New Zealand Association of Ruminant Nutritionists

Agenda for members meeting 19-20 February 2025

Palmerston North Event Conference & Function Centre 354 Main Street, Palmerston North Central

Day 1 - Wednesday 19th February

| From 8.30 | Coffee and networking | |
|-----------|--|-----------------|
| 9.15 | Welcome | Alun Faulkner |
| 9.30 | Nutrition and meat quality | Nicola Schreurs |
| 10.30 | Whenua Haumanu regenerative agriculture project | Amelia Almeida |
| 11.15 | 15 minute comfort break | |
| 11.30 | Sheep feed preferences for NZ native shrubs | Sarah Pain |
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| 12.30 | Lunch | |
| 1.30 | Milk synthesis, nutrition and milk docket | Laura Pattie |
| 2.30 | Reproduction and GHG modelling | Clive Bingham |
| 3.30 | Afternoon tea | |
| | | |
| 4.00 | Effect of nutrition on the development and performance of calves | Ajmal Khan |
| 5 | close | Alun Faulkner |

Group Dinner in Palmerston North- Brew Union Brewing (at own cost)

Day 2- Thursday 20th February

AgResearch Visit

Tennent Drive, 11 Dairy Farm Road, Turitea 4442

| 9am | Methane lab visit at Agresearch | Stefan Muetzel |
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| | | and Arjan Jonker |
| 10.30 | Biotechnology options for improving forages | Nick Roberts |
| 11.30 | Close | |

Bios of speakers

Nicola Schreurs

Nicola is a Senior Lecturer of Ruminant Nutrition and Meat Science in the Animal Production and Health group of the Institute of Veterinary, Animal and Biomedical Sciences at Massey University. Current research projects investigate feed requirements for gaining body condition score in sheep, effect of slaughter age on meat quality of lamb and quality of beef from crossbred steers. Nicola grew up on a farm in Pokeno and then moved to the Manawatu to engage in tertiary studies. Nicola obtained an Honours degree in Animal Science from Massey University and followed this by PhD studies at Massey University and AgResearch looking at the effect of feeding forages on lamb flavour. Nicola spent two years as a post-doc at the Institut National de la Recherche Agronomique (INRA) in Clermont-Ferrand, France studying the development of muscle in beef cattle and returned to New Zealand in 2008 to take on her current role at Massey University.

Amelia Almeida

Dr. Amelia Almeida is committed to advancing sustainable ruminant production systems and enhancing feed efficiency while minimizing environmental impact. Dedicated to fostering innovation and resilience in the next generation of animal scientists at Massey University. Her current research focuses on measuring and mitigating greenhouse gas emissions in ruminant production. Amelias mission is to empower students and researchers to advance the knowledge and practice of animal nutrition and GHG emissions, and to contribute to the sustainable development of the livestock sector.

Sarah Pain

Sarah completed her undergraduate and postgraduate study at the University of Adelaide, in South Australia. Sarah worked as a lecturer at the University of Adelaide prior to moving to New Zealand in 2008 to take a lecturing position at Massey University within the Pastoral Livestock Production group. Sarah has worked with a range of animal species including previously, including, rats, fish, pigs, chickens, horses, and ruminant animals, but her research now primarily focuses on sheep reproduction, nutrition, physiology and production.

Laura Pattie

Laura graduated Bachelor of Veterinary Science with Distinction from Massey University and is a member of the Australian New Zealand College of Veterinary Sciences in Ruminant Nutrition. She worked as a farm veterinarian for 10 years before joining PGG Wrightson in 2020. Laura's passion is in animal nutrition having learnt during her veterinary career how good nutrition translates into great production, reproduction, and animal health outcomes. Laura is a firm believer in "setting good foundations of nutrition and using this base to build optimal animal performance.

Clive Bingham

Clive joined Zoetis in 2012 as a Livestock Veterinary Technical Advisor for the North Island of New Zealand. He qualified as a Veterinary Surgeon from Massey in 1989. While at Massey he also completed a Bachelor of Philosophy in Anatomy and Physiology, investigated the use of real-time ultrasonic scanning for the diagnosis of pregnancy and the estimation of foetal age in Red deer. Once qualified, he worked on the east coast of the North Island, principally in Wairoa, where he developed a passion for beef cattle reproduction. Since then he has worked in mixed veterinary practice overseas and in the King Country. In 2003 he became a Sheep For Profit advisor and then a registered Farmax consultant in 2005. His main areas of interest are Farm system analysis and parasitology. Clive is part of the technical advisory group for Wormwise and also a member of the Sheep and Beef committee of the New Zealand Veterinary Association. In his spare time he assists his wife on their hill country sheep and beef property in the southern King Country.

Ajmal Khan

Ajmal Khan is a Senior Scientist specializing in Animal Nutrition and Physiology at AgResearch Limited in New Zealand. With 20 years of international experience in South Korea, Canada, and New Zealand, he brings a wealth of expertise in the fields of animal nutrition and animal science. Dr. Khan has led interdisciplinary research teams, secured substantial funding, and managed projects focused on improving the welfare, health, and performance of dairy cattle, beef cattle and calves. His contributions to the field include 94 peer-reviewed papers, 31 research reports, and a book chapter, all advancing the understanding of ruminant nutrition. Through his research

and collaborations, Dr. Khan continues to drive innovation in sustainable livestock systems and support the development of practical, science-based solutions in animal nutrition.

Stefan Muetzel

Stefan is an animal nutritionist / microbiologist / agricultural engineer who joined AgResearch as a scientist in 2008. Here he developed three automated in vitro systems for gas and methane measurements. Stefans work focuses on hydrogen management in the rumen ranging from national methane inventory and early life interventions to commercial product development both in vitro and in vivo. Before Stefan worked on rumen fibre degradation at the University of Hohenheim and biohydrogenation at the Rowett Institute.

Arjan Jonker

Arjan (AJ) is a senior scientist in the Animal Nutrition and Physiology team of AgResearch. The main focus of AJs research is on enteric methane emissions and nitrogen excretion by pastoral ruminants and the utilisation of food industry by-products for livestock feeding to reduce the quantity of organic material going to landfill.

Nick Roberts