

**QMB Programme****Animal Genetics**

3 – 4 September 2015

Rydges Hotel, Queenstown, New Zealand

**Organising Committee:** Russell Snell (UoA), Steve Davis (LIC), John McEwan (AgResearch), Anna Santure (UoA)**Thursday 3 September**

<b>Time</b>	<b>Details</b>	<b>Location</b>
8:30am – 8.35am	<b>Welcome and Introduction :</b> Paul Gardner, University of Canterbury Russell Snell, University of Auckland	<b>Queenstown Rm</b>
<b>Session 1: Genomics in Populations</b> <b>SHARED SESSION: Animal Genetics and Computational Genomics</b>  <b>Chaired by Professor Murray Cox (Massey University)</b>		
8:35am – 9:15am	<b>Lisa Matisoo-Smith , University of Otago (AG1)</b> <i>Ancient DNA analyses in the Pacific - implications for human settlement history</i>	<b>Queenstown Rm</b>
9:15am – 9:35am	<b>Michael Knapp, University of Otago (AG2)</b> <i>Understanding the evolution of island gigantism - a genomic approach</i>	<b>Queenstown Rm</b>
9:35am – 10:10am	<b>Jenny Marshall Graves, La Trobe University; Australia (AG3)</b> <i>Sex and speciation: did sex chromosome turnover and rearrangement trigger mammalian divergence?</i>	<b>Queenstown Rm</b>
10:10am–10:30am	<b>Anna Santure, University of Auckland (AG4)</b> <i>Using genomics to manage adaptive potential in threatened populations</i>	<b>Queenstown Rm</b>
10.30 – 11.00am	<b>Morning Tea</b>	<b>Trade Area</b>
<b>Session 2 : Livestock Genetics and Genomics</b>  <b>Chaired by Dr Caroline Walker (DairyNZ)</b>		
11.00am–11.30am	<b>Mark Young, Beef + Lamb New Zealand Genetics (AG5)</b> <i>Genetic gains in NZ sheep and future challenges</i>	<b>Wakatipu Rm</b>
11.30am –12.00pm	<b>Jenny Pryce, Department of Primary Industries, Victoria (AG6)</b> <i>Characterising inbreeding depression using runs of homozygosity in Jersey cattle populations in Australia and the USA</i>	<b>Wakatipu Rm</b>
12.00pm–12.30pm	<b>Mathew Littlejohn, LIC (AG7)</b> <i>Discovery of thermoregulatory mutations in cattle</i>	<b>Wakatipu Rm</b>
12.30pm – 1.00pm	<b>Peter Amer, AbacusBio Limited (AG8)</b> <i>The value of genomic selection in a small population</i>	<b>Wakatipu Rm</b>
1.00pm – 2.00pm	<b>Lunch</b>	<b>Trade Area</b>

**Session 3 Epigenome and disease**  
**SHARED SESSION: Animal Genetics and Human Genome Disease**

**Chaired by Marjan Askarian (The University of Auckland)**

2.00pm – 2.40pm	<b>Allan McRae, The Queensland Brain Institute (AG9)</b> <i>Sponsored by Medi'Ray NZ Ltd</i> Genetics of DNA Methylation and Its Role in Disease	Clancy's Rm
2.40pm – 3.00pm	<b>Justin O'Sullivan, Liggins Institute, University of Auckland (AG10)</b> <i>Telling the story of single nucleotide polymorphisms in human growth and disease</i>	Clancy's Rm
3.00pm – 3.20pm	<b>Donia McCartney-Coxson, ESR, Wellington (AG11)</b> <i>Obesity and type-two diabetes: the role of epigenetics in disease, and the potential of these mechanisms as biomarkers of disease.</i>	Clancy's Rm
3.20pm – 3.40pm	<b>John Pearson, University of Otago, Christchurch (AG12)</b> <i>DNA Methylation in Patients with a Strong Family History of Early Onset Coronary Heart Disease</i>	Clancy's Rm
3.40pm – 4.00pm	<b>Marjan Askarian, University of Auckland (AG13)</b> <i>Circular RNA: A new enigma in genome function</i>	Clancy's Rm
4.00pm	<b>Afternoon Tea Available</b>	Trade Area
4.00pm – 6.00pm	Poster session	Trade Area
5.3pm – 6.30pm	Drinks and nibbles	Trade Area
7.30pm	<b>Joint Dinner with Human Genome and Disease</b> My Thai Restaurant 1st Floor Bay Centre 69 Beach Street Queenstown	<b>My Thai Restaurant</b>

