

# NEW ZEALAND SOCIETY OF ANIMAL PRODUCTION (INC)

## PRESIDENT'S PIECE

\_\_\_\_\_ JUNE 2023

As always, our year is starting with a hiss and a roar. We have seen our membership fluctuate with the change of year and I appeal to you to check your status or find out if your colleagues are interested in being members. We are delighted to welcome new members who have recently joined our society. It is always uplifting to see fresh faces becoming part of our society.

As it is a new year, we are planning a conference again with the NZ Grassland Association. We will be joining them in Rotorua. For this conference we are producing our proceedings with NZJAR and will self-publish our short communications. We received a good quantity of both long form and short communications this year and they will provide a broad range of science for the conference.

We also received interest from Australian researchers for this year's conference, so I encourage you all to keep an eye on the conference page and register when we get closer to the date.

As always, if you have any concerns or want to get in touch with us, please send either myself or Pauline an email.

Nick Sneddon

NZSAP President

# NZSAP AWARD WINNERS

### Jubilee Award

NZSAP each year present the Jubilee Award to senior students at Massey and Lincoln Universities for academic achievement in animal production. The recipients are nominated by the appropriate Heads of Department at each university and consist of a payment of \$250 plus a certificate. Nominations will normally be made to the Society in December of each year. Winners over the past three years are:

#### 2020

Jaida Joy – Massey University who advises I am currently working as a laboratory technician in the histology department at Medlab South down in Nelson, which my degree has greatly helped with, and I am on track to becoming a laboratory scientist.

*Emma Trolove* – Lincoln University advises she went on to compete my Agricultural Science degree with Honours last year (2021). My honours projection was in animal science researching 'The effect of fertilisers on gastrointestinal L3 larvae survival'. Since graduating I have taken a role with Rabobank on their graduate programme which runs for 18mths (started Feb 2022) and which has been awesome giving me lots of opportunities and the ability to be fully involved with the rural sector.

### 2021

Abbey Dowd – Lincoln University - who advises I am currently (November 2022) completing my Honours project on red deer milk, which I will finish this week but have been working on all year. I then head off to South Korea this Saturday for 4 weeks as part of the Prime Ministers Scholarship Agribusiness programme. There is a group of around 10 of us heading over there to tour around South Korea visiting places such as Fonterra, Zespri, Velvet and Deer milk factories. We also visit various farms and orchards. The aim of this tour is to expose us to agribusiness industries, supply chains and build connections with export countries. From then I head back to New Zealand on Christmas eve, where I will start my new job in the consultant graduate programme for Perrin Ag consultants in Rotorua in January.

*Bella Latimer* – Massey University who advises since finishing my Bachelor of Animal Science (Animal Welfare Major) in 2021, I have started my Masters of Science. My research is looking at dairy cow welfare in winter grazing systems in Southland. I have also just accepted a job offer from AgResearch as a technician on their Animal Behaviour and Welfare Team, so will be switching to part-time study to finish my masters.

#### 2022

*Brooklyn Taylor* – MU I am completing my Masters of Science (Animal Science) at Massey University. My master's thesis will be based on "Genetically selecting for bareness in sheep and the implications that may be caused by this selection." Selecting Romney sheep that have been crossed with naturally shedding sheep will hopefully reduce the need for shearing without reducing the production of the herd. If successful this will hopefully help farmers mitigate the financial burden of wool coats due to the reduction in wool prices and increase in cost of shearing. I hope to continue my passion for animal science by moving into a career based on improving animal production and welfare through genetics.

*Luke Robb* – LU - This year I am completing my fourth year of my Bachelor of Agricultural Science Degree at Lincoln University and I am completing my year with honours. I am working on an LIC 'SLICK' gene project in which I am investigating the effect of cold stress on dairy calves with the SLICK heat tolerant gene. The trial is being run at the Lincoln University Research Dairy Farm and is being supervised by Jon Hickford and Racheal Bryant as well as the LURDF farm staff. I am looking forward to the project (albeit involving cold and frosty mornings!) which will help to put the past three years of learning into action. I hope that this will give me the necessary skills and motivation to pursue my passion of helping farmers through meaningful research once I graduate. I would like to thank the NZSAP for recognizing the achievements of myself and other young scientists as well as assisting us to achieve to the best of our abilities whilst pursuing university studies.

