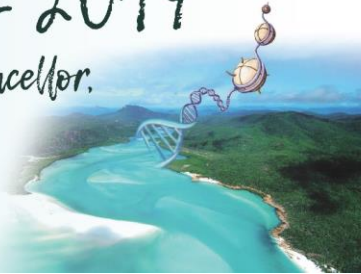




Epigenetics 2017

Hotel Grand Chancellor,
Brisbane

29th October - 1st November 2017



Hotel Grand Chancellor, 29th October – 1st November 2017

SUNDAY 29th OCTOBER

5.00 – 7.00pm Registration Open
Casual Meet and Greet in the Grand Chancellor Bar

MONDAY 30th OCTOBER

8.00 – 9.00am Registration Open

9.00 – 9.10am Conference Welcome – Prof Susan Clark

9.10 – 11.00am **Session 1: Epigenetics Mechanisms**
Chairs: Marnie Blewitt & Tanya Soboleva

9.10 – 9.50am **Keynote Speaker: Prof Stephen Baylin, John Hopkins University**
How epigenetic abnormalities may induce initiation and progression of human cancer

9.50 – 10.10am **A/Prof Jose Polo, Monash University**
Dissection of specific transcriptional complexes at single locus resolution by TINC

10.10 – 10.30am **Prof Susan Clark, Garvan Institute of Medical Research**
The 3D Cancer Epigenome

10.30 – 10.45am Free Abstract:
A/Prof Chen Davidovich, Monash University
Mechanism for RNA-mediated regulation of an epigenetic modifier: the Polycomb repressive complex 2 (PRC2) binds to RNA bearing short repeats of consecutive guanines

10.45 – 11.00am Free Abstract:
Dr Partha Pratim Das, Monash University
Evaluating the functions of epigenetic regulators in mouse embryonic stem cells (mESCs), using CRISPR-Cas9 functional genomics approach

11.00 – 11.30am Morning Tea

11.30 – 1.00pm **Session 2: Functional Epigenomics and Transcriptomics**
Chairs: Chen Davidovich & Juliet French

11.30 – 12.00pm **Prof John Mattick, Garvan Institute of Medical Research**
Structure-function relationships and plasticity of the regulatory RNAs that guide epigenetic processes

12.00 – 12.20pm **A/Prof Carl Walkley, St Vincent's Institute of Medical Research**
Rewriting the transcriptome: Adenosine-to-Inosine RNA editing by ADARs.

12.20 – 12.35pm Free Abstract:
Dr Iain Searle, University of Adelaide
Transcriptome-wide Mapping of RNA 5-Methylcytosine in Arabidopsis mRNAs and non-coding RNAs

12.35 – 12.50pm Free Abstract:
Dr Emily Wong, University of Queensland
Interplay of cis and trans mechanisms driving transcription factor binding, chromatin, and gene expression evolution

12.50 – 1.30pm Fast forward poster abstracts – 10 posters with 2 minutes each

1.30 – 3.00pm Lunch & Poster Presentations

3.00 – 4.30pm **Session 3: Cancer Epigenetics**
Chairs: TBC

3.00 – 3.20pm **Dr Heather Lee, University of Newcastle**
Single-cell analysis to advance epigenetic therapy in acute myeloid leukaemia



3.20 – 3.40pm	A/Prof Vicki Whitehall , QIMR Berghofer Medical Research Institute <i>Oncogenic BRAF Mutation Induces Widespread DNA Hypermethylation in a Murine Model for Human Serrated Colorectal Neoplasia</i>
3.40 – 4.00pm	Dr Yuen Yee Cheng , University of Sydney <i>DNA methylation as a non-invasive epigenetic biomarker for cancer.</i>
4.00 – 4.15pm	Free Abstract: Prof Melissa Southey , Monash University <i>Heritable methylation marks associated with cancer risk: what are they telling us?</i>
4.15 – 4.30pm	Free Abstract: A/Prof Tomasz Wojdacz , Aarhus University <i>Clinical Importance of DNA methylation Signatures in Chronic Lymphocytic Leukaemia Patients Treated with Chemo-immunotherapy</i>
4.30 – 5.00pm	Afternoon Tea
5.00pm	Bus transfer to QIMR Berghofer Medical Research Institute
5.30 – 6.30pm	Public lecture at QIMR Berghofer Medical Research Institute - Prof Peter Jones <i>"Epigenetics – The Next Hope for Cancer Treatments"</i>
6.30 – 7.30pm	Welcome reception at QIMR Berghofer Medical Research Institute
7.30pm	Bus transfer with optional stops in Fortitude Valley, the City, South Bank and Hotel Grand Chancellor
	Free Evening

