

## QRW Programme

### Genome Biology

Sunday September 3rd – Monday 4th September, 2017

Rydges Hotel, Queenstown, New Zealand

## Sunday 3<sup>rd</sup> September

Time	Details	Location
<b>Plenary session</b> <b>Chaired by Dr Tim Hore (University of Otago).</b>		
9:00am-9:05am	<i>Welcome</i> <b>Justin O'Sullivan</b> University of Auckland	QT 1
9:05am-10:00am	<b>Wolf Reik (G1)</b> Babraham Institute <i>Epigenetic reprogramming in mammalian development</i>	QT 1
10:00am-10:30am	<b>Morning tea</b>	Trades Area
<b>Epigenome remodelling</b> <b>Chaired by Judith Marsman (University of Otago)</b>		
10:30am-11:15am	<b>Susan Clark (G2)</b> Garvan Institute Of Medical Research <i>Epigenome Remodelling in Cancer</i>	QT 1
11:15am-11:30am	<b>Tracy Bryan (G3)</b> Children's Medical Research Institute <i>Links between DNA replication stress and telomere extension in cancer cells</i>	QT 1
11:30am-11:45am	<b>Amy Osborne (G4)</b> University Of Otago <i>Cannabis use and epigenetics: EPIC insights into the human methylome</i>	QT 1
11:45am-12:00pm	<b>Julia Horsfield (G5)</b> <i>sponsored by BGI</i> University Of Otago <i>Cohesin facilitates zygotc genome activation in zebrafish</i>	QT 1
12:00pm-12:15pm	<b>Jisha Antony (G6)</b> University Of Otago <i>Dysregulated transcriptional response to differentiation signals in cohesin-mutant myeloid cells</i>	QT 1
12:15pm-12:30pm	<b>Tayaza Fadason (G7) Student competition</b> Auckland University <i>Decoding the regulatory overlap between Obesity and Type 2 Diabetes using Hi-C genome structure and expression quantitative traits loci</i>	QT 1
12:30pm-1:30pm	<b>Lunch</b>	Trades Area

<b><u>Non-coding RNAs and plasticity</u></b> <b>Chaired by Tracy Hale (Massey University)</b>		
1:30pm-2:15pm	<b>Shiv Grewal (G8)</b> National Cancer Institute <i>Epigenetic genome control by non-coding RNAs and RNA processing factors</i>	QT 1
2:15-2:30pm	<b>Juliet French (G9)</b> Qimr Berghofer Medical Research Institute <i>Novel lncRNAs, CUPID1 and CUPID2, modulate breast cancer risk by modulate response to DNA damage.</i>	QT 1
2:30-2:45pm	<b>Katherine Pillman (G10)</b> University of South Australia <i>miR-200 and the Quaking RNA binding protein control a large alternative splicing network and cell plasticity in epithelial cells.</i>	QT 1
2:45-3:00pm	<b>Peter Dearden (G11)</b> <i>sponsored by Bio-Rad Laboratories Pty Ltd</i> University Of Otago <i>Developmental plasticity and its impacts on the genome</i>	QT 1
3:00-3:15pm	<b>Y. Liao (G12) Student competition</b> University of Otago <i>A nanopore sequencing-based multiplex assay for pharmacogenetics of clopidogrel and warfarin</i>	QT 1
3:15-3:30pm	<b>Lekha Jain (G13) Student competition</b> Auckland University <i>Genetic variation in genes of the GH/IGF-1 axis in human development and disease</i>	QT 1
3:30pm-4:00pm	<b>Afternoon Tea</b>	Trades Area
<b><u>Metagenomes</u></b> <b>Chaired by Justin M. O'Sullivan (University of Auckland)</b>		
4:00pm-4:45pm	<b>Jing Yang-Fu (G14)</b> University Of Groningen <i>Our genomes: the interaction of genome and metagenomics paves the way towards personalized medicine</i>	QT 1
4:45pm-5:30pm	<b>Jed Friedman (G15)</b> University Of Colorado Anschutz Medical Center <i>Gut Microbes in Infants of Obese Mothers Promotes Hepatic Inflammation, Macrophage Polarization, and Fatty Liver in Germ Free Mice</i>	QT 1
5:30-5:45 pm	<b>Ahn (G16) Student Competition</b> University of Otago <i>Stratification of TCGA melanoma patients according to TIL and PD-L1 expression using RNA-seq data.</i>	QT 1
5:45-6:00pm	<b>Vincent Harley (G17)</b> Hudson Institute of Medical Research <i>Sex specific RNA splicing in mammals</i>	QT 1
6:00-6:05pm	<b>Justin O'Sullivan &amp; Mary Morrison</b> Auckland University <i>Billy Apple n=1</i>	QT 1
6:05pm-7:30pm	<b>Poster session</b> <i>sponsored by Agilent</i> <b>Social Mixer</b> <i>sponsored by BGI</i>	Trades Area

