

Sunday 4 November 2018

PRE-CONFERENCE WORKSHOPS

Time TBC | **Species Identification in Metagenomic Data Sets: From the Clinic to the Ocean**

Time TBC | **Galaxy Australia – The Free Genetics and Genomics Analysis Platform**

1400 - 1800 | Conference Registration Open

OPENING ORATION (Chair: Vikki Marshall)

1700 - 1800 | **Guest Speaker - Kevin White**

1800 - 2000 | **Welcome Reception & Trade Exhibition – Stamford Grand**

Monday 5 November 2018

0730 - 1730 | Registration Desk Open

0800 - 1800 | Trade Exhibition Open

0845 - 0900 | **Official Welcome and Conference Opening**

SESSION 1: Ancient DNA & Forensics (Chairs: Laura Weyrich & TBD)

0900 - 0945 | **Keynote Speaker - Ludovic Orlando**
Tracking Six Millenia of Horse Selection, Admixture and Management with Complete Genome Time-Series

0945 - 1010 | **Invited Speaker - Sallyann Harbison**
Challenges and opportunities in transforming Forensic DNA genotyping to massively parallel sequencing technology

1010 – 1035 | **Invited Speaker - Jeremy Austin**
Using hybridisation enrichment and next generation sequencing for identification of highly degraded human remains.

1035 - 1105 | **Morning Tea & Trade Exhibition**

1105 – 1130 | **Invited Speaker - Michael Knapp**
New technologies for an old problem - the role of ancient DNA and functional genomics in bird conservation

1130 - 1150 | **Invited abstract - Vanessa Hayes**
Analysis of 1025 LO-mitogenomes suggest a geographical divide shaped early human dispersals within Southern Africa

1150 - 1200 | Lightning Poster Session 1

1200 - 1300 | **Lunch & Trade Exhibition**

SESSION 2: Bioinformatics (Chairs: Andreas Schreiber & Kat Pillman)

1300 - 1345 | **Keynote Speaker - Taru Tukiainen**
Genomic approaches to decipher the extent and impacts of X chromosome inactivation

1345 - 1410 | **Invited Speaker - Nicole Cloonan**
TBA

1410 - 1430 | **Invited Abstract - Harriet Dashnow**
STRetch: detecting and discovering pathogenic short tandem repeat expansions

1430 - 1450 | **Invited Abstract - Hyun Jae Lee**
Integrated pathogen load and dual transcriptome analysis of systemic host-pathogen interactions in severe malaria

1450 - 1510 | **Invited Abstract - Hardip Patel**



	National Centre for Indigenous Genomics
1510 - 1530	Invited Abstract - Natalie Twine Big Data Technologies Enables Distant Relationship and Disease Variant Discovery in ALS
1530 - 1630	Poster Session 1 & Afternoon Refreshments
SESSION 3: New Technologies Part 1 (Chairs: Mark Van der Hoek & Vikki Marshall)	
1630 – 1700	BGI sponsored Keynote - Radoje Drmanac DNA Nanoballs and Single-Tube LFR: Affordable "Perfect" Genome Sequencing
1700 - 1720	Invited Abstract - Quentin Gouil Reconstructing haplotyped methylomes with long-read sequencing for fine dissection of imprinting in mice
1720 - 1740	Invited Abstract - Martin Smith Massively multiplexed targeted long-read single cell sequencing for deep phenotyping of tumour and immune cell repertoire
1740 - 1800	Invited Abstract - Eva Chan Cool things that can be done with Optical Mapping
1800 - 2000	Student Night
1800 - 2100	VIP Function