TUESDAY 31st OCTOBER

8.30am	Registration Open
9.00 – 10.30am	Session 4: Bioinformatics Chairs: Eva Maria Novo Pardo & Jason Ross
9.00 – 9.20am	Prof Terry Speed , Walter and Eliza Hall Institute of Medical Research <i>Detection of 5-methylcytosine with nanopore sequencing</i>
9.20 – 9.40am	Dr Allan McRae , University of Queensland <i>Changes in epigenetic landscape with human age</i>
9.40 – 9.55am	Free Abstract: Dr Ruth Pidsley , Garvan Institute of Medical Research <i>Epigenetic hallmarks of the cancer microenvironment</i>
9.55 – 10.10am	Free Abstract: Dr Michael Duffy , University of Melbourne <i>Acetylations of the P. falciparum variant histones Pf H2A.Z and Pf H2B.Z are associated with gene expression</i>
10.10 – 10.25am	Free Abstract: Ksenia Skvortsova , Garvan Institute of Medical Research <i>DNA hypermethylation encroachment at CpG island borders in cancer is predisposed by H3K4 monomethylation</i>
10.25 – 11.00am	Morning Tea
11.00 – 12.30pm	Session 5: Neuroepigenetics Chairs: Jeff Craig & Nicole Smith
11.00 – 11.20am	A/Prof Anne Voss , Walter and Eliza Hall Institute of Medical Research <i>Histone modifying enzymes laying the basis for neuronal development.</i>
11.20 – 11.40am	Dr Timothy Bredy , University of Queensland <i>The who, what, where, why and how of new DNA modifications in the brain</i>
11.40 – 12.00pm	Professor Geoffrey Faulkner , University of Queensland <i>L1 retrotransposons and somatic genome mosaicism in the mammalian brain</i>



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12.00 – 12.15pm	Free Abstract: TBC
12.15 – 12.30pm	Free Abstract: Dr Peter Hickey , Johns Hopkins University <i>Neuronal Brain Region-Specific DNA Methylation and Chromatin Accessibility are Associated with Neuropsychiatric Disease Heritability</i>
12.30 – 1.00pm	Fast forward poster abstracts – 10 posters with 2 minutes each
1.00 – 2.30pm	Lunch & Poster Presentations
2.30 – 4.00pm	Session 6: Cancer Genetics and Therapy Chair: Melissa Southey
2.30 – 3.10pm	Keynote Speaker: Prof Peter Jones , Van Andel Institute <i>Awakening Sleeping Retroviruses for Cancer Therapy</i>
3.10 – 3.30pm	A/Prof Pilar Blancafort , University of Western Australia <i>Targeted epigenetic editing for reprogramming of complex phenotypes in breast cancer</i>
3.30 – 3.45pm	Free Abstract: A/Prof Jason Lee , QIMR Berghofer Medical Research Institute <i>G9a histone methyltransferase as an epigenetic sensor of tumour hypoxia</i>
3.45 – 4.00pm	Free Abstract: Prof Deborah Marsh , University of Sydney <i>DNA damage modifies the chromatin landscape of histone H2B monoubiquitination in a p53-dependent manner</i>
4.00 – 4.30pm	Afternoon Tea
4.30 – 5.30pm	Session 7: Young Investigators Awards Chairs: Justin Wong & Ruth Pidsley
4.30 – 4.45pm	Free Abstract: Qian Du , Garvan Institute of Medical Research <i>DNA replication timing shapes the cancer epigenome</i>
4.45 – 5.00pm	Free Abstract: Dr Timothy Kelso , Salk Institute <i>Chromatin accessibility underlies synthetic lethality of SWI/SNF subunits in ARID1A-mutant cancers</i>
5.00 – 5.15pm	Free Abstract: Namitha Mohandas , Murdoch Childrens Research Institute <i>DNA methylation analysis of monozygotic twins discordant for epilepsy</i>
5.15 – 5.30pm	Free Abstract: Dr Charlene Waryah , University of Western Australia <i>Epigenetic reprogramming of epithelial specific miRNAs in breast cancer using the CRISPR dCas9 platform</i>
5.30 – 6.30pm	AEPiA Committee Meeting (members only)
7.00 – 11.00pm	Conference Dinner at the Grand Chancellor
WEDNESDAY 1ST NOVEMBER	
8.30am	Registration Open
9.00 -10.30am	Session 8: Development and Aging Chairs: Iain Searle
9.00 – 9.40am	Dr Gavin Kelsey , Babraham Institute <i>Epigenetic mechanisms patterning the germline</i>
9.40 – 10.00am	Dr Ozren Bogdanovic , Garvan Institute of Medical Research



