# Provisional Programme and Application Form

**Southport Theatre and Convention Centre** 

## **British Society of Animal Science Annual Conference**

30 March - 1 April 2009



#### Please read these notes before completing application form

**APPLICATIONS** One per delegate please. Application form, accompanied by the appropriate payment to be sent to the BSAS Office. A confirmation including receipt will be issued to all delegates. Delegates may also register on line BSAS webpage http://www.bsas.org.uk/Meetings\_&\_Workshops/

**CONFERENCE FEE** The Conference registration fee includes the BSAS Proceedings. Applications forms for the discounted rate must be received by 28 February. **All authors must register by 14 February**, failure to register by this date may result in the summary being withdrawn from the programme and not being published in the proceedings.

#### **BSAS** Students and retired members

A special low rate conference fee is offered to BSAS students/post graduates and retired members.

Registration entitles you to attend:

- All BSAS Sessions (Monday Wednesday)
- Joint WPSA/BSAS Session Tuesday

**WPSA Conference** BSAS delegates are invited to attend the WPSA Gordon Memorial Lecture on Tuesday in the Lakeside Suite at 17:30 hours.

**Equine Event** We would encourage all students studying equines to attend the Equine Day on Monday. Please see programme for further details.

STUDENT PROGRAMME All students attending the BSAS Conference are invited to attend the Student Sunday at the Scarisbrick Hotel, followed by the Monday morning programme at the Southport Theatre and Convention Centre. Only BSAS student members will be entitled to the FREE Student Sunday package which includes the Sunday/Monday programme, social and meal on Sunday and a contribution of £30 towards Sunday night accommodation. Please join the society if you wish to take advantage of this package. Non-members can also attend this programme at a cost of £50 - see application opposite.

**ACCOMMODATION** Delegates are asked to complete a brief form at registration confirming their accommodation in Southport. This in turn will be given to Southport Conference & Tourism Office, as proof of delegates staying in Southport so that the society gets FREE hire charge for the Southport Theatre and Convention Centre and thus keeps the conference fee down. To book on-line or view hotels available please go to the BSAS website and click on the link under Accommodation http://www.bsas.org.uk/Meetings\_&\_Workshops/ You can also book through the Southport Tourist and Information Centre on 01704 5333333.

#### **MEALS**

**Evening Meals** The Conference Dinner on Monday and the Tuesday Evening Event which includes a buffet are both being held in the Floral Hall at the Southport theatre and Convention Centre.

**Lunch** A snack bar, where delegates may purchase a light lunch, will be available on Monday and Wednesday. Tuesday lunch is booked separately via the application form.

**PAYMENT** We accept payment using the following credit cards: Visa (credit and debit), Mastercard and Switch or you may prefer to pay by cheque, made payable to **BSAS**. Electron and Maestro cards are not accepted. Please make your payment in £ sterling.

**CANCELLATION** 30 days prior to the conference: 75% refund. Within 30 days of the conference: No refund

**CAR PARKING** There is pay on street parking, pay car parks and limited parking available at the various hotels and guest houses, please enquire when booking accommodation.

**BSAS SUBSCRIPTION** BSAS Members may pay their BSAS 2009 Subscription together with their conference fee. Non-members may also join the society via the Annual Conference Application Form and thereby take advantage of the discounted conference fee. Please enclose the completed BSAS Membership Application Form and relevant membership information as requested. All forms can be downloaded from the BSAS website.

BSAS, PO Box 3, Penicuik, Midlothian, EH260RZ, UK

Tel: +44 (0)131 445 4508 Fax: +44 (0) 131 535 3120 Email: BSAS@sac.ac.uk http://www.bsas.org.uk

## BSAS ANNUAL MEETING APPLICATION FORM

#### **Southport Theatre and Convention Centre**

30 March - 1 April 2009

| Name (Prof/Dr/Mr/Mrs   | s/Miss/Ms) First NameSurname  |          |
|--|---|----------|
| Address  |   | BLOCK    |
|  |   | CAPITALS |
| ORGANISATION (for  | lapel badge)  | PLEASE   |
| Telephone No   | Fax NoEmail   |          |
| Membership No (if kno  | own):   | _        |
| BSAS CONFEREN  | NCE FEE (please tick box as appropriate) STUDENT PROGRAMME  |          |
| Member<br>Non member<br>Member - retired an                                    | on or before 28 Feb on or after 1 March $£250$ $\Box$ $£330$ $\Box$ BSAS Student Sun/Monday attending programme ed and students $£100$ $\Box$ $£120$ $\Box$ Student Members FREE $\Box$   |          |
| Day rate Conference<br>BSAS member one of<br>Non-member<br>Member - retired an | day conference fee $£150 \square £100 \square \square$ includes Sunday evening $£200 \square £130 \square \square$ carvery, tea and coffee.   | £        |
| Presenting theatre   | Presenting poster Please note authors must register by 14 Feb   |          |
| ACCOMMODATIO   | If you wish to book one of the conference hotels then please book through the BSAS website. Please see accommodation note opposite.   | ]        |
| MEALS  | Lunch Tuesday (see meals opposite) £10.00   |          |
| Tuesday - BSAS I   | Conference Dinner, Floral Hall, £36.00 □ Evening event including buffet, Floral Hall £18.00 □ ents, diet - etc please specify   | £        |
| SUBSCRIPTIONS A  | AND PROCEEDINGS   |          |
| Current member Membership includir Membership includir Undergraduates FRE      | Iption (retired and postgraduates half price)  New member 2009  Ing on-line access to the journal ANIMAL £65.00/£32.50  Ing on-line access to ANIMAL and the hardcopy £115/£82.50  EE includes on-line access to ANIMAL  the 2009 BSAS Annual Proceedings @ reduced rate - £30.00 | £        |
| Visa Mastercard  | Credit card number  |          |
| Switch   | 3 digit no (back of card) Issue no (switch)   |          |
| Visa debit O   | Card Expiry Date  |          |
|  | Name of Credit card holder (block capitals)   |          |
|  | eard or cheque and return application form to TOTAL REMITTANCE Box 3, Penicuik, Midlothian, EH26 ORZ, UK  | £        |



### **PROGRAMME**

SESSIONS - SOUTHPORT THEATRE AND CONVENTION CENTRE

Denotes invited session

RRITISH SOCIETY OF ANIMAL SCIENCE ANNUAL MEETING 30 March - 1 April 2009

| ROOM                  |         |   | Floral Hall                          | Waterfront Suite 1                                     | Waterfront 2                | Waterfront 3                               | Lakeside Suite        | Floral Hall   |
|-----------------------|---------|---|--------------------------------------|--|-----------------------------|--|-----------------------|---|
| Capacity<br>Sunday PM | Cturley |   | 400 +                                |  |                             |  |                       | DOCTEDO   |
| 9-Mar-09              |         | nt programme<br>orick Hotel                   |                                      |  |                             |  |                       | POSTERS   |
| .5 Wai -05            | Ocarisc | TICK I IOICI                                  |                                      |  |                             |  |                       | BSAS Poster Session I   |
|                       |         |   |                                      |  |                             |  |                       | Displayed - 13:00 Monday -Tuesday 12:30 hours   |
| Monday AM             |         |   |                                      |  | Student Programme           | Student Programme                          |                       |   |
| 30 March 2009         |         |   |                                      |  | Workshop 1                  | Workshop 2                                 |                       | Discussion session Monday 15:00-16:00 hours   |
|                       |         | <u>  _                                   </u> | l                                    | L  |                             | . 4  |                       | Pigs and other Species  |
| 4 I BM                | 12:00   | Registration ar                               |                                      |  |                             |  |                       | Ch: Jennie Litten-Brown   |
| Monday PM             | 40.00   | Session 1                                     | 13:30 - 14:45<br>President's Session | 13:30 - 15:10  |                             |  |                       | Diamonia Manday 45,00 40,00 haves   |
|                       | 13:30   | Session 1                                     | Food and Feed Security               | Equine I Ch: Catherine Hale                            |                             |  |                       | Discussion session Monday 15:00-16:00 hours<br>Ch: Dr Peter Rowlinson   |
|                       |         |   | Ch: Prof Jamie Newbold               | Ch. Catherine Hale                                     |                             |  |                       | Physiology Reproduction (Ruminant)  |
| 15:00 16:00           |         | Tea/coffee and                                | poster presentations                 |  |                             |  |                       | Filysiology Reproduction (Ruminant)   |
|                       |         | . sarconee and                                | 16:00 - 17:30                        | 16:00 - 17:25  | 16:00 - 17:15               | <del></del>                                |                       | Discussion session Monday 15:00-16:00 hours   |
|                       | 16:00   | Session 2                                     | Climate Change and Animal Health     | Dairy Reproduction and                                 | Equine II                   |  |                       | Product Quality   |
|                       |         |   | and Welfare                          | Fertility  | Ch: Dr Debbie Nash          |  |                       | Ch: Dr Ian Richardson   |
|                       |         |   | Ch: Prof Nigel Scollan               | Ch: Dr Melissa Royal                                   |                             |  |                       |   |
| 19:30                 |         | BSAS Confere                                  | nce Dinner - Floral Hall             |  |                             |  |                       | Discussion session Tuesday 10:00-10:45 hours  |
| Tuesday AM            |         |   | 09:00 - 10:00                        |  |                             |  |                       | Ruminant Nutrition  |
| 31 March 09           | 09:00   | Session 3                                     | HAMMOND LECTURE - Milk and meat in   | n our diet: Good or bad for health and                 | I wealth?                   |  |                       | Ch: Dr Ryan Law   |
|                       |         |   | Prof lan Givens                      |  |                             |  |                       | , in the second |
| 10:00 -10:45          |         | Coffee/tea and                                | poster viewing                       |  |                             |  |                       |   |
|                       |         |   |                                      | 10:45 - 12:30  | 10:45 - 12:30               | 10:45 - 12:35                              |                       |   |
|                       | 10:45   | Session 4                                     |                                      | Workshop   | Animal Health               | Genetics I                                 | WPSA                  | BSAS Poster Session II  |
|                       |         |   |                                      | What the Funders Want                                  | Ch: Prof Ilias Kyriazakis   | Ch: Dr Suzanne Rowe                        |                       | Displayed - 13:00 Tuesday - Wednesday 12:30   |
|                       |         |   |                                      | Ch: Dr Sinclair Mayne                                  | <u> </u>                    | 4  |                       |   |
| 12:30- 13:30          | +       | Lunch   | L                                    | 40.00 45.45.49.00                                      |                             | 40.00 45.45                                | VV-4                  | Discussion session Tuesday 15:00-16:00 hours  |
| Tuesday PM            | 12.20   | Cassian F                                     |                                      | 13:30- 15:15 (WPSA/BSAS)<br>Conflicts between Consumer | 13:30- 15:15<br>Genetics II | 13:30 - 15:15                              | Waterfront 1<br>Suite | Invitro   |
|                       | 13:30   | Session 5                                     |                                      | Requirements and Food Security                         | Ch: Dr Eileen Wall          | Non-Farmed Species Ch: Jennie Litten-Brown | Joint session         | Ch:   |
|                       |         |   |                                      | Ch:  | Cii. Di Lileeti Wali        | CII. Sellille Litteri-Blown                | 30111 36331011        | Discussion session Tuesday 15:00-16:00 hours  |
| 15:15-16:00           |         | Tea/coffee and                                | poster viewing                       | <u> </u>   |                             |  |                       | Genetics: Dairy and Goats   |
|                       |         |   | <u> </u>                             | 16:00 - 17:45  | 16:00 - 17:50               | 16:00-17:40                                |                       | Ch: Dr Mike Coffey  |
|                       | 16:00   | Session 6                                     |                                      | Greenhouse Gases and                                   | Finishing and Carcass       | Sheep Reproduction                         | WPSA                  | ,   |
|                       |         |   |                                      | Farming Systems  | Composition                 | and Nutrition                              |                       | Discussion session Tuesday 15:00-16:00 hours  |
|                       |         | L   | L                                    | Ch: Prof Geoff Simm                                    | Ch: Dr lan Richardson       | Ch: Dr Liam Sinclair                       |                       | Genetics: Sheep   |
|                       | 18:00   | l   | L                                    | BSAS AGM 18:00 hours                                   |                             |  |                       | Ch: Dr Geoff Pollott  |
|                       | 19:30   | Event night - F                               | loral Hall                           |  |                             |  |                       |   |
| Wednesday AM          |         |   |                                      | 08:45-10:25  | 08:45-10:05                 | 08:45 - 10:40                              | WPSA                  | Discussion session Wednesday 10:25 -11:00 hrs   |
| 1 April 09            | 08:45   | Session 7                                     |                                      | Extensive Ruminant                                     | Ruminant Nutrition          | Pig Meat Quality                           |                       | Evaluation of Treated Feeds   |
|                       |         |   |                                      | Production   | Ch: Prof Ian Givens         | Ch: Dr Mick Hazzeldine                     |                       | Dr Danesh Mesgaran  |
| 10.25 11.00           |         | Coffooltoo                                    | poster viewing                       | Ch: Prof Mike Theodorou                                |                             |  |                       | Discussion cossion Wednesday 40:05 44:00 b-   |
| 10:25 - 11:00         | +       | Corree/tea and                                | poster viewing                       | 11:00 - 13:00  | 11:00- 12:30                | 11:00 - 12:45                              |                       | Discussion session Wednesday 10:25 -11:00 hrs Exotic Feed Evaluation  |
|                       | 11.00   | Session 8                                     |                                      | Dairy Cattle Nutrition                                 | Behaviour and Welfare       | Methods of measuring                       | WPSA                  | Dr John Cone  |
|                       | 11.00   | 06331011 0                                    |                                      | Ch: Dr Ryan Law  | Ch: Dr Emma Baxter          | Meat Quality                               | JA                    | DI SONIN CONE   |
|                       |         |   |                                      | On. Di Nyan Law  | On. Di Emina Baxio          | Ch: Jimmy Hyslop                           |                       | Poultry   |
|                       |         |   |                                      |  |                             |  |                       |   |