Monday 4th August		
Time	Details	Location
<b>Plenary Session</b> <b>Chaired by Donia Macartney-Coxson (ESR)</b>		
9:00am-9:55am	<b>John Mattick (G18)</b> <i>sponsored by Merck &amp; pH Scientific</i> Garvan Institute Of Medical Research <i>Noncoding exons are universally alternatively spliced and are likely the modular functional unit of regulatory RNAs</i>	QT 1
9:55am – 10:10am	<b>Elsie Jacobson (G19)</b> Liggins Institute Immune Cell migration and genome organization	QT 1
10:10am-10:30am	<b>Morning tea</b>	Trades Area
<b>Epigenetics in cancer</b> <b>Chaired by Helen Fitzsimons (Massey University)</b>		
10:30am-11:15am	<b>Ross Hannan (G20)</b> <i>sponsored by Millennium Science New Zealand</i> The Australian National University <i>Analysis of the epigenetic regulation and three-dimensional organisation of ribosomal genes during malignant transformation reveals new targets for cancer therapy.</i>	QT 1
11:15am-11:30am	<b>Aniruhda Chatterjee (G21)</b> University Ofstoc Otago <i>Epigenetic driver of melanoma metastasis and a clue for novel methylation mediated gene activation mechanism?</i>	QT 1
11:30am-11:45am	<b>Mik Black (G22)</b> University Of Otago <i>In silico detection of candidate synthetic lethal gene pairs using cancer genomics data</i>	QT 1
11:45am-12:00pm	<b>Anita Dunbier (G23)</b> <i>sponsored by Thermo Fisher Scientific</i> University Of Otago <i>Epigenetic regulation of genes associated with breast cancer risk and progression</i>	QT 1
12:00-12:15pm	<b>Tracy Hale (G24)</b> Massey University <i>Untethering the genome: How loss of HP1<math>\alpha</math> enhances malignant cell invasion</i>	QT 1
12:15pm-12:30pm	<b>Voon (G25)</b> Monash <i>Inhibition of a K9/K36 Demethylase by an H3.3 Point Mutation Found in Paediatric Glioblastoma</i>	QT 1
12:30pm-1:30pm	<b>Lunch</b>	Trades Area

