



Embracing disruption

as an opportunity for animal science

**Joint AAAP and AAAS
Animal Production Congress**



08 -12 July 2024

Melbourne Convention and Exhibition Centre | www.aap2024.com

Draft Program

Tuesday 9 th July 2024				
0730	Registration			
0845 - 1030	Plenary 1			
0845- 0915	Opening, Awards & Welcome to Country			
0915 - 0945	Keynote 1: Michael Watkins, University of South Australia , Indigenous plants for humans and animals			
0945- 1015	Keynote 2: Underwood Lecture: Chris Ashworth, Zinpro - Mineral Nutrition across livestock species			
1015-1030	Panel Discussion and Question Time			
1030 - 1100	Morning Tea			
1100 - 1230	Concurrent Session 1			
90min	Stream1: Nutrition: Minerals and novel supplements Chairs: Plenary	Stream2: ES: Alternatives to reduce methane emissions Chairs: Sarah Meale, Md Elias Uddin Room 220	Stream3: Reproduction Chairs: Shawn McGrath Room 219	Stream4: Wildlife/ human disruption Chairs: Evan Bittner, Fiona Ryan Room 218
1100	EXTENDED PRESENTATION Phytogetic Feed Additives (PFA) and Organic Trace Minerals (OTM) Offer Solutions to Improve the Sustainability of Livestock Production. Waraporn Kraitavin	Emission responses to 3- NOP in northern Australian beef grazing systems. Stuart Denman	EXTENDED PRESENTATION Paired comparison of Merino sheep reproductive performance in the NSW rangelands. Pregnancy status and ewe retention or sell decisions in extensive Merino flocks. Sue Hatcher	EXTENDED PRESENTATION: Urban encroachment on wildlife. Mengxiong Wangnengxiong
1112		Emission responses to 3- NOP fodder cubes in growing cattle. Gonzalo Martinez-Fernandez		
1124	The performance of Phosphorus deficient mature cows in the Victoria River District (NT) improved rapidly when they were supplemented. Tim Schatz	Determining the dose response for red seaweed to achieve methane mitigation in Merino sheep fed high-fibre diets. Charlotte Adam	The effect of ewe breeding values for fleece weight on lamb weaning weights, with a nutritional overlay. Andrew Reid	Human dimensions: adding to the complexity of effective feral pig management. Heather Channon

1136	Zinc sources provide different effects on performance, bone mineralization and on bacteria count in broilers. Yron Joseph Manaig	Feeding conserved forages impact on dairy production methane emissions. Long (Paul) Cheng	Maternal supplementation with rumen-protected arginine to improve twin-lamb survival in the Merino. Alyce Swinbourne	Paul Eden
1148	Effect of Transition Feeding of Asparagopsis-oil (Asp-oil) on Sheep Performance. Apeh Omede	Considerations of pelleting and storing an energy supplement containing 3-Nitrooxylpropanol for grazing cattle. Mariano Parra	Dorper lambs have poorer survival at the same birthweights in the same environments as Merinos using an annual artificial breeding program. Beth Paganoni	Zoo's Victoria. Fiona Ryan
1200	ELEVATOR PITCHES Innovative approaches to sow feeding. Liang Chou Hsia	ELEVATOR PITCHES The relationship between dry matter intake, methane production, methane yield, methane intensity, milk-yield, and rumination time in Australian Holstein dairy cows. Fazel Almasi	The percentage of normal sperm declines in consecutively collected ejaculates of ram semen. Katherine Seymour	TBC
	Effects of dietary mixture of coated copper and zinc on growth performance, frequency of diarrhea, nutrient digestibility, and immune responses of weaned pigs. Jinwook Nam	Effect of weaning age on post-weaning methane emissions from grazing heifers. Arjan Jonker		
	Monitoring fecal bacterial flora change involved in disease onset in riding horse. Yutaka Uyeno	Optimising a breeding value format for simultaneous inclusion of enteric methane emissions in breeding schemes and national inventories. Suzanne Rowe		
1212	Short-term effects of dietary selenium on lactating sows to improve litter performance, milk composition and tissue selenium retention in piglets. Minsoo Park	Rumen methanogenesis inhibitor discovery using in silico docking and molecular dynamics. Namal Ranaweera	ELEVATOR PITCHES Morphological indices of three indigenous breeds of goat. Affiong Henry	TBC
			Effects of reduced glutathione supplementation to semen freezing extender on glutathione and thiol content in frozen-thawed bull spermatozoa. Kazuko Ogata	
			Discovery of the enrichment pathways and Biomarkers using Metabolomics techniques in Unilateral and Bilateral castration in yellow cattle. Ali Mujtaba Shah	