# STUDENT SUNDAY/MONDAY PROGRAMME 29<sup>th</sup>-30<sup>th</sup> MARCH 2009

#### Sunday 29th March

Scarisbrick Hotel,

Time Workshop 1 14:00 Registration at the Scarisbrick Hotel, Southport 14:15 Applying for funding for training, conferences and workshops 15:00 Break 15.15 Getting papers accepted for publication 16:00 Break 16:15 Thesis writing 17:00 Break

Introduction to Podcasting

Dinner and social

#### Monday 30th March

17.15

19:00

Southport Theatre and Convention Centre

| Southport | Workshop 2                    | Workshop 3            |
|-----------|-------------------------------|-----------------------|
| 09:00     | Careers for animal scientists | Podcasting continued. |
| 10:30     | Break                         |                       |
| 11:00     | Careers for animal scientists | Podcasting continued. |

All students are welcome - however if you wish to take advantage of student discounts then please join the Society.

#### **Theatre Sessions** Monday, 30 March 2009

Registration (Snack cash bar open for sandwiches, light lunch) 12:00

#### Floral Hall

| Food   | AND | EFFD | SEC    | IDITV |
|--------|-----|------|--------|-------|
| T (MM) | ANI |      | A DEAL |       |

Session 13:30 - 14:45 hours

Chair: Professor Jamie Newbold

| 13:30 | FFS1   | Food and Feed Security - A government's view  Jane Kennedy MP, Minister of State (Farming and the Environment) |
|-------|--------|--|
| 14:00 | FFS2   | Food Production and Land Use Meurig Raymond, NFU Wales   |
| 14:30 | Discu  | ssion  |
| 15:00 | Tea/co | offee and poster viewing   |

#### Climate Change and Animal Health and Welfare

Session 16:00 - 17:15 hours

Chair: Professor Nigel Scollan

| 16:00 | CC1 Impact and adaptation of livestock to climate change<br>Dr Dominic Moran, SAC                        |
|-------|--|
| 16:30 | CC2 Impact of climate change on animal health and welfare<br>Dr Philip Skuce, Moredun Research Institute |
| 17:00 | Discussion   |
| 19:30 | Conference Dinner - Floral Hall  |

McCallum Lindsay, Dumbell Lucy

Tea/coffee and poster viewing

#### **Waterfront Suite 1**

15:00

| EQUIT<br>Session | 13:30 - | · 15:10<br>r: Catherine Hale   |
|------------------|---------|--|
| 13:30            | EQ1     | Equine Stereotypies: Current theories and future directions  Dr Matthew Parker, Royal Veterinary College, University of London   |
| 14:00            | 1       | The effect of age and gender on the time taken for horses to learn an operant task Moss Kelly, Greening Linda  |
| 14:15            | 2       | Effects of back massage pads to reduce stress in the horse by the assessment of behaviour, heart rate and salivary cortisol <i>Harris Amy, Northrop Alison, Martin Jaime, Adjei Lisa</i> |
| 14:30            | 3       | Genetic evaluation of UK sport horses for dressage competition<br>Stewart I, Woolliams JA, Brotherstone S  |
| 14:45            | 4       | The relationship between judge assessment of behaviour and 'way of going' and scored performance within an elite level dressage competition Whitaker Tim, Mills Amy, Kane Robert         |
| 14:50            | 5       | Racehorse conformation and its' potential to predict animal performance<br>Pocock Lara, Litten-Brown Jennie  |
| 14:55            | 6       | Fit and fat; a horse carer's perspective<br>Abraham Donna, Dumbell Lucy  |
| 15:00            | 7       | An investigation into the weaning practices used within the UK equine breeding industry sector Febery Erica, Greening Linda  |
| 15:05            | 8       | Social play and its initiation in an established group of young domestic horses  |

#### Theatre Sessions Monday, 30 March 2009

#### **Waterfront Suite 1**

#### DAIRY REPRODUCTION AND FERTILITY

|       | 16:00 | ODUCTION AND FERTILITY<br>1-17:25<br>:: Dr Melissa Royal  |
|-------|-------|---|
| 16:00 | 9     | Evaluation of the performance of in-calf dairy heifers either housed or out-wintered on forage brassicas (stubble turnips)  Marsh Simon, Billington Paul, Brizuela Carole, Kirby Scott  |
| 16:15 | 10    | Prediction of conception at 1st artificial insemination using a combination of energy balance indicators Valergakis George E., Oikonomou Georgios, Arsenos Georgios, Georgiadis Marios P., Banos Georgios                     |
| 16:30 | 11    | Effect of dietary energy content pre- and post-calving on production and blood metabolites of dairy cows during early lactation <i>Law R. A., Young F. J., Patterson D. C., Kilpatrick D. J., Wylie A. R. G., Mayne C. S.</i> |
| 16:45 | 12    | An evaluation of the effect of nutritional strategy in early lactation on reproductive performance of Holstein-Friesian dairy cows <i>Gilmore H. S., Young F. J., Law R. A., Wylie A. R. G., Patterson D., Mayne C.S.</i>     |
| 17:00 | 13    | The effect of growth rate on age at first calving, fertility and milk production during the first lactation of Holstein-Friesian heifers on UK dairy farms<br>Brickell Jessica, Wathes D Claire                               |
| 17:15 | 14    | Key indicators and decision-making trees to analyze reproduction problems linked to environmental factors: data from a commercial dairy unit Knapp Emilie, Chapaux Philippe, Istasse Louis, Touati Kamal                      |
| 17:20 | 15    | Ovarian Status, Uterine Pathology and Physical Condition of Anoestrus and Culled Buffaloes in Chitwan, Nepal  Devkota Bhuminand, Bohora Tapendra Prasad, Singh Amit Kumar, Matsui Motozumi,  Miyake Yoh-Ichi                  |
| 19:30 | BSAS  | Conference Dinner, Floral Hall  |

#### Theatre Sessions Monday, 30 March 2009

#### **Waterfront Suite 2**

| EQUINE II |         |      |  |  |  |  |
|-----------|---------|------|--|--|--|--|
|           | Session |      |  |  |  |  |
|           | 16:00   | EQ2  | Equine Health Dr Jonathan Elliott, Royal Veterinary College, University of London  |  |  |  |
|           | 16:30   | 16   | Changes in the bacterial populations in the equine hindgut following the addition of inulin to the diet.<br>Newbold C. J., Macias B., Crawford C., Elliott J., Harris P. A., Bailey S.R., McEwan N.R.                              |  |  |  |
|           | 16:45   | 17   | The effects of digestive enhancer supplements on digestibility in leisure horses<br>Tucker Lucy, Thomas David, Weidgraaf Karen, Taylor-Pickard Jules   |  |  |  |
|           | 17:00   | 18   | The effect of epithelial diffusion on microcotyledon formation and placenta efficiency in the Thoroughbred<br>Berridge Stephen   |  |  |  |
|           | 17:05   | 19   | Linseed oil or sunflower oil as supplements in horse compound feedstuffs : effects on plasma insulin and on plasma triglycerides fatty acids  Robaye Vincent, Dufrasne Isabelle, Dotreppe Olivier, Istasse Louis, Hornick Jean-Luc |  |  |  |
|           | 17:10   | 20   | Equine limb and oral fibroblasts in <i>in vitro</i> models of cell proliferation and wound contraction <i>Watts Emma</i> , <i>Rose Michael</i>   |  |  |  |
|           | 19:30   | BSAS | S Conference Dinner, Floral Hall   |  |  |  |

#### Floral Hall

#### SIR JOHN HAMMOND MEMORIAL LECTURE

Session 09:00- 10:00

Chair: Professor Jamie Newbold

09:00 HM Milk and meat in our diet: Good or bad for health and wealth

Prof Ian Givens University of Reading

10:00 Tea/coffee and poster viewing

#### **Waterfront Suite 1**

#### Workshop - What the Funders Want

Session 10:45-12:30

Chair: Dr Sinclair Mayne

10:45 WFW1 A Defra Perspective

Dr Sue Popple, Deputy Director, Farming and Food Sciences Team, Defra

11:05 WFW2 A BBSRC Perspective

Dr Alf Game, Deputy Director of Research, BBSRC

11:25 WFW3 The Welsh Assembly Government's Perspective

Mr Chris Lea, Rural Affairs and Heritage, Welsh Assembly Government

11:45 WFW4 The Scottish Government's Perspective

Prof Maggie Gill, Rural and Environment Research and Analysis Directorate

Scottish Government

12:05 Discussion

12:30 Lunch Break

#### CONFLICTS BETWEEN CONSUMER REQUIREMENTS AND FOOD SECURITY

Session 13:30-15:15

Chair:

#### WPSA/BSAS SESSION (tbc)

13:30 Global Raw Material Markets

Tony Bell, Raw Material Director, BOCM PAULS

14:00 Feed additives

Dr Hadden Graham, President, FEFANA

15:15 Tea/coffee and poster viewing

#### **Waterfront Suite 1**

#### GREEN HOUSE GASES AND FARMING SYSTEMS

| Session | 16:00 - | 17:45 |
|---------|---------|-------|
| Session | TA-AA - | 1/.73 |

