# New curricula

# Learning, teaching, and assessment programs

**Advanced Training in Nuclear Medicine** 



#### **About this document**

The new Advanced Training in Nuclear Medicine curriculum consists of curriculum standards and learning, teaching, and assessment (LTA) programs.

This document outlines the Advanced Training in Nuclear Medicine LTA programs for trainees and supervisors. It should be used in conjunction with the Advanced Training in Nuclear Medicine curriculum standards.

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# Program overview

#### **CURRICULUM STANDARDS**

The curriculum standards are summarised as 19 learning goals. The learning goals articulate what trainees need to be, do and know, and are assessed throughout training.

BE	Professional behaviours
DO	<ol> <li>Leadership in the nuclear medicine department</li> <li>Supervision and teaching</li> <li>Quality improvement</li> <li>Clinical assessment and management including prescribing radioisotopes</li> <li>Longitudinal care of patients, including those receiving Theranostics and transitions in care</li> <li>Communication</li> <li>Investigations and procedures</li> </ol>
KNOW	<ol> <li>Scientific basis of nuclear medicine, including radiation safety</li> <li>Cardiovascular nuclear medicine</li> <li>Endocrine nuclear medicine</li> <li>Gastrointestinal nuclear medicine</li> <li>Genitourinary nuclear medicine</li> <li>Musculoskeletal nuclear medicine</li> <li>Neurological nuclear medicine</li> <li>Oncological nuclear medicine</li> <li>Pulmonary nuclear medicine</li> <li>Inflammation and infection</li> <li>Radionuclide therapies / Theranostics</li> </ol>

#### LTA STRUCTURE

The learning, teaching, and assessment (LTA) structure defines the framework for delivery and trainee achievement of the curriculum standards in the program.

The program is structured in three phases. These phases establish clear checkpoints for trainee progression and completion.



#### **Entry criteria**

Prospective trainees must have:

#### General entry requirements

- Current 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 practising certificate if applying in Aotearoa New Zealand.
- An appointment to an Advanced Training position in an RACP-accredited training setting or network or an approved non-core training position.

#### **RACP**

Completed RACP Basic Training, including the Written and Clinical Examinations

#### **RANZCR**

- Completed all Phase 2 requirements of the RANZCR Clinical Radiology Training Program, including Phase 2 examinations and a minimum of 48 months full time equivalent (FTE) accredited training time
- Completed all system focused training and workbased assessment requirements including research (trainees must submit RANZCR certification confirming completion of this requirement)

#### LTA PROGRAMS

The LTA programs outline the strategies and methods to learn, teach, and assess the curriculum standards.

#### **Entry**

1 training application

#### Learning

Minimum 36 months FTE professional experience

1 rotation plan per rotation

Radionuclide therapy/theranostics learning package

Bone densitometry training - course or logbook

- 1 paediatric case report
- 1 cardiac cases logbook
- 1 positron emission tomography logbook

RACP Advanced Training Orientation resource

RACP Supervisor Professional Development Program

RACP Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety resource

RACP Health Policy, Systems and Advocacy resource

CT anatomy course (RACP trainees only)

Recommended resources

#### **Teaching**

- 2 supervisors per rotation
- 1 research project supervisor

#### **Assessment**

- 12 learning captures per phase
- 12 observation captures per phase (reduced to 4 for 2026 only)
- 4 progress reports per phase
- 1 research project

**AANMS Basic Sciences Course** 

AANMS Continuous Assessment Program

# About the program

# **Purpose of Advanced Training**

The RACP offers Advanced Training in 33 diverse medical specialties as part of Division, Chapter, or Faculty training programs.

The purpose of Advanced Training is to develop a workforce of physicians who:

- have received breadth and depth of focused specialist training, and experience with a wide variety of health problems and contexts
- are prepared for and committed to independent expert practice, lifelong learning, and continuous improvement
- provide safe, quality health care that meets the needs of the communities of Australia and Aotearoa New Zealand.