1224	TBC	Development of methane-mitigating materials for ruminants using fermented seaweed liquid. Naoki Fukuma	Spatiotemporal distribution of pregnancy loss in Thoroughbreds in Australia. Cara Wilson	TBC
		Q&A	Q&A	
1230 – 1330	Lunch			
1330 – 1500	Concurrent Session 2			
90min	Stream1: Nutrition: Alternative Feed Resources Chairs: Plenary	Stream2: Methane emissions and nitrogen utilisation Chairs: Paul Cheng, Mariano Parra Room 220	Stream3: Reproduction: Cattle & horses Chairs: Sue Hatcher Room 219	Stream 4: Animal Health & Disease Chairs: Room 218
1330	Observations of average daily gains in young beef cattle grazing native pastures augmented with legumes versus native pastures only. Mary Williams	Effect of concentrate level on methane emissions from grazing dairy cows – A meta-analysis. Arjan Jonker	Weight pre-join and at joining are important for conception in commercial Angus beef heifers. Wayne Pitchford	The impact of heterogeneous residual variance across years on estimated breeding values for fly strike in sheep. Elena Dehnavi
1342	Mineral composition in black soldier fly larvae a promising alternative to fishmeal and soybean meal in livestock feed. Ishaya Gadzama	In vitro rumen fermentation and protein protection of canola and soybean meals using tannin extract from Bauhinia hookeri. Bereket Zeleke Tunkala	Insights into Pregnancy Loss Management Practices: A Cross-Sectional Study in the Australian Thoroughbred Industry. Cara Wilson	The preventive effects of <i>Lentilactobacillus hilgardii</i> H-50 strain that binds to lipopolysaccharide on dextran sulphate sodium-induced acute colitis in mice. Rina Kanazawa
1354	TBC	Prediction of enteric methane in dairy cows using readily available on-farm data. Md Elias Uddin	Beef on dairy: current and potential usage of beef genetics in the Australian dairy herd. Jo Newton	Enhancement of IgA production from mouse Peyer's patch cells by acetic acid bacteria. Sokleap Heng
1406	ELEVATOR PITCHES	ELEVATOR PITCHES	Paddock Power: Assessing the impact of paddock characteristics on reproductive wastage in cattle using a commercial dataset. Eleanor Fordyce	Single-cell transcriptomic landscape in BALF with varying PRRSV virulence levels. Bridgette Logan
	The artificial gastro-intestinal tract model: a reliable application platform for validating nutritional and functional effects of feed additives in monogastric animals. Kyuyeol Son	In vitro evaluation of an anti-methanogenic additive for pasture-based supplementation. Mariano Parra		
	Rumen Available N-to-Energy Synchronization of Intercropped Whole Plant Oat with Whole Plant Faba Bean as Forage Hay in Dairy Cows: Effect of Maturity Stage at Harvesting. Peiqiang Yu	Comparing residual methane traits of lactating dairy cows measured using respiration chambers and GreenFeeds at pasture. Arjan Jonker		
	Screening of potential biomarker peptides for quality evaluation of processed soybean products based on	The Application of Propionate Producing Bacterial Consortium Can Further Reduce Ruminal Methanogenesis under The		

	an untargeted peptidomic approach. Anguo Liu	Condition of Directly Inhibiting Methanogenesis without any Offsetting Effects In vitro. Jongsik Jeong		
1418	TBC	ELEVATOR PITCHES	Relative expression of sperm protamine 1 (Prm1) mRNA as a prospective marker of bull fertility may be breed-dependent. Bambang Purwantara	Single-cell transcriptomic landscape in BALF with varying PRRSV virulence levels. Byeonghwi Lim
		Methane emissions from grazing dairy cows measured by a micrometeorological technique. Pragna Prathap		
		The Synergistic Approach of Adding Nitrate, Fumarate, and Propionate Producing Bacteria and Its Impact on Fermentation Characteristics, Methanogenesis and Ruminant Microbiota In vitro. Jongsik Jeong		
		Investigating Dual Effects: Screening Amide Compounds in vitro for Methane Reduction and Enhanced Nitrogen Utilization Efficiency in Ruminants. Chaemin Yu		
1430	TBC	$\delta^{15}\text{N}$ and physiologic changes in Angus steers before, during and after a heat stress event. Brandon Fraser	Impact of phyto-oestrogens resulting from grazing legume pastures on the 35 d conception rate in pluriparous cattle. Jessica Wyse	Phyto-chemical analysis and antimicrobial properties of North-eastern Himalaya plants against bovine mastitis causing bacteria. Neelesh Sharma
1442	TBC	ELEVATOR PITCHES	ELEVATOR PITCHES	Strategies toward foot and mouth disease-free for South Sulawesi Province in Indonesia. Nurlina Saking
		The relationship between δ^{15} in tail hair, reproductive performance and total annual live-weight production of heifers over one calving season. Karen Eyre	Paddock Power: Assessment of Paddock Area and Distance-to-Water effects on likelihood of P4M in beef cows? Kieren McCosker	
		Genetic correlations between urinary nitrogen traits and calving interval in dairy cattle. Irene Van Den Berg	Fertility Analysis of Imported Dairy Cows in Large Scale Dairy Farm in Up Country. Sagarika Sumanasekara	
		Effects of biochar addition on temperature and greenhouse gas emission during cow manure composting. Dai Hanajima	The application of Black pigs follicular fluid exosomes on immature oocytes vitrification. Hsin Li	
1454		Q&A	Q&A	Managing triplet-bearing ewes separately from twin-bearing ewes