Chair: Prof Geoff Simm

| 16:00 | 21 | Quantification of greenhouse gas emissions from a beef feedlot system in south-east Australia during summer conditions  Bai Mai, Muir Stephanie, Rowell Doug, Hill Julian, Chen Deli, Naylor Travis, Phillips Frances,  Denmead Tom, Griffiths David, Edis Robert |
|-------|----|---|
| 16:15 | 22 | Decrease in methane emissions in dairy cows with linseed supply Martin Cécile, Ferlay Anne, Chilliard Yves, Doreau Michel   |
| 16:30 | 23 | Cost effectiveness of abating greenhouse gases from UK livestock systems Wall Eileen, McVittie Alistair, Eory Vera, Moran Dominic   |
| 16:45 | 24 | Using values economics to add mitigation of greenhouse gases to dairy selection tools Wall Eileen, Moran Dominic  |
| 17:00 | 25 | Effects of dietary protein concentration on energetic efficiency and methane emission in lactating dairy cows  Yan T, Young F. J., Patterson D. C., Mayne C. S.   |
| 17:15 | 26 | The effect of dietary fish oil inclusion level on intake and methane emissions of beef steers<br>Petrie Kirstie, Hart Kenton, Callan Jimmy, Boland Tommy, Kenny David   |
| 17:30 | 27 | Effect of level of concentrate supplementation on methane emission of Holstein and Holstein-Jersey dairy cows  Yan T, Ferris C P, Mayne C S   |
| 17:35 | 28 | Effect of spice supplementation on <i>in vitro</i> methane production using ground wheat as a substrate <i>Khan Mohammad Mehedi Hasan, Chaudhry Abdul Shakoor</i>   |
| 17:40 | 29 | Effect of Improved Feeding on Nutrient Digestibility, Growth Rate and Methane Production in Growing Cattle and Manure Management on Manure Quality <i>Akbar M. Ali</i>  |

#### **Waterfront Suite 2**

| 18:00 | <b>BSAS</b> | <b>ANNUAL</b> | <b>GENERAI</b> | LMEETING |
|-------|-------------|---------------|----------------|----------|
|       |             |               |                |          |

19:30 Event Night - Floral Hall

#### Floral Hall

#### SIR JOHN HAMMOND MEMORIAL LECTURE

Session 09:00- 10:00

Chair: Professor Jamie Newbold

09:00 HM Milk and meat in our diet: Good or bad for health and wealth 

Prof Ian Givens University of Reading

10:00 Tea/coffee and poster viewing

#### **Waterfront Suite 2**

| 11440211 ONE SUITE 2 |  |  |  |
|----------------------|--|--|--|
|                      | ANIMAL HEALTH Session 10:45 - 12:30 Chair: Prof Ilias Kyriazakis |  |  |
| 10:45                | 30   | Are Scottish Blackface ewes more resistant to nematode parasite infection than Greyface ewes? <i>Kidane A., Tolkamp B.J., Kyriazakis I., Athanasiadou S., Houdijk J.G.M.</i>   |  |
| 11:00                | 31   | Faecal dry matter and nematode infection in parasite-resistant Merino sheep Williams Andrew, Karlsson John, Palmer Dieter, Vercoe Phil, Williams Ian, Greeff Johan, Emery David  |  |
| 11:15                | 32   | Unravelling some mysteries of porcine respiratory and reproductive syndrome virus (PRRSV) infections: new insights from modelling studies Doeschl-Wilson Andrea, Kyriazakis Ilias, Galina-Pantoja Lucina                         |  |
| 11:30                | 33   | A comparsion of the gut microbiota in indoor and outdoor reared pigs<br>Brunton Lucy, Knapp Jeremy, Heritage John, Miller Helen  |  |
| 11:45                | 34   | Zinc Oxide reduces enterotoxigenic <i>Escherichia coli</i> K88 growth in culture and reduces the inflammatory response of porcine intestinal epithelial cells to infection <i>Sargeant Hannah, Shaw Marie-Anne, Miller Helen</i> |  |
| 12:00                | 35   | The effects of sire genotype and the porcine circovirus type 2 vaccine on the growth performance of pigs from weaning to slaughter <i>Taylor Amy, Jagger Steven, Toplis Paul, Wellock Ian, Miller Helen</i>                      |  |
| 12:05                | 36   | Quebracho ( <i>Schinopsis quebracho-colorado</i> ) tannin for the treatment of sheep gastrointestinal parasites. Effect of faecal egg counts on lamb growth.<br><i>Jamieson Stuart, Hovell F.D.DeB</i> .                         |  |
| 12:10                | 37   | In vitro anthelmintic activity of Chicory extracts from plants of different vegetative stages on Teladorsagia circumcincta L3 Parissi Z, Athanasiadou S, Houdijk J, Kyriazakis I   |  |
| 12:15                | 38   | Health status, production and reproduction performance in cattle herds as influenced by management Knapp Emilie, Chapaux Philippe, Istasse Louis, Touati Kamal   |  |
| 12:20                | 39   | Influence of two drying off methods on udder health index in Holstein cows given short dry period <i>Hosseini Ghafari m, Ghorbani G. R, Rahmani h. R, yari m, Akbarian A, Hosseini ghafari A</i>                                 |  |
| 12:25                | 40   | Incidence of African swine fever and its socio-economic implications on pig production in Lagos State, Nigeria  Akinyele Adesehinwa, J.O Saka  |  |

#### **Waterfront Suite 2**

#### GENETICS II

| Session | 13:30<br>Chair | - 15:15<br>: Dr Eileen Wall  |
|---------|----------------|--|
| 13:30   | 41             | Meta-analysis of the halothane gene effect on parameters of pig meat quality Salmi Btissam, Bidanel Jean-Pierre, Larzul Catherine  |
| 13:45   | 42             | Novel epistatic QTL for chemical body composition and accretion as well as feed efficiency in pigs Duthie Carol-Anne, Simm Geoff, Doeschl-Wilson Andrea, Kalm Ernst, Knap Pieter, Roehe Rainer   |
| 14:00   | 43             | The effects of three muscling Quantitative Trait Loci on growth patterns of crossbred lambs Lambe Nicola, Macfarlane Jenny, Masri Amer, Matika Oswald, Haresign Will, Bunger Lutz                |
| 14:15   | 44             | Comprehensive Evaluation of the Direct Effects of LM-QTL on Carcass Traits in Crossbred Lambs Masri Amer, Macfarlane Jenny, Lambe Nicola, Haresign William, Ruis-Vilarrasa Elisenda, Bunger Lutz |
| 14:30   | 45             | Evidence for segregation of a third gene with a major effect on ovarian function in Cambridge sheep $Hanrahan\ J\ P$   |
| 14:45   | 46             | Linkage disequilibrium in two divergent genetic groups of dairy cows using a high-density map of Single Nucleotide Polymorphisms  Banos Georgios, Coffey Mike                                    |
| 15:00   | 47             | The effect of linkage disequilibrium on the estimates of the single nucleotide polymorphic effects <i>Moore Kirsty, Gibson John, Johnston David</i>  |
| 15:15   | Tea/c          | offee and poster viewing   |

#### **Waterfront Suite 2**

#### FINISHING AND CARCASS COMPOSITION

|                | TINISHING AND CARCASS COMPOSITION |  |  |
|----------------|-----------------------------------|--|--|
| Session        |                                   | 0-17:50  |  |
|                | Chair                             | : Dr Ian Richardson  |  |
| 16:00          | 48                                | Use of forage brassicas and bio-active chicory/plantain/clover mixtures for lamb finishing <i>Vipond John, Mathieson Stephanie, Veldhuis Anouk</i>   |  |
| 16:15          | 49                                | Investigation of the variation in lamb meat quality on three winter finishing systems <i>Phillips Kate, Wheeler Karen, Fisher Alan, Nute Geoffrey</i>  |  |
| 16:30          | 50                                | The effect of genotype and diet on lamb meat quality from hill sheep systems<br>Speijers Marijntje, Dawson Lynne, Carson Alistair, Kilpatrick David, Moss Bruce  |  |
| 16:45          | 51                                | Influence of sex type on tenderness of beef as measured by slice shear force and Warner-Braztler shear force.  Moss Bruce, Richardson Ian, Gordon Alan, Matthews Kim, Hadley Philip, Homer Dennis  |  |
|                |                                   | moss bruce, Richardson Ian, Gordon Alan, Matthews Rim, Hadiey I http, Homer Dennis   |  |
| 17:00          | 52                                | A comparison of steers and heifers of the Charolais and Limousin breed for animal performance, carcass parameters and meat quality <i>Lively F.O., Keady T.W.J., Moss B.W., Patterson D.C.P., Gordon A.</i>  |  |
| 17:15          | 53                                | Meat quality of beef cattle offered grass silage and legume / cereal wholecrop silage either alone or in combination with grass silage  Kennedy Peter, Dawson Lynne, Moss Bruce, Fearon Ann  |  |
| 17:30          | 54                                | The effects of supplementation of maize silage diets during pregnancy on ewe and subsequent lamb performance <i>Keady TWJ, Hanrahan JP</i>   |  |
| 17:35          | 55                                | The effects of incorporating either lupins or soya bean meal into concentrate diets when compared with a control concentrate diet on the performance and carcase characteristics of finishing lambs Marley Christina, Fychan Rhun, Theobald Vince, Davies Rob, Sanderson Ruth, Abberton Michael, Davies Dave |  |
| 17:40          | 56                                | The effect of alpha-tocopherol concentration and antioxidant enzyme activities on the shelf life stability of beef from different feeding systems  Garcia-Galicia Ivan, Richardson Ian, Ball Rose, Coulmier Didier, Scollan Nigel  |  |
| 17:45          | 57                                | Forage based fattening of male buffalo calves ( <i>Bubalus bubalis</i> ) under farmers' managed condition in Dang district, Nepal <i>Devkota Naba Raj, Ghimire Sandeep</i>   |  |
| 18:00<br>19:30 |                                   | S ANNUAL GENERAL MEETING - Waterfront Suite 1<br>Night - Floral Hall   |  |

#### Floral Hall

#### SIR JOHN HAMMOND MEMORIAL LECTURE

Session 09:00- 10:00

Chair: Professor Jamie Newbold

09:00 Milk and meat in our diet: Good or bad for health and wealth

Prof Ian Givens University of Reading

10:00 Tea/coffee and poster viewing

#### **Waterfront Suite 3**

| GENETICS I |                |   |
|------------|----------------|---|
| Session    | 10:45<br>Chair | - 12:35<br>: Dr Suzanne Rowe  |
| 10:45      | 58             | Evaluation of genetic trends for milk yield and somatic cell counts in the Holstein breed in terms of changes in the lactation curve<br>Mrode Raphael, Coffey Mike, Moore Kirsty                                |
| 11:00      | 59             | Selection for milk production in a single Holstein herd: effects on correlated traits<br>Pollott Geoff, Coffey Mike   |
| 11:15      | 60             | An investigation on the effect of management factors and contemporary group definition on the genetic evaluation of Calving Interval in British Limousin cattle <i>Moore Kirsty, Mrode Raphael, Coffey Mike</i> |
| 11:30      | 61             | Preliminary genetic analysis of beef carcass data  Coffey Mike, Wall Eileen, Banos Georgios, Roehe Rainer   |
| 11:45      | 62             | Genetic correlations between piglet birth weight, its variation and survival in different dam and sire lines using Bayesian analysis  Kapell DNRG, Ashworth CJ, Knap PW, Roehe R                                |
| 12:00      | 63             | A comparison of the performance of Holstein-Friesian and Norwegian Red dairy cattle on commercial dairy farms over five lactations <i>Ferris C.P., Patterson D.C., Kilpatrick D.J.</i>                          |
| 12:15      | 64             | A comparison of the reproductive performance of Holstein-Friesian and Norwegian Red dairy cattle on commercial dairy farms over five lactations <i>Ferris C.P., Patterson D.C., Kilpatrick D.J.</i>             |
| 12:20      | 65             | Including muscularity in Holstein-Friesian dairy breeding goals Wall Eileen, Winters Marco, Coffey Mike   |
| 12:25      | 66             | Genetic variation of rectal temperature and its relationship to milk production in Holstein Dairy Cows Khalajzade Saeed, Emam Jomeh Nasser, Salehi Abdolreza, Moghimi Esfandabadi Ahmad                         |
| 12:30      | 67             | Effect of rearing season on heritability of cocoon traits in silkworm   |

