



A career as a **Clinical Geneticist**

Becoming a Clinical Geneticist will allow you the opportunity to be a doctor within a quickly evolving and rewarding area of healthcare. Clinical Genetics is a specialty which is growing in importance as genomic testing allows patients and their families to access personalised care and treatment to help ensure better outcomes.



What is a Clinical Geneticist?

A Clinical Geneticist is a medical doctor specialising in managing patients and families with or at risk of a genetic condition. They work closely with genetic counsellors to support patients,

families and clinical teams in the management of genetic conditions.

Clinical Geneticists help identify families at possible risk of a genetic condition by assessing a patient's physical features and medical history, gathering and analysing family history and inheritance patterns and calculating chances of recurrence. They provide information about genetic testing and related procedures. They are trained to diagnose patients who may have been unable to find a medical diagnosis for their condition, and may provide an end to the diagnostic odyssey many genomic patients travel through before their genetic diagnosis. Clinical Geneticists are often involved in medical research and may frequently publish journal articles and present at conferences.



Genetics or Genomics?

Historically, genetic testing could only be performed on one gene at a time, whereas now genomic testing allows testing of all genes in one test.

Genomic testing allows analysis of how different genes interact with each other and how this can influence an individual's health and provide best possible outcomes by allowing access to early screening and/or personalised treatment.



Where do Clinical Geneticists work?

Most Clinical Geneticists working in NSW Health work as part of a skilled team within Genetics Services within certain public hospitals. Clinical Geneticists are often consulted by other health specialties to provide advice and assessment which may include but are not limited to:

- Oncology
- Preconception and Prenatal
- Cardiology
- Neurology
- Paediatrics
- Metabolics



Future for Clinical Geneticists

The role of the Clinical Geneticist is quickly evolving as technological advances allow genetic testing to be offered to a growing number of patients and their families. Increasingly, genetic therapies are being trialled for many genetic conditions, and clinical genetics is essential in the accurate delivery of these new gene therapies. Working as a Clinical Geneticist within NSW Health will allow you to be at the cutting edge of the genomic revolution in healthcare.



How do I become a Clinical Geneticist?

To work as a Clinical Geneticist in Australia you will need to complete Specialist qualifications in Clinical Genetics, which is a recognised specialty of the Royal Australian College of Physicians (RACP). To complete this you will require a Bachelor of Medicine/ Bachelor of Surgery or equivalent, as well as completion of (RACP) Basic Physician Training (BPT), including the RACP Written and Clinical Examinations. Following completion of RACP BPT requirements, RACP trainees can apply for Advanced Training in Clinical Genetics.

Please refer to RACP for up to date information on entry and training requirements: www.racp.edu.au/



Career Path

Completion of medical qualification approved by RACP*
www.racp.edu.au/become-a-physician/becoming-a-physician

Completion of basic training

Completion of specialised training in Clinical Genetics

Attainment of the Fellow of Royal College Australasian of Physicians (FRACP) qualification

Continued professional development as a practicing Clinical Geneticist

Useful Links:

HGSA Website: www.hgsa.org.au/resources/careers-in-genetics-and-genomics

RACP Website: www.racp.edu.au/trainees/advanced-training/advanced-training-programs/clinical-genetics

* please refer to individual entry requirements for accredited medical degree courses for more information