

Advancing Milling & Nutrition Conference

in conjunction with Recent Advances in Animal Nutrition, Australasian Equine Science Symposium and Nutrition Society of Australia

13-14 May 2025,

Crown Promenade, Melbourne, Australia



ADVANCING MILLING & NUTRITION

13-14 MAY 2025

FINAL PROGRAM

Tuesday 13 th May 2025		
0730 - 1730	Registration Open	Promenade Foyer, Level 1
0830-1030	Plenary 1 – Challenges and Opportunities Sponsor: Buhler AG	Chair: Alex Turney Promenade 1 & 2
0830-0840	David Bray and Alex Turney - Welcome	
0840-0845	Alex Turney - AMN Program Chair - Overview	
0845 – 0915	Robert van Barneveld - <i>SunPork</i> Protein production into the future - challenges and opportunities	
0915-0945	Geoffrey Annison- <i>Industry Consultant</i> The crucial connection – An exploration of the way consumer interactions are currently driving nutritional demand	
0945-1015	Constance Cullman - <i>President and CEO - American Feed Industry Association</i> Future demands of the feed industry	
1015-1030	Panel discussion	
1030 – 1100	Morning Tea Sponsored by: BEC Feed Solutions	
1100 – 1300	Plenary 2 – Understanding ingredients and what needs to change Sponsor: Premier Tech	Chair: Neil Gannon Promenade 1 & 2
1100-1130	Gene Pesti – <i>University of Georgia, USA</i> Measurement of the nutrient and energy contents of feedstuffs: Adoption of the latest approaches to analysis is long overdue	
1130-1200	Wayne Bryden – <i>University of Queensland</i> Mycotoxins – a Five Decade Journey Across Feed and Food in Australia	
1200-1230	Ian Sawyer - <i>Feedworks</i> What's new in technology and feeding the world	
1230-1300	Wayne Bryden, Liz Owens and Ian Sawyer Panel discussion	
1300 – 1400	LUNCH Sponsored by: AUSPAC Ingredients	

*** Please note that this program is subject to change 07/5/2025***

1400 – 1530	Concurrent Session 1		
	RAAN-A & Milling & Nutrition P1&2	Equine P3	Flour M2
	Nutrition meets environment Chair: Fran Cowley	Nutrition Chair: Peter Huntington	Practical session
1400-1410	Richard Eckard - <i>University of Melbourne</i> Accounting for carbon in livestock diets	Joe Pagan - <i>Kentucky Equine Research</i> The role of omega-3 and omega-6 polyunsaturated fatty acids in equine nutrition: A new perspective	Mat Rees – <i>AEGIC</i> PEKAR Testing Demonstration with audience participation
1410-1420			
1420-1430	Matthew Harrison - <i>Tasmanian Institute of Agriculture</i> : Towards prosperous, low emissions, biodiversity-rich livestock farms	Erica Gee - <i>Massey University</i> Selenium status of horses in New Zealand	
1430-1440			
1440-1450	Stephen Wiedemann - <i>Integrity Ag</i> Improving the environmental performance in the animal industry through lifecycle assessments	Mark Barnett - <i>MTB Equine Consultancy Services</i> Feeding industrial hemp flour to horses results in zero detectable levels of Tetrahydrocannabinol (THC) and Cannabidiol (CBD)	
1450-1500		Nerida McGilchrist - <i>Equilize Horse Nutrition Pty Ltd</i> Effect of pelleting, cubing and chaffing on rate of lucerne forage intake	
1500-1510	Panel Q&A	Ryon Springer - <i>Kentucky Equine Research</i> Modelling neutral detergent soluble crude protein in feedstuffs and its implications for crude protein availability in the horse	Christoph Grabmer, Buhler AG Operational efficiency in Flour Milling based on three core principles
1510-1520	Breanna Roque – <i>Future Feed</i> Health and safety review of <i>Asparagopsis</i> feed in ruminant livestock diets	Pat Harris - <i>Waltham Petcare Science Institute</i> Our recent research linked to feeding the ID horse/pony	
1520-1530	Jaz Skinner - <i>University of Southern Queensland</i> Evaluating the feasibility of the RumiWatch system to monitor the feeding behaviour of grazing beef cattle		
1530-1600	Afternoon Tea Sponsored by: LGPM		
1600-1730	Concurrent Session 2		
	RAAN-A P1	Milling, Nutrition & Flour P2	Equine P3
	Fibre sources Chair – Zoey Durmic	Ingredient management and quality Chair - Sid Jain	Gut Microbiome, Health and Development Chair - Chris Rogers
1600-1610	Rodrigo Albornoz - <i>Dairy Australia</i> Future forage priorities for the Australian dairy industry	Charlie Rikard Bell – <i>APRIL</i> Nutritional traceability in feed mills	Danielle Fitzgerald - <i>University of Queensland</i> The symbiotic relationship between the horse and its gastrointestinal microbiome
1610-1620			Mark Barnett - <i>MTB Equine Consultancy Services</i> The role of microbial metabolites in the health, wellbeing, and performance of the horse