# **Overview of specialty**

Nuclear medicine specialists have expertise in the study and application of nuclear properties and molecular tracers in prevention, detection, diagnosis, management, and treatment of diseases and disorders.

Nuclear medicine determines the cause of the medical problem based on the function of the organ, tissue, or bone. This is how nuclear medicine differs from anatomically based methods of determining the presence of disease based primarily on structural appearance.

Nuclear medicine specialists address the **health care needs of the community** through:

- diagnosis, management, and treatment of serious diseases and disorders.
- **investigation and imaging**, which provides detailed physiological and molecular information to help detect and diagnose the presence and severity of cancers and many other conditions in most organs and tissues in the body (for example the heart, brain, lungs, bones, liver, kidneys, thyroid, and skeleton).
- **non-invasive tools to monitor and predict** responses to therapy, and to help characterise diseases based on their molecular imaging appearances.
- training to select the most appropriate examination and treatment for the patient's particular medical problem, thereby avoiding unnecessary cost, inconvenience, and radiation exposure.

Nuclear medicine specialists possess unique clinical attributes, such as:

- broad clinical science knowledge, including anatomy, chemistry, radiation biology and safety, radiopharmacy, normal physiology and pathophysiology of disease, and nuclear physics.
- high level skills in the technical processes and routine procedures undertaken in the specialty, including bone densitometry, PET, planar and SPECT gamma imaging, and radionuclide therapy.

- **clinical judgement skills** that focus on the clinical setting and the pathophysiological processes involved in each case.
- monitoring quality and adherence to regulatory standards of radionuclide preparation, administration, and disposal, and advising other clinicians of the clinical assessments, indications, limitations, and risks of diagnostic and therapeutic applications of radioactive materials and molecular ligands.

Nuclear medicine specialists have distinctive professional skills, including:

- research skills to support ongoing evidence-based practice in the specialty, with
  well-developed educational skills to support a teaching role in areas related to the specialty,
  especially with medical students, junior staff, nursing and allied health professionals, and
  members of the public.
- **high level communication skills**, especially in the explanation and reporting of procedures and studies employed in the specialty, and in the discussion of scientifically complex molecular treatments. Graduates of the program will be able to use these skills with referring doctors, other health professionals, and with patients and their families or carers.
- quality assurance skills to enable the implementation and ongoing evaluation of nuclear medicine practice to a high technical and professional standard.
- **organisational skills** to support independent practice in nuclear medicine, as well as contributions to and leadership of hospital teams.
- working as an integral member of multidisciplinary teams. Nuclear medicine physicians
  and specialists work collaboratively with other health professionals to make balanced and
  objective clinical decisions, and ensure each patient receives the best available treatment
  and management.

# Supervising committee

The program is supervised by the Committee for Joint College Training in Nuclear Medicine.

#### Qualification

#### **RACP** trainees

RACP trainees who successfully meet the completion standards and criteria of this program will be awarded Fellowship of the Royal Australasian College of Physicians (FRACP).

#### **RANZCR** trainees

RANZCR trainees cannot qualify for RACP Fellowship. Trainees will receive a letter confirming their completion of the Nuclear Medicine Advanced Training program.

# Learning goals and progression criteria

# Learning, teaching, and assessment structure

The learning, teaching and assessment structure defines the framework for delivery and trainee achievement of the curriculum standards in the Advanced Training program.

Advanced Training is structured in three phases. These phases will establish clear checkpoints for trainee progression and completion.

- 1 Specialty foundation
- Orient trainees and confirm their readiness to progress in the Advanced Training program.
- 2 Specialty consolidation
- Continue trainees' professional development in the specialty and support progress towards the learning goals.
- 3 Transition to Fellowship
- Confirm trainees' achievement of the curriculum standards, completion of Advanced Training, and admission to Fellowship.
- Support trainees' transition to unsupervised practice.