12:35 Lunch Break

Bizhannia Alireza

Mirhosseini Seyed Ziaeddin, Ghanipoor Mani, Seidavi Alireza, Mavvajpour Moeinolddin,

#### **Waterfront Suite 3**

| Non-Farmed Species Session 13:30-15:15 Chair: Dr Jennie Litten-Brown |                |   |
|--|----------------|---|
| 13:30  | NFS1           | Zoos: Conservation or exploitation?  Jamie Copsey, Durrell Wildlife Conservation Trust, Jersey  |
| 14:00  | NFS2           | Animal learning: its role in animal management and welfare  Dr Anne McBride, Director Animal Behaviour Unit, University of Southampton  |
| 14:30  | 68             | Hindgut digestibility in the dog Singh Ishwani, Hendriks Wouter, Tucker Lucy, Thomas David  |
| 14:45  | 69             | Immune enhancing potential of a canola oil-based supplement for the working dog Rutherfurd-Markwick Kay, Thomas David, McGrath Michelle, O'Flaherty Kelly, Weidgraaf Karin  |
| 15:00  | 70             | Chromium oxide and titanium dioxide as indigestible markers in dogs<br>Singh Ishwani, Hendriks Wouter, Tucker Lucy, Thomas David  |
| 15:15  | Tea/co         | offee and poster viewing  |
| SHEEP ]  | REPRO          | ODUCTION AND NUTRITION  |
| Session  | 16:00<br>Chair | -17:40<br>: Dr Liam Sinclair  |
| 16:00  | 71             | The effects of herbage allowance and frequency of allocation to ewes in mid pregnancy on ewe and  |
| 10.00  | 71             | subsequent lamb performance  Keady TWJ, Hanrahan JP   |
| 16:15  | 72             | Effects of replacing grass silage with maize silage or concentrates on lamb output from housed pregnant ewes  |
|  |                | Annett Ronald, Carson Alistair  |
| 16:30  | 73             | Effects of altering the plane of nutrition during the rearing phase and pregnancy of 2-tooth ewes, of two genotypes, on ewe and subsequent lamb performance <i>Keady TWJ, Hanrahan JP</i>                           |
| 16:45  | 74             | Performance of crossbred Welsh Mountain ewes in the hill environment Wolf B T, McLean B M L, Davies O D, Griffiths J B  |
| 17:00  | 75             | Lifetime performance of crossbred ewes in the hill sheep sector   |
|  |                | Annett Ronald, Carson Alistair, Dawson Lynne, Irwin Desmond, Kilpatrick David   |
| 17:15  | 76             | Effects of mild early- and mid-pregnancy under-nutrition on foetal and placental development in Scottish Blackface and Suffolk sheep.  Werkman Marleen, Rooke John, McIlvaney Kirstin, Dwyer Cathy, Ashworth Cheryl |
| 17:30  | 77             | Effects of early- and mid-pregnancy under-nutrition on maternal and foetal plasma free amino acid   |
|  |                | concentrations in Scottish Blackface and Suffolk sheep Rooke John, Werkman Marleen, McIlvaney Kirstin, Dwyer Cathy, Ashworth Cheryl   |
| 17:35  | 78             | Effects of plane of nutrition and selenium supplementation of ewes in early and mid-pregnancy on meat quality of offspring  Muñoz Camila, Carson Alistair, McCoy Maurice, Moss Bruce, Gordon Alan                   |
| 10.00  | Davo           |   |
| 18:00<br>19:30   |                | ANNUAL GENERAL MEETING - Waterfront Suite 1 Night - Floral Hall 10  |

#### **Waterfront Suite 1**

EXTENSIVE RUMINANT PRODUCTION

## Session 08:45 - 10:25

|       | Chair | : Prof Mike Theodorou  |
|-------|-------|--|
| 08:45 | ERP1  | Production and other ecosystem services from extensive grassland-based systems in Europe: policy options and technical innovations<br>Dr Alain Peeters, RHEA, Belgium                                      |
| 09:10 | ERP2  | Efficient production from Grassland Prof Nigel Scollan & Jon Moorby, IGER  |
| 09:35 | ERP3  | Balancing the competing needs of climate change, biodiversity and sustainable rural communities<br>Dr Harvard Prosser, Welsh Government  |
| 09:55 | 79    | Effect of lipid-rich plant extract on the fatty acids composition and meat quality of Charolais × Friesian steers  Kim Eun Joong, Scollan Nigel D., Richardson R. Ian, Gibson K., Ball R., Coulmier Didier |
| 10:10 | 80    | Comparison of the performance of finishing beef cattle offered grass silage and legume / cereal wholecrop silage either alone or in combination with grass silage <i>Kennedy Peter, Dawson Lynne</i>       |

10:25 Tea/coffee and poster viewing

#### **Waterfront Suite 1**

| DAIRY CATTLE NUTRITION |             |  |  |
|------------------------|-------------|--|--|
| Session                | 11:00-13:00 |  |  |
|                        | Chair       | : Dr Ryan Law  |  |
| 11:00                  | 81          | Effects of dietary protein concentration on the efficiency of nitrogen utilisation in lactating dairy cows <i>Yan T, Young F J, Patterson D C, Mayne C S</i>   |  |
| 11:15                  | 82          | An evaluation of the effect of nutritional strategy in early lactation on performance and energy status of Holstein Friesian dairy cows  Young Fiona, Law Ryan, Gilmore Hazel, Patterson Desmond, Wylie Alastair, Mayne Sinclair   |  |
| 11:30                  | 83          | Alfalfa hay replacement with <i>Kochia scoparia</i> and its effects on early lactation Brown Swiss dairy cows  Saremi Behnam, Shahdadi Alireza, Zaher-Farimani Mohammad  |  |
| 11:45                  | 84          | Effect of rumen-protected methionine and choline on plasma metabolites of Holstein dairy cows Ardalan Mehrnaz, Rezayazdi Kamran, Dehghan-Banadaky Mehdi  |  |
| 12:00                  | 85          | Delineating the role of trans octadecenoic acids in the regulation of milk fat synthesis: The relationship between trans-10 18:1 and milk fat yield in cows fed high oleic acid or high linoleic acid plant oil supplements  Lock Adam L., Hinrichsen Torben, Bauman Dale E. |  |
| 12:15                  | 86          | Manipulating the fatty acid composition of lipids in the digital cushion of the bovine claw <i>Baird Lorna G, O'Connell Niamh E., Young Ian S.</i>   |  |
| 12:30                  | 87          | The effect of dairy cow breed and cross on milk production and fatty acid composition under grazing conditions Palladino Rafael Alejandro, Buckley Frank, Murphy John J., Prendiville Robert, Callan James, Kenny David  |  |
| 12:35                  | 88          | The effect of a short extended grazing period in the spring and straw allocation on the milk yield and composition of autumn calving dairy cows.<br>Sinclair L. A., McAleer C.   |  |
| 12:40                  | 89          | Physically effectiveness of ensiled apple pomace and its effects on ruminal passage rate of digesta in Holstein dairy cows  Ghoreishi Sayid Fazlollah, Pirmohammadi Rasoul, Teimouri yansari Asadollah   |  |
| 12:45                  | 90          | Detanning can cause improvements in ruminal cell wall degradation and total tract apparent NDF digestibility of Sainfoin ( <i>Onobrychis vicifolia</i> )  Khalilvandi Hamed, Dehgan-banadaki Mehdi, RezaYazdi Kamran   |  |
| 12:50                  | 91          | Effect of rumen-protected choline on production performance and body condition of Holstein dairy cows  Ardalan Mehrnaz, Rezayazdi Kamran, Dehghan-Banadaky Mehdi   |  |
| 12:55                  | 92          | An investigation of calf rearing practices on dairy farms in Northern Ireland Morrison Steven, Carson Alistair, Matthews David, Mulholland Martin  |  |
| 13:00                  | End o       | of Session and conference.   |  |

#### **Waterfront Suite 2**

| RUMINANT NUTRITION |                |  |
|--------------------|----------------|--|
| Session            | 08:45<br>Chair |  |
| 08:45              | 93             | Effects of level and form of dietary zinc on dairy cattle performance and keratin production in the teat canal.  Cope Carolyn, Mackenzie Sandy, Wilde David, Sinclair Liam   |
| 09:00              | 94             | Prediction of metabolisable energy concentration of fresh grass – which digestibility variable is better, organic mater or energy? <i>Yan T, Ferris C P, Mayne C S</i>   |
| 09:15              | 95             | Effects of normal and high oleic acid rapeseed in the dairy cow diet on milk fatty acid composition <i>Kliem Kirsty, Humphries David, Givens Ian</i>   |
| 09:20              | 96             | Effect of dairy management (conventional, organic) and season (winter, summer) on fatty acid composition of retail whole milk<br>Stergiadis Sokratis, Butler Gillian, Seal Chris, Leifert Carlo  |
| 09:25              | 97             | Use of selenium enriched fertilizers in the management of a suckling herd: effects over a 5 years period Robaye Vincent, Dotreppe Olivier, Hornick Jean-Luc, Paeffgen Stefan, Istasse Louis, Dufrasne Isabelle                                 |
| 09:30              | 98             | The Sodium Bentonite and Sodium Bicarbonate effects on feedlot performance and rumen parameters of Holstein steers.  Kianoosh Shadi, Shivazad Mahmood, Rezayazdi Kamran, Ferdosmakan Ali   |
| 09:35              | 99             | Effects of chromium supplementation on production responses of heat stressed dairy cows Mirzaee Mehdi, Ghorbani Gholamreza, Khorvash Mohammad, Rahmani Hamidreza, Yari Mojtaba, Ghasemi Ebrahim  |
| 09:40              | 100            | The effects of chromium supplementation on blood parameters related to protein and lipid metabolism in early lactating cows  Mirzaee Mehdi, Khorvash Mohammad, Ghorbani Gholamreza, Rahmani Hamidreza,  Hashemzade Cigari Farzad, Yari Mojtaba |
| 09:45              | 101            | In vitro degradability of different fractions of Solanum lycocarpum St Hil. Rezende Lima Neto Helio, Shakoor Chaudhry Abdul, Mehedi Hassan Khan Mohammad, Riaz Virk Muhammed   |
| 09:50              | 102            | Effect of yeast and mannanoligosaccharides on <i>in vitro</i> fermentation of different substrates Bagheri Maryam, Ghorbani Gholam R., Rahmani Hamid R., Khorvash Mohammad   |
| 09:55              | 103            | Fermentation kinetic of three non-cultivated pastures located in the central plateau of Mexico Rayas-Amor Adolfo A., Dorward Peter, Rehman Tahir, Mould Fergus L., Castelan-Ortega Octavio A.  |
| 10:00              | 104            | Effect of Processing of Palm Oil Petiole on Palatability in Bali (Bos sondaecus) Cows<br>Afdal Muhammad, Syarif Suhassy, Kasim Azhar   |
| 10:25              | Tea/c          | offee and poster viewing   |

