Clinical Genomic Data Analysis: A Practical Course

KINGHORN CENTRE FOR CLINICAL GENOMICS

GARVAN INSTITUTE OF MEDICAL RESEARCH

Objectives To explore and examine clinical genomic data in depth;
To develop an understanding of processes that underpin clinical genomic data analysis; and
To obtain hands on experience in identifying variants and deducing their impact.

Times	Monday	Tuesday	Wednesday	Thursday	Friday
Morning (9.30am start)	**Talk:** Genomics and genome structure	**Lecture:** Genome bioinformatics for clinicians; *Seave*	**Talk:** Homozygosity mapping and recessive disorders	**Talk:** Gene networks, protein modelling and clinical databases	**Talks:** Molecular biology of cancer; Cancer genomics (practicality & pathology)
Morning	**Talk:** How do you interpret a variant?	**Workshop:** Integrated Genome Viewer and assessing variant quality	**Workshop:** Genome filtering and homozygosity mapping	**Workshop:** Additional analysis tools when a result is not clear	**Workshop:** Cancer genomic data and analysis
Afternoon	**Workshop:** Interpreting variants	**Talk:** Genome filtering	**Talk:** Copy Number Variants	**Talk:** How to write a genomic report	**Talk:** Cancer genomics in research and WGS **Evaluation**
Afternoon (finish time will vary between 3.30 to 5pm)		**Workshop:** Genome filtering	**Workshop:** Copy Number Variants	**Talk/mini-workshop** Quality metrics; Clinical capture and Patient Archive	**Task:** Solving a family [self-assessment opportunity with individual feedback]
Afternoon (4pm)	**Tour:** KCCG genomics facility			**Evaluation** for 4-day course participants	

Please note this outline may be subject to change in line with course applications and the composition of the attendees.
Specific timings and objectives for each day will be provided directly to participants.

Course Convenor: Dr Tony Roscioli. Faculty members/speakers for 18-22 July include: Prof Michael Buckley, Dr Mark Cowley, Prof Michael Field, Dr Andre Minoche, Prof Sandra O'Toole, Prof Neil Watkins. Education coordinator: Bronwyn Terrill (b.terrill@garvan.org.au).

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AGTA Australasian Genomic Technologies Association