
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>linseed oil or nitrate</td>
<td></td>
</tr>
<tr>
<td>13:45</td>
<td>96</td>
<td>Influence of time of access to pasture and provision of a total mixed ration on the intake,</td>
<td>J Mufungwe, S M Rutter, S Birch, J A Huntington, R G Wilkinson, L A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>milk fatty acid profile and methane production of high yielding dairy cows</td>
<td>Sinclair</td>
</tr>
<tr>
<td>14:00</td>
<td>97</td>
<td>A comparison of enteric methane emissions by Holstein-Friesian dairy cows and crossbred/Norwegian</td>
<td>L Dong, T Yan, C P Ferris, D A McDowell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dairy cows</td>
<td></td>
</tr>
<tr>
<td>14:30</td>
<td>99</td>
<td>Does the 305 day lactation total reflect dairy cow production potential?</td>
<td>R Miller, J Scaife, T Whittaker</td>
</tr>
<tr>
<td>14:45</td>
<td>100</td>
<td>Hepatic copper status and performance of dairy cows fed copper sulphate or a copper containing</td>
<td>L A Sinclair, S Birch, A M Mackenzie</td>
</tr>
<tr>
<td></td>
<td></td>
<td>rumen bolus either without or with added sulphur and molybdenum</td>
<td></td>
</tr>
<tr>
<td>15:00</td>
<td>101</td>
<td>The performance of grazing dairy cows offered concentrates on a ‘feed-to-yield’ basis, when</td>
<td>P J Purcell, A J Dale, A W Gordon, C P Ferris</td>
</tr>
<tr>
<td></td>
<td></td>
<td>grazed grass is assumed to sustain either a ‘high’, ‘medium’ or ‘low’ milk yield</td>
<td></td>
</tr>
<tr>
<td>15:05</td>
<td>102</td>
<td>The effect of concentrate feed level on the rumen pH of grazing dairy cows</td>
<td>D Johnston, S Dawson, C P Ferris</td>
</tr>
<tr>
<td>15:15</td>
<td>104</td>
<td>Study of the plasma metabolome to describe rumen function and diet utilization in dairy cows fed</td>
<td>A Belanche, C J Newbold, M Doreau, P Nozière, M Beckmann, J M Moorby</td>
</tr>
<tr>
<td></td>
<td></td>
<td>differing in carbohydrate and protein concentrations</td>
<td></td>
</tr>
<tr>
<td>15:20</td>
<td>105</td>
<td>Effect of cow genotype and concentrate feed level on enteric methane emissions from grazing dairy</td>
<td>H P Jiao, A W Gordon, S Murray, A F Carson, CP Ferris</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cows</td>
<td></td>
</tr>
<tr>
<td>15:25</td>
<td></td>
<td>Tea/coffee</td>
<td></td>
</tr>
</tbody>
</table>
WEDNESDAY 30 APRIL 2014

BUSINESS SCHOOL SOUTH - THEATRE B52
09:00-11:00
HAMMOND - MEETING THE GLOBAL FOOD CHALLENGE -
SCIENCE AND BUSINESS IN PARTNERSHIP
Chair: Prof P Williams

09:00   Introduction
        P E V Williams

09:10   106 Preparing an agri business strategy (plants) for the challenges of 2020
        J Parr

09:40   107 Opportunities and challenges in animal nutrition
        L A den Hartog

10:10   108 Social challenges facing animal industry and business in supporting global food provision
        C Leeuwis

10:40   Discussion

11:00   Coffee/Tea

BUSINESS SCHOOL SOUTH - THEATRE B52
11:30-13:00
LARGE SCALE PRODUCTION
Chair: Dr D Telford and Dr Emily Burton

11:30   109 Embracing Technology
        D Speller

12:00   110 Is there any link between herd size and welfare of pigs?
        K Knage-Rasmussen, J T Sørensen, T Rousing, H Houe