Figure: Advanced Training learning, teaching, and assessment structure for the RACP trainee pathway. RANZCR pathway trainees enter training at the beginning of the specialty consolidation phase, the second phase is the completion phase (named Transition to Fellowship phase for RACP pathway trainees).

- 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.



Advanced Training is a **hybrid time- and competency-based training program**. There is a minimum time requirement of full-time equivalent experience, and progression and completion decisions are based on evidence of trainees' competence.

# **Entry criteria**

# ntry attributes

Prospective trainees can demonstrate:

- a commitment and capability to pursue a career as a nuclear medicine specialist
- the ability and willingness to achieve the common learning goals for Advanced Training:
  - team leadership
  - supervision and teaching
  - the professional behaviours, as outlined in the Competencies

Prospective trainees must have:

#### **General entry requirements**

- Current 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 practising certificate if applying in Aotearoa New Zealand.
- An appointment to an Advanced Training position in an RACP-accredited training setting or network or an approved non-core training position.

## **RACP**

RAG

 Completed RACP Basic Training, including the Written and Clinical Examinations

#### **RANZCR**

- Completed all Phase 2 requirements of the RANZCR Clinical Radiology Training Program, including Phase 2 examinations and a minimum of 48 months full time equivalent (FTE) accredited training time
- Completed all system focused training and work-based assessment requirements including research (trainees must submit RANZCR certification confirming completion of this requirement)

#### **Progression criteria**

To progress to the next phase or to complete the program, trainees must demonstrate:

- the ability to plan and manage their learning and to complete their learning and assessment requirements in a timely manner
- achievement of the learning goals to the levels outlined in the <u>learning goal</u> progression criteria.

Training committees or delegated progress review panels will consider evidence supporting trainees' achievement of the progression criteria and make progress decisions.

If criteria have not been met, committees or panels may decide to place conditions on trainees' progression to the next phase of training or not to progress trainees until all criteria have been achieved.

# **Learning goals**

The <u>curriculum standards</u> are summarised as **19** learning goals.

The learning goals articulate what trainees need to be, do, and know, and are assessed throughout training on a five-point scale. This scale determines the expected standard for each learning goal at the end of each training phase. Trainees must meet these standards to progress to the next phase or complete the program.

Learning and assessment tools are linked to the learning goals which allows trainees to

demonstrate competence across each learning goal.

Levels	Levels 1 2		3	4	5
Be: Competencies (professional behaviours)	Needs to work on behaviour in more than five domains of professional practice	Needs to work on behaviour in four or five domains of professional practice	Needs to work on behaviour in <b>two or three</b> <b>domains</b> of professional practice	Needs to work on behaviour in <b>one domain</b> of professional practice	Consistently behaves in line with all 10 domains of professional practice
Do: 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 (i.e., ready access to a supervisor)	Is able to act with supervision at a distance (i.e., limited access to a supervisor)	Is able to supervise others
Know: Knowledge guides	Has heard of some of the topics in this knowledge guide	Knows the topics and concepts in this knowledge guide	Knows how to apply this knowledge to practice	Frequently shows they apply this knowledge to practice	Consistently demonstrates ap plication of this knowledge to practice