1620-1630	Bill Mahanna – Pioneer Seeds Maize silage digestion kinetics	Claus Holm - FOSS A novel automated multiplex solution for analysis of mycotoxins in grains	Holly Mills - University of Adelaide Equine nutraceutical buffers gastric acid in an in vitro model over an 8-hour period
1630-1640		Neal Cass – Hydronix Ltd The importance of moisture control and measurement throughout the feed and flour milling process.	Anne Beasley - University of Queensland Beyond chemical control of equine internal parasites - the strategy toolbox
1640-1650	Panel Q&A	Jeffrey Marco Wee – Kemin Animal Nutrition and Health Improving Pellet Milling Efficiency Through Preconditioning	
1650-1700	Nerida McGilchrist - Equilize Horse Nutrition The case for exogenous enzymes in equine nutrition	George Boloutis - Gordyn & Palmer Digitalisation in milling	Chris Lawlor - International Animal Health Products Safety of a biological control agent targeting gastrointestinal nematodes as a feed additive for horses.
1700-1710	Lynette Hilly – University of Adelaide Comparison of Bacillus probiotics and exogenous xylanase in broiler diets containing wheat	Kin Ken Chew –Kemin Animal Nutrition and Health Harnessing Real-Time Sensor Technology and Surfactant Science for Precision Milling	Simon Bailey – University of Melbourne Production of biogenic amines in the equine gastrointestinal tract: effects of carbohydrate overload
1710-1720	Amy Moss – University of New England An alternative approach to determine ileal digestibility of nutrients in poultry via response surface methodology	Philipp Fritschi -Buhler AG High precision feed milling	Joe Pagan -Kentucky Equine Research Factors affecting body size and the incidence of skeletal disease in Thoroughbred foals
1720-1730	Rebel Northey – University of New England Digestibility of two commercial food waste sources for broiler chickens with potential to be useful alternative ingredients		
1730-1930	Conference Reception Tonic Bar Sponsored by LGPM		

Wednesday 14 th May 2025				
0800 – 1630	Registration Open			
0830-1000	Concurrent Session 3			
	RAAN-A P1	Milling & Nutrition P2	Equine P3	Flour M2
	Environmental Nutrition Chair – Tamsyn Crowley	Innovation and Technology Chair – Megan McKenzie	Horses, Society and Welfare Chair - Melody de Laat	Advances and Optimisation Chair – Katherine Sherrie
0830-0840	Ben Holman - <i>NSW DPIRD</i> The sources and impact of microplastic intake on livestock and poultry performance and meat products: A review	Hugh Gould - <i>NSW DPIRD Chief Scientist Unit</i> CRISPR technology in agriculture	Jaz Skinner - <i>University of Southern Queensland</i> Changing role of horses in society	Sam LiRosi - <i>Premier Tech</i> Packaging innovations for flour
0840-0850			Chris Rogers - <i>Massey University</i> Responding to a changing environmental regulatory framework: The New Zealand Equine industry experience.	