12:30   111 Can the UK learn to love mega-farming? A study of economic, environmental, animal welfare and
        social outcomes, and their impact on planning, politics and PR
        A Jackson

13:00-14:00 Lunch - Atrium

BUSINESS SCHOOL SOUTH - THEATRE B52
14:00-15:30
PRECISION LIVESTOCK FARMING
Chair: Dr T Mottram

14:00   Introduction
        T Mottram

14:15   112 Precision Sheep Management - New approaches and future development
        C Umstatter

14:40   113 Applying precision technologies to the on-farm measurement and management of grazing
        S M Rutter

15:05   114 EU Projects on precision livestock farming
        D Berckmans

15:30   Tea/coffee
### Young Pigs

**Chair:** Dr I Wellock

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 15:45 | 115     | Study on the feasibility of udder conformation measures in sows  
A Balzani, S A Edwards |
| 16:00 | 116     | The effect of supplementing piglet creep feed with Propyl Thiosulfinate (PTS) and Propyl Thiosulfinate Oxide (PTSO) on piglet and sow performance  
E Bibby, N Blackie |
| 16:15 | 117     | Management strategies to improve the performance of low birth weight pigs to weaning and their long term consequences  
S Douglas, S Edwards, I Kyriazakis |
| 16:30 | 118     | High specification starter diets improve the performance of low birth weight pigs to 10 weeks of age  
S Douglas, I Wellock, S Edwards, I Kyriazakis |
| 16:45 | 119     | Spray-dried porcine plasma products improve performance of enterotoxigenic *Escherichia coli* challenged weaner pigs  
J G M Houdijk, L A Smith, J Pollock, M Pelser, C A Van Vuure |
| 17:00 | 120     | Post weaning pig performance using different levels of starter 1 diet and impact of feed and house change on feed intakes  
P McMullen, A O’Connell, E Magowan, R Wregor, W Henry |
| 17:15 | 121     | The standardised ileal digestible lysine requirement of 7 to 16 kg weaned pigs fed antibiotic-free diet  
R Kahindi, J Htoo, M Nyachoti |
| 17:20 | 122     | Unveiling the causes of poor performance in piglets during the nursery phase  
| 17:25 | 123     | Effect of dietary inclusion of *Saccharomyces cerevisiae* (CNCM I-1079) at 2x10⁹ cfu/kg feed on post weaned pig performance and gut morphology  
F Mansoor, V Demey, E Magowan |

