



WPSA (UK Branch) ANNUAL MEETING

26th/27th April 2017

University of Chester, Parkgate Road, Chester, CH1 4BJ

Tuesday 25th April 2017

12:30-17:30 BSAS student programme

Wednesday 26th April 2017

Binks 107

10:10 OPENING WPSA ANNUAL MEETING

10:20-11:16 Session 1: Original communications (14 mins) (Health and disease) Chair: Helen Masey O'Neill

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|-------|---|--|
| 10:20 | 1 | Reduction of prevalence, numbers, virulence, and antibiotic resistance of foodborne pathogens in commercial broiler caeca samples
W Abdelrahman, S P Smith, S A Carlson, D R McIntyre, H O Pavlidis |
| 10:34 | 2 | Effect of dietary phytonutrients in ameliorating coccidiosis challenge
L Berriman, S P Rose, V Pirgozliev |
| 10:48 | 3 | The mechanisms underlying the beneficial effects of precision delivery coated butyrate in a necrotic enteritis model in broilers
T Goossens, M H H Awaad |
| 11:02 | 4 | Efficacy of TYPLEX TM in broilers with natural Campylobacter challenge
F Khattak, S Williams, J Mahdavi, J Houdijk |

11:20-12:30 Session 2: Invited speakers session Chair: Vicky Sandilands

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|-------|---|---|
| 11:20 | 5 | Aiden Leek (Trouw Nutrition)
The potential application of insects for poultry nutrition |
| 11:55 | 6 | Mike McGrew (The Roslin Institute and R(D)SVS)
Future prospects for gene editing of poultry genomes |

12:30-13:30 Lunch, White's Dining Hall

13:30-14:53		Session 3: Original communications (Physiology in broilers and breeders) (14 mins) and short oral introductions to a selection of the poster presentations (3 mins)	
Chair: Elizabeth Ball			
13:30	7	A new method of stunning poultry: evaluation of physiological and behavioural responses to Low Atmospheric Pressure Stunning (LAPS) in broilers J E Martin, K Christensen, Y Vizzier-Thaxton, M A Mitchell, D E F McKeegan	
13:44	8	An investigation into the effects of residual feed intake and growth rate on measures linked to leg bone health in broiler chickens M A Palmer, C L Bailie, E Magowan, B U Metzler-Zebeli, N Mahoney, K Wimmers, A Lennon, N E O'Connell	
13:58	9	Basal hypothalamic orexigenic gene expression is sexually dimorphic after re-feeding with normal and diluted diets. S D Caughey, P W Wilson, N Mukhtar, R B D'Eath, T Boswell, I C Dunn	
14:12	10	Pancreatic Peptide YY (PYY) expression is responsive to short-term nutritional state and the pancreas constitutes the major site of PYY mRNA expression in chickens A Reid, I C Dunn	
14:26	11	Differences in the feed conversion efficiency of broilers are not reflected in their liver metabolome A Tonks, M Woodward, D Juniper, C Rymer	

Short orals

Chair: Nick Sparks

14:40	12	Growth performance of broiler chickens fed a mixture of essential oils of oregano and cinnamon and paprika oleoresin in diets with or without acidifier supplementation F Golaghaei, M Mohiti-Asli, M Mohammadi
14:43	13	Nutrient-gene interactions to produce leaner meat using conjugated linoleic acid in poultry S Ramiah, G Yong Meng, T Sheau Wei, Y Swee Keong, M Ebrahimii
14:46	14	Effect of supplementing broiler diets with bioavailable silica on tendon and bone strength A Desbruslais, S Prentice, D Scholey, M R Bedford, C Perry, E Burton
14:49	15	Variability of metabolisable energy in different wheat cultivars for broilers M R Azhar, S P Rose, M R Bedford, V R Pirgozliev, A M Meckenzie
14:52	16	An investigation of the effects of provision of platform perches and dust-baths on welfare-related measures in commercial broiler chickens C L Bailie, M Baxter, N E O'Connell
14:55	17	Comparison of foraging and dustbathing enrichments for commercial broiler chickens M Baxter, C L Bailie, N E O'Connell
14:58	18	Essential oils (CRINA® & nutmeg) influenced intestinal morphology and microbial population of broiler chickens A O Fafiolu, O G Ojo, J O Alabi, I D Dada, A A Teniola, O O Oluwatosin, V R Pirgozliev

15:01 19 The inclusion of whole grain wheat in the diets of growing turkeys
D Juniper, R Ahmed, C Rymer,

15:04-16:00 Tea and poster viewing, Small Hall. Authors in attendance

Binks 107

16:00-16:42 **Session 4: Original communications (Approaches to improve welfare and safety) 14 mins**
Chair: Jessica Martin

