RACP Specialists. Together
EDUCATE ADVOCATE INNOVATE

Advanced Training in **Clinical Genetics**

Proposed learning, teaching and assessment programs summary

ENTRY CRITERIA

Summary of proposed changes
- No proposed changes

CURRENT REQUIREMENT	Prospective trainees must: • have completed RACP Basic Training, including the Written and Clinical Examinations • hold a current medical registration • have been appointed to an appropriate Advanced Training position
PROPOSED REQUIREMENT	Prospective trainees must: • have completed RACP Basic Training, including the Written and Clinical Examinations • hold a General medical registration with the Medical Board of Australia if applying in Australia, or a medical registration with a general scope of practice with the Medical Council of New Zealand and a practicing certificate if applying in Aotearoa New Zealand. • have been appointed to an appropriate Advanced Training position

LOCATION OF TRAINING

Summary of proposed changes
- Recommended that training is completed in at least 2 different accredited training settings (experiences in Adult Internal Medicine and Paediatrics & Child Health positions can be considered as distinct settings).

CURRENT REQUIREMENT	• Complete at least 24 months of training in Australia and/or Aotearoa New Zealand.
PROPOSED REQUIREMENT	• Recommend complete training in at least 2 different accredited training settings (experiences in Adult Internal Medicine and Paediatrics & Child Health positions can be considered as distinct settings). • Complete at least 24 months of training in Australia and/or Aotearoa New Zealand.

PROFESSIONAL EXPERIENCE

Summary of proposed changes
- Reference to 'General clinical genetics', 'Metabolic genetics' and 'Cancer genetics' has been replaced with relevant professional experience
- Core training has been reduced to minimum 24 months
- Non-core training has been increased to maximum 12 months
- Laboratory training requirements are now recommended rather than required
- One week of exposure to genomics/variant curation has been replaced with a recommendation to complete a university course

CURRENT REQUIREMENT	**36 months of certified training time** consisting of: **For general clinical genetics:** • Minimum 30 months FTE in core general clinical genetics training • Maximum 6 months FTE in non-core training **For metabolic genetics:** • Minimum 24 months FTE in core metabolic genetics training • Minimum 6 months FTE in core general clinical genetics training • Maximum 6 months FTE in non-core training **For cancer genetics:** • Minimum 18 months FTE in core cancer genetics training • Minimum 12 months FTE in core general clinical genetics training • Maximum 6 months FTE in non-core training *See APPENDIX 1a: **Professional Experience** - Laboratory experience for additional information on current laboratory experience requirements.* *See APPENDIX 1b: **Professional Experience** – Non-core training for additional information on current non-core training requirements.*
PROPOSED REQUIREMENT	Complete at least **36 months of relevant professional experience** in approved rotations in at least 2 different training settings, including: • **24 months minimum** FTE in accredited core clinical genetics training positions *Strongly recommended that trainees undertake their core training time within their specialisation of choice (e.g., general clinical genetics, metabolic genetics, or cancer genetics).* • **12 months maximum** in approved non-core training with demonstratable relevance to the clinical genetics learning goals. • It is recommended trainees undertake laboratory experience once over the course of their training (during either core or non-core training time) via one of the following options: 1. 3- 6-month laboratory position 2. A series of laboratory rotations, including: ○ 1 week in a cytogenetics diagnostic laboratory ○ 2 weeks in a diagnostic molecular laboratory ○ 1 week in a biochemical genetics laboratory 3. 1 variant curation university course. Suitable courses may include: ○ UNSW short course Clinical & Laboratory Diagnostic Genomics

RACP
Specialists. Together
EDUCATE ADVOCATE INNOVATE

Advanced Training in Clinical Genetics
Proposed learning, teaching and assessment programs *summary*

LEARNING PROGRAM

Summary of proposed changes
- Learning Needs Analysis replaced with new Learning Plan tool
- Professional qualities reflections replaced with Learning captures (in the assessment program).

CURRENT REQUIREMENT	• **1** Learning Needs Analysis per year • **1** Professional qualities reflection per year
PROPOSED REQUIREMENT	• **1** Learning plan per rotation

LEARNING COURSES

Summary of proposed changes
- Adoption of new RACP learning courses that will be common across all Advanced Training programs.

