

11th Australasian Mutation Detection Meeting: methods, genome sequencing - detecting variants one-by-one or genome-wide, cancer gene analysis & diagnostic applications

11th – 14th September 2016
Alice Springs, NT

PROGRAM

Subject to rearranging

Sunday 11th September

12.00 – 13.00 **Registration** - foyer outside meeting room

13.00 – 14.00 **Lunch & Registration**

14.00 – 14.05 **Welcome Address**
Desiree Du Sart
VCGS, Melbourne, VIC

Session 1 ANCIEN DNA

14.05 – 15.05 **KEYNOTE SPEAKER**
Ancient DNA (exact title TBA)
Speaker from Prof. David Lambert's Lab, TBA
Ancient DNA Lab, Griffith University. QLD

15.05 – 15.15 **Open Discussion**

Session 2 FORENSIC DNA

15.15 - 16.15 **KEYNOTE SPEAKER**
DNA in Forensics: its application to human identification and more
Dadna Hartman
Molecular Biology, Victorian Institute of Forensic Medicine, VIC

16.15 - 16.25 **Open Discussion**

16.25 - 16.45 **Coffee Break**

Session 3 NEXT STEPS FOR NATIONAL DATA SHARING - HVPA

16.45 - 18.30 **Human Variome Project Australian Node. Details to come soon.**

The Human Variome Project Australian Node is a national data sharing facility for improving clinical genetic testing services and supporting medical research.<http://www.hvpaaustralia.org.au/>

18.30 - 19.00 **Free Time**

19.00 – 21.30 **Welcome Dinner – Poolside - DoubleTree by Hilton**

Monday 12th September

Session 4 LIQUID BIOPSY

8.30 – 9.30 **KEYNOTE SPEAKER**
Circulating tumour DNA as a non-invasive diagnostic tool in cancer
Stephen Wong
Molecular Biomarkers and Translational Genomics Lab, Peter MacCallum Cancer Centre, VIC

9.30 – 9.50 **Open Discussion**

9.50 – 10.10 **COMPANY LECTURE**
AGENA BIOSCIENCE
How Agena Bioscience is Driving Down Limit of Detection for Solid Tumours and Liquid Biopsies
Yvette Emmanuel
Applications and Technology Scientist at Agena Bioscience Inc.

10.10 – 10.20 **Rapid Fire Poster Presentations 1**

10.20 – 10.50 **Coffee Break**

Session 5 NON-INVASIVE PRENATAL TESTING

10.50 – 11.50 **KEYNOTE SPEAKER**
Whole genome NIPT: A window into the earliest stages of human development
Mark Pertile
VCGS, Melbourne, VIC

11.50 – 12.20 **IVF and NIPT - the perfect match?**
Peter Field

12.20 – 12.50 **Open Discussion**

12.50 – 13.50 **Lunch**

Session 6 EXOME SEQUENCING

13.50 – 14.50 **KEYNOTE SPEAKER**
Diagnostic Genome Analysis of Rare Hereditary Disorders
Hans Schaeffer
Radboud Univ. Medical Center, Nijmegen, The Netherlands

- 14.50 - 15.00 **Open Discussion**
- 15.00 – 15.20 **Analytical Validation of Exome Sequencing**
Claire Love
- 15.20 - 15.40 **Clinical Exome Sequencing at VCGS**
Dean Phelan

15.40 – 15.50 **Rapid Fire Poster Presentations 2**

15.50 – 16.20 **Poster Session (*poster presenters to stand by their poster*)**

Session 7 EXTERNAL QUALITY ASSESSMENT FOR NGS TECHNOLOGIES

- 16.20 - 17.30 **KEYNOTE SPEAKER**
EQA for NGS technologies
Desiree du Sart for
European Molecular Genetics Quality Network (EMQN), UK
- 17.30 - 18.30 **Open Discussion**
- 18.30 - **Evening at leisure**

Tuesday 13th September

Session 8 WHOLE GENOME SEQUENCING DIAGNOSTIC NGS & NOVEL METHODS

- 8.30 - 9.30 **KEYNOTE SPEAKER**
Whole Genome Sequencing Service at the Kinghorn Centre (exact title TBA)
Marcel Dinger
- 9.30 - 9.40 **Open Discussion**
- 9.40 - 10.00 **Hi-Plex for simple, accurate and low-cost mutation detection**
Daniel Park
- 10.00 - 10.20 **Quantitative JAK2 V617F Assay Using Droplet Digital PCR**
Geraldine Duncan
- 10.20 - 10.40 **COMPANY LECTURE**
BIO-RAD
Drop Everything - Precision Biology with Droplet Digital™ PCR
Richard Harrison
Genomics Marketing Manager, Asia Pacific, Bio-Rad Laboratories Pty Ltd
- 10.40 - 11.10 **Coffee Break**

Workshop 1 VARIANT CURATION

11.10 – 13.00 Panel

- Marcel Dinger
- Desiree du Sart
- Scott Grist
- Vince Harley (to be confirmed)
- Hans Schaeffer

Variant Curation

- The general process followed by most labs
- Cases
- Live Curation

The audience is asked to participate with open discussion

13.00– 14.00 **Lunch**

Session 9 MUTATION DETECTION METHODS & APPLICATIONS

14.00 - 14.20 **COMPANY LECTURE**
QIAGEN
GeneReader - (title TBA)
Speaker TBA

14.20 - 14.40 **Y Chromosome microdeletions and Next Generation Sequencing**
Peter Field

14.40 – 15.00 **Pitfalls of CALR mutation testing: Is there still a role for bone marrow biopsy in the diagnosis of myeloproliferative neoplasms?**
Mary Koleth

15.00 - 15.20 **Sudden death and family cascade testing- expect the unexpected**
Daniel Flanagan

15.20 - 15.30 **Gene mutations in myelodysplastic syndrome (MDS): a preliminary study from a Sydney South West Laboratory**
Anne-Marie Marivel

15.30 - 15.40 **Using a Sequenom assay to detect mitochondrial mutant load in prenatal testing for mitochondrial disorder, NARP**
Chelsea Holt

15.40 - 15.50 **Sensitive and specific colorimetric DNA detection by loop-mediated isothermal amplification coupled with invasive reaction assisted nanoparticles**
Xueping Ma

15.50 - 16.00 **INNOVATION ZONE**
2 minute elevator pitch of a great idea, trend, tool, technique you developed/heard of etc...You do not have to be a company - Don't be shy!
○ TBA – is this you?

16.00 – 16.30 **Coffee Break**

16.30 – 17.00 **Free Time to get your outback gear on!**

17.00 – 22.30 **Dinner in the Outback**
Assemble in the hotel foyer at 17.00 pm for prompt departure
Dress in Outback style, jeans etc. Bring a jacket. Wear comfortable shoes!
Bring sunglasses.

Wednesday 14th September

Workshop 2 **POP UP DISCUSSION**

8.30 – 10.30 **YOU determine the topics**
Please come to the meeting with one or more topics or issues that you feel should be discussed. The theme(s) for this workshop shall be determined by popular demand at the meeting. Delegates will be emailed before the meeting with a list of topics to think about.

10.30 – 10.40 **Windup & Summary**
MEETING END

10.40 – 11.10 **Coffee Time – (*Lunch bags will be provided for you to take away*)**