0850-0900	Chris Carter - <i>University of Tasmania</i> Feeding and nutrition in suboptimal aquatic environments	Phat van Nguyen – <i>AP Engineering</i> Organic fumigation: Non-chemical pest control and storage – Post harvest solutions	Lauren Hemsworth - <i>University of Melbourne</i> Recreational horse welfare: Human behaviour change for horse welfare improvement	Philipp Fritschi - <i>Buhler</i> High precision flour milling
0900-0910			Elizabeth Owens – <i>Milne Agrigroup</i> Evolution of equine welfare - sport horses and the Federation Equestrian Internationale.	
0910-0920	Panel Q&A	Olivier Latorre - <i>Premier Tech</i> Packaging Innovations for powdery, granular and flaky ingredients. Sponsor presentation	Ken Hinchcliff – <i>University of Melbourne</i> Emerging themes in equine exercise physiology and sports medicine	Mat Rees - <i>AEGIC</i> Optimal settings for Australian Grain
0920-0930	Ian Hodge - <i>Celtic Sea Minerals</i> In vitro buffering capacity and greenhouse gas emission analysis of a marine based rumen buffer in a high starch diet	Alister MacDonald - <i>Feedworks</i> Recycling / value add: The novel application of enzymes for effective use of co-products and by-products		
0930-0940	Charlotte Adam – <i>University of New England</i> The tissue residue response to bromoform supplementation for Australian Merinos fed high- or low-quality +basal diets	Annabel Mactier - <i>Grain Growers Ltd</i> The future of grain freight in 2045	Warwick Bayly – <i>Washington State University</i> Using accelerometer-based inertial measurement unit sensors to identify racing Thoroughbreds at high risk of catastrophic musculoskeletal injury.	Pietro Barbalarga – <i>OMAS - Allegiant</i> From Vision to Reality: The Journey of Building Moulins Soufflet's 900TPD Flexible Flour Mill with Omas
0940-0950	Fred Petranyi - <i>dsm-firmenich</i> Microbiome modulation by a precision biotic-based glycan reduces the impact of necrotic enteritis in broiler chickens	Doug Pearson - <i>Feedworks</i> Insylo: IoT solution for livestock feed supply chain optimization		
0950-1000	3-minute Poster Pitches	Alex Turney - <i>Lallemand</i> Cow monitoring technologies. Now and into the future.	Kylie Legg - <i>Massey University</i> Relationship between jockey experience and head displacement whilst riding Thoroughbred racehorses	
	John Alawneh : Changes to milk, ruminal, faecal microbiota, and milk production in dairy cows supplemented with a lactobacilli-based direct-fed microbial			
	Shuangshuang Guo : Effects of <i>Lactobacillus reuteri</i> postbiotics on growth performance and intestinal health of broilers challenged with coccidia and Clostridium perfringens			
	Chris Lawlor : Safety of a biological control agent targeting gastrointestinal			