### Business School South - A25

**08:15-08:50**

**AA Breakfast**

### Business School South - A25

**09:30-11:00**

**Beef Management and Production**

**Chair:** Dr M Vickers

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 09:30 | 124     | Feeding behaviour, body composition traits and performance of pregnant beef suckler cows differing in phenotypic residual feed intake offered grass silage  
C Fitzsimons, DA Kenny, AG Fahey, M McGee |
| 09:45 | 125     | The effect of suckler cow genotype on energetic efficiency and maintenance energy requirements  
C X Zou, F J Lively, A R G Wylie, T Yan |
### WEDNESDAY 30 APRIL 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Code</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00</td>
<td>126</td>
<td>Relationships between methane (CH\textsubscript{4}) production and residual feed intake (RFI) or two divergent breeds of finishing steers offered either a concentrate-straw based diet or a silage based diet</td>
<td>C-A Duthie, J A Rooke, J J Hyslop, D W Ross, A Waterhouse, R Roehe</td>
</tr>
<tr>
<td>10:15</td>
<td>127</td>
<td>Feed intake, animal performance and net feed efficiency (NFE) in finishing Stabiliser steers</td>
<td>J J Hyslop, R Fuller, U Taylor, D Thirlwell, S Wareing</td>
</tr>
<tr>
<td>10:30</td>
<td>128</td>
<td>Effect of reducing the starch content of cereal based rations by the partial replacement of barley with soya hulls for intensively finished beef cattle</td>
<td>S P Marsh, D P R Harries, E M Vickers</td>
</tr>
<tr>
<td>10:35</td>
<td>129</td>
<td>Gene expression in the insulin signalling pathway in beef bulls differing in phenotypic residual feed intake offered a high concentrate diet</td>
<td>C Fitzsimons, D A Kenny, M McGee, S M Waters</td>
</tr>
<tr>
<td>10:40</td>
<td>130</td>
<td>Response to \textit{in vivo} glucose tolerance test in Holstein Friesian bulls during dietary restriction and subsequent re-alimentation</td>
<td>K Keogh, D A Kenny, A K Kelly, S M Waters</td>
</tr>
<tr>
<td>10:45</td>
<td>131</td>
<td>Oats for intensively finished bulls</td>
<td>S P Marsh, D K Blenkiron, E M Vickers</td>
</tr>
<tr>
<td>10:50</td>
<td>132</td>
<td>Effect of feeding a yeast culture (Diamond V XP\textsubscript{13}) on the performance of intensively finished bulls</td>
<td>S P Marsh, W S Pollett, A Bond</td>
</tr>
<tr>
<td>10:55</td>
<td>168</td>
<td>Evaluation of Rosé and Cereal Beef Production for Holstein bulls</td>
<td>S P Marsh, S J S Jones</td>
</tr>
<tr>
<td>11:00</td>
<td></td>
<td>Coffee/Tea</td>
<td></td>
</tr>
</tbody>
</table>

### BUSINESS SCHOOL SOUTH - A25

#### 11:30-13:20

**PIGS**  
Chair: Dr E Magowan

<table>
<thead>
<tr>
<th>Time</th>
<th>Code</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30</td>
<td>133</td>
<td>Modelling the environmental impacts of commercial pig production using Life Cycle Assessment</td>
<td>S Mackenzie, N Ferguson, I Leinonen, I Kyriazakis</td>
</tr>
<tr>
<td>11:45</td>
<td>134</td>
<td>Meta-analysis on the effects of animal and management factors influencing feed efficiency and growth in growing and finishing pigs</td>
<td>I Kyriazakis, S Douglas, O Szyszka, K Stoddart, S A Edwards</td>
</tr>
<tr>
<td>12:00</td>
<td>135</td>
<td>Feeding value of bean starch concentrates for growing pigs</td>
<td>J G M Houdijk, O Olukosi</td>
</tr>
<tr>
<td>12:15</td>
<td>136</td>
<td>Increased aggression at mixing results in fewer injuries in stable social groups of pigs</td>
<td>S Desire, S P Turner, R B D’Eath, A Doeschl-Wilson, C R G Lewis, R Roehe</td>
</tr>
<tr>
<td>12:30</td>
<td>137</td>
<td>The provision of multiple chewing ropes to pigs housed in large groups and the effects on oral fluid sample representation</td>
<td>L L Dawson, S A Edwards</td>
</tr>
<tr>
<td>12:45</td>
<td>138</td>
<td>Pig performance and \textit{Salmonella} prevalence pre and post slaughter when finisher pigs are offered organic acid in feed</td>
<td>F Mansoor, G Bagdonaite, E Magowan</td>
</tr>
</tbody>
</table>