Tuesday 6 November 2018	
0730 - 1800	Registration Desk Open
0800 - 1800	Trade Exhibition Open
0850 - 0900	Welcome to Day Two
SESSION 4: New Technologies Part 2 (Chairs: Mark Van der Hoek & Vikki Marshall)	
0900 - 0945	Keynote Speaker - Marlon Stoeckius CITE-seq: Highly multiplexed simultaneous measurement of epitopes and transcriptomes in single cells
0945 - 1010	Invited Speaker - Ryan Lister Dissecting plant development at single cell resolution
1010 - 1040	Morning Refreshments & Trade Exhibition
SESSION 5: Cancer (Chairs: Deb White & TBD)	
1040 - 1125	Keynote Speaker - Kevin White From Petabytes to Molecular Insights: Building a System for Precision Medicine
1125 - 1145	Invited Abstract - Sujanna Mandal The super enhancer-driven long noncoding RNA IncNB promotes neuroblastoma tumorigenesis
1145 - 1205	Invited Abstract - Katherine Pillman MicroRNAs regulate large-scale alternative splicing in cancer by controlling the RNA-binding protein Quaking
1205 - 1215	Lightning Poster Session 2
1215 - 1315	Lunch & Trade Exhibition
1315 - 1340	Invited Speaker - Nic Waddell TBA
1340 - 1400	Invited Abstract - Sunny Wu Landscape of the breast cancer tumour microenvironment using single-cell RNA sequencing
1400 - 1420	Invited Abstract - Richard Tothill Going nuclear: Using single-nuclei RNA-sequencing for analysis of rare tumours
1420 - 1520	Poster Session 2 & Afternoon Refreshments & Screening of Melbourne Cup
SESSION 6: Neurogenetics (Chairs: Mark Corbett & Sam Buckberry)	
1520 - 1605	Keynote Speaker - TBD
1605 - 1630	Invited Speaker - Naomi Wray Genetics of Common Disease: Progress and Next Steps
1630 - 1650	Invited Abstract - Peter Hickey Genome-wide analysis of DNA methylation in samples from the Genotype-Tissue Expression (GTEx) project
1650 - 1710	Invited Abstract - Irina Voineagu The Landscape of Circular RNA Expression in the Human Brain
1710 - 1730	Invited abstract - Anushree Balachandran Uncovering novel aspects of human neural crest biology using multiomic approaches
1730 - 1815	AGTA Annual General Meeting
1830 - 2330	Conference Dinner

Wednesday 7 November 2018	
0730 - 1730	Registration Desk Open
0800 - 1300	Trade Exhibition Open
0855 - 0900	Welcome to Day Three
SESSION 7: Plants (Chairs: Matthew Gilliam & Rakesh David)	
0900 - 0945	Keynote Speaker - Jim Haseloff TBA
0945 - 1010	Invited Speaker - Jacqueline Batley Investigating the Role of Structural Variation in Brassica Disease Resistance
1010 - 1030	Invited Abstract - Agnieszka Golicz Roles of long non-coding RNAs in Plant Sexual Reproduction
1030 - 1100	Morning Refreshments & Trade Exhibition
1100 - 1125	Invited Speaker - Rachel Burton Genome Sequencing, Assembly and Annotation of the Industrially Useful Plant <i>Plantago ovata</i>
1125 - 1145	Invited Abstract - Michael Roach Population sequencing reveals clonal diversity and ancestral inbreeding in the grapevine cultivar Chardonnay
1145 - 1205	Invited Abstract - Yayu Wang Functional Structure and Association of Root Microbiome with Foxtail Millet Yield Unravelling by Ultra-Deep Metagenomic Sequencing
1205 - 1305	Lunch & Trade Exhibition
SESSION 8: Metagenomics (Chairs: Renee Smith & Anthony Borneman)	
1305 - 1350	Keynote Speaker - Elizabeth Dinsdale Mosaic of microbes: Investigating the involvement of marine microbiomes in the life and death of kelp forests
1350 - 1415	Invited Speaker - James Paterson A TCE contaminated aquifer reveals a Piggyback-the-Persistent viral strategy
1415 - 1440	Invited Speaker - Michael McDonald Tracking evolution in experimental populations of microbes using time-resolved whole genome sequencing
1440 - 1500	Invited Abstract - Alicia Byrne A genomic autopsy of perinatal death
1500-1520	Invited Abstract - Samuel Forster Genome based metagenomic analysis using an extensive human gastrointestinal culture collection
1520 - 1545	Invited Speaker - Gene Tyson Expanding our view of microbial communities in thawing permafrost
1545 - 1615	Awarding of Prizes, 2019 Conference Launch and Conference Close

The 2018 AGTA Conference reserves the right to amend or alter any advertised details relating to dates, program and speakers if necessary and without notice, as a result of circumstances beyond their control. All attempts will be made to keep any changes to an absolute minimum.