				during late pregnancy and lambing improves triplet lamb survival. Emmanuelle Haslin
	Effects of different levels of dietary crude protein on the physiological response, reproductive performance, blood profiles, milk composition and odour emission in gestating sows. HongJun Kim			Q&A
1500- 1530	Afternoon Tea			
1530-1700	Concurrent Session 3			
90min	Stream1: Advancements in Animal Genetics and Breeding Chairs: Irene van den Berg, Elena Dehnavi Plenary	Stream2: Mitigation of Environmental Stress Chairs: Surinder Singh Chauhan, Pippa Pryor Room 220	Stream3: Animal Health & Disease Chairs: Room 219	Stream4: Precision Agriculture Chairs: Michael Rose, Fazel Almasi Room 218
1530	EXTENDED PRESENTATION: Using objective technologies to inform Australian Sheep Breeding Values for carcase traits. Sam Walkom	ELEVATOR PITCHES	Development of a novel next-generation probiotics for cattle health management. Jui-Chun Hsieh	TBC
		Effects of energy levels and energy structure at different ambient temperatures on energy metabolism related indexes of growing-finishing pigs. Dan Jiang		
		The effects of Plume Poppy on Australian feedlot cattle during periods of heat stress. Leesa Dunstan		
		Heat stress ameliorative potential of herbal feed additives in Bannur sheep. Devaraj Chinnasan		
1542		Treating rams with melatonin prior to joining increased pregnancy rate by 26.9%. Alice Weaver	Calcium and magnesium status of lambs grazing mixed species annual fodder crops. Edward Clayton	Detecting beef cattle behaviours that may impact supplement intake variation through agricultural technologies. Karen Eyre
1554	What are the potential impacts of the genetic selection of livestock for faster growth? Thomas Keogh	Using the Iberia Heat Tolerance test to identify heat tolerance in Droughtmaster cows. Pippa Pryor	Novel approaches in sampling, detection, isolation, and identification of Mycoplasma ovipneumoniae in sheep with respiratory tract infection. Mauida Alkhallawi	ELEVATOR PITCHES
				The relationship between body condition score and liveweight for different sheep breeds. Amy Bates
				Prediction of Hot Carcass Weight of Feedlot Angus Cattle. Ning Han
				Grazing behaviour of lambs on mixed annual fodder crops. Linda Café

1606	Updating the trait definition and genetic prediction model for cow survival. Majid Khansefid	Temperature responses of Bos taurus dairy cattle carrying the "SLICK" gene during a controlled thermal challenge. Gemma Worth	TBC	Machine Learning applications in animal health: A case study of lameness in dairy cows. Adwait Ghanawat
1618	Preliminary estimates of direct genetic and maternal genetic parameters for birth and weaning weight of Philippine native pigs. Ester Battad Flores	An efficient way to cool lactating cows under heat stress in an era of climate change. Chin Lee	A Comparison of skin lesion occurrence in Brahman and Composite beef cattle in the early wet season following the application of treated fly tags. Caity Kelly	Development of machine learning models utilising acceleration data for peripartum behaviour monitoring in Purebred Spanish mares. Manuel Garcia-Garcia
1630	Determining host control of rumen microbial profiles in deer. Jordan Clarke	EXTENDED ORAL: Climate Change and Livestock Production: Emerging Concepts and Technologies for Sustenance. Sejian Veerasamy	The production impact of ineffective gastrointestinal nematode control in Fijian small ruminant systems. Tiago A.C.C da Silva	The impact of automated feedlot bunk management on Brahman cross steers; performance, health, and carcass outcomes. Samuel Platts
1642	TBC		In-vitro selection and characterization of antimicrobial resistance profile in mastitis-causing bacteria. Bigya Dhital	ELEVATOR PITCHES An automatic detection for morphological based boar sperm of multi-magnification microscopic images with deep learning-based approach. Taehyun Lee Automatic calculation of boar semen concentration using deep learning based object detection. Jisoon An
1654	Q&A	Q&A	ELEVATOR PITCHES Carvacrol protects IPEC-J2 cells from oxidative stress via modulation of mitophagy and anti-oxidative effect. Ming-Chun Hsu Exploring the impact of cystic echinococcosis on cattle carcass weight using a directed acyclic graph. Cara Wilson	Q&A
1700-1900	Poster Session 1 and Welcome Reception and awards			

Wednesday 10th July 2024	
0845-1000	Plenary 2 Livestock and the Community
0845-0915	Keynote 3: Kirsty Richards, SunPork (Autism in Agriculture)
0915-0945	Keynote 4: McClymont lecture Prof Lindewe Majele Sabanda, CGIAR System - Reimagining resilient livestock food systems from farm to fork

