

MAPNET 2022

14-16 March 2022
Online via Zoom

Programme

Monday 14 March

Master of ceremony: Samantha Baldwin (Plant & Food Research)

9:00 am **Mihi and welcome**
Karaitiana Taiuru, Taiuru & Associates Ltd and Phillip Wilcox, University of Otago

Convenor: Melissa Taane (Plant & Food Research)

9:20 am **Karaitiana Taiuru**
Māori Data Sovereignty: An introduction and implementation using Te Tiriti principles

10:05 am **Short break**

10:20 am **Ben Te Aika**
Genomic Medicine Pathfinder: A pathfinder programme to develop capability and infrastructure for research into personalised genomic-data informed medicine for Aotearoa New Zealand

11:05 am **Phillip Wilcox and Huti Watson**
Aotearoa Variome Project: an update

12:05 pm **Lunch break**

12:25 pm **Lunch networking**

Convenor: Susan Thomson (Plant & Food Research)

12:55 pm **Aisling Rayne**
Looking to the past to navigate the future: Weaving place-based knowledge for culturally significant species in the age of genomics

1:35 pm **Andrew Griffiths**
Capturing global genetic diversity in a white clover core collection using pooled GBS

2:00 pm **Roy Costilla**
Accelerating genetic gains in New Zealand dairy sheep

2:25 pm **Kathryn McRae**
Tools for the identification of genomic regions influencing response to disease in New Zealand sheep

2:50 pm **Julie Blommaert**
Transposable element dynamics in Sparidae genomes

3:10 pm **Close for day**

Tuesday 15 March

9:00 am Welcome

Convenor: Rebecca Bloomer (Plant & Food Research)

9:05 am Jeffrey Endelman
Haplotype Reconstruction and QTL Mapping in Tetraploid Diallel Populations

10:00 am Bruce Weir
A new look at identity by descent: relatedness for inbred populations

10:45 am Short break

11:00 am Olivia Angelin-Bonnet
Investigating genotype-phenotype relationships for tuber bruising in autotetraploid potatoes

11:45 am Networking

12:30 pm Lunch break

Convenor: John McCallum (Plant & Food Research)

1:00 pm Speaker TBC

1.25 pm John McCallum
Building R Statistical Genetics Workflows as Task Graphs with the Targets Package

1:50 pm Gancho Slavov
Genomics enabled Management of Radiata Pine

2:15 pm Jamie Macalister
Developing a model for genomic selection of low gluten epitope wheat

2:40 pm Prethbotr Chan
Genome-wide association study for milk traits in New Zealand dairy sheep

3:05 pm Close for the day

Wednesday 16 March

9:00 am Welcome

9:05 am Illumina sponsor video

Convenor: Margaret Carpenter (Plant & Food Research)

9:10 am Sara Montanari

A multiplexed plant-animal SNP array for selective breeding and species conservation applications

9:35 am John McEwan

Low-cost methods of quantifying disease challenge infection whilst simultaneously genotyping the host via sequencing-based assays

10:00 am Alex Caulton

Systematic evaluation of assays to profile DNA methylation: application for livestock breeding

10:25 am Sandeep Gupta

Development of a Recombinase Polymerase Amplification assay for rapid in-field detection of *Oryctes rhinoceros nudivirus* in coconut rhinoceros beetle

10:50 am Short break

11:05 am Genotyping breakout discussion groups

12:05 pm Lunch break

Convenor: Margaret Carpenter (Plant & Food Research)

1:05 pm Timothy Bilton

Rumen microbiome information as a proxy phenotype for enteric methane emissions in the New Zealand livestock industry

1:30 pm Christina Flammensbeck

Snapper like it hot: growth and gene expression in response to temperature

1:55 pm Breakout groups

What is needed by the MapNet community moving forward

2:25 pm Come back and summary

2:40 pm Thank you and closing/ karakia