#### **Waterfront Suite 2**

#### BEHAVIOUR AND WELFARE

| Session | n 11:00 - 12:30<br>Chair: Dr Emma Baxter |  |
|---------|--|--|
| 11:00   | 105                                      | The behaviour of cows in response to rubber mats in milking parlour stalls Gudaj Ryszard, Blackie Nicola, Bleach Emma, Scaife Jes, Amory Jonathan  |
| 11:15   | 106                                      | The prevalence of hock lesions in UK dairy cattle and the significance of risk factors associated with the development of the condition <i>Potterton Sarah, Green Martin, Harris John, Millar Kate, Whay Helen, Huxley Jon</i> |
| 11:30   | 107                                      | Spatial distribution of scottish blackface ewes in comparison to other crossbreds on a hill environment <i>McCLoskey Eileen, Mc Adam Jim, Carson Alistair</i>  |
| 11:45   | 108                                      | Cluster analysis of farming systems according to predisposing factors of lameness in dairy sheep.<br>Gelasakis Athanasios I., Arsenos Georgios, Valergakis Georgios E., Fortomaris Paschalis,<br>Banos Georgios                |
| 12:00   | 109                                      | The effect on lamb vigour of adding supplementary vitamin E to ewe diets in late pregnancy Matheson Stephanie, John Rooke, Ison Sarah, Jack Mhairi, Ashworth Cheryl, Dwyer Cathy   |
| 12:15   | 110                                      | Prediction of parturition in dairy cattle using a 2D accelerometer to measure lying behaviour – A preliminary observational field study <i>Blackie Nicola, Bowe Shelley, Bleach Emma</i>                                       |
| 12:20   | 111                                      | Changes in lying behaviour and activity during the peri-parturient period in primiparous and multiparous Holstein dairy cows  Bowe Shelley, Blackie Nicola, Bleach Emma  |
| 12:25   | 112                                      | Is there a relationship between the behaviour of beef cattle and emissions of methane and ammonia from feedlot systems?  Muir Stephanie, Bai Mai, Loh Zoe, Hill Julian, Chen Deli, Naylor Travis, Griffiths David, Edis Robert |
| 12:30   | End o                                    | of session and Conference  |

#### Waterfront 3

| PIG MEAT QUALITY Session 08:45 - 10:40 Chair: Dr Mick Hazzeldine |        |  |
|--|--------|--|
| 08:45  | 113    | Effects of low protein diets on fat deposition in the whole body and within the muscle and subcutaneous adipose tissue of pigs  Stonehouse Gary, Hughes Sue, Hallett Kath, Stewart Alan, Wood Jeff   |
| 09:00  | 114    | Effect of pig growth rate and health status on meat eating quality <i>Zammerini Dario, Miller H. M., Marriott D. T., Richardson R. I., Whittington F. M., Wood J. D.</i>   |
| 09:15  | 115    | The use of glycerol in diets for finishing pigs  McCann Elizabeth, Magowan Elizabeth, Beattie Violet, McCracken Kelvin, Gordon Fred,  Scott Marian, Robinson Mary-Jane, Bradford Raymond   |
| 09:30  | 116    | The effect of dietary regime and method of grouping on the variation in growth rate between pigs Magowan Elizabeth, McCann Elizabeth, Beattie Violet, McCracken Kelvin, Bradford Raymond, <i>Scott Marian, Robinson Mary-Jane, Gordon Fred</i> |
| 09:45  | 117    | Evaluation of alternative methods to predict the lean meat percentage of pig carcasses Magowan Elizabeth, McCann Elizabeth, Moss Bruce, Kilpatrick David   |
| 10:00  | 118    | Using meta-analysis to determine the influence of dietary factors on pork quality<br>Trefan Laszlo, Bünger Lutz, Doeschl-Wilson Andrea   |
| 10:15  | 119    | The use of near infrared reflectance spectroscopy (NIRS) to predict the nutritive value of standard commercial diets for post-weaned pigs  McCann Elizabeth, Park Rae, Hutchinson Michael, Owens Bronagh, Beattie Violet                       |
| 10:20  | 120    | Effect of a compensatory growth feeding regime on muscle glycogen and meat quality attributes in pigs  Chaosap Chanporn, Parr Tim, Wiseman Julian  |
| 10:25  | 121    | The use of DeviGuard in diets for growing pigs Beattie Violet, Allan Gordon, Magowan Elizabeth, McCann Elizabeth   |
| 10:30  | 122    | Feeding value of fish meal analog as a protein source for starter pigs Akinyele O.K. Adesehinwa, Adedapo Alalade, Olajide Sokunbi  |
| 10:35  | 123    | The effect of terminal sire breed on the fatty acid profile of pork Magowan Elizabeth, Fearon Ann, McCann Elizabeth, Beattie Alan  |
| 10:40  | Tea/Co | offee and Poster Viewing   |

#### **Waterfront Suite 3**

| METHODS OF MEASURIN | G MEAT QUALITY |
|---------------------|----------------|
|---------------------|----------------|

| Session Session | ion 11:00 - 13:00<br>Chair: Dr Jimmy Hyslop |   |
|-----------------|---|---|
| 11:00           | 124   | Associations of objective physical measurements of beef meat samples and tenderness assessed by a trained taste panel Ross D.W., Richardson R.I., Navajas E.A., Prieto N., Hyslop J.J., Marriott D., Simm G., Roehe R.  |
| 11:15           | 125   | Potential of NIR spectroscopy for prediction of tenderness of beef sirloin Moss Bruce, Gordon Alan, Matthews Kim, Homer Dennis, Hadley Philip   |
| 11:30           | 126   | Influence of time of measurement post mortem on the near infra- red spectra of beef longissimus dorsi and prediction of tenderness <i>Moss Bruce, Gordon Alan</i>   |
| 11:45           | 127   | On-line prediction of the fatty acid content of beef meat by near infrared reflectance spectroscopy <i>Prieto Nuria, Ross Dave, Navajas Elly, Nute Geoff, Richardson Ian, Hyslop Jimmy, Simm Geoff, Roehe Rainer</i>  |
| 12:00           | 128   | Associations between beef density by X-ray computed tomography, intramuscular fat and fatty acid composition: preliminary results <i>Navajas E. A., Richardson R. I., Glasbey C. A., Prieto N., Ross D.W., Hyslop J.J., Simm G., Roehe R.</i>   |
| 12:15           | 129   | X-ray computed tomography accurately assesses beef carcass composition Navajas E.A., Glasbey C.A., Fisher A.V., Ross D.W., Hyslop J.J., Richardson R. I., Simm G., Roehe R.   |
| 12:30           | 130   | Front face fluorescence spectroscopy as a rapid non-invasive tool for determining diet composition in free-ranging ruminants  Lee Michael, Theobald Vince, Wold Jens-Petter, Veberg Annette, Lundby Frank, Fraser Mariecia  |
| 12:45           | 131   | Genetic parameters for carcass linear and area measured by Video Image Analysis and their association with carcass traits assessed by EUROP scores Rius-Vilarrasa Elisenda, Bünger Lutz, Brotherstone Sue, Matthews kim, Haresign Will, Macfarlane Jenny, Davies Mervyn, Roehe Rainer |
| 13:00           | End o                                       | f Session and Conference  |

#### Poster Sessions Monday 13:00 - Tuesday 12:30

#### FLORAL HALL

#### PIGS AND OTHER SPECIES

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parental lines

Poster viewing, authors in attendance Discussion Monday 15:00 - 16:00 Chair: Dr Jennie Litten-Brown

- 132 The behaviour of finisher pigs of three genotypes during routine handling using standard or modified weighing Clarke Helen, D'Eath R.B, Miller H.M. 133 Influence of mixing on the initiation of piglet feeding and post weaning growth performance Reynolds Fiona, Forbes J. M., Miller Helen 134 Influence of drinker design and position on the behaviour of growing pigs O'Connell Niamh, Magowan Elizabeth, McCann Elizabeth 135 Responses to multiple enrichment in post weaned pigs Benton Hayley, Bleach Emma 136 Effect of a compensatory growth feeding regime on performance and gross carcass characteristics in growing / finishing pigs Chaosap Chanporn, Parr Tim, Wiseman Julian 137 The pigmeat supply chain: pre-assessment for a Life Cycle Inventory Olea Rafael, Guy Jonathan, Edge Helen, Edwards Sandra E. 138 Effect of supplemental copper and citric acid on growth performance and body composition of common carp (Cyprinus carpio) Shirmohammad Fatemeh. Pourreza Javad 139 Heavy metal uptake, bioaccumulation and histopathological responses in gills of freshwater fish from Indus River, Pakistan Jabeen Farhat, Chaudhry Abdul Shakoor 140 Cyprinus carpio as a biomarker to monitor metal pollution in the Indus River, Pakistan Jabeen Farhat, Chaudhry Abdul Shakoor 141 A comparison of behaviours of common squirrel monkeys (Saimiri sciureus) between enclosure designs at Cotswold Wildlife Park and Woburn Safari Park Tosar Nisha, Litten-Brown Jennie 142 Effects of dietary chromium-methionine supplementation on blood metabolites and insulin resistance index in Fructose-fed diabetic rats model Ghiasi seyed Ehsan, Valizadeh Reza, Rajabian Reza, Tahmasbi Abdolmansour, Jalal razieh, naserian abasali
- The Effect of GnRH Injection at two different stages of the estrous cycle on plasma progesterone and estradiol concentrations in water buffalo

  Kohram Hamid, Mohammadi Ghodratallah, Dirandeh Essa

Study of resistance and vitality responses in six silkworm (Bombyx mori L.) hybrids under individual selection for

Seidavi Alireza, Mirhosseini Seyed Ziaeddin, Mavvajpour Moeinolddin, Bizhannia Alireza, Ghanipoor Mani