	nematodes as a feed additive for livestock			
1000-1030	Morning Tea Sponsored by: Adisseo Asia Pacific			
1030-1200	Concurrent Session 4			
	RAAN-A P1	Milling & Nutrition P2	Equine P3	Flour M2
	Nutritional Metabolism Chair – Nigel Tomkins	Operational Management & Decision Making Chair - David Bray	Thoroughbred Racing and Welfare Chair - Wayne Bryden	Advances and Optimisation Chair – Paul Martin Session Sponsor: Satake
1030-1040	David Innes - University of New England Metabolic and biochemical regulation of feed intake in ruminants	Brad Tresidder – Gallagher Insurance Insurance Market Update: How to maximise current market conditions and reduce premiums	Chris Whitton, The University of Melbourne Limb injury prevention in racehorses – what have we learned from research?	See Milling & Nutrition Program in P2 for Insurance and Energy presentations.
1040-1050				
1050-1100	Shiva Greenhalgh - Sydney Animal Nutrition Recent advances in managing obesity in companion animals	Alex Townsend – Choice Energy The data behind making energy decisions for Millers Bronwyn Von Hellens – FeedSafe & FAMIQs Overcoming the most common pain points in your system	Michaela Gibson - Massey University Race day fatality in the 2023/24 New Zealand Thoroughbred racing season and the role of the equine mortality review panel Laura Nath Sudden death in Thoroughbred racehorses: can we predict or prevent it?	Dimitrios Argyriou – Grainar, GREECE Optimizing Enzyme Systems in Flour Milling: A DOE-Based Approach for Performance and Cost Efficiency'. Video session Roger Cook – Satake The principles and methods for particle separation
1100-1110				
1110-1120	Panel Q&A	Phil Chan - Bendigo Bank Agribusiness The Bank's sustainability approach to support responsible lending in a changing world	Joe Pagan / Ryon Springer -Kentucky Equine Research Implications of cooling methods for Thoroughbred racehorses	
1120-1130	Thomas Keogh - CSIRO Implementation of a revised sheep growth model to track fat and protein body composition			
1130-1140	Matthew Meggison – BEC Feed Effect of a combination of specific essential oils, on performance and carcass yield traits, when fed to finishing Lambs			
1140-1150	Francesca Susca - Lallemand A Dedicated Research Program for Postbiotic Bacteria in Companion Animals	Dale Grey – Agriculture Victoria Understanding the variant of modelling weather predictions		
1150-1200	3-minute poster pitches Alison Leary: Pilot study Investigating the effects of yeast polysaccharides on commercial broiler performance			
			Lily Anderson -Massey University Life after racing: descriptors of rehomed Thoroughbred racehorses in New Zealand	ATMA Inc. Award Presentations Presentation for Jack Walsh Award Graeme Lukey Award

	Fahrul Irawan: Assessing the effects of varying cassava supplementation in 50% leucaena diets on toxicity in Bali bulls			Young Achiever Award	
	Shuangshuang Guo: <i>Poria cocos</i> polysaccharides alleviated porcine epidemic diarrhea virus-induced intestinal injury by modulating lipid metabolism in piglets				
1200-1300	Lunch Sponsored by: Moltech Australia Pty Ltd				
	Plenary 3 – Nutritional Drivers of Metabolism In conjunction with Nutritional Society of Australia				
1300-1500	RAAN-A, Equine & Milling & Nutrition Chair – Wayne Bryden	P1&2	Flour Chair – Travis Dunkley	M2	
1300-1330	Ian Lean – <i>Scibus</i> Delineation of metabolic disorders in ruminants requires accurate phenotype definition		Kavish Naidoo Wheat Milling: Precision, Process, and Product Integrity		
1330-1400	Jessica Biesiekierski – <i>The University of Melbourne</i> Navigating the complexities of food intolerances				
1400-1420	Melody de Laat – <i>Queensland University of Technology</i> Nutrition and the gastrointestinal tract: key factors driving metabolic dysfunction in horses		Tony Smith - <i>Baking Association Australia</i> Supporting a better baking industry		
1420-1430					
1430-1440	Panel session		Chris Whiteway / Mat Rees - <i>AEGIC</i> Training videos / eLearning ATMA flour milling award trip		
1440-1500					
1500-1530	Afternoon Tea Sponsored by : Alltech Lienert Australia				
1530 – 1730	Plenary 4 – Future Focus Chair – Nick Reid Sponsor: Jefe	P1&2	Flour Chair – Bernard O'Brien	M2	
1530 - 1600	Tom Williams – <i>Number 8 Bio</i> Bioengineering for animal nutrition		Steve Faerber – <i>UK Flour Millers</i> Advances in Flour Miller Training Industry Roundtable - How flour milling has advanced		
1600-1630	John Russell – <i>Tegel Foods Ltd (International NZ)</i> Feeding innovation: The use and implementation of AI in nutrition & milling				
1630-1700	Brad Ridoutt – <i>CSIRO</i> Animal-sourced foods in a healthy sustainable diet – what is the Australian evidence?				
1700-1720	Panel Discussion				
1720-1730	Winner of the 2025 AMN Innovation Award Announced Conference Summary & Close				