## Friday 4 September

Time	Details	Location
<b>Session 4 Medical Genomics and Proteins</b> <b>SHARED SESSION Animal Genetics, Computational Genomics and Genome &amp; Disease</b> <b>Chaired by Professor Cristin Print (The University of Auckland)</b>		
8.30am – 9.15am	<b>Erez Lieberman Aiden, Baylor College of Medicine (AG14)</b> <i>How the genome folds: now inside the loop</i>	Ben Lomond Restaurant
9.15am – 9.35am	<b>Ken Dodds, AgResearch (AG15)</b> <i>Optimization of sequencing effort for relatedness estimation using genotyping-by-sequencing.</i>	Ben Lomond Restaurant
9.35am – 10.00am	<b>Alicia Oshlack, Murdoch Children’s Research Institute (AG16)</b> <i>Tumour Transcriptomes: going beyond expression profiling</i>	Ben Lomond Restaurant
10.00am–10.30am	<b>Morning tea</b>	Trade Area
<b>Session 5 Phenotypic Effects of Genome Variation</b> <b>Chaired by Dr Mathew Littlejohn (LIC)</b>		
10.30am–11.00am	<b>Suzanne Rowe, AgResearch (AG17)</b> <i>Genomic host control of the rumen microbiome</i>	Wakatipu Rm
11.00am–11.20am	<b>Mallory Crookenden, DairyNZ (AG18)</b> <i>Neutrophil dysfunction during the transition period</i>	Wakatipu Rm
11.20 – 11.50am	<b>Bjorn Oback, AgResearch (AG19)</b> <i>Towards embryo based genome selection of cattle</i>	Wakatipu Rm
11.50am–12.10pm	<b>Caroline Walker, DairyNZ (AG20)</b> <i>Genetic variation is associated with mastitis in dairy cows</i>	Wakatipu Rm
12.10pm–12.30pm	<b>Rayna Anderson, AgResearch (AG21)</b> <i>Application of Genotyping by-Sequencing (GBS) in Atlantic Salmon (Salmo salar).</i>	Wakatipu Rm
12.30pm – 2.00pm	<b>Lunch</b>	Trade Area
<b>Session 6: Genes, Mutations and Function</b> <b>SHARED SESSION: Animal Genetics and Human Genome Disease</b> <b>Chaired by Professor Russell Snell (The University of Auckland) Sponsored by illumina</b>		
2.00pm – 2.45pm	<b>Jerry Taylor, University of Missouri (AG22)</b> <i>Adventures in next-generation sequencing</i>	Ben Lomond Restaurant
2.45pm – 3.00pm	<b>Tara Richman, The University of Western Australia, Perth (AG23)</b> <i>Mutation in MRPS34 compromises protein synthesis and causes mitochondria dysfunction</i>	Ben Lomond Restaurant
3.00pm – 3.15pm	<b>Tania Fink, LIC (AG24)</b> <i>Investigation of the influence of DGAT1 K232A on gene expression in the bovine lactating mammary gland.</i>	Ben Lomond Restaurant

3.15pm – 4.00pm	<b>Elinor Karlsson, Broad Institute of Harvard and MIT (AG25)</b> <i>From Ancient History to Modern Medicine: Selection, Disease, and Genome Function</i>	<b>Ben Lomond Restaurant</b>
4.00pm	<b>Professor Russell Snell, The University of Auckland (AG26)</b> <i>Sponsored by illumina</i> Closing remarks for both meetings	<b>Ben Lomond Restaurant</b>
4.05pm	<b>Afternoon tea available</b>	<b>Level 5 Area</b>