0945 -1000	Panel discussion, questions			
1000-1030	Morning Tea			
1030 1230	Concurrent Session 4			
120min	Stream1: Nutrition: Digestibility and energy calculations Chairs: Plenary	Stream2: Pig Science Chairs: Room 220	Stream3: Beef & Buffalo Science Chairs: Luis Prada e Silva, Cassius Coombs, Anthony Carr Room 219	Stream4: Small Ruminants Chairs: Kristy DiGiacomo, Kathryn Dawson, Thomas Keogh Room 218
1030	Application of in vitro three-step digestion and fermentation evaluation on probiotic supplementation effect of pig diet. Chiao-Ting Chang	EXTENDED ORAL: Net protein efficiency of a pork production system. Robert van Barneveld	Crops for Cattle: Increasing the efficiency of north Australian cattle production systems through using local crops to improve dry season weight gain. Kim Phelps	Effect of dietary inclusion of agro-waste based antioxidant enriched maize substitute on Gaddi goat performance and selected meat quality attributes. Gauri Jairath
1042	Relationship between feed fermentation kinetics and dietary fiber structure: based on pig in vitro digestion and fermentation models. Feng Yong		Efficiency of pasture utilisation and performance of a rangeland cow calf operation when a live rumen specific yeast probiotic is added to a mineral supplement. Kip Karges	Nutrient utilization of ozone-treated paddy straw-based complete feed pellets on growth performance in goat kids. Manoj Kumar Gendley
1054	Rumen fermentation dynamics, microbial community, and metabolite profiles reveal insights into residual feed intake variability in Hanwoo steers. Cheolju Park	A lower crude protein, higher standardized ileal digestibility Lysine: Crude Protein ratio for improved growth and reduced scouring in newly weaned pigs. James Langley	Effects of biochar supplementation on greenhouse gas emissions from grazing cattle. Gamaliel Simanungkalit	Changes in body composition from early to mid-lactation as determined by Dual Energy X-ray Absorptiometry (DEXA) in dairy goats. Jayde Kirkham
1106	ELEVATOR PITCHES	Predicting the heat production of growing pigs based on heart rate monitoring using machine learning. Shuai Zhang	ELEVATOR PITCHES	Failing to wean a lamb as a ewe lamb impacted ewe lifetime efficiency. Emmanuelle Haslin
	Hand-held NIR sensor accurately predicts bovine information through faecal scanning. Cassius Coombs		Effects of pineapple peel silage on growth performance and carcass parameters in Hostein steers. Hsin-Tai Hong	
	Screening of temperate pasture species for in vitro methane production in a dairy production system. Dilini Weerathunga		Commercial beef production from twinner cattle. Leo Cummins	
	Ecological characteristics and possible function of uncultured Succinivibrionaceae in the rumen of Holstein cows. Miho Fujimori		The incidence of unsafe levels of cadmium in southern Australian beef. Courtney Bellgrove	
1118	Comparison of equations to predict the metabolizable energy content as applied to different heights in the strata of lucerne. Karen Harper	Impacts of feeding different levels of soluble and insoluble non-starch polysaccharides on faecal <i>Escherichia</i>	Impact of fatty acids on the eating quality of beef. Nipa Rani Sarker	Assessment of anthelmintic efficacy in meat goats. Kathryn Dawson

		<i>coli</i> excretion and performance after weaning. John Pluske		
1130	Estimation of metabolizable energy value of okara meal in broiler chicken using approximate nutritive value, in vivo and in vitro digestibility technique. Bagus Himawan Wicaksono	Starch-driven feed intake in pigs is partially explained by sweet and sour taste sensitivities. Eugeni Roura	Increasing the inclusion rate of 3-nitroxypropanol and dietary grain content reduces methane yield in feedlot cattle fed steam-flaked wheat and barley-based diet. Mohammed Rashed Chowdhury	Grazing forage oats during the lambing period may increase perinatal lamb survival. Susan Robertson
1142	ELEVATOR PITCHES	Monoglycerides of butyric, caprylic and capric acid support weaner pig performance. Robert Hewitt	Increasing the inclusion rate of 3-nitroxypropanol and dietary grain content reduces methane yield in feedlot cattle fed steam-flaked wheat and barley-based diet. Jillian Burgess	Production characteristics of feedlot lambs fed a novel probiotic. Georgina Mutton
	Integrated metabolic profiling and transcriptional analysis reveals the difference of liver lipid metabolism between Duroc pigs and Taoyuan black pigs. Fengna Li			
	Maternal nutrition differs Intramuscular adipogenesis potential of Wagyu (Japanese Black) fetus muscle. Taketo Haginouchi			
	Preliminary evaluation of using deer fecal as a source of microbial inoculum for the in vitro digestibility. Ya-Chun Liu			
1154	Comparing calibration statistics from a benchtop and handheld NIR instrument using pig faecal and ileal DE content datasets. Charlie Rikard-Bell	Energy concentration in feed ingredients depends on chemical composition and growth stage of pigs. Noa Park	ELEVATOR PITCHES	In vitro dietary analysis of browses and pasture consumed by goats. Morteza Moradi
			Methane emissions from Angus and Brahman heifers fed forage-based diets. Gamaliel Simanungkalit	
			Feedlot finisher diet composition affects inhibition of methane by 3-nitrooxypropanol. Fran Cowley	
			Utilisation profiles of front-feet weighing system by breeding cows in extensive grazing environments. Priscila Arrigucci Bernardes	
1206	NIR Calibration Development for Neutral Detergent Fibre Digestibility in cattle based on a Range of Australian Forages. Richard Meyer	Effects of adding plant extracts to diet on growth performance of weaned piglets. Yu-Jie Chang	The effect of strategic supplementation on calf survival, re-conception rates and overall productivity. Luis Prada e Silva	ELEVATOR PITCHES
				Molecular Adaptation of Rumen Epithelia to Ruminant Metabolites with High-concentrate Starter Introduction in a Lamb Model. Kai Zhang
				Reproduction and growth of sheep in Samoa islands. Faatoialemanu Areta