#### Poster Sessions Monday 13:00 - Tuesday 12:30

#### **FLORAL HALL**

#### PHYSIOLOGY REPRODCTION (RUMINANT)

Poster viewing, authors in attendance Discussion Monday 15:00 - 16:00 Chair: Dr Peter Rowlinson

|     | Chair: Dr Peter Rowlinson   |
|-----|---|
| 145 | Evaluation of some blood metabolites and hormonal changes in early <i>postpartum</i> ovarian cyst in dairy cattle <i>Ziaea ehsan, moghaddam gholamali, rafat abas, davarpor hamid, isfandiari hadi</i>  |
| 146 | Effects of milk production and seasonal calving on some blood metabolites changes in dairy cows at postpartum period ziaea ehsan, moghaddam gholamali, rafat abas, daghigh kia hosein, davarpor hamid   |
| 147 | Evaluation of some serum metabolites effect on ovarian cyst at <i>postpartum</i> in dairy cattle <i>moghaddam gholamali, ziaea ehsan, rafat abas, daghigh kia hosein, farajian musa</i>   |
| 148 | The study of shearing effects on some blood parameters in Red Karaman ewes Bayram Bulent, Farajyan Mousa, Esfandyari Hadi, Moghaddam Gholamali, Dorostkar Mohammad  |
| 149 | Effect of propylene glycol on blood glucose, $\beta$ -hydroxybutyrate and Urea at during Late Pregnancy in Ewes Moghaddam gholamali, Farajian mousa, Shoja Jalil, Pirani nasrolah, ziyayi ehsan   |
| 150 | Effects of dry period length on milk production and composition in early lactating Holstein cows Soleimani Akbar, Heravi Moussavi Alireza, Danesh Mesgaran Mohsen, Safa Soroush   |
| 151 | Effect of different calving classes in the first calving on subsequent milk production in Holstein dairy cows Heravi Moussavi Alireza, Danesh Mesgaran Mohsen   |
| 152 | GnRH affects emergence of a new follicular wave in cows with cystic ovaries<br>Dirandeh Essa, Kohram Hamid, Zare Shahneh Ahmad, Saberifar Tannaz  |
| 153 | The effect of days dry on milk production and fertility in subsequent lactation of high producing Holstien cows  Danesh Mesgaran S., Heravi Moussavi A., Koolabadi G, Banikamali A.   |
| 154 | Effects of dry period length on follicular dynamics in early lactating Holstein cows Soleimani Akbar, Heravi Moussavi Alireza, Danesh Mesgaran Mohsen, Safa Soroush   |
| 155 | Follicular responses of the right versus left ovaries to eCG treatment in Shall Iranian ewes Kermani moakhar Hamed, Kohram Hamid, Salehi Reza, Zare Ahmad   |
| 156 | Effect of unheated Mare serum on <i>In vitro</i> maturation of sheep oocytes.  Khodaeimotlagh Mahdi, Zarehshahne Ahmad, Daliri Morteza, Kohram Hamid, Gharagozlou Faramarz, Abtahi Faezesadat, Bakhtiarzade MohamadReza   |
| 157 | Performance and Physiological Responses of Holestein Dairy Calves under Heat Stress Fed Diets<br>Supplemented with Chromium – Methionine<br>Yari Mojtaba, Ghorbani Gholam Reza, Alikhani Masud, Rahmani Hamid Reza, Khorvash Mohamad,<br>Mirzaee Mehdi, Hashem Zade Farzad, Hosseini Ghafari Morteza, Nazari Zade Hasan |

#### Poster Sessions Monday 13:00 - Tuesday 12.30

#### FLORAL HALL

#### PRODUCT QUALITY

Poster viewing, authors in attendance Discussion Monday 15:00 - 16:00 Chair: Dr Ian Richardson

- 158 On-line application of visible and near infrared reflectance spectroscopy to predict physical and sensory characteristics of beef quality Prieto Nuria, Ross Dave, Navajas Elly, Nute Geoff, Richardson Ian, Hyslop Jimmy, Simm Geoff, Roehe Rainer 159 Organoleptic properties of seasoned and unseasoned dry meat products from beef and camel meat Patience Olusolafakolade, Andrew Babatunde Omojola 160 Finishing diets used in beef and lamb production in Northern Ireland: results of a questionnaire survey McAfee Alison, Duffy Emeir, Cuskelly Geraldine, Fearon Ann, Wallace Julie, Bonham Maxine, Moss Bruce, Strain Sean 161 Evaluation of period of fasting and mixing of steers prior to slaughter on meat eating quality. Lively Francis, Moss Bruce, Keady Tim, Farmer Linda, Gault Norman, Tolland Ernest, Tollerton Joan, Devlin Declan 162 Predicting the slaughter characteristics of finished beef cattle using a live animal digital image analysis system under typical on-farm management conditions Hyslop J. J., Ross D. W., Schofield C. P., Navajas E. A., Roehe R., Simm G. 163 Effects of supplemental vitamin E and packaging system on the shelf life of venison from red deer (Cervus elaphus) finished off grass or concentrates Fisher Alan, Richardson Ian, Wheeler Karen, Davies Mervyn Evaluation of measurements that may define venison quality parameters in UK farmed deer 164 Davies Mervyn, Wheeler Karen, Chapple Dennis, Fisher Alan Evaluation of techniques to predict the percentage lean meat of primal cuts from pig carcasses 165 Magowan Elizabeth, McCann Elizabeth, Moss Bruce, Kilpatrick David 166 Computer-assisted image analysis for the evaluation of wool quality in Arkharmerino × Ghezel crossbreed
- Influence of abattoir, carcass suspension method, ageing time and anatomical position of the measurement on visual and near infrared spectrum characteristics of the *longissimus dorsi* of lambs *Oltra Octavio, Farmer Linda, Moss Bruce, Birnie Jonathan*
- Evaluation of the Direct Effects of MyoMAXTM on Carcass Traits in Crossbred Lambs

  Masri Amer, Macfarlane Jenny, Lambe Nicola, Haresign William, Rius-Vilarrasa Elisenda, Bunger Lutz
- 169 Isomerisation of trans-10 cis-12 conjugated linoleic acid during acidic methylation Lee Michael, Tweed John

Esfandyari Hadi, Shoja Jalil, Rafat Sayed Abbas, Dorostkar Mohmad

#### **Poster Sessions** Monday 13:00 - Tuesday 12.30

#### **FLORAL HALL**

| RUMINANT NUTRITION | Rum | INANT | NU | TRITION |
|--------------------|-----|-------|----|---------|
|--------------------|-----|-------|----|---------|

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| Poster viewing, authors in attendance |
|---------------------------------------|
| Discussion Tuesday 10:00-10:45 hours  |
| Chair: Dr Ryan Law                    |

|     | Discussion Tuesday 10:00-10:45 hours<br>Chair: Dr Ryan Law  |
|-----|---|
| 170 | Effect of dietary crude protein level on the performance of cereal fed Holstein bulls Marsh Simon, Briggs Peter, Ferguson David   |
| 171 | Cubing Diet and Chewing Behavior in Feedlot Male Calves Oskoueian Ehsan, Foroughi Alireza, Valizadeh Reza, Fazaeli Hasan, Yahaghi Mohamad   |
| 172 | Animal performance characteristics in suckler-bred steers and heifers finished at 16-20 months of age on a grass silage and barley-based concentrate ration offered as a complete diet <i>Hyslop J. J., Ross D. W., Navajas E. A., Prieto N., Roehe R., Simm G.</i>   |
| 173 | Effect of weaning dairy-bred bull calves either gradually or abruptly Marsh Simon, Greenow Rachel   |
| 174 | Evaluation of barley distillers' grains ensiled with or without molassed sugar beet pulp on feed intake and production of Holstein dairy cows <i>Kazemi M, Tahmasbi A. M., Valizadeh R, Danesh Mesgaran M, Moheghi M. M, Mojtahedi M</i>                              |
| 175 | Effects of differing concentrations of rumen degradable protein with fixed level of rumen undegradable protein on intake, digestibility and rumen parameters of dairy cows.  Rafiei Hassan, Afzalzadeh Ahmad, Khadem AliAkbar, Asadi Ali                              |
| 176 | Dry matter intakes, milk yield and milk composition of dairy cows offered concentrate diets containing either yellow lupins or soya bean meal <i>Marley Christina, Fisher Bill, Fychan Rhun, Sanderson Ruth, Abberton Michael, Davies Dave</i>                        |
| 177 | Effect of zinc sources on haematology, enzyme activity and blood serum zinc concentration in Holstein dairy cattle sobhanirad saeid, valizadeh reza, azizi feridoon, Hedayati Mehdi, tahmasebi abdolmansoor   |
| 178 | Effect of different source of supplemental protein with dried pistachio by product on performance and ruminal pH and N-NH3 of Holstein dairy cows  Gholizadeh Hojat, Naserian Abasali, Valizadeh Reza, Tahmasebi Abdolmansoor   |
| 179 | Effect of different levels of fish oil and canola oil on DMI, milk production, and blood metabolites of high producing Iranian Holstein dairy cows in early lactation vafa toktam, naserian abbasali, heravi moussavi alireza, valizadeh reza, danesh mesgaran mohsen |
| 180 | Effect of supplemented diet by sucrose and/ or starch on blood cholesterol and some hepatic enzymes in Holstein steers Rezaii F., Danesh Mesgaran M., Heravi moussavi A.  |

182 Effect of feeding diet containing Fish oil and Canola oil from transition period on milk production and components of Holstein cows in early lactation vafa toktam, naserian abbasali, heravi moussavi alireza, valizadeh reza, danesh mesgaran mohsen

Krizova Ludmila, Svobodova Jarmila, Richter Michal, Homolka Petr, Hadrova Sylvie

183 Effects of organic and inorganic zinc sources on production, composition and zinc concentration of milk in early lactating Holstein cows sobhanirad saeid, Tahmasebi Mehdi, Azizi Feridoon, Valizadeh Reza, Tahmasebi Abdolmansoor, Nasserian Abbasali

The effect of dietary soybean isoflavones on their concentration and total output in bovine milk

#### **Poster Sessions** Monday 13:00 - Tuesday 12:30

#### **FLORAL HALL**

#### **RUMINANT NUTRITION**

Poster viewing, authors in attendance

- Discussion Tuesday 10:00-10:45 hours Chair: Dr Ryan Law: 184 Linear and quadratic models as predictors of dry matter production and nutritive value of pastures located in the central plateau of Mexico Rayas-Amor Adolfo A., Dorward Peter, Rehman Tahir, Mould Fergus L., Castelan-Ortega Octavio A. 185 Effect of substitution barley grain with dried sugar beet pulp on ruminal pH and NH3-N concentration of Holstein steers Mojtahedi Mohsen, Danesh Mesgaran Mohsen, Heravi Moussavi Alireza, Tahmasebi Abdolmansour 186 Chewing behavior of Holstein steers fed diets containing different levels of nonforage NDF in a low forage Mojtahedi Mohsen, Danesh Mesgaran Mohsen, Heravi Moussavi Alireza, Tahmasebi Abdolmansour 187 The effect of feeding ensiled alternative forages compared with ensiled ryegrass on excreta losses from growing lambs Marley Christina, Fychan Rhun, Fraser Mariecia, Sanderson Ruth, Jones Raymond 188 Effects of replacing beet pulp with pistachio Hull and interaruminal infusion of urea on feed intake, ruminal and abomasum N-NH3 and blood metabolites in Iranian Balochi sheep Gholizadeh Hojat, Naserian Abasali, Valizadeh Reza, Tahmasebi Abdolmansoor Effect of inoculants on fermentation and nutritive value of unwilted and wilted alfalfa silage 189 hashemzadeh cigari farzad, khorvash mohammad, ghorbani gholam reza, taghizade akbar, sadegi khaled, mohammadzadeh hamid 190 An on-farm evaluation of the effects of season of shearing on ewe and subsequent lamb performance Keady TWJ, Hanrahan JP 191 Effects of different levels replacement of ensiled pistachio epicarp with corn silage on fattening parameters and lamb performance Mahdavi Ali, Zaghari Mojtaba, Zahedifar Mojtaba, Nikkhah Ali, Alemi Fatemeh, Aghashahi Alireza, Hosseini Sayed Abdollah, Mahdavi Ala 192 Effects of Whole cottonseed on small intestine morphology of Chaal fattening male lambs Absalan Mohsen, Afzalzadeh Ahmad, Khadem Ali Akbar, Sharifi Davood Effect of cobalt supplementation on performance of mehraban lambs Aliarabi Hassan, Bisheh Sari Shahab, Tabatabaei Mohamad Mahdi, Ahmadi Ahmad, Zamani Poya, Alipour Daryoush, Zamani Zahra
- 193
- 194 The influence of steam treated sugarcane pith as feed ingredient on digestibility and passage rate of Iranian Baluchi sheep Chaji Morteza, Naserian Abbasali, Valizadeh Reza
- 195 The effect of different feeding levels of dried pistachio epicarp on fattening performance of lambs Mahdavi Ali, Zaghari Mojtaba, Zahedifar Mojtaba, Nikkhah Ali, Alemi Fatemeh, Aghashahi Alireza, Hosseini Abdollah, Mahdavi Ala
- 196 Investigation on the effects of adding direct-fed Microbial on total tract apparent nutrient digestibility in Khazanehei Hamidreza, Rezayazdi Kamran, Nikkhah Ali
- 197 Effect of lucerne hay particle size and form of neutral detergent soluble carbohydrates on performance of Holstein cows in midlactation Asadi Ali, Ghorbani Gholam R., Alikhani Masoud, Teimouri-Yansari Asad