<b><u>Tissues and mitochondria</u></b> <b>Chaired by Aniruddha Chatterjee (University of Otago)</b>		
1:30-1:45pm	<b>Melanie McConnell (G26)</b> Victoria University Of Wellington <i>Visualising polymorphisms in the mitochondrial genome - a new tool in mitochondrial transfer analysis</i>	QT 1
1:45-2:00pm	<b>Tony Merriman (G27)</b> University Of Otago <i>The non-coding genome: from genome-wide association study signal to causal variant</i>	QT 1
2:00-2:15pm	<b>Ian Morison (G28)</b> University Of Otago <i>Tissue-specific epigenetic markers and disease discovery</i>	QT 1
2:15-2:30pm	<b>Joanna Williams (G29)</b> University Of Otago <i>Histone deacetylase activity is regulated following induction of long-term potentiation in vivo.</i>	QT 1
2:30-2:45pm	<b>Hamish Spencer (G30)</b> University Of Otago <i>Non-conflict Models for the Evolution of Genomic Imprinting.</i>	QT 1
2:45-3:00pm	<b>Tim Hore (G31)</b> University Of Otago <i>Epigenetic memory in vertebrates</i>	QT 1
3:00pm-3:30pm	<b>Afternoon tea</b>	Trades Area
<b><u>Cardiac epigenetics and new tools</u></b> <b>Chaired by Julia Horsfield (Otago University) sponsored by BGI</b>		
3:30-3:45pm	<b>Greg Jones (G32)</b> University Of Otago <i>The epigenetics of cardiovascular diseases and associated risk factors.</i>	QT 1
3:45-4:00pm	<b>Judith Marsman (G33)</b> University Of Otago <i>Finding a function for genetic variants associated with abdominal aortic aneurysm</i>	QT 1
4:00-4:15pm	<b>Martin Kennedy (G34)</b> <i>sponsored by Bio-Strategy</i> University Of Otago <i>The MinION nanopore sequencer – toy or tool?</i>	QT 1
4:15-4:30pm	<b>Nikki Freed (G35)</b> Massey University <i>New tools for diet analysis: nanopore sequencing of unamplified genomic DNA from stomach contents to detect with high resolution what rats are eating</i>	QT 1
4:30-4:45pm	<b>Peter Stockwell (G36)</b> University Of Otago <i>The DMAP package for DNA methylation analysis</i>	QT 1
4:45-5:00pm	<b>Zhouchun Shang (G37)</b> BGI <i>Integrated profiling of single-cell chromatin accessibility and transcriptome reveals regulatory heterogeneity</i>	QT 1

6.00pm - 7.00pm	<b>6.00pm Opening Remarks</b> <b>6.15pm Plenary talk</b> Nobel prize winner Dr Bruce Beutler - 2011 Nobel Prize in Physiology or Medicine, for "discoveries concerning the activation of innate immunity" University of Texas, USA <i>Sponsored: University of Otago</i>	<b>Queenstown Room</b>
7.00pm – 9.00pm	<b>Opening Night Mixer</b> <i>sponsored by Merck &amp; pH Scientific</i>	<b>Trades Area, Rydges Hotel</b>

### Genome Biology Poster Session Summary

<b>Genome Biology Posters</b>		
(G38)	<b>Scott Cohen</b> Children's Medical Research Institute <i>Electron microscopy of human telomerase</i>	<b>Trades Area</b>
(G39)	<b>Telfer, E.J</b> Scion <i>A preliminary assembly of the massive 25 Gb Pinus radiata megagenome.</i>	<b>Trades Area</b>
(G40)	<b>Hunter, F.W</b> University of Auckland <i>Development and application of CRISPR functional genomic capability at the University of Auckland</i>	<b>Trades Area</b>
(G41)	<b>Zhu, Z.Z.</b> BGI <i>Application of cell-free RNA sequencing on BGISEQ-500 platform</i>	<b>Trades Area</b>
(G42)	<b>Leichter, A.L.</b> University of Otago <i>Development of single-cell methodologies to interrogate DNA methylation patterns at a whole genome scale</i>	<b>Trades Area</b>
(G43)	<i>Withdrawn</i>	
(G44)	<b>Yang, T.T</b> BGI <i>Application of RNA sequencing on BGISEQ-500 platform</i>	<b>Trades Area</b>
(G45)	<b>Issam Mayyas</b> University of Otago <i>Mechanisms of Active DNA Demethylation in somatic cells</i>	<b>Trades Area</b>
(G46)	<b>Suzan Momani</b> University of Otago <i>Predicting altered methylation patterns in early pre-eclampsia</i>	<b>Trades Area</b>
(G47)	<b>M. Safavi</b> Environmental Protection Agency, New Zealand <i>A journey of GMO regulation in New Zealand</i>	<b>Trades Area</b>
(G48)	<b>Eccles, M.R.</b> University of Otago <i>Epigenetic driver of melanoma metastasis identified by genome-wide analysis</i>	<b>Trades Area</b>
Guest	<b>Billy Apple</b> <b>n=1</b>	<b>Trades Area</b>