				Migration stress on production of Bakarwali sheep and goat herds in Himalayan ranges mitigated with highland pasture. Arvind Kumar
1218	ELEVATOR PITCHES	Evaluating the net energy requirements for maintenance based on indirect calorimetry and heart rate monitoring in gestating sows. Li Zhe	Heavier weaned steer calves have heavier carcasses and improved carcass characteristics. Jena Alexopoulos	Impact of different short-term heat stress duration and breeds on sheep meat quality. Minghao Zhang
	Nutrient digestibility of locally based diet on local chicken breed. Mardhati Mohammad			
	Enhancing the growth performance and milk yield of dairy goats through the pelleted Napier-grass based total mixed ration. Nor Dini Rusli			
	Effects of feed energy level and energy structure on growth performance and energy metabolism of Songliao black pigs at low temperature. Kai Zhou			
1230 – 1330	Lunch			
1330-1530	Concurrent Session 5			
120 min	Stream1: Nutrition: Dietary Manipulations and Probiotics Chairs: Plenary	Stream2: Meat Science Chairs: Room 220	Stream3: Global Farm Platform Chairs: Jordana Rivero-Viera Room 219	Stream4: Poultry Science Chairs: Henny Akit, Muhsin Al Anas Room 218
1330	A new probiotic, Bacillus pumilus AQP4275, to improve broiler efficiency: meta-analysis of 11 zootechnical trials. Alison Leary	Meat quality score of high-marbling beef evaluated by Australian and Middle Eastern consumers. Don Nguyen	EXTENDED PRESENTATION: Advancements in Sustainable Ruminant Livestock Systems: Insights from the North Wyke Farm Platform. Jordana Rivero-Viera	Dietary apidaecin api-PR19 addition improves growth performance, intestinal health and modulating gut microbiota in broilers. Chenxu Wang
1342	The blend of bacillus fermented soybean meal, functional amino acids and nucleotide improves small intestinal integrity, nutrient digestibility, growth, and reduces the prevalence of diarrhea in weaned piglets compared with animal proteins. Dinh-Hai Nguyen	Consumer eating quality and physicochemical traits of pork loin and topside differed between genetic lines. Xiying Li		Sex-related differences in haematological parameters of Mae Hong Son chickens. Kulisara Marupanthorn
1354	Seaweed extract improves antioxidant property and intestinal health in dogs by modulating gut microbiota and its metabolite composition. Mingrui Zhang	Investigating local consumer attitudes, habits, and preferences for sheep meat in Samoa. Tusiata Lemuelu	EXTENDED PRESENTATION: Achieving data-driven net zero: challenges and solutions from Harper Adams University Future Farm. Joshua Onyango	Investigation of the effects of Bacillus subtilis -fermented product extracts on the growth performance, intestinal morphology, and cecal microbiota in broilers. Fa-Shuang Yuan
1406	Early overnutrition affects epigenetics related to mitochondria beta-	Muscle affects the intramuscular fat content and total heme content of		Dietary Bacillus velezensis KNF-209 supplementation improves growth

	oxidation in grass-fed Wagyu longissimus muscle. Daichi Nishino	pork silverside, loin and bolar blade. Yi Xu		performance, enhances immunity, and promotes gut health in broilers. Ying Liu
1418	ELEVATOR PITCHES	Metabolic enzyme activity may explain the variation in meat quality between three pig muscles across two ageing times. Huiling Huang	EXTENDED PRESENTATION: Integrated Crop and Livestock Global Farm Platform Research: University of Wisconsin-Platteville. Andrew Cartmill	Effects of Taiwanese green propolis ethanolic extracts on the intestinal inflammation-associated gene expression and fecal microbiota in laying hen chicks. Ying-Chu Chen
	Addition of β -mannanase in weaning pig's diet enhances the utilization of palm kernel meal, a representative alternative ingredient. Minhyuk Jang			
	Effect of various probiotics, synbiotics or enzyme cocktail on nursery feed. Seong-min Koo			
	Characterization of uncultured fiber-adherent rumen microorganisms in cattle by single-cell genomic analysis. Shuhei Takizawa			
1430	Increasing lipid content of common pastures and forages may improve livestock production. Lucy Watt	Effects of adding CaCl ₂ to vascular rinse on tenderness and muscle structure in lamb. Bob Campbell		Molecules participating in the sexually dimorphic feather pigmentation in <i>Chrysolophus pictus</i> . Chin Li
1442	The supplementation of carbohydrases to diets containing wheat distiller's dried grains with solubles in broiler chickens. Eunjoo Kim	ELEVATOR PITCHES	Decoding Theileria resistance: Identification of novel SNPs of OR51H1 gene in Vechur and crossbred cattle using pooled sample Sanger sequencing. Muhammed Elayadeth Meethal	Hens ovarian microsomal triacylglycerol transfer protein responds to heat stress for VLDL secretion. Petnamnueng Dettipponpong
		Dietary Isoleucine supplementation improves fresh meat drip loss through improving redox homeostasis of finishing pigs. Linjuan He		
		Effects of dietary fermented shiitake residues on growth performance, meat quality and flavor substances of finishing pigs. Qiuping Guo		
	Prediction of chemical components of fresh pork by near-infrared spectroscopy (NIRS) and nuclear magnetic resonance (NMR). Xiying Li			
1454	Effect of increasing ratios of branched-chain amino acids and arginine and glycine supplementation in broilers fed low crude protein, amino acid-supplemented diets from day 0 to 10. Roxanne de Gula-Barrion	Accreditation of in-abattoir dual energy X-ray absorptiometry predictions of lamb carcass composition. Stephen Connaughton	Science and technology innovation of Grass-based Livestock Husbandry for North China Grassland. Hai-Chun Jing	Administration of probiotics in one-week-old chicks suppresses <i>Campylobacter jejuni</i> colonization. Aito Murakami