13
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:50</td>
<td>139</td>
<td>RNA degradation in tissues collected from pigs subjected to two different slaughtering methods</td>
<td>K May, J Wiseman, J Brameld, H V Masey O’Neill, T Parr</td>
</tr>
<tr>
<td>12:55</td>
<td>140</td>
<td>Assessing animal welfare – in sow herds using data on meat inspection, medication, or sow mortality</td>
<td>K Knage-Rasmussen, J T Sørensen, H Houe, T Rousing</td>
</tr>
<tr>
<td>13:00</td>
<td>141</td>
<td>The commercial viability of crossbreeding modern and traditional pig breeds</td>
<td>S J Collingbourne, C J De Luna, S Chikunya, A Carter</td>
</tr>
<tr>
<td>13:05</td>
<td>142</td>
<td>Blood collection methods: Vacutainer® selection for serum or plasma mineral analysis (pigs)</td>
<td>S C Mansbridge, N Atkins, A M Mackenzie</td>
</tr>
<tr>
<td>13:10</td>
<td>143</td>
<td>Reduction of androstenone in organic entire male pigs by reduction of weight and age</td>
<td>R Thomsen, J T Sørensen, T Rousing</td>
</tr>
<tr>
<td>13:15</td>
<td>144</td>
<td>Primary culture of porcine epithelial cells</td>
<td>A F Smith, Z Christoforidou, R Burt, M C Lewis, M Bailey</td>
</tr>
<tr>
<td>13:20</td>
<td></td>
<td>Lunch - Atrium</td>
<td></td>
</tr>
</tbody>
</table>

**BUSINESS SCHOOL SOUTH - A25**

**RABBITS AND GOATS**

Chair: Dr Neil McEwan

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>145</td>
<td>Comparison of the microbial population in faeces of rabbits and guinea pigs by next generation sequencing</td>
<td>E J Crowley, J M King, T Wilkinson, H J Worgan, K M Huson, M T Rose, N R McEwan</td>
</tr>
<tr>
<td>14:15</td>
<td>146</td>
<td>In vivo diegestibility of diets containing fungi biodegrade cowpea husks by growing rabbits</td>
<td>A O Adedire, A V Jegede, O O Oduguwa, M O Edema, S A Adedire, K T Akanni</td>
</tr>
<tr>
<td>14:30</td>
<td>147</td>
<td>Nutrient intake and digestibility of weaner rabbits fed graded levels of roasted pigeon pea meal</td>
<td>K E Akande</td>
</tr>
<tr>
<td>14:35</td>
<td>148</td>
<td>Growth performance of weaned rabbits fed diets supplemented with varying levels of baker’s yeast</td>
<td>(Saccharomyces cerevisiae) B M Shehu, J O Ayo, B A Ayanwale</td>
</tr>
<tr>
<td>14:40</td>
<td>149</td>
<td>Multiple regression analysis for the prediction of milk yield in dairy goat herds in Greece</td>
<td>A I Gelasakis, S Pinopoulos, I Amarantidis, R Giannakou, G Arsenos</td>
</tr>
<tr>
<td>14:55</td>
<td>150</td>
<td>Nutritional performance of West African dwarf goats fed wild sunflower (Tithonia diversifolia) leaf meal supplemented diet</td>
<td>J A Odedire, F F Oloidi</td>
</tr>
<tr>
<td>15:00</td>
<td>151</td>
<td>Restricted feeding of goats during the last third of gestation modifies reproductive parameters in their female offspring</td>
<td>B Laporte-Broux, C Duvaux-Ponter, S Roussel, P Chavatte-Palmer, A Eymard, A A Ponter</td>
</tr>
<tr>
<td>15:05</td>
<td>152</td>
<td>Physiological factors affecting the electrical conductivity of goat milk</td>
<td>G Arsenos, A Gelasakis, R Giannakou, H Georgakis, M Tzavella, A Aggelidis</td>
</tr>
<tr>
<td>15:20</td>
<td></td>
<td>Tea/coffee</td>
<td></td>
</tr>
</tbody>
</table>
WEDNESDAY 30 APRIL 2014

BUSINESS SCHOOL SOUTH - A25
16:00-17:15
SHEEP HEALTH
Chair: Dr E Genever

16:00 153 Factors affecting lamb mortality on a sheep breeding farm
V Attoh-Kotoku, E L K Osafo, A Donkoh, M Duodu, J Nunoo, S N Aboagye

16:15 154 Breed, but not maternal under nutrition, affects markers of immune status in lambs
C Ashworth, C Hogg, S Matheson, C M Dwyer, J A Rooke

