

## QRW Programme

### Applied Genetics Technologies

Thursday 30 August – Friday 31 August, 2018

Rydges Hotel, Queenstown, New Zealand

<b>Thursday 30 August</b>		
Time	Details	Location
<b>Session 1: New Genetic Technologies</b> <b>Chaired by Björn Oback (AgResearch)</b>		
8.50am-9.00am	<b>Welcome and Introduction: Björn Oback</b>	<b>Clancy's Room</b>
9.00am-9.30am	<b>A. Francis Stewart (G1)</b> <i>Sponsored by AgResearch</i> TU Dresden <i>Beyond CRISPR/Cas9 genome editing to genome engineering</i>	
9.30am-10.00am	<b>Konrad Fischer (G2)</b> <i>Sponsored by AgResearch</i> Technical University of Munich (TUM) <i>Genetically modified pigs for biomedicine</i>	<b>Clancy's Room</b>
10.00am-10.30am	<b>Morning Tea</b>	<b>Trades Area</b>
<b>Session 2: Genome Editing for Agriculture &amp; Pest control</b> <b>Chaired by Matthew Littlejohn (LIC)</b>		
10.30am-11.00am	<b>Alison Van Eenennaam (G3)</b> <i>Sponsored by LIC</i> University of California, Davis <i>Gene editing in cattle</i>	<b>Clancy's Room</b>
11.00am-11.30am	<b>Goetz Laible (G4)</b> AgResearch <i>Generation of enhanced cattle genotypes by genome editing</i>	<b>Clancy's Room</b>
11.30am-12.00pm	<b>Neil Gemmell (G5)</b> <i>sponsored by Thermo Fisher Scientific</i> University of Otago <i>Genetic Tools for Pest Eradication – Opportunities and Challenges</i>	<b>Clancy's Room</b>
	<b>Short selected talks:</b>	<b>Clancy's Room</b>
12.00pm-12.15pm	<b>Melanie Laird (G6)</b> University of Otago <i>Possums and primordial germ cells – a novel method of pest control</i>	<b>Clancy's Room</b>
12.15pm-12.30pm	<b>Zach McLean (G7)</b> AgResearch <i>Precise disruption of DAZL abrogates the male germline in sheep</i>	<b>Clancy's Room</b>
12.30pm -1.30pm	<b>Lunch</b>	<b>Trades Area</b>
<b>Session 3: Social license (joint with Plant Biology &amp; Marine Biology)</b> <b>Chaired by Revel Drummond (Plant and Food)</b>		
1:30pm-1:45pm	<b>Barry Scott (G8)</b> Institute of Fundamental Sciences, Massey University <i>The implications of gene editing technology for New Zealand</i>	<b>Queenstown Room</b>
1:45pm-2:00pm	<b>Julie Everett-Hincks (G9)</b> University of Otago <i>Gene editing in Aotearoa - legal considerations</i>	<b>Queenstown Room</b>

2:00pm-2:15pm	<b>Maui Hudson (G10)</b> University of Waikato <i>Social License or Cultural License: Is there a difference?</i>	Queenstown Room
2:15pm-2:30pm	<b>Jim Sinner (G11)</b> Cawthron Institute <i>Social license in the marine environment: Dissecting the discourse</i>	Queenstown Room
2:30pm-2:45pm	<b>Damien Mather (G12)</b> University of Otago <i>Conflicts between agricultural and tourism sectors: evidence for solutions</i>	Queenstown Room
2:45pm-3:00pm	<b>Timothy Strabala (G13)</b> Environmental Protection Authority <i>The regulation of GMOs in New Zealand</i>	Queenstown Room
3:00pm-3:15pm	<b>Mariska Wouters (G14)</b> Ministry for the Environment <i>Gene editing technology: how it fits in New Zealand's policy framework</i>	Queenstown Room
3:15pm-3:30pm	General discussion	Queenstown Room
3:30pm-4.00pm	Afternoon Tea	Trades Area
<b>Session 4: Genomic selection and breeding (joint with Marine Biology)</b> <b>Chaired by Jane Symonds (Cawthron Institute)</b>		
4.00pm-4.30pm	<b>Dorian Garrick (G15)</b> Massey University <i>Genomic Selection for Improvement of Populations</i>	Clancy's Room
4.30pm-4.50pm	<b>Fiona Hely (G16)</b> AbacusBio Ltd <i>Optimised selection strategies in New Zealand aquaculture breeding schemes</i>	Clancy's Room
4.50pm-5.10pm	<b>Shannon Clarke (G17)</b> AgResearch <i>Delivering genomic solutions to New Zealand's biological economy</i>	Clancy's Room
5.10pm-5.25pm	<b>Noemie Valenza-Troubat (G18)</b> Plant and Food Research & Victoria University <i>'Genomics of New Zealand trevally: identifying the genetic basis of quantitative traits to inform a newly developed breeding programme'</i>	Clancy's Room
5.25pm - 6.30pm	<b>Poster session</b> sponsored by Millennium Science New Zealand <b>Social Mixer with drinks and nibbles</b> sponsored by Merck & pH Scientific	Trade Area
7.30pm	<b>Joint Dinner at Winnies (with Marine Biology)</b>	Winnies, 7-9 The Mall Queenstown

