

MODEL ORGANISMS IN HUMAN HEALTH AUSTRALIA

MEETING PROGRAM

<i>Tuesday June 27</i>	
13:00-13:55	Registration / arrival tea and coffee
13:55- 14:00	Welcome remarks
14:00-16:00	Session 1 <i>Chair – Michelle Henstridge</i>
14:00-14:45	Trudi Schupbach <i>The EGF receptor pathway regulates axis establishment in Drosophila and serves as a model for disease in humans</i>
14:45-15:15	Elina Hypponen <i>Modelling lifestyles through genetic proxy markers: insights into causal effects on health</i>
15:15-15:30	Matthew Piper <i>Longevity via amino acid restriction is mediated by TOR-dependent transcriptional control in Drosophila</i>
15:30-15:45	Dan Hesselson <i>Rescue of Pink1 Deficiency by Stress-Dependent Activation of Autophagy</i>
15:45-16:15	<i>Afternoon Tea</i>
16:15-17:45	Session 2 <i>Chair – Patricia Jusuf</i>
16:15-17:00	Anna Huttenlocher <i>Imaging inflammation in vivo: Chemokines and inflammation resolution</i>
17:00-17:15	Donna Denton <i>Understanding hormone-mediated autophagy-dependent cell death</i>
17:15-17:30	Iliia Voskoboinik <i>From a test-tube to patients: understanding how cytotoxic lymphocytes maintain immune homeostasis</i>
17:30-17:45	Poster talks
17:45-19:00	Poster session
19:30-21:00	<i>Dinner (BBQ dinner in restaurant)</i>

Wednesday June 28	
8:30-10:30	Session 3 <i>Chair – Massimo Hilliard</i>
08:30-09:15	Pierre-Pascal Lenck Santini <i>Rodent models of cognitive and behavioural disorders with epilepsy</i>
09:15-09:45	Marina Kennerson <i>Developing animal models for inherited peripheral neuropathies</i>
09:45-10:00	Nicole Van Bergen <i>NAD(P)HX Dehydratase (NAXD) deficiency: a novel neurodegenerative disorder exacerbated by febrile illnesses</i>
10:00-10:15	Richard Burke <i>The Voltage-gated Chloride Channels ClC-b and ClC-c play critical roles in lifespan and cell viability respectively</i>
10:15-10:30	Morgan Newman <i>Zebrafish genetic models of familial Alzheimer's disease suggest accelerated brain aging and a phase shift into a pathological state with a central role of HIF1</i>
10:30-11:00	Morning Tea
11:00-13:00	Session 4 <i>Chair – Coral Warr</i>
11:00-11:45	Hugo Bellen <i>Flies to uncover novel rare human genetic disease and their pathogenic mechanisms</i>
11:45-12:30	Phil Hieter <i>Catalyzing Connections: Canada's Rare Diseases Models & Mechanisms Network</i>
12:30-13:00	<i>Discussion on setting up Australian network of partnerships between model organism and medical researchers.</i> John Christodoulou, Nigel Laing, Brandeis McBratney-Owen
13:00-14:00	Lunch
14:00-15:30	Session 5 <i>Chair – Brent Neumann</i>
14:00-14:45	Sandhya Koushika <i>Regulation of synaptic vesicle protein trafficking and transport</i>
14:45-15:00	Rob Bryson-Richardson <i>Identification of therapies for myofibrillar myopathy</i>

15:00-15:15	Mirana Ramialison <i>Detecting cardiac enhanceropathies using comparative genomics between human and marmoset</i>
15:15-15:30	Peter Houwelling <i>Alpha-Actinin-3 is a novel genetic modifier of Duchenne muscular dystrophy</i>
15:30-16:15	<i>Afternoon Tea and Poster session</i>
16:15-18:15	Session 6 Chair – Travis Johnson
16:15-17:00	Eric Wieschaus <i>Post-transcriptional downregulation of Bazooka-Par3 through Snail transcriptional target genes during epithelial-mesenchymal transitions in Drosophila</i>
17:00-17:30	Patrick Tam <i>Modelling craniofacial development in mutant mice and epiblast stem cells</i>
17:30-17:45	Nigel Laing <i>Functional analysis in diagnostic genomic pipelines</i>
17:45-18:00	Sureshkumar Balasubramanian <i>RNA-dependent epigenetic silencing contributes to transcriptional down regulation caused by intronic repeat expansions</i>
18:00-18:15	Marina Carpinelli <i>Grainyhead-like 2 maintains epithelial integrity during palate closure</i>
19:00	<i>Dinner (three courses in restaurant)</i>