		Entry criteria	Progression criteria		Completion criteria
		Entry into training At entry into training, trainees will:	Specialty foundation  By the end of this phase, trainees will:	Specialty consolidation RANZCR trainees first phase of training By the end of this phase, trainees will:	Transition to fellowship (RACP trainees) Completion phase (RANZCR trainees By the end of training, trainees will:
Be	1. Professional behaviours	Level 5 consistently behave in line with all ten domains of professional practice	Level 5 consistently behave in line with all ten domains of professional practice	Level 5 consistently behave in line with all ten domains of professional practice	Level 5 consistently behave in line with all ten domains of professional practice
	2. Leadership in the nuclear medicine department: Lead a team of health and clerical professionals in the nuclear medicine context, encompassing inpatients, outpatients and multidisciplinary	Level 1 be able to be present and observe	Level 2 be able to act with direct supervision	Level 3 be able to act with indirect supervision	Level 5 be able to supervise others
	3. Supervision and teaching: Supervise and teach professional colleagues	Level 1 be able to be present and observe	Level 2 be able to act with direct supervision	Level 3 be able to act with indirect supervision	Level 5 be able to supervise others
	4. Quality improvement: Identify and address failures in health care delivery	Level 1 be able to be present and observe	Level 2 be able to act with direct supervision	Level 3 be able to act with indirect supervision	Level 5 be able to supervise others
Do	5. Clinical assessment and management, including prescribing radioisotopes: Clinically assess and manage the ongoing care of patients, including prescribing radioisotopes	Level 1 be able to be present and observe	Level 2 be able to act with direct supervision	Level 3 be able to act with indirect supervision	Level 5 be able to supervise others
	6. Longitudinal care of patients, including those receiving Theranostics and transitions in care:  Manage and coordinate the longitudinal care and transitions in care of nuclear medicine patients, including those receiving Theranostics	Level 1 be able to be present and observe	Level 2 be able to act with direct supervision	Level 3 be able to act with indirect supervision	Level 5 be able to supervise others
	7. Communication: Communication to optimise the care of nuclear medicine patients	Level 1 be able to be present and observe	Level 2 be able to act with direct supervision	Level 3 be able to act with indirect supervision	Level 5 be able to supervise others
	8. Investigations and procedures: Plan, prepare for, perform, and provide aftercare for important investigations and practical procedures in nuclear medicine	Level 1 be able to be present and observe	Level 2 be able to act with direct supervision	Level 3 be able to act with indirect supervision	Level 5 be able to supervise others

		Entry criteria		ression teria	Completion criteria
		Entry into training At entry into training, trainees will:	Specialty foundation  By the end of this phase, trainees will:	Specialty consolidation RANZCR trainees first phase of training By the end of this phase, trainees will:	Transition to fellowship (RACP trainees) Completion phase (RANZCR trainees By the end of training, trainees will:
	9. Scientific basis of nuclear medicine, including radiation safety	lear medicine,  have heard of know the topics know how to apply this knowledge to		know how to apply this knowledge to	Level 5 consistently demonstrate application of this knowledge to practice
	10. Cardiovascular nuclear medicine	Level 1 have heard of some of the topics in this knowledge guide	Level 2 know the topics and concepts in this knowledge guide  Level 3 know how to apply this knowledge to practice		Level 5 consistently demonstrate application of this knowledge to practice
	11. Endocrine nuclear medicine	Level 1 have heard of some of the topics in this knowledge guide	Level 2 know the topics and concepts in this knowledge guide	Level 3 know how to apply this knowledge to practice	Level 5 consistently demonstrate application of this knowledge to practice
	12. Gastrointestinal nuclear medicine	Level 1 have heard of some of the topics in this knowledge guide	Level 2 know the topics and concepts in this knowledge guide	Level 3 know how to apply this knowledge to practice	Level 5 consistently demonstrate application of this knowledge to practice
Know	13. Genitourinary nuclear medicine	Level 1 have heard of some of the topics in this knowledge guide	Level 2 know the topics and concepts in this knowledge guide	Level 3 know how to apply this knowledge to practice	Level 5 consistently demonstrate application of this knowledge to practice
	14. Musculoskeletal nuclear medicine	Level 1 have heard of some of the topics in this knowledge guide	Level 2 know the topics and concepts in this knowledge guide	Level 3 know how to apply this knowledge to practice	Level 5 consistently demonstrate application of this knowledge to practice
	15. Neurological nuclear medicine			Level 3 know how to apply this knowledge to practice	Level 5 consistently demonstrate application of this knowledge to practice
	16. Oncological nuclear medicine	Level 1 have heard of some of the topics in this knowledge guide	Level 2 know the topics and concepts in this knowledge guide	Level 3 know how to apply this knowledge to practice	Level 5 consistently demonstrate application of this knowledge to practice
	17. Pulmonary nuclear medicine	Level 1 have heard of some of the topics in this knowledge guide	Level 2 know the topics and concepts in this knowledge guide	Level 3 know how to apply this knowledge to practice	Level 5 consistently demonstrate application of this knowledge to practice

