Program (as at Aug 22, 2019)

RECENT ADVANCES IN ANIMAL NUTRITION - AUSTRALIA
25th Biennial Conference
Theme: The Future Protein Decade
UNE Belshaw Lecture Theatre

Wednesday, October 23, 2019

12.00  Registration
14.00  Welcome and opening – Prof Bob Swick
14.05  Opening address – Prof Brigid Heywood, Vice Chancellor and CEO, UNE

Session 1. Sustainable protein supply, Chair: Prof Bob Swick, UNE

*Plenary papers*

14.15  The future protein decade: Perspectives on global pressure to agriculture, Dr Julian McGill, LMC International, United Kingdom

McClymont Rural Science Distinguished Keynote Speaker

14.45  Overcoming nature’s paradox in skeletal muscle to optimise animal production, Prof Gordon Lynch, University of Melbourne

15.15  Panel discussion
15.45  Tea

Session 2. Protein metabolism and utilisation, Chair: Prof Wayne Bryden

*Annison and Leng Oration*

15.45  Integration of energy and protein transactions in the body to build new tools for predicting performance and body composition of ruminants, Prof Hutton Oddy, NSW Department of Primary Industries

16.15  Dietary protein reduction improves the energetic and amino acid efficiency in lactating sows, Prof Nathalie Trottier, Michigan State University

16.45  Do more mechanistic models increase accuracy of prediction of metabolisable protein supply in ruminants? Prof Mike Allen, Michigan State University

17.15  Panel discussion

18.30  Drinks

19.00  Meet and greet BBQ at the Stro
Thursday, October 24, 2019

Session 3. Novel Feed Additives and Gastrointestinal Metabolism, Chair Prof Frank Dunshea

**Short Papers**

08.30 Antioxidant supplementation improves production performance in Holstein Friesian dairy cattle during summer, R. Osei-Amponsah, University of Melbourne

08.45 Efficacy of feed additives on immunity and gut integrity in broiler chickens challenged with Eimeria, A. Kumar, University of New England

09.00 Effect of organic acids and chromium supplementation on amelioration of heat stress in growing pigs, L. H. Hieu, University of Melbourne

09.15 Tibial mineralization in broilers as influenced by two levels of dietary calcium and phytase during subclinical necrotic enteritis, H. K. Zanu, University of New England

09.30 – 10.00 Tea

10.30 Effect of pasture levels in a mixed dairy diet on enteric methane production from an in vitro digestibility system, N. D. Meads, Alltech Inc

10.45 Bacillus subtilis 29784 reinforces the gut barrier and prevents pro-inflammatory response, D. P. Prévéraud, Adisseo, France

11.00 Age-related changes in apparent digestibility of non-starch polysaccharides in broiler chickens fed maize- or wheat-based diet, E. Kim, University of New England

11.15 Range usage or body weight has minor effect on the gastrointestinal passage rate of commercial free-range laying hens, M. Kolakshyapati, University of New England

**Plenary papers**

11.30 The potential of silage lactic acid bacteria derived Nano-selenium as a dietary supplement in sheep, Prof Michael Lee, University of Bristol, United Kingdom

12.00 Feeding whole grain and phytase to meat chickens: recent Australian experience, Amy Moss, UNE, Dr Amy Moss, University of New England

**Cumming-Farrell Oration**

12.00 Associations between gastrointestinal tract function and the stress response after weaning in pigs, Prof John Pluske, Murdoch University

12.30 Panel Discussion

13.00 Lunch

Session 5. Insect Protein and Feed Processing, Chair Roger Hegarty

**Plenary papers**

14.00 Maximising the benefits of pelleting diets for modern broilers, Dr Reza Abdollahi, Massey University, New Zealand

14.30 Protein recycling using insects in animal nutrition, , University of New England

15.00 Insect meal: a novel animal feed protein source for the Australian market, Dr Kristy DiGiacomo, University of Melbourne

15.30 Free range laying hens: revealing the dynamics and impact of hen movement, Dr Isabelle Ruhnke, University of New England
16.00  Panel Discussion
16.30  Poster session and commercial displays with drinks and nibbles
  Short papers will also have posters
  
  **Additional posters:**
  
  Maximising and effective measurement of energy from poultry feeds, S. Musigwa, University of New England
  
  Ileal morphology and jejunal gene expression of broilers fed meat and bone meal, phytase and antibiotics during necrotic enteritis challenge, H. K. Zanu, University of New England
  
  Effect of ethyl-cellulose rumen-protected methionine on dairy cow performance during transition phase, M. Ali, Evonik, Singapore
  
  Biofortification of animal products with L-selenomethionine for better human & animal health in Australia, B. Bruneel, Orffa Additives, The Netherlands
  
  Hydroxy Methionine: beyond its methionine value for piglets’ growth performance and health status, D.I. Batonon-Alavo, Adisseo, Singapore
  
  Hydroxy-methionine supplementation improves meat quality, L.W.O. Souza, Adisseo, France

18.30  Drinks at Austin College
19.00  Conference Dinner at Austin College
20.00  After dinner “Nutritional idiosyncrasies of the dinosaur”– Dr Peter Selle, Sydney Uni

**Friday, October 25, 2019**

**Session 6. Feeding Quality and Animal Performance**

**Short papers**

08.30  Defining mineral requirements in an expanding Australian industry for black tiger prawns, Penaeus monodon, H.H. Truong, CSIRO
08.45  Black soldier fly larvae does not compromise broiler meat quality, J. de Souza Vilela, University of New England
09:00  Biopolymer composites for slow release of toxins to manage Pimelea poisoning in cattle, E. Gauthier
09:15  Body weight is associated with welfare, health and egg production status in commercial free-range laying hens, Terrence Sibanda, University of New England
09.30  Dietary protein source and level affect litter quality in meat chickens, Dr Nishchal Sharma, University of New England
09.45  Tea

**Session 7. Protein and Amino Acid Nutrition**

10:15  Dietary nitrogen utilization and prediction of amino acid requirements in equids, Prof Nathalie Trottier, Michigan State University
10.45  Nutritional implications of feeding reduced protein diets to meat chickens, Matt Hilliar, University of New England
11.15  Recent advances to improve nitrogen efficiency of grain-finishing cattle in North American and Australian feedlots, Dr Fran Cowley, University of New England
11.45  Nitrogen recycling and feed efficiency of cattle fed protein restricted diets, Dr Luis Prada e Silva, QAFFI
12.15  Panel discussion
12:45  Closing and Student Awards, Prof Bob Swick
1300  Closing followed by lunch