Thursday June 29	
8:30-10:30	Session 7 <i>Chair – Sandra Cooper</i>
08:30-09:15	Daniel MacArthur <i>Leveraging massive-scale genomic data sets to improve variant interpretation</i>
09:15-09:45	John Christodoulou <i>Towards the development of a targeted therapeutic for Rett syndrome: in vitro amelioration of disrupted microtubule dynamics and in vivo mouse studies</i>
09:45-10:30	Heather Best/Tamar Sztal <i>PYROXD1: a novel early-onset myopathy gene, essential for life, and a key to unlock how altered redox impacts muscle pathology</i>
10:00-10:15	Linda Parsons <i>Determining the molecular interface between nutrition, cell growth and tumourigenesis</i>
10:15-10:30	Ian Smyth <i>A mouse model for Harlequin Ichthyosis uncovers fundamental roles for ABCA12 in lipid homeostasis and cellular function in multiple organ systems</i>
10:30-11:00	Morning Tea
11:00-13:00	Session 8 <i>Chair – Ben Hogan</i>
11:00-11:30	Kathryn North <i>Genomics and the Brave New World of Personalised medicine: A global and local perspective</i>
11:30-12:00	Moira O'Bryan <i>Microtubules as the masters of sperm function</i>
12:00-12:15	Michael Lardelli <i>Zebrafish models of familial Alzheimer's disease mutations for understanding molecular mechanisms and drug discovery</i>
12:15-12:30	Leanne Dibbens <i>Uncovering genes mutated in epilepsy and their associated phenotypes</i>
12:30-12:45	Kelly Smith <i>Myosin Vb-mediated endosomal trafficking of N-cadherin is required for heart chamber formation</i>
12:45-13:00	Gary Hime <i>Grainyhead regulates midgut stem cell function</i>
13:00	Conference close

Poster Presentations

1. Elena Savva

Snail and escargot co-ordinately regulate Drosophila intestinal stem cell differentiation

2. Frances Lemckert

CRISPR/Cas9 knockout of an alternatively spliced exon – sounds simple?

3. Zeeshan Shaukat

Drosophila as a model for Chromosomal Instability

4. Patricia Jusuf

Zebrafish models to provide mechanistic links between human behaviours and their genetic associates

5. Michael Murray

The polycomb group ubiquitinase Sce represses the Hox gene Abd-B to promote EMT in Drosophila

6. Michelle Henstridge

Membrane Attack Complex / Perforin-like proteins in development: Insights from Drosophila Torso-like

7. Chiao Xin Lim

Elucidating the pathomechanism of KCNT1 mutations in human epilepsy

8. Haowei Jiang

Engineering the familial Alzheimer's disease mutation PSEN2 N141I into the zebrafish genome for analysis of transcriptomic effects

9. Daniel Bakopoulos

The Perforin-like protein Torso-like in Drosophila embryonic patterning

10. Nhi Hin

Whole transcriptome sequencing reveals non-coding gene expression and splicing changes in zebrafish brains affected by aging and Alzheimer's disease

11. Nicole Dominado

Grainyhead regulates midgut stem cell function

12. Tanya Jayne

In vivo assays for investigating P75^{NTR} and NRH1 transmembrane cleavage events using zebrafish embryos

13. Travis Johnson

A transgenic resource for the study of human gene function in Drosophila

14. Brent Neumann

Phosphatidylserine 'save-me' signals drive functional recovery of severed axons

15. Goncalo Pocas

The subcellular localization and axonal transport of α -synuclein in a Drosophila model for Parkinson's disease