CURRENT REQUIREMENT	• **Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety resource**, by the end of Advanced Training
PROPOSED REQUIREMENT	• RACP **Advanced Training Orientation** resource (within the first six months of Advanced Training) • RACP **Health Policy, Systems and Advocacy** resource (recommended completion before the Transition to Fellowship phase) • RACP **Supervisor Professional Development Program,** by the end of Advanced Training • **Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety resource**, by the end of Advanced Training

LEARNING ACTIVITIES

Summary of proposed changes
- Tertiary counselling course has been removed from the program
- Attendance at hospital meetings, journal clubs and relevant conferences has been removed from the program (noting this requirement remains under criteria for accreditation)
- Paediatric Advanced Life Support course (Aotearoa NZ Paediatrics & Child Health trainees only) has been removed from the program (noting this requirement is completed during Basic Training)
- Case reports are considered a learning tool in the new program rather than an assessment. Proposed number of required Case reports reduced from 12 to 6 over the course of training
- Introduction of a logbook will enable trainees to record experiences as a substitute for the diminished case reports.

CURRENT REQUIREMENT	• **1** University genetics course • Attendance at hospital meetings, journal clubs and relevant conferences (recommended) • **1** Tertiary counselling course (recommended) • Paediatric Advanced Life Support course (Aotearoa NZ Paediatrics & Child Health trainees only)

PROPOSED REQUIREMENT	• **1** University genetics course, over the course of training. Suitable courses include:
	  ◦ Harvard Medical School Genetics Fundamentals
	  ◦ GMED5001: Genomics in Clinical Practice
	• **1** Logbook by the end of Advanced Training over the course of training
	• **2** Case reports per phase

RACP Specialists. Together
EDUCATE ADVOCATE INNOVATE

Advanced Training in Clinical Genetics
Proposed learning, teaching and assessment programs *summary*

TEACHING PROGRAM

Summary of proposed changes
- Proposed all core training rotations require at least 1 supervisor with FRACP in clinical genetics rather than "a practicing clinical geneticist".
- Proposed changes to supervision requirements for non-core training
- Introduction of Progress Review Panels for all Advanced Training programs.

CURRENT REQUIREMENT	**Core training** • 1 supervisor per rotation, who is a Fellow of the RACP and a practising clinical geneticist • 1 supervisor per rotation, who is a Fellow of the RACP (or equivalent) **Non-core training** • 1 x supervisor per rotation, who is a Fellow of the RACP and a practising clinical geneticist (general clinical genetics and cancer genetics streams) or metabolic geneticist (metabolic genetics stream) • 1 x supervisor per rotation, who is a Fellow of the RACP (or equivalent)

PROPOSED REQUIREMENT	**Core training:**
	• **2** individuals for the role of Education Supervisor per rotation, including:
	  ○ **Minimum of 1** supervisor per rotation who is a Fellow of the RACP in clinical genetics
	
	Non-core training:
	• **2** individuals for the role of Education Supervisor per rotation, including:
	  ○ **Minimum of 1** supervisor per rotation who is a Fellow of the RACP or an individual with equivalent physician accreditation (i.e., a Fellow of another College e.g., Royal Colleges of Physicians, Board certified clinical geneticist)
	
	Other
	• **1 individual for the role of Research Project Supervisor** (may or may not be the Education Supervisor)
	• **1 RACP training committee to act as a Progress Review Panel**

ASSESSMENT PROGRAM

Summary of proposed changes
- Introduction of new Learning capture tool that will be common across all Advanced Training programs
- Case-based discussions replaced with new Observation capture tool that will be common across all Advanced Training programs
- Supervisor's report replaced by new Progress report tool that will be common across all Advanced Training programs
- Case reports moved from assessment program to learning program as these will be considered learning tools in the new program.

CURRENT REQUIREMENT	• **1** Supervisor's report per rotation
	• **1** Advanced Training Research Project over the course of training
	• **12** Case Reports:
	  ○ **3** Case Reports in the first training year
	  ○ **4** Case Reports in the second training year
	  ○ **5** Case Reports in the third training year
	Core training
	• **4** Case-based discussions per year
	Non-core training
	• **2** Case-based discussions per year

PROPOSED REQUIREMENT	• **12** Observation captures per phase • **12** Learning captures per phase • **4** Progress reports per phase • **1** Research project over the course of training

RACP Specialists. Together
EDUCATE ADVOCATE INNOVATE

Advanced Training in Clinical Genetics

Proposed learning, teaching and assessment programs *summary*

LTA STRUCTURE

- A learning, teaching and assessment (LTA) structure defines the framework for delivery and trainee achievement of the curriculum standards
- Advanced Training is structured in three phases that establish checkpoints for progression and completion.

PROGRESS POINTS

- An **entry decision** is made before entry into the program.
- **Progress decisions**, based on competence, are made at the end of the specialty foundation and specialty consolidation phases of training.
- A **completion decision**, based on competence, is made at the end of the training program, resulting in eligibility for admission to Fellowship.