1506	The effect of low-dose bromoform supplementation during late gestation in beef cows. Mariana Caetano	The impact of the Advanced Livestock Measurement Technologies project on objective measurement in meat supply chains. Daniel Brown	Resilience of indigenous Indian goat breeds to thermal and nutritional. Sunitha Thomas	Development of native geese production by determining feed requirement with supplemental forage. MSK Sarker
1518	ELEVATOR PITCHES	AUS-MEAT accreditation of an ultrawide band microwave device to predict sheep meat hot carcass GR tissue depth. Kate Loudon	ELEVATOR PITCH	ELEVATOR PITCH
	Exploring the Impact of Forage-to-Concentrate Ratios on the Ruminant Microbiome in vitro, with a Focus on Protozoa-associated Prokaryotes. Geonwoo Kim		Feeding sheep a blend of essential oils can improve production and reduce methane emission intensity. Suyog Subedi	Effect of dietary energy levels on growth, early egg production, and egg quality in laying hens. Hyunsoo Kim
	Influence of management system on lamb growth performance. Alice Bunyan		Q&A	Comparison of follicle growth rate and oviposition interval in quails. Chih-Feng Chen
	Effects of dietary supplementation of Lactobacilli Bamboo Powder on growth performance, blood biochemistry and intestinal properties of broiler chickens. Rong-Dian Su			Q&A
1530-1600	Afternoon Tea			
1600-1715	Plenary 3			
1600-1630	Keynote 5: Stobbs Lecture: Fran Cowley, University of New England – Towards mitigation of greenhouse emissions from grazing and forage based ruminant production systems.			
1630-1700	Keynote 6: Tim McCallister (Canada) – Emerging strategies to mitigate methane emissions			
1700-1715	Panel discussion / questions.			
1715-1800	Poster Session 2			
	Free evening			

Thursday 11th July 2024	
7.45 – 8.45	AAAS AGM Breakfast
0845-1000	Plenary 4
0845-0915	Keynote 7: Barnett Lecture – Jean-Loup Rault, University of Vienna - Positive animal welfare – Why and how?
0915-0945	Keynote 8: Matt Shaffer, Data gene , Collaborative approach to the genetic progress in the dairy industry
0945 -1000	Panel
1000 - 1030	Morning tea
1030-1200	Concurrent Session 6

90min	Stream1: Methane Emission, Feed Additives and Genomic Insights Chairs: Irene van den Berg, Nipa Rani Sarker Plenary	Stream2: Animal Welfare Chairs: Lauren Hemsworth Room 220	Stream3: Dairy Science Chairs: Room 219	Stream 4: Adoption, education and extension Chairs: Sue Hatcher, Charlotte Adam Room 218
1030	Methane phenotyping with different durations provides similar genetic parameters. Michael Aldridge	Animal welfare epidemiology: benefits and challenges of its application in commercial livestock production. Rutu Galea	Chicory reduces Nitrogen excretions but not methane emissions of dairy cows compared with irrigated pasture and forage rape. Juan Keim	Building Dookie VR to share the story of agriculture. Stuart Barber
1042	Generation of daughters from dairy cow sires with divergent methane breeding values. Olivia Spaans	Tail biting perpetrators show decreased amino acid plasma profiles compared to non-perpetrator pigs. Abedin Abdallah	Effect of age at first calving on milk yield in dairy cattle. Nur Nazratul Fareha Mohd Yasid	Teaching pasture assessment and forage budgeting to Animal Science students in the context of drought resilience. Shawn McGrath
1054	Breeding for reduced methane emissions in New Zealand dairy cattle: Greenfeed visitation and phenotypic variation by breed. Lorna McNaughton	Maternal calls altered gene expression of a receptor associated with physiological stress in the hippocampus of female meat chickens. Peta Taylor	Effect of injectable trace mineral supplementation on dairy calf health and antioxidant status. Mohammad Javed Ashar	Educating the next generation of beef producers about sustainable rangeland management through on-station courses. Stacey Holzapel
1106	Feed intake for sheep fed ad libitum pellets under feedlot conditions can be estimated precisely in three weeks for most breed types. Karen Moore	Challenges and opportunities in cage-free egg production systems for layer hens: perspectives from Asian egg producers. Kate Hartcher	Impact of oral inoculation with cyanide-utilizing ruminal bacteria on cyanide degradation efficiency, microbial community, and milk quality in dairy cows supplemented with fresh cassava root. Anusorn Cherdthong	Enhancing livestock farmer education through extension programs. Hsiu Chu Lee
			Potential for the development of A2 milk in Japan. Mai Tokunaga	Effects of vegetation type on the distribution of predators for village chickens. Marizvikuru Mwale-Manjoro
			Dairy farmers' attitudes in A2 milk production. Takeyuki Ozawa	Lean management in the Taiwanese pig farming industry and its impact on employees'. Kuo-Cheng Yu
1118	Identification of causal mutations in dairy cows using gene expression and trait physiology. Mohammad Ghoreishifar	Exploring Relationships Between Sleep-like Posture Patterns and Learning Abilities in Japanese Black Calves. Sita Liu	Multi-omics reveals the contribution of rumen microbiome to lactation initiation in dairy cows during the transition period. Guangfu Tang	Stakeholder attitudes towards and engagement with traceability among the cattle, sheep and goat industries. Marta Hernandez-Jover
1130	Novel SNP in the bovine OR51H1 gene and its association with resistance to Theileria infection in tropically adapted	Developing a welfare benchmarking system for grazing beef cattle in Australia. Linda Cafe	Prediction of total-tract starch digestibility of lactating dairy cows using faecal starch. Sandi Nayohan	Understanding alpaca industry management practices to identify key knowledge gaps. Imogen Boughey