16:30 155 Impact of environmental temperature on in vitro establishment rate of Teladorsagia circumcincta
S Ptochos, S Athanasiadou, M R Hutchings, J G M Houdijk

16:45 156 In vivo validation of the antiparasitic properties of medicinal plants
S Athanasiadou, A Tolera, E Debela, K Tolossa, S Terry, A Regassa, A Nurfeta, J G M Houdijk

17:00 157 Performance of three Nigerian indigenous sheep experimentally infected with Trypanosoma vivax
I K Oyewusi, E B Otesile, O O Adeleye, A O Talabi

BUSINESS SCHOOL SOUTH - A24
09:00-11:00
HOST-PATHOGEN-ENVIRONMENT INTERACTIONS
Chair: Dr T McNeilly and Dr R Flynn

09:00 158 Bovine Tuberculosis: host-pathogen interactions
J C Hope

09:30 159 Ecology of Bovine TB control in wildlife and cattle
R McDonald

10:00 159 Transcriptional profiling and DNA methylation analysis of CD4+ T cells from Mycobacterium bovis infected cattle
R Doherty, R Whiston, P Cormican, C Couldrey, C O’Farrelly, K Meade

10:15 160 Dynamics of the major acute phase proteins in milk during a Streptococcus uberis mastitis challenge
F C Thomas, R Tassi, T McNeilly, R Zadoks, M M Waterston, H Haining, P D Eckersall

10:30 161 Host responses to virulent and avirulent strains of Clostridium perfringens as measured in situ in broilers
K M Russell, P Kaiser, N H Sparks, V Parreira, J F Prescott, M A Mitchell, R E Clutton, T Kanellos, S Athanasiadou

10:45 162 Response to Teladorsagia circumcincta infection in Scottish Blackface lambs selected for divergent phenotypes for resistance
K M McRae, B Good, J P Hanrahan, T Sweeney, M J O’Connell, O M Keane

11:00 Coffee/tea
**BUSINESS SCHOOL SOUTH - A24**

**MEAT QUALITY**
Chair: Mr K Matthews

11:30 163 Urinary cortisol and cortisone concentrations in Holstein Friesian young bulls as markers of pre-slaughter handling  
J Keenan, M Mooney, B Moss, C Elliott

11:45 164 Characterising the fatty acid profile of beef supplied through a premium Welsh beef supply-chain  
S A Morgan, S A Huws, J K S Tweed, G H Evans, T D M Rowe, N D Scollan

12:00 165 The relationship between slice shear force and tenderness of beef assessed by an un-trained consumer sensory panel  
C R Craigie, T Wagstaff, I Cullingworth, D W Ross, C A Maltin

12:15 166 Meat quality traits of crossbred lamb loins sired by high and low muscle density rams (as measured by computer tomography)  
E M Price, J A Roden, I Richardson, N Clelland, W Haresign, J M Finch, GE Gardner, N D Scollan

12:30 167 Fatty acid composition of crossbred lambs loins sired by high and low muscle density rams (as measured by computer tomography)  

168 (this paper is now in the Beef Management and Production Session)

12:35 169 From food to feed: Food industry co-products in animal nutrition as functional feed ingredients for enhanced meat quality  
E Kasapidou, E Sossidou, P Mitlianga

12:40 170 Effect of dietary supplementation of flaxseed on fatty acid profile in broilers  
H Al-Khalaifa, A Al-Nasser, S Al-Qallaf

12:45 171 Comparing chemical and amino acid profiles of four commercial freshwater fish species  
F Jabeen, A S Chaudhry

12:50 172 Fatty acid profiles of freshwater *Catla catla* fish harvested from upstream and downstream locations of river Ravi, Pakistan  
H A Shakir, J I Qazi, A S Chaudhry