16:00 20 Quantifying the effects of cuttlebones and an abrasive beak blunting object on beak shape and pecking force in two breeds of laying hens
K L H Morrissey, T M Widowski, S Brocklehurst, V Sandilands

16:14 21 Understanding the formation of the cuticle on eggs: a tool to improve egg safety?
P W Wilson, M M Bain, W Icken, A Jones, V Olori, F Quinlan-Pluck, G O S Williams, I C Dunn

16:28 22 A new approach to knowledge exchange and innovation in practice
C A Weeks, L van Dijk, D C J Main

17:15 **RF GORDON MEMORIAL LECTURE**

Prof.Dr. Rudi Preisinger (Chief Technical Officer, EW Group)
Innovative layer genetics to handle global challenges in egg production

18:15 **RF Gordon Memorial Reception - Small Hall**

19:30 **WPSA ANNUAL DINNER – White’s Dining Hall**

Thursday 27th April 2017

Binks 011

09:00-10:00 **Hammond Lecture**

Prof. Geoff Simm (The Roslin Institute and R(D)SVS)
What has animal science ever done for us, and what does it need to do now?

10:00-10:30 Tea and poster viewing, Small Hall. Authors in attendance

Binks 107

10:30-11:30 **Joint WPSA/BSAS Industry Session**
Chair: Emily Burton

10:30 23 Prof. David Hughes (Imperial college London)
Consumer engagement with the animal production sector

11:00 24 Nick Rousseau (Woven Network)
The use of insects in the animal production sector with an insight into consumer perception of insects as food or feed and potential to replace antibiotics

11:30-12:00 WPSA AGM

**12:00-13:00 Session 5: Original communications (Nutrition) (14mins)
Chair: Dawn Scholey**

- 12:00 25 Rapeseed cultivar and micronizing affect the metabolisable energy of rapeseed meal for broilers
E S Watts, S P Rose, A M Mackenzie, L Barnard, V R Pirgozliev
- 12:14 26 The inclusion of processed soya in the starter diet for broilers improves 35 day performance
H Masey O'Neill, H Hall, M Bosch, W Smink
- 12:28 27 Effect of L-Dopa on performance and lipid profile of broiler starter
B R O Omidwura, A F Agboola
- 12:42 28 Inter-relationship of microbial phytase and myo-inositol on growth performance, energy partitioning of male and female broiler chickens when fed a wheat-soy based diet designed to have a relatively low available phosphorus (P) content
W Mirza, M R Bedford, S P Rose, V R Pirgozliev
- 12:56 29 The use of near infrared reflectance spectroscopy (NIRS) to predict the nutritive value of wheat for broilers
M E E Ball, J Sloss, A Catlett, R Garcia, V R Pirgozliev, H Masey O'Neill

13:10 - 13.20 Presentation of president's prizes and close of meeting

Posters

- 30 The potential of microwave ashing for bone mineralisation measurement
A Desbruslais, D Scholey, K Wilshaw, E Burton
- 31 Influence of in ovo adminstartion of organic zinc on performacnes and tibia charaterestic of chicken
S Nicknam, F Shariatmadari, M A Karimi Torshizi
- 32 The effect of glycosylation on antimicrobial activity of the cuticle
M A Zigler, I C Dunn, F Quinlan-Pluck, P W Wilson, N Whenham
- 33 Effect of black seed (Nigella sativa) and garlic dietary inclusion on carcass characteristics and cellular immunity of broilers
A Al-Homidan, M M Fathi, H Najib, T A Ebeid, A A Alsuhaime, O K Abou-Emera
- 34 Effect of naked neck and frizzle genes on cell mediated immunity, concentration of serum immunoglobulins and lymphoid organs of chickens
M M Fathi, I Al-Homidan, O K Abou-Emera
- 35 Investigating the constraints of family poultry production in Iran
A Shams, H Razmi, M H Shahir

- 36 Impact of overnight storage conditions on lactic acid bacteria colony counts in chicken caecal samples
A Alsudani, M Le Bon, G Manning, D Scholey, E Burton
- 37 Carbohydrases and prebiotics influenced nutrient retention without affecting growth of broilers
A D Craig, O A Olukosi, M R Bedford, P Hastie
- 38 The effect of xylanase supplementation to diets containing wheat DDGS on laying hen performance
I Whiting, S P Rose, A Amerah, V R Pirgozliev
- 39 The effect of dietary fibre sources with bile acid on broiler chicken performance and intestinal morphology
H Hematy, F Shariatmadari, M A Karimi Torshizi
- 40 The mycotoxin profile of wheat and its relationship with broiler performance
M E E Ball, J Sloss, M Oplatowska, S Haughtey, C T Elliot