	<i>Developmental DNA methylation dynamics in the chordate amphioxus</i>
10.00 – 10.15am	Free Abstract: Dr Juanma Vaquerizas , Max Planck Institute for Molecular Biomedicine <i>Emergence of chromatin architecture during early embryogenesis</i>
10.15 – 10.30am	Free Abstract: Prof Chris O'Neill , University of Sydney <i>Reprogramming of Histone 3 Lysine 9 Acetylation after Fertilisation in the Mouse Affects the Onset of Normal Gene Expression and is Perturbed by the Culture of Zygotes in vitro</i>
10.30 – 11.00am	Morning Tea
11.00 – 12.10pm	Session 9: Epigenetic Biomarkers Chair: Clare Stirzaker
11.00 – 11.20am	Prof Sudha Rao , University of Canberra <i>Interplay between the epigenome & nuclear Signaling Kinases: Novel liquid biopsy biomarkers for metastatic cancers.</i>
11.20 – 11.40am	Prof Greg Goodall , University of South Australia <i>Regulatory interactions in Epithelial to Mesenchymal Transition: Poised Promoters, microRNAs and circular RNAs</i>
11.40 – 11.55am	Free Abstract: Dr Jason Ross , CSIRO <i>Colvera™, a ctDNA liquid biopsy assay for colorectal cancer. Our journey from discovery to the clinic</i>
11.55 – 12.10pm	Free Abstract: A/Prof Jeffrey Craig , Murdoch Childrens Research Institute <i>Time- and dose-dependent associations between prenatal alcohol exposure and placental global DNA methylation</i>
12.10 – 1.10pm	Lunch
12.10 – 1:10pm	Qiagen Lunchtime Workshop - <i>New technologies in Epigenetics</i>
1.10 – 3.00pm	Session 10: Epigenomics Chairs: David Martino
1.10 – 1.50pm	Prof Fei Lan , Fudan University <i>Regulation of Enhancer Activity by a ZMYND8 - Histone Demethylase Complex</i>
1.50 – 2.10pm	Dr Peter Molloy , CSIRO <i>The Epigenome at Birth: looking back and projecting forward</i>
2.10 – 2.30pm	Prof Ryan Lister , University of Western Australia <i>Frequent lack of repressive capacity of promoter DNA methylation identified through genome-wide epigenomic manipulation</i>
2.30 – 2.45pm	Free Abstract: Dr Eva Maria Novoa Pardo , Garvan Institute of Medical Research and Massachusetts Institute of Technology <i>Charting the unknown epitranscriptome</i>
2.45 – 3.00pm	Free Abstract: Prof Philippe Collas , University of Oslo <i>4-dimensional reorganization of the genome during stem cell differentiation</i>
3.00 – 3.30pm	Awards and Conference Close
3.30 – 4.00pm	Afternoon Tea