

## AMSI BIOINFOSUMMER 2018 PROGRAM

<b>Monday 3 December</b>		
<b>Day 1 - Introduction to Bioinformatics</b>		
1000 - 1100	<b>REGISTRATION</b>	Alexander Lecture Theatre (G57)
1100 - 1130	Conference Opening Professor Peter Klincken AC, Chief Scientist of Western Australia	Alexander Lecture Theatre (G57)
1130 - 1200	Opening Lecture Professor Susan Wilson, University of NSW	Alexander Lecture Theatre (G57)
1200 - 1330	<b>LUNCH (catered)</b>	Arts Building Lawns
1200 - 1330	<b>CHOOSEMATHS LUNCH EVENT (catered)</b>	Arts Building Seminar Room
1330 - 1445	Workshop 1: Introduction to Pawsey Cloud Mark Gray, Pawsey Supercomputing Centre	Arts Building Seminar Room
1330 - 1445	Workshop 2: Introduction to R Dr Alethea Rea, The University of Western Australia	Arts Building Seminar Room
1445 - 1515	<b>AFTERNOON TEA (catered)</b>	Arts Building Lawns
1515 - 1700	Workshop 1 continues: Introduction to Pawsey Cloud Mark Gray, Pawsey Supercomputing Centre	Arts Building Seminar Room
1515 - 1700	Workshop 2 continues: Introduction to R Dr Alethea Rea, The University of Western Australia	Arts Building Seminar Room
1700 - 1715	<b>RELOCATE</b>	
1715 - 1745	Improving crops with genomics and bioinformatics Professor Dave Edwards, The University of Western Australia	Alexander Lecture Theatre (G57)
1745 - 1900	<b>WELCOME RECEPTION (catered)</b>	The University Club

<b>Tuesday 4 December</b>		
<b>Day 2 - Single Cell ' omics</b>		
0845 - 0900	<b>REGISTRATION</b>	Alexander Lecture Theatre (G57)
0900 - 0945	Western Australian Cancer Single Cell Initiative Professor Alistair Forrest, Harry Perkins Institute of Medical Research	Alexander Lecture Theatre (G57)
0945 - 1030	Missing data and technical variability in single cell RNA-sequencing experiments Assistant Professor Stephanie Hicks, Johns Hopkins Bloomberg School of Public Health	Alexander Lecture Theatre (G57)
1030 - 1100	<b>MORNING TEA (catered)</b>	Arts Building Lawns
1100 - 1130	scMerge: Integration of multiple single-cell transcriptomics datasets leveraging stable expression and pseudo-replication Dr Shila Ghazanfar, The University of Sydney	Alexander Lecture Theatre (G57)
1130 - 1200	Improving the Bioinformatics Curriculum Mr Jason Williams, Cold Spring Harbor Laboratory, DNA Learning Center	Alexander Lecture Theatre (G57)
1200 - 1230	<b>POSTER SESSION: Fast Forward Presentations</b> Chaired by Dr Saskia Freytag, Walter & Eliza Hall of Medical Research Institute	Alexander Lecture Theatre (G57)
1230 - 1330	<b>LUNCH: Celebrating Diversity in STEM (catered)</b>	Arts Building Lawns
1330 - 1500	Workshop 3: Statistical analysis and comprehension of single cell RNA-sequencing data in R/Bioconductor Assistant Professor Stephanie Hicks, Johns Hopkins Bloomberg School of Public Health	Arts Building Seminar Room
1330 - 1500	Workshop 4: Introduction to RNA-Seq with the Kallisto and Sleuth workflows Mr Jason Williams, Cold Spring Harbor Laboratory, DNA Learning Center	Arts Building Seminar Room
1500 - 1530	<b>AFTERNOON TEA (catered)</b>	Arts Building Lawns
1530 - 1700	Workshop 3 continues: Statistical analysis and comprehension of single cell RNA-sequencing data in R/Bioconductor	Arts Building Seminar Room
1530 - 1700	Workshop 4 continues: Introduction to RNA-Seq with the Kallisto and Sleuth workflows Mr Jason Williams, Cold Spring Harbor Laboratory, DNA Learning Center	Arts Building Seminar Room
1700	<b>CLOSE DAY 2</b>	

