

QRW Programme

Applied Genetics Technologies

Thursday 30 August – Friday 31 August, 2018

Rydges Hotel, Queenstown, New Zealand

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

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

Friday 31 August		
Time	Details	Location
Session 5: CRISPR genome editing Chaired by Goetz Laible (AgResearch)		
9.00am-9.10am	Welcome and Introduction: Goetz Laible	
9.10am-10.00am	<i>Sponsored by AgResearch</i> Plenary lecture: Luis Montoliu (G19) Spanish National Research Council (CSIC) <i>Using CRISPR genome editing tools for animal modelling human rare diseases</i>	
10.00am-10.30am	Morning Tea	Trade Area
Shared Session 6: Genetic Disease Models and Genetics Oversight NZ (joint with Rare Brain Diseases) Chaired by Francis Hunter (University of Auckland)		
10.30am-10.50am	Tracey Dickson (G20) University of Tasmania <i>Getting the Balance Right: Targeting Excitatory Dysfunction in the ALS Cortex</i>	
10.50am-11.10am	Imke Tammen (G21) <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>	
11.10am-11.30am	Renee Handley (G22) <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>	
11.30am-11.50am	Peter Dearden (G23) Genomics Aotearoa, University of Otago <i>Genomics Aotearoa: Aiming to improve the use of genomics in New Zealand</i>	
11.50am- 12.10pm	Kate Neas (G24) Genetic Health Service NZ <i>A step towards unifying health genomic activity in NZ introducing Genomic Health Alliance New Zealand</i>	
12.10pm-12.30pm	Discussion session <i>Sharing/ improving/linking research resources</i>	
12.30pm-1.30pm	Lunch	
Session 7: Genome editing for human health Paul Tan (NZeno)		
1.30pm-2.00pm	Francis Hunter (G25) <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>	
2.00pm-2.30pm	William Kelton (G26) Scion <i>Immunogenomic engineering of MHC alleles</i>	

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