Integrating genomics into the healthcare of Australians

Australian Genomics is a national network of clinicians, researchers and diagnostic geneticists working together to provide evidence for the effective and equitable delivery of clinical genomics in healthcare. We are funded by a five year, $25M National Health and Medical Research Council grant. Australian Genomics is made up of 78 partner organisations, including the clinical and diagnostic genetics services of all Australian states and territories and all major research and academic institutions. We work with state-funded genomics programs; Melbourne Genomics Health Alliance, Sydney Genomics Collaborative, Canberra Clinical Genomics and Queensland Genomics Health Alliance, as well as the Australian Government’s Department of Health and Australian Digital Health Agency. We engage more than 200 Investigators across the country, overseen by a National Steering Committee and National Implementation Committee, with Independent and Community Advisory Groups providing expert advice and public perspectives to our work.

Our purpose

Provide strategies to government for the equitable, effective and sustainable delivery of genomic medicine in healthcare.

Enhance Australia’s gene discovery, functional genomics and drug discovery research capacity.

Ensure genomic and medical data is stored safely and shared responsibly to increase our understanding of health and disease.

Advance a new era in clinical delivery, where the patient is informed, involved and empowered.

Build Australia’s research and clinical expertise in genomic medicine.

Our model

Our four research Programs each address different challenges to the integration of genomic medicine into Australian’s healthcare, while our Flagship projects pilot the delivery of genomic medicine at clinical sites across the country.
Our disease Flagships are where we test the clinical validity and cost-effectiveness of genomic testing approaches in patients with rare diseases and cancer. Our Flagships are currently recruiting participants, with additional Flagships to commence in 2018.
Mapping Australia's functional genomics capability

To realise the full potential of genomic medicine, a deeper understanding of the functional consequences of genetic variants is essential. **Australian Genomics** is connecting Australia’s researchers with clinicians to build a functional genomics network to test whether gene alterations identified in the clinic lead to proteins with altered function.

Our progress

Stay up to date by subscribing to our newsletter at: [www.australiangenomics.org.au](http://www.australiangenomics.org.au)
Genomics & the community

Combining personal experience with expertise across law, health policy, science, information technology and patient advocacy, our Community Advisory Group provide advice on all areas of our research strategy and implementation.

The Group is an essential foundation of Australian Genomics. All members are volunteers, who share a purpose to ensure the patient and community voice is heard, that genomics research is conducted rigorously and ethically, and to influence public policy so that future genomic healthcare is resourced, effective and accessible.

Acting locally, building nationally, linking globally

We are piloting informatics solutions for genomic data management, where state and territory-held health data is linked, and accessed with consent, through a secure federated network. This allows genomic and medical information to be safely shared for clinical benefit, whilst maintaining security of patient data. We harness the latest technology and adhere to practices and principles at the forefront of international best practices. Our key partners in this project include the CSIRO, Queensland Genomics Health Alliance, Sydney Genomics Collaborative, Melbourne Genomics Health Alliance and the Global Alliance for Genomics and Health.
Australian Genomics Health Alliance is funded by the NHMRC Targeted Call for Research into Preparing Australia for the Genomics Revolution in Health Care 2016-2020 (Grant no.113531). Our research is ethically approved by the Melbourne Health Human Research Ethics Committee (HREC/16/MH/251).