	dwarf Vechur and crossbred cattle. Muhammed Elayadeth Meethal			
1142	ELEVATOR PITCHES	ELEVATOR PITCHES	ELEVATOR PITCHES	Integration of indigenous and conventional knowledge to ensure water security for cattle. Michael Chimonyo
	Analysis of Selection signatures using Runs of homozygosity patterns in Yellow Korean Native Chicken. Jaewon Kim	On the trail of the tail: which behavioural changes are most predictive of tail biting in pigs? Megan Lucas	Effect of forage NDF concentration and a saturated fat supplement in the diet of Holstein-Friesian cows during hot weather. Leah Marett	
	The effect of amino acid variants on the albumin gene of quail using Polyphene -2. Affiong Henry	Ammonia on Live Export Vessels practical management options. Anthony Carr	Feeding Effect of TMR-based Diet on Domestically Developed Corn Silage. Jong Geun Kim	
	TBC	Is familiarity with pen mates related to tail biting in the first week post-weaning in non-docked pigs? Lauren Hemsworth	The Selection of Potential Psychobiotics and Their Postbiotics from kefir for Alleviating Neurodevelopmental Disorders Using Cell Models. Cheng-Yu Huang	
1154	Q&A	Bedding application and air change rate management to improve the manure pad condition in the confined cattle housing. Ifa Hanafi	Green Synthesis and Nano-Encapsulation of Himalayan Herb in Functional Ethnic Dairy Product for Lifestyle Disease Prevention and Its Animal Model Validation. Arvind Kumar	Breaking Barriers and Cultivating Careers: Empowering New Parents in Agricultural Research. Cara Wilson
		Validation of detecting mastitis in lactating sows using udder temperature measured with infrared thermographic camera technology: A pilot study. Buddhika Liyanage	Q&A	Disrupting the status quo: a new approach for identifying and assigning conference session chairs. Jo Newton
1200-1330	Lunch & Poster Session 3			
1330-1500	Concurrent Session 7			
90min	Stream1: Pig Science Chairs: Rebecca Athorn, Hasan Zaman Plenary	Stream 2: Impact and Assessment of Environmental Stress Chairs: Surinder Singh Chauhan, Pippa Pryor Room 220	Stream3: Meat Science: Consumers and meat products Chairs: Gauri Jairath Sponsor: AMPC Room 219	Stream4: Food Efficiency and Global Security Chair: Michael Friend Room 218
1330	The incidence of osteochondrosis and related gene markers in boars subject to growth performance. Te-Lin Lee	Measuring HSP in tail hair as an alternative method to assess Heat Stress in Cattle. Kieren McCosker	Short duration lairage reduces total viable count of microbes on the hide of cattle. Emma Lynch	EXTENDED PRESENTATION: Food Efficiency and Global Security. Meredith Harrison
1342	Effects of gestational aspirin supplementation on farrowing rate	Effects of summer season exposure at different trimesters of gestation on survival and first-lactation milk	Tackling future sheep meat production from past lessons learnt: Utilising forages of low to	

	and piglet birth weight of sows mated during summer. Fan Liu	production capacity of the offspring. Farhad Ahmadi	moderate nutritive value by supplementary feeding. Eric Ponnampalam	
1354	The need for further enrichment strategies to deter tail biting in pigs; a systematic review and meta-analysis approach. Kate Plush	ELEVATOR PITCHES	Estimation of pre-slaughter stress in local Pakistan's beef cattle during transportation and lairage stay using biochemical measurements. Jamal Nasir	Isolation and characterization of bacteriophages against Salmonella from Taiwan's poultry farm. Wun-Yuan Wu
		Study of heat adaptability dynamics of Kosali cattle breed of India. Ashutosh Tiwari		
		Heat stress responses and GNAI3 gene polymorphism study in three indigenous goat breeds. Swagat Mohpatra		
		Assessing the Goodness of Fit of Different Temperature-humidity Index Models on Milk Yield and Milking Frequency in Auto-milking Systems in Hot and Humid Environment. Chia-Jung Lee		
1406	ELEVATOR PITCHES	Dairy cows with lower body temperature on thermoneutral days are likely to have lower body temperature on days with high temperature humidity index. Leah Marett	Bushfire exposure associated with increased incidence of beef dark colour defects. Melindee Hastie	Alternative protein sources in human diet i.e. precision fermentation, technology. Minh Ha (TBC)
	An investigation of parturient ocular appearance in sows. Alexandra Walls			
	The influence of an encapsulated functional fatty acid blend on the distribution of colostrum quality among commercial sow herds. Christine Clark			
	Validating the use of respiration chambers to assess methane emission from pigs in Taiwan. Hsi Wen Hung			
1418	A microbial perspective on straw as a pre-farrow nesting material for sows. Tanya Nowland	Adaptation of Grower Pigs to Heat Stress: Impacts on Blood Volume, Respiratory Alkalosis and Organ Damage Using Evans Blue. Jeremy Cottrell	Synthesis, characterization and inclusion of nanocellulose as a novel fat replacer in chicken patties. Naveen Zillabathula	Hanwoo pemmican with canola oil replacing animal fat : Effects on quality and storage characteristics. Soyoung Jang
1430	Effects of high voltage electrostatic field treatment on the conformational structure of pork. Ti-Chun Chang	Investigating the Crossroads of Host-Microbiota Interaction in Growing Pigs during Chronic Heat Stress through Transcriptome, Metabolite, and Microbiome Integration. Chiwoong Lim	An Assessment of the Competitive Advantage of Modern Retail Meat Shops in Indonesia. Robi Agustiar	Study on the preparation of resistant starch from Cyperus esculents meal and prebiotic properties. Jinrong Wang