#### 2021 Travel Awards

#### Alex Caulton

From the 18<sup>th</sup> June to 11<sup>th</sup> July I was fortunate to travel internationally as part of my PhD project with the University of Otago and AgResearch. The purpose of the trip was to meet with international contacts in the US and UK and present my work at the World Congress Applied to Livestock Genomics (WCGALP) in Rotterdam, Netherlands. The goal of these activities was to foster ongoing collaborations and initiate new ones in the field of animal genomics.

I first visited the University of Los Angeles California (UCLA) at the Harbour Medical Centre, Torrance, CA, USA, where I was hosted by Bobby Brooke, Executive Director of the Epigenetic Clock Development Foundation (Clock Foundation). I presented our work in the development of epigenetic clocks for New Zealand livestock, and its use as a molecular biomarker to predict the biological age of an animal.

From Torrance I travelled to the US Department of Agriculture (USDA) at Clay Centre, Nebraska, where I was hosted by Tim Smith (Research Scientist). I was given a tour of farm and lab facilities and presented a seminar to the USDA staff members, highlighting the research carried out within the Animal Genomics team at AgResearch.

From America I travelled to the UK, first visiting Innovis in Aberystwyth, Wales, where I was hosted by the director Dewi Jones. Here I gave a talk to the Innovis team around sheep breeding and genomics in New Zealand. I was given a tour of the sheep yards and flocks. Finally, I ended my travels in Rotterdam in the Netherlands where I attended the WCGALP meeting. The WCGALP conference is a high-profile meeting, held once every four years. I gave a presentation at this conference on my work titled "Demonstrating the use of a mammalian methylation microarray for epigenome wide association studies in livestock". This was a fantastic opportunity to reconnect with researchers at an in-person event after two years of virtual conferences during the Covid pandemic. There were a number of recurring themes that came through during the conference, these were: defining phenotypes for traits, including functional information into genomic selection models, whole genome sequencing for genomic selection and the inclusion of environmental traits in breeding goals.

Thank you to NZSAP for kindly granting \$3500 towards this trip. International contacts are crucial to our work, and it was an amazing opportunity to reconnect with researchers in the animal genomics field after the past few years where travel has not been an option. I am excited to pursue a number of leads that came out of this trip, including access to samples, collaborative long-read sequencing projects and extensions to current routine genotyping services.

Thank you again to the NZSAP for your kind contribution.

#### 2022 Ruminant Reproduction Symposium (RRS) Travel Award

#### Olivia Spaans

Thank you to NZSAP for the RRS travel award to attend the Ruminant Reproduction Symposium and present research from my recently completed PhD. Attending the symposium provided the opportunity to connect with other researchers in ruminant reproduction and visit Teagasc and University College Dublin. Such visit strengthened existing connections with research and science leaders and helped in developing new ones.

Developing and maintaining a network with other researchers over the last few years has been challenging due to the limited travel and conference opportunities, so travelling to Ireland for RRS marks a pinnacle in my early career and represents a remarkable opportunity for personal growth and professional contribution.

The topic of my PhD was investigating the role of peripartum inflammation on the uterine health of dairy cows. My RRS talk focused on the identification of circulating inflammatory markers with the potential to predict cows at risk of failing to resolve uterine inflammation. The talk garnered significant attention from numerous researchers in the field, generating a remarkable level of interest and fostering engaging and fruitful discussions.

Thanks again to NZSAP for their kind contribution.

#### King's Birthday Honour

Longstanding NZSAP member Dr Brian Wickham of Hamilton was awarded the Companion of the New Zealand Order of Merit – CNZM for his services to the dairy industry and statistical genetics. Among Brian's substantial list of achievements he was awarded the NZSAP McMeekan Award in 1998 for outstanding contributions to NZSAP and leadership in the development of technologies undergoing current and future improvement.

Professor Dorian Garrick, Chief Scientist at the Ruakura Research Centre AL Rae Centre for Genetics and Breeding, School of Agriculture and Environment, Ruakura Research Centres, Massey University kindly provided the following outline of Brian's achievements.

"In the early 80's his leadership role saw the envisioning and implementation of an industry-wide database. Brian's vision was that such a database should extend well beyond the animal details of pedigree and performance recording and should include farms, herds, artificial insemination technicians, semen inventories and related activities.