#### **FLORAL HALL**

#### IN VITRO

Poster viewing, authors in attendance Discussion Tuesday 15:00-16:00 hours Chair:

- Behavior analysis of a first order degradation model when fitting the nutrient ruminal disappearance data Fathi Nasri M. Hassan, Danesh Mesgaran Mohsen, France James, Riasi Ahmad
- Evaluation of mathematical models to describe protein fraction degradation kinetics of various oilseed meals Danesh Mesgaran M., Tashakkori T., Heravi Moussavi A., Danesh Mesgaran S., Vakili A.
- 200 Ruminal crude protein degradability parameters of some feedstuffs using *in situ* technique Besharati Maghsood, Taghizadeh Akbar, Janmohamadi Hossein, Moghadam GholamAli
- The effect of fluctuations in rumen pH on protozoa populations in rumen fluid as determined by real-time PCR Vakili Alireza, Danesh Mesgaran Mohsen, Heravi Mousavi Alireza, Valizadeh Reza, Nassiry Mohamad Reza, Yáñez Ruiz David R., Newbold Charles Jamie
- In vitro rumen fungi growth in a medium containing sodium hydroxide treated wheat straw using competitive PCR assay

  Sekhavati M.H., Mohammadabadi T., Danesh Mesgaran M., Nassiry M.R., Fani Maleki A.
- In vitro rumen fungi quantification in medium containing sodium hydroxide or formaldehyde treated sunflower meal using quantitative competitive PCR assay

  Mohammadabadi T., Danesh Mesgaran M., Heravi Moussavi A. R., Nassiry M. R., Sekhavati M. H., Chaji M., Fani Maleki A., Alshowkany A. R.
- Evaluation of a zero-order model to describe ruminal degradation kinetics of whole soybean incubated *in situ* Fathi Nasri M. Hassan, Danesh Mesgaran Mohsen, Kebreab Ermias
- The effect of non fibre carbohydrate on *in vitro* first order dry matter disappearance kinetic of cellulose *Rezaii F., Danesh Mesgaran M., Heravi Moussavi A.*

#### FLORAL HALL

| GENET | PICS: DAIRY AND GOATS Poster viewing, authors in attendance Discussion Tuesday 15:00-16:00 hours Chair: Dr Mike Coffey   |
|-------|--|
| 206   | Genetic parameter estimation of economic traits in Raienian Cashmere goats Rezvannejad Elham, Moradi Shahrbabak Mohammad, Moravej Hosein   |
| 207   | Derivation of economic values (EVs) for production traits of Markhoz goat breed in Iran Zandi Mohammad Bagher, Moradi sharbabak Mohammad, Miraie Ashtiani Sayed Reza, Rashidi Amir                                     |
| 208   | Genetic polymorphism at the Growth Hormone Locus in Iranian Talli Goats by PCR-SSCP mousavizade Seyed Azim, Nassiri Mohammad Reza, Ghiasi Heidar, Mohammad Abadi Mohammad Reza   |
| 209   | The study on polymorphisms of BMP-15 gene in Iranian native goats  Deldar-Tajangookeh Hamid, Zare Shahneh Ahmad, Zamiri Mohammad Javad, Nejati-Javaremi Ardshir  |
| 210   | Heterogeneity of variance for milk traits at different herd sizes in Holstein dairy cattle in Iran and the best method(s) for data transformation.  Varkoohi sheyda, MiraiiAshtiani SeyedReza, Mehrabani Yeganeh Hasan |
| 211   | Estimation of the udder composite trait in Holstein population of Iran Bakhtiarizadeh Mohamadreza, Moradi shahr babak Mohamad, Pakdel Abass  |
| 212   | Estimation of genetic trend for milk and fat yields in Iranian Holstein cattle Sheikhloo Mohamadreza, Shodja Djalil, Pirani Nasrollah, Alijani Sadegh, Rafat Abas  |
| 213   | What has happened to the genetic merit of average UK Holstein cows over the last 24 years?<br>Pollott Geoff, Coffey Mike   |
| 214   | Estimation of genetic trends for twinning rate in Holstein dairy cattle of Iran using linear and threshold models Ghavi Hossein-Zadeh Navid, Nejati-Javaremi Ardeshir, Miraei-Ashtiani Seyed Reza, Kohram Hamid        |
| 215   | Acyl-CoA: diacylglycerol acyltransferase 1 (DGAT1- K232A) gene polymorphism in Iranian Holstein cows Saheb Foroutani Far, Mohammad reza Nassiry, Fatemeh Hosseini, Rohollah Zahmatkesh                                 |
| 216   | Polymorphism of insulin like growth factor I receptor in Iranian Najdi and Holstein cows by using of PCR-RFLP  Bakhtari Azizollah, Rahmani Hamid Reza, Edriss Mohmmad Ali, Sayed Tabatabaei Badruddin Ebrahim          |
| 217   | Software packages in animal breeding Sahebhonar Mohammad, Moradi Shahrbabak Mohammad, Miraei Ashtiani S. REZA, Sayadnejad MohammadBagher   |
| 218   | Genetic analysis of type traits in the Holstein population of Iran Bakhtiarizadeh Mohamadreza, Moradi shahr babak Mohamad, Pakdel Abass, Dirandeh Essa   |

#### FLORAL HALL

GENETICS: SHEEP

| GENET | ics. Sheep   |
|-------|--|
|       | Poster viewing, authors in attendance<br>Discussion Tuesday 15:00-16:00 hours<br>Chair: Dr Geoff Pollott   |
| 219   | A proposed novel breeding system for intensively reared dairy flocks.  Gelasakis Athanasios I., Valergakis Georgios E., Fortomaris Paschalis, Giannakopoulos Constantinos G.,  Arsenos Georgios                        |
| 220   | Genetic and phenotypic correlations of growth weight traits in Moghani sheep Rafat Seyed Abbas, Shodja Djalil, Dorostkar Mohammad, Pirani Nasrollah  |
| 221   | The estimation of variance components for reproductive traits of Moghani sheep Bayeriyar Mehdi, Shodja Djalil  |
| 222   | Effects of auto selection and threshold selection of dams for litter size in sheep Shirali Masoud, Nejati-Javaremi Ardeshir, Mehrabani-Yeganeh Hassan  |
| 223   | Estimation of economic values for economical traits of Zandi sheep breed Zandi mohammad bagher, Zahmatkesh Barbod, Amini Saman   |
| 224   | Estimation of economic values for growth and reproduction traits in Iranian Karakul sheep breed Zahmatkesh Rohollah, Rahimi Ghodratollah, Hafezian Hassan  |
| 225   | The wool properties and body weights of the Indigenous Red Karaman and Karyaka sheep breeds of Turkey Pasa Elnour, Esfandyari Hadi, Farajiyan Mousa, Mogghaddam Gholamali, shahbazi Payman, Bayram Bulent, Ziaee Ehsan |
| 226   | Associations between polymorphism of growth hormone receptor (GHR) gene and growth traits of Baluchi sheep  Vafaye Valeh Mehdi, Tahmoorespour Mojtaba, Ansari Mazyar, Karimi Davood, Nasiry Mohamadreza                |
| 227   | Association of Leptin and Ghrelin polymorphisms with growth traits in Baluchi sheep<br>Tahmoorespour Mojtaba, Ansari Mazyar, Taheri Amir, Vafaye Valeh Mehdi, Nassiry Mohamad Reza,<br>Karimi Davood                   |
| 228   | Genetic Polymorphism of MTNR1A Locus in Iranian Shal and Karakul Sheep Ghiasi Heydar, Nasiry Mohamad Reza, Mousavizadeh Abdol Azim   |
| 229   | Study of the Bone Morphogenetic Protein 15 (BMp15) Mutation in Moghani Sheep using RFLP Method Nemati Zabihollah, Barzegari Abolfazl   |

#### **FLORAL HALL**

#### **EVALUATION OF TREATED FEEDS**

Poster viewing, authors in attendance Discussion Wednesday 10:25-11:00 hours

- Chair: Dr Danesh Mesgaran Evaluation of microwave irradiation effects on nutritive value of Broom Sorghum grain using in vitro gas 230 production technique Parnian Farhad, Taghizadeh Akbar 231 Disappearance of dry matter and neutral detergent fibre (NDF) of sunflower meal treated with sodium hydroxide or formaldehyde by isolated mixed rumen bacteria using in vitro culture Danesh Mesgaran M., Mohammadabadi T., Heravi Moussavi A., Nassiri M. 232 Antinutritional factors, ruminal degradation and in vitro protein digestibility of gamma irradiated full-fat Taghinejad Roudbaneh Mehdi, Nikkhah Ali, Sadeghi Ali Asghar, Raisali Gholamreza, Chamani Mohamad 233 Effects of different additives on the chemical composition, in vitro and in situ digestibility of whole crop canola silage Naserian Abasali, Bohluli Atiyeh 234 Evaluation effects of Lucerne hay treated by Saccharomyces cerevisiae using in vitro gas production Ansari Adel, Taghizadeh Akbar, Janmohamadi Hussein, Zarini Gholamreza 235 Evaluation of ensiling on the nutritive value of barley distillers' grains Kazemi M, Tahmasbi A. M., Valizadeh R, Danesh Mesgaran M, Mojtahedi M, Moheghi M. M. 236 Effect of adding different levels of probiotic on in vitro gas production Besharati Maghsood, Taghizadeh Akbar, Ansari Adel 237 The effect of silver nano-particles (Nanosilver) on in vitro gas production of barley grain and lucerne hay Faramarzi-Garmroodi A., Danesh Mesgaran M., Jahani Azizabadi H., Vakili A. In situ dry matter degradable coefficients of whole crop barley silage treated with Lactobacillus plantarum or 238 mixed with Pediococcus pentosaceus plus Popionbacter freudenreichii Vatandoost M, Danesh Mesgaran M, Heravi Moussavi A, Vakili A
- 239 Antinutritional factors, ruminal degradation and in vitro protein digestibility of gamma irradiated canola seed Ebrahimi Mahmoudabad Sayed Roohollah, Nikkhah Ali, Sadeghi Ali Asghar, Raisali Golamreza
- 240 Effect of Microbial Inoculants on Ruminal Dry Matter and Nutrients Degradability of Corn Silage Using in situ Method in Zel Sheep Kamarloiey Mahrokh, Teimouri yansari Asadollah