12:55-14:00 Lunch - Atrium

**BUSINESS SCHOOL SOUTH - A24**

**EPIDEMIOLOGY/SURVEILLANCE**
Dr J van Dijk

14:00 173 Diagnosis and surveillance of infectious diseases in wildlife (WildTech)  
D Hannant, P Barrow, AB Abu-Median, L Yon, R Lea, T Giles, M Hutchings, D Gavier-Widen,  
C Billinis, L Petrovska, K Sachse, R Ehricht, P Mertens, A Bossers, M Artois, D Bourne,  
S Jackson-Morgan, E Leighton, T McNamara

14:30 174 Exploring community ecology and interactions of micro- and macroparasite infections in Ethiopian village chickens  
J M Bettridge, S E Lynch, M C Brena, K Melese, T Dessie, Z G Terfa, T T Desta, SP Rushton,  
O Hanotte, P Kaiser, P Wigley, R M Christley
Owner-reporting of adverse health events provides richer data than traditional veterinary-focussed data collection
C A Pugh, B M de C Bronsvoort, I G Handel, D N Clements, K M Summers

BVD testing strategies in neonatal calves: serial application of ELISA and real time RTPCR to address the potential “diagnostic gap”
R G O'Neill, C Gallagher, D A Graham

Tuberculosis in domestic pigs in Great Britain
S S Bailey, T R Crawshaw, N H Smith, C J Palgrave

Prevalence, risk factors and vaccination efficacy of contagious ovine echthyma (orf) in England
J Onyango, F Mata, W McCormick, S Chapman

Bovine tuberculosis test reactors: *seek, and ye shall find!*
J van Dijk

Prevalence of gastrointestinal parasites among pigs in the Ejisu Municipality in Ghana
J Atawalna, V Attok-Kotoku, A Donkoh, R Folitse, C Amenakpor

The efficacy of the paratuberculosis vaccine in cattle and sheep: a meta-analysis of case-control trials
F Mata, C Catt

E-learning: fad or future?
J-A Murray

Academic staff perceptions of the importance of generic skills for veterinary graduates and the contribution of the different components of the final phase of a veterinary curriculum
R Weller, S May

Design and validation of a computer-aided learning program to enhance students’ ability to recognize lameness in the horse
A Barstow, T Pfau, D M Bolt, R K Smith, R Weller

Demographic influences on staff and student attitudes to veterinary student support requirements
K Pickles, P Kass, R Mellanby, S Rhind

A novel method of educating students about zoonotic disease: bringing the vets and medics together
S Caddy, A Davies, E Torok

The impact of maths support tutorials for higher education animal science students
N L J N van Veggel, J R Amory

On-line resources for teaching statistical methods to students of the animal sciences
B T Wolf, M H Leitch

Academic staff perceptions of the usefulness of an embedded research project in the final phase of a clinical veterinary programme
R Weller, S May
### WEDNESDAY 30 APRIL 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:35</td>
<td>190</td>
<td>Analysis of the success of two live-animal assessment aids in determining readiness for slaughter in beef cattle</td>
<td>H Scott-Browne, R J Cooke</td>
</tr>
<tr>
<td>10:40</td>
<td>191</td>
<td>Current methods used by English farmers to ascertain prime slaughter condition in beef cattle</td>
<td>H Scott-Browne, R J Cooke</td>
</tr>
<tr>
<td>10:45</td>
<td>192</td>
<td>Could we use the Wiki approach to assist animal science/husbandry teaching and training?</td>
<td>G E Pollott</td>
</tr>
<tr>
<td>10:50</td>
<td></td>
<td>Coffee/tea</td>
<td></td>
</tr>
</tbody>
</table>