Following the successful implementation of a single national database for dairy cattle his next major accomplishment was to leverage the data in that database in order to most accurately rank our dairy bulls and dairy cows so that selection could be effective at improving our industry. Under Brian's leadership, NZ was the first country to implement an across-breed national evaluation system, and to account for cattle size and pasture intake so that selection could directly improve efficiency rather than just production as was the target in most other dairying nations.

Having established a world leading and best practice selection scheme for the benefit of New Zealand, Brian then directed his attention to again leverage the single national database, but this time to investigate the role of genomics to improve the rate of genetic gain. Those activities formed the foundation of genomic improvement in dairy cattle on a global basis, and were a strong role model for other livestock and plant improvement in New Zealand."

Other Awards and Distinctions received by Brian over the years include:

- 1987 2000 Foundation Chairman of the INTERBULL Steering Committee.
- 1992 2000 Vice President of the International Committee on Animal Recording.
- 2000 : INTERBULL award in recognition of outstanding contribution to the development of international genetic evaluations.
- 2002: Massey University 75<sup>th</sup> Anniversary Medal for outstanding contributions to agriculture in NZ.
- 2009: International Committee on Animal Recording President's Award for outstanding contributions to ICAR and its objectives.
- 2022: Irish Cattle Breeding Federation established the Brian Wickham Travel Bursary Award.

The New Zealand Society of Animal Production proudly congratulates Brian on his latest honour and greatly appreciates his continued support of the Society.

### MURRAY WOOLFORD YOUNG DAIRY SCIENTIST AWARD

APPLICATIONS DUE: 31<sup>st</sup> JULY 2023

HTTP://WWW.NZSAP.ORG/MURRAY-WOOLFORD-YOUNG-DAIRY-SCIENTIST-AWARD

### NZSAP ANIMAL SCIENCE TRAVEL AWARD

Applications DUE: 31<sup>st</sup> JULY 2023

HTTP://WWW.NZSAP.ORG/NZSAP-ANIMAL-SCIENCE-AWARD

# ALLAN CRAWFORD MEMORIAL TRAVEL AWARD

APPLICATIONS DUE: 31<sup>st</sup> JULY 2023

HTTP://WWW.NZSAP.ORG/ALLAN-CRAWFORD-MEMORIAL-TRAVEL-AWARD

# **OVERDUE 2023 MEMBERSHIP SUBSCRIPTIONS**

MEMBERSHIP SUBSCRIPTIONS ARE OVERDUE FOR PAYMENT. PROMPT PAYMENT IS APPRECIATED.

### NZSAP MEMBERSHIP FEES 2023

Full membership	\$95
Student membership	\$47.50
Australian members	\$95
Rest of World members	\$125

### NZSAP CONFERENCE 2023\_

The annual NZSAP conference will be held from the **14th to the 16th of November 2023 in Rotorua**, as a conjoint with New Zealand Grassland. Hope to see you all there.

### NZSAP PROCEEDINGS – FREE ONLINE

The 2022 proceeding of the NZSAP is published online and can be accessed using the following link: <u>http://www.nzsap.org/view/biblio/volume/81</u>

### NEW MEMBERS

The NZSAP would like to welcome our new members:

Jessica Dalton Lara Dalldorf Titus Zindove Katie Starsmore Nicolas Lyons Inthujaa Sanjayaranj Roy Costilla Take Ozawa Dinesha Jayawardana

### To nominate somebody for an award, please send the following to the Executive Secretary:

NZSAP, c/-. School of Agriculture and Environment, Massey University, Private Bag 11-222, Palmerston North 4442. Email: <u>nzsap.inc@gmail.com</u>

- Position
- Name of Nominee (Printed) and signature of Nominee
- Proposer (Print name) and Proposer's signature
- Seconder (Print name) and signature of Seconder
- Date

Title	Name	Phone	Email	Location
President	Nick Sneddon	06 351 8276	n.w.sneddon@massey.ac.nz	Massey University
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### 2021/22 MANAGEMENT COMMITTEE

- Any contributions to the Newsletter should be forwarded to: **Omar Al-Marashdeh**, *Science South building, Faculty of Agriculture and Life Sciences, Lincoln University, Lincoln 7647* Email: Omar.Al-Marashdeh@lincoln.ac.nz