#### **FLORAL HALL**

| Ехотіс | FEED EVALUATION Poster viewing, authors in attendance Discussion Wednesday 10:25-11:00 hours Chair: Dr John Cone   |
|--------|--|
| 241    | Dry matter degradation of various sources of dried citrus pulp determined with the nylon bag technique Bayat kohsar javad, tahmasbi Abdolmansour, nasserian abbasali, safari rashid, valizadeh reza  |
| 242    | Fermentation and <i>in vitro</i> gas production of untreated and high pressure steam treated sugarcane pith by rumen fungi  Chaji Morteza, Mohammadabadi Tahereh   |
| 243    | Evaluation of nutritional value in some tropical by products using <i>in vitro</i> gas production technique <i>Taghizadeh Akbar, Besharati Maghsood</i>  |
| 244    | Nutritional evaluation of vinasse as a ruminant feed  Iranmehr Mahdieh, Khadem Aliakbar, Rezaian Mohammad, Afzalzadeh Ahmad  |
| 245    | Pistachio hull tannin affected gas production and ammonia concentration during <i>in vitro</i> fermentation bohluli atiyeh, naserian abasali   |
| 246    | Evaluation of nutritive value of white mulberry (Morus alba) fruits waste<br>Mahdavi Ali, Hosseini Sayed Abdollah, Mohiti Asl Maziyar, Lotfolahiya Houshang, Aghashahi Alireza,<br>Hosseini Sayeh Hadi, Mirabdolbaghi Jaleh, Alemi Fatemeh |
| 247    | Nutritive evaluation of Damascus rose extraction residues: Chemical composition and <i>in vitro</i> gas production <i>Khorami Behzad, Khadem Aliakbar, Fazaeli Hamid, Afzalzadeh Ahmad</i>   |
| 248    | Protein fermentation characteristics in rumen fluid determined with the gas production technique <i>Cone John, Rodrigues Miguel</i>  |
| 249    | In vitro rumen degradability and ammonia level of different spices Khan Mohammad Mehedi Hasan, Chaudhry Abdul Shakoor, Lima Neto Helio, Virk Muhammed Riaz   |
| 250    | Effects of chemical and physical treatments on <i>in situ</i> dry matter degradation parameters of <i>Lathyrus sativus</i> (grass pea)  Vahdani Narges, Reza-yazdi kamran, Dehghan-banadaki Mahdi, Moravej Hosein                          |
| 251    | Determining of nutritive values of tomato pomace using <i>in situ</i> and gas production techniques Taghizadeh Akbar, Palanghi Valiolah, Safamehr A, Nobakht A, Mehmannavaz Y, Paya H  |
| 252    | Increasing nutritive value of white grape pomace by ensiling and drying for ruminants nutrition Golghasemgharebagh Ahad, Pirmohammadi Rasoul, Hamidi Omid  |
| 253    | Evaluation of nutritional values of caraway-seed pulp feeding Holstein dairy cattle Moheghi M.M, tahmasbi A.M, Nasserian A.A, Kazemi M, Bayat Kohsar J   |
| 254    | Correlation of <i>in vitro</i> gas production and <i>in situ</i> technique for evaluation of tomato pomace degradability Safari Rashid, Valizadeh Reza, Tahmasebi Abdolmansoor, Naserian Abasali, Bayat Javad                              |
|        |  |

In vitro gas production technique to determining of nutritive value of various sources of citrus pulp Bayat kohsar Javad, Tahmasebi Abdolmansour, Nasserian Abasali, Safari Rashid, Valizadeh Reza

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#### WPSA/BSAS Theatre Sessions Wednesday, 1 April 2009

#### **Waterfront Suite 2**

#### WPSA/BSAS THEATRE PRESENTATIONS

- The influence of thyme and pennyroyal essential oils, found to be effective as acaricides against the poultry red mite (*Dermanyssus gallinae*), on occurrence of taint in hens' eggs *Smith Tegan, George David, Sparagano Olivier, Shiel Robert, Seal Chris, Guy Jonathan*
- 257 A genetic-epidemiological model for Marek's Disease in Poultry *Nath Mintu, Bishop Stephen*
- Variance component estimation of clutch traits of Iranian native fowl Ebadi-Tabrizi Alireza, Nejati-Javaremi Ardeshir, Shabani Reyhaneh, Mehri Mehran
- 259 The influence of different levels of dietary fish oil on the performance and Biochemical parameters of broiler chickens safamehr alireza, aghaei namatolah, mehmannavaz yosef
- 260 The effects of in ovo feeding of threonine and carbohydrates on growth performance of broiler chickens
  Mousavi S. N., Arab Baghi F., Shivazad M., Ghahri H., Foroudi F.
- Intensive selection for growth in broilers has not altered normal feeding behaviour Howie Jennifer, Tolkamp Bert, Avendano Santiago, Kyriazakis Ilias
- What contributes to differences in phenotypic variation between generations? *Wolc Anna, White Ian, Lisowski Miroslaw, Hill William*
- 263 Liquid feed fermented with Lactobacillus salivarius reduces susceptibility of broiler chickens to Salmonella enterica typhimurium Sal 1344 nalr Savvidou Soumela, Beal Jane, Brooks Peter, La Ragione Roberto
- The effect of feeding stearidonic acid enriched soya oil to broilers on the fatty acid composition and sensory characteristics of chicken meat *Rymer Caroline, Givens Ian*

#### WPSA/BSAS Poster Session Tuesday 13:00 - Wednesday 12:30

#### FLORAL HALL

#### WPSA/BSAS POSTER

| 265 | Bayesian estimation of posterior means of heritability for weight at week 8 in Iranian indigenous chickens using an animal model Farhangfar Homayoun, Rowlinson Peter, Navidizadeh Mohammad Ebrahim, Mirzaei R.A., Fathi Nasri Mohammad Hassan, Lotfi Noghabi Reza   |
|-----|--|
| 266 | Effects of Acute Progesterone Injection on Performance, Plasma Hormones and Ovarian Morphology of Feed Satiated and Fed Restricted Broiler Breeder hens Zaghari Mojtaba, Taherkhani Reza, Honarbakhsh Shirin   |
| 267 | Effect of medicinal plants and organic acid on growth performance of Ross broilers Ziaieh, Karimi Torhizima, Bashtani M, Farhangfar H, Rowlinson P, Zeinalia   |
| 268 | Effects of vitamin E and C supplementation on performance and immune response of broiler chicks. <i>Hesabinameghi Alireza</i>  |
| 269 | Application of a duplex PCR approach for the specific and simultaneous detection of <i>Bifidobacterium spp</i> . and <i>lactobacillus spp</i> . in duodenum, jejunum, ileum and cecum of broilers <i>Mirhosseini Seyed Ziaeddin, Seidavi Alireza, Shivazad Mahmoud, Chamani Mohammad, Sadeghi Ali Asghar, Pourseify Reza</i> |
| 270 | Investigation on relative population of <i>Salmonella spp</i> . bacteria in duodenum, jejunum, ileum and cecum of poultry using densitometry technique <i>Seidavi Alireza</i>  |
| 271 | Relative frequency alteration of <i>Escherichia coli</i> in broiler intestine<br>Seidavi Alireza, Mirhosseini Seyed Ziaeddin, Shivazad Mahmoud, Chamani Mohammad,<br>Sadeghi Ali Asghar, Pourseify Reza  |
| 272 | Effects of Dietary Phytase, Calcium and Phosphorus Levels on Performance, and Nutrient utilization in Male Broiler Chickens Nassiri Moghaddam Hassan, Hassanabadi Ahmad, Alizadeh Ghamsari Amir  |
| 273 | Effects of different levels of canola meal on egg quality  Gaykani Ruhollah, Zaghari Mojtaba, Shivazad Mahmood   |
| 274 | Comparison of the Effects of Different Kinds of NSP Enzymes on the Performance, Litter Moisture and Jejuna Digesta Viscosity of Broilers Fed Barley-Based Diet Shirzadi Hassan, Moravej Hossein, Shivazad Mahmoud  |
| 275 | Modelling and optimising early performance for broiler chicks  Ahmadi Hamed, Golian Abolghasem   |
| 276 | Effect of various Lactobaccillus administration methods in hatchery on serum cholesterol levels of broiler chickens  Hashemzadeh Zobeideh, Karimi Torshizi Mohammad Amir, Rahimi Shaban  |
| 277 | Comparison of various methods of probiotic administration in hatchery against Salmonella infection in broiler chicks  Hashemzadeh Zobeideh, Karimi Torshizi Mohammad Amir, Rahimi Shaban, Zahraei Salehi Taghi   |
| 278 | Modifying egg fatty acids content with supplementation of palm olein oil (POO) in laying hen diet  |

Hosseini Vashan Seyed Javad, Afzali Nazar, Golian Abolghasem, Malekaneh Mohammad, Allahressani Ali

#### WPSA/BSAS POSTER

| 279 | Analysis of Inbreeding, Effective Population Size and Inbreeding Depression in Iranian Native Fowls(Mazandaran Province)  Ghazi Khani Shad Ali, Nejati Javaremi Ardeshir, Mehrabani Yeganeh Hassan                                     |
|-----|--|
| 280 | Evaluation the effect of fat and antioxidant on immune response of broiler chickens reared under heat stress Ghofrani Ivari Yaser, Shariatmadari Farid, Karimi Torshizi Mohammad Amir, Armin Fatemeh                                   |
| 281 | White mulberry (Morus alba) fruits waste and its use in broilers nutrition Mahdavi Ali, Hosseini Sayed Abdollah, Mohiti Asl Maziyar, Lotfolahiyan Houshang, Aghashahi Alireza, Hosseini Sayed Hadi, Mirabdolbaghi Jaleh, Alemi Fatemeh |
| 282 | Effect of various levels of Full-Fat Sunflower Seed on performance of broiler chickens Salari Somayyeh, Nassiri Moghadam Hasan, Arshami javad, Golyan Abolghasem, Sari Mohsen  |
| 283 | Determination of apparent metabolizable energy of Full-Fat Sunflower Seed in broiler chickens Salari Somayyeh, Nassiri Moghadam Hasan, Arshami Javad, Golyan Abolghasem, Sari Mohsen   |
| 284 | Growth performance of broilers consuming wheat or barley based diets with or without enzyme Anjum Muhammad Safdar, Chaudhry Abdul Shakoor, Virk Muhammad Riaz  |
| 285 | Effects of antibiotic and probiotic supplementation to diets containing fat on broiler performance Sharifi Seyed Davood, Tavazoee Ehsan, Khdem Ali Akbar, Barin Abbas  |
| 286 | Can medicinal plants with antimicrobial properties be replacment for antibiotics in broiler production?<br>Sharifi Seyed Davood, Khorsandi saeedeh, Khadem Ali Akbar, Salehi Abdolreza   |
| 287 | Effects of enzyme and probiotic supplementation to diets containing wheat on broiler performance Sharifi Seyed Davood, Hashemi Chelavi Nargess   |
| 288 | Effect of different digestible lysine levels on performance, and blood parameters of broilers in starter Alemi Fatemeh, Shivazad Mahmoud, Zaghari Mojtaba, Moravej Hossein, Mahdavi Ali, Hosseini Sayed Abdollah, Mahdavi Ala          |
| 289 | The effects of dietary electrolyte balance on the performance and eggshell quality of laying hens exposed to heat-stress environment in late laying period safamehr alireza, Nobakht Ali   |
| 290 | Dietary digestible lysine effects on growth and immune response of male and female broilers in starter Alemi Fatemeh, Shivazad Mahmoud, Zaghari Mojtaba, Moravej Hossein, Mahdavi Ali, Hosseini Sayed Abdollah, Mahdavi Ala            |
| 291 | Effect of prebiotic(Fermacto) on performance of broiler chicks in low protein diets  Amirdahri Saeid, Janmohammadi Hossein, Taghizadeh Akbar, Rafat Abbas  |
| 292 | Effect of prebiotic(Fermacto) on lipid profile of broiler chicks<br>Amirdahri Saeid, Janmohammadi Hossein, Taghizadeh Akbar, Estakhri Rassul, Rafat Abbas  |
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