1442	Intramuscular supplementation of iron alleviates bacterial-induced diarrhea of weaned piglets by enhancing intestinal barrier function. Huahua Du	The influence weather station location on heat load prediction in Australian Feedlots. Angela Lees	Antimicrobial screening of bacteriocin-like inhibitory substances producing lactic acid bacteria and characterizes the nature and stability of substances. Md Rahman	TBC
1454	ELEVATOR PITCH	Q&A	ELEVATOR PITCH	Q&A
	Rational utilization of non-conventional feed resources in feed formulation technology can help reduce food loss and explore sustainable production models of pigs. Qile Hu		Influence of stocking density on the performance and meat quality of vanaraja poultry. Bindhu Sanka	
1500-1530	Afternoon Tea			
1530 - 1630	Concurrent Session 8			
60 min	Stream1: Reproduction: Pig and Poultry Chairs: Kate Plush? Plenary	Stream2: ES: Livestock sustainability Chairs: Paul Cheng, Mariano Parra Room 220	Stream 3: Animal Health & Disease Chairs: Room 219	Stream4: Precision Agriculture Chair: Michael Rose, Fazel Almasi Room 218
1530	TBC	Carbon footprints of case study dairy farms in southeast Australia. Saranika Talukder	Growth Comparison and Intestinal Health in Broilers Fed Scent Leaf Meal (<i>Ocimum gratissimum</i>) and Synthetic Antibiotic. Akintunde Adedoyin	The influence of the eShepherd™ virtual fencing system on behaviour in grazing beef cattle. Jarrod Lees
1542	Preliminary analysis of black pig seminal plasma extracellular vesicles on boar semen cryopreservation. Chia-En Wu	ELEVATOR PITCHES	Development and efficacy evaluation of a new phytogenic anti-coccidial solution for control of coccidiosis in poultry. Kyuyeol Son	Management of dairy cattle using virtual-herding and fencing with Halter technology. Megan Verdon
		The hydrolytic efficiency and synergistic action of recombinant xylan-degrading enzymes on corn byproducts. Chunyue Li		
		Evaluation of spent mushroom substrate silage applied on feeding Holstein-Friesian lactating cows. Ming-Han Tsai		
		Effects of irrigating Napiergrass with cattle wastewater on the environment, crop growth, and cattle health. Hsin-Jung Lee		
1554	Analysis and applications of Black Pig oviduct extracellular vesicles. Jung-Wen Huang	Practical approaches to mitigate greenhouse gas emissions in	Vaccine cross protection against Salmonella Enteritidis in layers. Christine Clark	Multi-site calibration and validation of a UAV-borne multispectral camera for

		ruminant and monogastric livestock. Liang Chou Hsia		predicting dairy pasture biomass. Anna Thomson
1606	Arresting calcium-regulated sperm metabolic dynamics enables prolonged fertility in liquid storage of chicken semen. Atsushi Asano	Bromoform degradation by pure cultures of Methanobrevibacter gottschalkii in vitro. Renata Tognelli	Common health issues in livestock grazing annual fodder crops. Dione Howard	Accuracy of an inexpensive handheld hyperspectral scanner in predicting dairy pasture nutrient composition for various pasture species. Monique Berkhout
1618	ELEVATOR PITCHES	ELEVATOR PITCHES	Bacteriocin Microcin J25's Antibacterial Infection Effects and Novel Non-Microbial Regulatory Mechanisms: Differential Regulation of Dopaminergic Receptors. Lijun Shang	Developing a sensor-based behavioural indicator for heat stress in extensive beef cattle grazing systems. Anita Chang
	Automated approach for detecting morphological characteristics of porcine embryo. Hayoung Lee	Super-oxygenation of water with probiotic supplementation for methane emission reduction. Tshering Gyeltshen		
	Change of Ras and RasGTPase on cell proliferation during maturation in cumulus oocyte complexes of pigs. Eun Ju Seok	Methane mitigation assessment on-farm in dairy calves fed a sugarcane extract. Pragna Prathap		
	Nervonic acid induces mitochondrial oxidative stress to trigger ovarian inflammation through activating NLRP3/ IL- 1 β pathway. Xiangzhou Zeng	Dosing dairy cows with Bacillus or adding Bacillus in vitro did not mitigate methane production. Sreemol Suthan Nair		
1630	Congress Close			
1900-2300	Congress Dinner and awards			

Friday 12th July 2024				
0830 – 1600	Post Conference Tours			
	Tour 1: Healesville Wildlife Sanctuary with Lunch at DeBortoli	Tour 2: Mornington Peninsula with Lunch at T'Gallant Winery	Tour 3: Werribee Open Range Zoo with lunch at Shadow Fax Winery	