**BUSINESS SCHOOL SOUTH - A26**  
11:30-12:50  

### DAIRY, GENOMICS AND GENETICS  
Chair: Prof M Coffey

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30</td>
<td>193</td>
<td>Predicted energy balance for dairy cows based on National herd data</td>
<td>S L Smith, E Wall, M P Coffey</td>
</tr>
<tr>
<td>11:45</td>
<td>194</td>
<td>Genetic parameters of mastitis related traits in dairy sheep</td>
<td>G Bramis, G Arsenos, A Psifidi, G Banos</td>
</tr>
<tr>
<td>12:00</td>
<td>195</td>
<td>Validation of previously discovered markers for mastitis resistance in an independent population of dairy sheep</td>
<td>A Psifidi, G Bramis, G Arsenos, G Banos</td>
</tr>
<tr>
<td>12:15</td>
<td>196</td>
<td>Estimation of genomic breeding values for milk yield in UK dairy goats</td>
<td>S Mucha, R Mrode, M P Coffey, J Comington</td>
</tr>
<tr>
<td>12:30</td>
<td>197</td>
<td>Can limited molecular data be useful to improve a rare breed of cattle?</td>
<td>G E Pollott, A Charlesworth, D C Wathes</td>
</tr>
<tr>
<td>12:45</td>
<td>198</td>
<td>Analysis of candidate innate immune genes and signalling pathways associated with resistance to mastitis in dairy cows</td>
<td>X Chen, SJ Zhang, ZR Cheng, D Werling, DC Wathes</td>
</tr>
<tr>
<td>12:50-14:00</td>
<td></td>
<td>Lunch - Atrium</td>
<td></td>
</tr>
</tbody>
</table>

**BUSINESS SCHOOL SOUTH - A26**  
14:00-15:05  

### POULTRY  
Chair: Dr C Rymer

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>199</td>
<td>Diners' attitudes towards broiler chicken welfare</td>
<td>E Lazutkaite, J Amory</td>
</tr>
<tr>
<td>14:15</td>
<td>200</td>
<td>The long chain n-3 polyunsaturated fatty acid content of chicken breast muscle is increased by supplementation of the birds’ diet with linseed oil but not folic acid</td>
<td>C Rymer, L Dimmack, K Kleim</td>
</tr>
<tr>
<td>14:30</td>
<td>201</td>
<td>Meta-analysis of factors that affect nutrient requirements in laying period of broiler breeder hens Part 1: Developing nutrient requirement models</td>
<td>S Honarbakhsh, M Zaghari, A Haghdooost</td>
</tr>
<tr>
<td>14:45</td>
<td>202</td>
<td>Meta-analysis of factors that affect nutrient requirements in laying period of broiler breeder hens Part 2: Developing Performance prediction models</td>
<td>S Honarbakhsh, M Zaghari, A Haghdooost</td>
</tr>
</tbody>
</table>
14:50 203 Effects of feed form on dietary *Aspilia africana* leaf utilization by broilers  
O O K Oko, E A Agiang, L N Agwunobi, G D Eyoh, P O Ozung, B O Asuquo

14:55 204 A comparison of production parameters of two strains of layer hens producing brown and white hens  
H Al-Khalaifa, A Al-Nasser, G Ragheb, M Al-Bahouh, F Khalil

15:00 205 Effect of parental live weight on the reproductive performance of Japanese quail  
(*cortunix cortunix japonica*)  
I O Dudusola