<b>Wednesday 5 December</b>		
<b>Day 3 - Plants and Animals</b>		
0845 - 0900	<b>REGISTRATION</b>	Alexander Lecture Theatre (G57)
0900 - 0945	The genome of the HIS germ cell line from Trichoplusia ni, an agricultural pest and novel model for small RNA biology Professor Zhiping Weng, University of Massachusetts Medical School	Alexander Lecture Theatre (G57)
0945 - 1030	How bioinformatics, genomics, and open data is transforming public health and clinical microbiology Associate Professor Torsten Seemann, The University of Melbourne	Alexander Lecture Theatre (G57)
1030 - 1100	<b>MORNING TEA (catered)</b>	Arts Building Lawns
1100 - 1130	Sheep Functional annotation reveals proximal regulatory elements contributed to the evolution of modern breeds Marina Naval Sanchez, CSIRO	Alexander Lecture Theatre (G57)
1130 - 1200	Bioinformatics and Genomics applications in plant pathology Dr James Hane, Curtin University	Alexander Lecture Theatre (G57)
1200 - 1230	Real time portable genome sequencing for global food security Dr Laura M. Boykin, The Cassava Virus Action Project	Alexander Lecture Theatre (G57)
1230 - 1330	<b>LUNCH</b>	
1330 - 1500	Workshop 5: Introduction to genome assembly and annotation Associate Professor Torsten Seemann, The University of Melbourne	Arts Building Seminar Room
1330 - 1500	Workshop 6: Building a Registry of Candidate cis-Regulatory Elements for Human and Mouse Professor Zhiping Weng, University of Massachusetts Medical School	Arts Building Seminar Room
1500 - 1530	<b>AFTERNOON TEA (catered)</b>	Arts Building Lawns
1530 - 1700	Workshop 5 continues: Introduction to genome assembly and annotation Associate Professor Torsten Seemann, The University of Melbourne	Arts Building Seminar Room
1530 - 1700	Workshop 6 continues: Building a Registry of Candidate cis-Regulatory Elements for Human and Mouse	Arts Building Seminar Room
1700 - 1800	<b>PUBLIC LECTURE REGISTRATION (catered)</b>	UWA Business School foyer
1800 - 1930	Public Lecture Wildlife Detectives: The story of genome research, discovery and exploration at Australia's first Museum Dr Rebecca Johnson, Australian Museum Research Institute	Wesfarmers Lecture Theatre (G91)

<b>Thursday 6 December</b>		
<b>Day 4 - Epigenetics</b>		
0915 - 0930	<b>REGISTRATION</b>	Alexander Lecture Theatre (G57)
0930 - 1015	Emerging technologies in reading and writing the epigenome Professor Ryan Lister, Harry Perkins Institute of Medical Research	Alexander Lecture Theatre (G57)
1015 - 1100	Deciphering the sequence determinants of regulatory dynamics Assistant Professor Simon van Herringen, Radboud University	Alexander Lecture Theatre (G57)
1100 - 1130	<b>MORNING TEA (catered)</b>	Arts Building Lawns
1130 - 1200	Errors and error-correction in plant and animal genomes Professor Matthew Hahn, Indiana University	Alexander Lecture Theatre (G57)
1200 - 1230	Hi-C explores genome-wide chromatin architecture and identifies long-range enhancers Professor Gordon Smyth, Walter & Eliza Hall Institute of Medical Research	Alexander Lecture Theatre (G57)
1230 - 1330	<b>LUNCH</b>	
1330 - 1500	Workshop 7: integrative analysis of epigenomic dynamics at regulatory elements Assistant Professor Simon van Herringen, Radboud University	Arts Building Seminar Room
1330 - 1500	Workshop 8: scMerge Dr Shila Ghazanfar, The University of Sydney	Arts Building Seminar Room
1500 - 1530	<b>AFTERNOON TEA (catered)</b>	Arts Building Lawns
1530 - 1700	Workshop 7 continues: integrative analysis of epigenomic dynamics at regulatory elements Assistant Professor Simon van Herringen, Radboud University	Arts Building Seminar Room
1530 - 1700	Workshop: Building Shiny Apps Dr Rebecca Lange, Curtin University	Arts Building Seminar Room
1800	<b>COMBINE Careers Session (catered)</b>	The Tavern, UWA

<b>Friday 7 December</b>		
<b>Day 5 - Metabolomics and Proteomics</b>		
0845 - 0900	<b>REGISTRATION</b>	Alexander Lecture Theatre (G57)
0900 - 0945	Genome sequencing and association mapping to dissect the genetic basis of yield and adaptation in barley Dr Camilla Hill, Murdoch University	Alexander Lecture Theatre (G57)
0945 - 1015	Modelling biological sequences using infinite hidden Markov models Dr Timo Lassmann, Telethon Kids Institute	Alexander Lecture Theatre (G57)
1015 - 1045	Kinase activity prediction from phosphoproteomics data Dr Ashley Waardenberg, Australian Tropical Health and Medicine, James Cook University	Alexander Lecture Theatre (G57)
1045 - 1115	Multi-block multivariate data integration: insights into asthma Dr Stacey Reinke, Edith Cowan University	Alexander Lecture Theatre (G57)
1115 - 1145	<b>MORNING TEA (catered)</b>	Arts Building Lawns
1145 - 1315	Workshop 9: Predicting kinase activity from phospho-proteomics data with KinSwingR Dr Ashley Waardenberg, Australian Tropical Health and Medicine, James Cook University	Arts Building Seminar Room
1145 - 1315	Workshop 10: The integration of analytical workflows and data analytics for metabolomics Dr Joel Gummer, Murdoch University	Arts Building Seminar Room
1315 - 1330	<b>CONFERENCE WRAP UP &amp; CLOSE</b>	Alexander Lecture Theatre (G57)

*Note: this program is subject to change*