<b>Friday 31 August</b>		
<b>Time</b>	<b>Details</b>	<b>Location</b>
<b>Session 5: CRISPR genome editing</b> <b>Chaired by Goetz Laible (AgResearch)</b>		
9.00am-9.10am	<b>Welcome and Introduction: Goetz Laible</b>	Clancy's Room
9.10am-10.00am	<i>Sponsored by AgResearch</i> <b>Plenary lecture: Lluís Montoliu (G19)</b> Spanish National Research Council (CSIC) <i>Using CRISPR genome editing tools for animal modelling human rare diseases</i>	Clancy's Room
10.00am-10.30am	<b>Morning Tea</b>	Trade Area
<b>Shared Session 6: Genetic Disease Models and Genetics Oversight NZ (joint with Rare Brain Diseases)</b> <b>Chaired by Francis Hunter (University of Auckland)</b>		
10.30am-10.50am	<b>Tracey Dickson (G20)</b> University of Tasmania <i>Getting the Balance Right: Targeting Excitatory Dysfunction in the ALS Cortex</i>	Clancy's Room
10.50am-11.10am	<b>Imke Tammen (G21)</b> <i>sponsored by Ramaciotti Centre for Genomics</i> University of Sydney <i>Generation of a sheep model of CLN7 Batten disease using the CRISPR/Cas9 genome editing system – preliminary results and ethical reflections</i>	Clancy's Room
11.10am-11.30am	<b>Renee Handley (G22)</b> <i>sponsored by Millennium Science New Zealand</i> University of Auckland <i>Brain urea increase is an early pathogenic event in Huntington's disease</i>	Clancy's Room
11.30am-11.50am	<b>Peter Dearden (G23)</b> Genomics Aotearoa, University of Otago <i>Genomics Aotearoa: Aiming to improve the use of genomics in New Zealand</i>	Clancy's Room
11.50am- 12.10pm	<b>Kate Neas (G24)</b> Genetic Health Service NZ <i>A step towards unifying health genomic activity in NZ introducing Genomic Health Alliance New Zealand</i>	Clancy's Room
12.10pm-12.30pm	<b>Discussion session</b> <i>Sharing/ improving/linking research resources</i>	Clancy's Room
12.30pm-1.30pm	<b>Lunch</b>	Trades Area
<b>Session 7: Genome editing for human health</b> <b>Paul Tan (NZeno)</b>		
1.30pm-2.00pm	<b>Francis Hunter (G25)</b> <i>sponsored by Integrated DNA Technologies Pte. Ltd</i> University of Auckland <i>Functional genomic approaches to understanding responses to cytotoxic anti-cancer therapies</i>	Clancy's Room
2.00pm-2.30pm	<b>William Kelton (G26)</b> Scion <i>Immunogenomic engineering of MHC alleles</i>	Clancy's Room

2.30pm-3.00pm	<b>Mark Nottle (G27)</b> University of Adelaide <i>Use of gene editing technology to accelerate xenotransplantation research</i>	Clancy's Room
	<b>Short selected talks:</b>	Clancy's Room
3.00pm-3.15pm	<b>Sarah Appleby (G28)</b> AgResearch <i>Generating immune-compatible sheep for xenotransplantation</i>	Clancy's Room
3.15pm-3.30pm	<b>Hilary Sheppard (G29)</b> University of Auckland <i>Functional outcomes of fine tuning the expression of PD-L1 and PD-1 proteins to the melanoma immune response</i>	Clancy's Room
3.30pm-4.00pm	<b>Afternoon Tea</b>	Trade Area
<b>Shared Session 8: Genome Editing for plants (joint with Plant Biology, Marine Biology)</b> <b>Chaired by Gregory Bryan (AgResearch)</b>		
4.00pm-4.25pm	<b>Andrew Allan (G30)</b> Plant and Food <i>New breeding technologies for fruit trees</i>	Queenstown Room
4.25pm-4.50pm	<b>Glenn Thorlby (G31)</b> Scion <i>Biotechnology and Forest Trees in New Zealand</i>	Queenstown Room
4.50pm-5.15pm	<b>Charleson Poovaiah (G32)</b> Scion <i>Developing Gene editing technology in conifers</i>	Queenstown Room
5.15pm-5.30pm	<b>Revel Drummond (G33)</b> Plant and Food Research <i>CRISPR Fruit: three bites at the problem</i>	Queenstown Room
5:30pm-5:40pm	<b>Closing remarks for all meetings</b>	Queenstown Room
7:00pm-7:10pm	<b>Welcome to public movie screening</b>	Clancy's Room
7:10pm-8:40pm	<b>FOOD EVOLUTION Movie</b>	Clancy's Room
8:40pm-9:30pm	<b>Panel discussion / Q&amp;A:</b> Alison van Eenennaam (UC Davis), Gregory Bryan (AgResearch/ZeaKal), Tony Conner (AgResearch), Aroha Te Pareake Mead (Ngāti Awa, Ngāti Porou)	Clancy's Room

We are extremely grateful for the support of our sponsors, including Queenstown Research Week sponsors and our Satellite specific sponsors.

Sponsors of the QRW Applied Genetic Technologies Satellite meeting include: **AgResearch** and the **Livestock Improvement Corporation**.