15:30 Tea/Coffee

**EXCHANGE BUILDING - LT2**

**DAIRY REPRODUCTION AND FERTILITY**

Chair: Prof K Sinclair

<table>
<thead>
<tr>
<th>Time</th>
<th>Code</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30</td>
<td>206</td>
<td>Evaluating the interval from calving to first service, and calving to conception in high yielding lame and non-lame Holstein-Friesian dairy cattle</td>
<td>A Ward, J Scaife, N Blackie</td>
</tr>
<tr>
<td>09:45</td>
<td>207</td>
<td>Effect of preimplantation factor on the secretion of prostaglandin F₂₅ and E₂ from bovine endometrial tissue following a lipopolysaccharide challenge <em>in vitro</em></td>
<td>R E Clamp, J Paddison, D Nash, M T Rose, E R Barnea</td>
</tr>
<tr>
<td>10:00</td>
<td>208</td>
<td>Body weight change in the dry period and milk yield deviation from the expected in early lactation as indicators of transition diseases in dairy cattle</td>
<td>G L Smith, C Mason, C J Ashworth, N C Friggens, M G G Chagunda</td>
</tr>
<tr>
<td>10:15</td>
<td>209</td>
<td>Increased beta-hydroxybutyrate production interrupts splenic immunity in dairy cows with <em>postpartum</em> negative energy balance</td>
<td>Z Cheng, I Wickham, D Morris, D C Wathes</td>
</tr>
<tr>
<td>10:30</td>
<td>210</td>
<td>Enteric methane emissions from non-lactating pregnant dairy cows while grazing</td>
<td>C P Ferris, H P Jiao, A F Carson, A W Gordon</td>
</tr>
<tr>
<td>10:35</td>
<td></td>
<td>Coffee/Tea</td>
<td></td>
</tr>
</tbody>
</table>

**EXCHANGE BUILDING - LT1**

**DAIRY HEALTH, BEHAVIOUR AND WELFARE**

Chair: Dr J Gibbons

<table>
<thead>
<tr>
<th>Time</th>
<th>Code</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>211</td>
<td>Lameness and other risk factors associated with hair loss on the hock, in a longitudinal study</td>
<td>P Y Lim, J N Huxley, M J Green, A R Othman, S L Potterton, J Kaler</td>
</tr>
<tr>
<td>14:15</td>
<td>212</td>
<td>Locomotion score as an early diagnosis tool for lameness in Holstein cows</td>
<td>A Kougioimtzis, G Valergakis, E Tsiamadis, G Arsenos, G Banos</td>
</tr>
<tr>
<td>14:30</td>
<td>213</td>
<td>Force plate analysis as an alternative to visual lameness scoring in detection of lameness in Holstein Friesian dairy cattle</td>
<td>A V Sawran, G Pollott, R Weller, T Pfau</td>
</tr>
<tr>
<td>14:45</td>
<td>214</td>
<td>Influence of lameness on the lying behaviour of straw housed, zero-grazed lactating Jersey cattle</td>
<td>L Maclaurin, N Blackie</td>
</tr>
</tbody>
</table>
The effect of housing system on oxidative stress of Holstein dairy cows in early lactation
M A Karatzia, M Kritsepi, G E Valergakis, I L Oikonomidis, G Arsenos

EXCHANGE BUILDING - LT1
16:00-17:20
DAIRY CALF NUTRITION AND MANAGEMENT
Chair: Dr N Blackie

16:00 216 A survey of bovine colostrum management practices on Irish dairy farms
C Cummins, R Sayers, I Lorenz, E Kennedy

16:15 217 Effects of feeding dairy heifer calves once daily from 28 days of age
K Johnson, R Butler, J Cooke, DC Wathes

16:30 218 A survey of current practice among dairy farmers out-wintering replacement heifers in Great Britain
N E Atkins, K Walley, E C L Bleach, L A Sinclair

16:45 219 Relationship between enteric methane emissions, gross energy intake and live weight of Holstein Friesian heifers
J McBride, S J Morrison, T Yan, A W Gordon

17:00 220 A survey of Jersey heifer calf rearing practices among UK dairy farmers
E C L Bleach, J J Ashton, R Trewella

17:05 221 Evaluation of feeding high (750g/d) or standard (500g/d) levels of milk replacer on the performance of artificially reared dairy-bred beef calves to 12 weeks
S P Marsh, T Webb, L C Newton, M Gould, G Cox

17:10 222 Teat versus bucket feeding systems for calves
S P Marsh, L Doyle, F C Heritage, M Gould, G Cox

17:15 223 Dynamics of detectable immunity: a study of bovine herpesvirus 1 specific antibodies in the bovine neonate
R G O'Neill, C Gallagher, D A Graham