RATING SCALES

Levels	1	2	3	4	5
Entrustable Professional Activities (EPAs)	Is able to be present and observe	Is able to act with direct supervision	Is able to act with indirect supervision (e.g. supervisor is physically located within the training setting)	Is able to act with supervision at a distance (e.g. supervisor available to assist via phone)	Is able to provide supervision
Knowledge guides	Has **heard of** some of the topics in this knowledge guide that underpin patient care *(heard of)*	**Knows** the topics and concepts in this knowledge guide that underpin patient care *(knows)*	**Knows** how to apply the knowledge in this knowledge guide to patient care *(knows how)*	**Frequently shows** they can apply knowledge in this knowledge guide to patient care *(shows how)*	**Consistently applies** sound knowledge in this knowledge guide to patient care *(does)*
Professional Behaviours (competencies)	Needs to work on behaviour in **more than 5 domains** of professional practice	Needs to work on behaviour in **4 or 5 domains** of professional practice	Needs to work on behaviour in **2 or 3 domains** of professional practice	Needs to work on behaviour in **1 or 2 domains** of professional practice	Consistently behaves in line with **all 10 domains** of professional practice

PROGRESSION CRITERIA

		Entry criteria	Progression criteria		Completion criteria
	Learning goals	At entry into training	End of specialty foundation	End of specialty consolidation	End of Transition to Fellowship
Be	**1. Professional behaviours**	**Level 5**	**Level 5**	**Level 5**	**Level 5**
Do (work tasks)	**1. Team leadership:** Lead a team of health professionals	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	2. Supervision and teaching: Supervise and teach professional colleagues	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	3. Quality improvement: Identify and address failures in health care delivery	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	4. Clinical assessment and management: Clinically assess and manage the ongoing care of patients	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	5. Management of transitions in care: Manage the transition of patient care between health professionals, providers, and contexts	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	6. Longitudinal care: Manage and coordinate the longitudinal care of patients/families with genetic conditions	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	7. Communication with patients: Discuss diagnoses and management plans with patients	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	8. Investigations: Select, organise, and interpret investigations	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	9. Clinic management: Manage an outpatient clinic	**Level 1**	**Level 3**	**Level 4**	**Level 5**
Know (Knowledge Guides)	**1. Clinical sciences**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	2. Laboratory based clinical genomics	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	3. Cancer genetics	**Level 1**	**Level 1**	**Level 2**	**Level 3**
	4. Genetic syndromes and management	**Level 1**	**Level 3**	**Level 4**	**Level 5**
	5. Metabolic genetics	**Level 1**	**Level 1**	**Level 2**	**Level 3**
	6. Subspecialty genetics	**Level 1**	**Level 2**	**Level 3**	**Level 4**
	7. Genetic counselling	**Level 1**	**Level 2**	**Level 4**	**Level 5**

APPENDIX 1a: Professional Experience - Laboratory experience

Current clinical genetics requirements

Laboratory experience
Throughout training, you're expected to attend the equivalent of 1 laboratory liaison per week covering areas like:

- cytogenetics
- molecular genetics
- serum/prenatal screening
- inborn errors of metabolism/biochemical genetics
- neonatal screening

During your 3 years of training, core experience should include minimum:

- 1 week in a cytogenetics diagnostic laboratory
- 2 weeks in a diagnostic molecular laboratory*
- 1 week in a biochemical genetics laboratory
- 1 week exposure to genomics/variant curation

Laboratory experience must meet the standards set out in the Laboratory Genetics section of the Joint Royal Colleges of Physicians Training Board's Specialty Training Curriculum for Clinical Genetics — August 2010 (Amendments 2016)

Proposed new clinical genetics requirements

Laboratory experience

- Please see Professional Experience on page 1 for further details.

APPENDIX 1b: Professional Experience – Non-core training

Current non-core requirements

Accepted non-core training for General clinical genetics:

- In clinical training that includes significant genetics exposure or in clinical genetics research
- In core metabolic genetics or cancer genetics positions

Accepted non-core training for for Metobolic genetics:

- In disciplines directly relevant to metabolic genetics that includes significant metabolic exposure such as:
  - metabolic/genetic research
  - biochemical laboratory
  - newborn screening laboratory

Accepted non-core training for for Cancer genetics:

- In clinical oncology (medical or surgical) or related oncology research

Proposed new clinical genetics requirements

- Please see Professional Experience on page 1 for further details.