	Entry criteria	Progression criteria		Completion criteria
	Entry into training  At entry into training, trainees will:	Specialty foundation  By the end of this phase, trainees will:	Specialty consolidation RANZCR trainees first phase of training By the end of this phase, trainees will:	Transition to fellowship (RACP trainees) Completion phase (RANZCR trainees By the end of training, trainees will:
18. Inflammation and infection	Level 1 have heard of some of the topics in this knowledge guide	Level 2 know the topics and concepts in this knowledge guide	Level 3 know how to apply this knowledge to practice	Level 5 consistently demonstrate application of this knowledge to practice
19. Radionuclide therapies / Theranostics	Level 1 have heard of some of the topics in this knowledge guide	know the topics and concepts in this knowledge guide	Level 3 know how to apply this knowledge to practice	Level 5 consistently demonstrate application of this knowledge to practice

# Learning, teaching, and assessment requirements

# **Overview**

# Requirements over the course of training

What do trainees need to do?	When do trainees need to do it?
Entry	
1 training application	At the start of the specialty foundation phase.  Due 28 February if starting at the beginning of the year and 31 August if starting mid-year.
Learning	
Minimum 36 months full time equivalent (FTE) professional experience	Minimum 12 months FTE during each phase.
Radionuclide therapy/theranostics learning package	Before the end of Advanced Training.
Bone densitometry training - course or logbook	Before the end of Advanced Training.
1 paediatric case report	Before the end of Advanced Training.
1 cardiac cases logbook	Over the course of Advanced Training.
1 positron emission tomography logbook	Over the course of Advanced Training.
RACP Advanced Training Orientation resource	During the first 6 months of the specialty foundation phase.
RACP Supervisor Professional Development Program	Before the end of Advanced Training.
RACP Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety resource	Before the end of Advanced Training, if not completed during Basic Training. Recommended completion before the specialty consolidation phase.
RACP Health Policy, Systems and Advocacy resource	Before the end of Advanced Training. Recommended completion before the transition to fellowship/specialty completion phase.
CT anatomy course	Before the end of Advanced Training.
Recommended resources	Recommended completion over the course of Advanced Training.
Teaching	
Nominate 1 research project supervisor	Recommended to be nominated before the specialty consolidation phase.
Assessment	
1 research project	Before the end of Advanced Training. Recommended submission before the transition to fellowship/specialty completion phase.
AANMS Basic Sciences Course	Before the end of Advanced Training.
AANMS Continuous Assessment Program	Once per 12 months FTE of core training.

# Requirements per phase

What do trainees need to do?	When do trainees need to do it?
Learning	
1 <u>rotation plan</u> per rotation	At the start of (or prior to starting) the rotation. Due 28 February for rotations in the first half or whole of the year and 31 August for rotations in the second half of the year.
Teaching	
Nominate 2 <u>supervisors</u> per rotation	At the start of each accredited or approved training rotation.
Assessment	
12 <u>learning captures</u>	Minimum 1 per month.
4 <u>observation captures</u>	Minimum 1 per month (for 2026 only, reduced to minimum 1 every 3 months).
4 progress reports	Minimum 1 every 3 months.

# **Entry**

# **Training application**

# Requirement

1 training application, at the start of the specialty foundation phase.

#### **Purpose**

The training application supports trainees to:

- confirm they meet the program entry criteria
- provide essential details for program enrolment, ensuring compliance with RACP standards
- establish a formal foundation for their training pathway, enabling access to program resources and support.

The application form will be reviewed by RACP staff. Trainees will be able to track the status of applications through the College's new <u>Training Management Platform (TMP)</u>.

Trainees can submit rotation plans and complete assessments while waiting for their application to be approved.

#### How to apply

Trainees are to submit a training application for the program using TMP.

#### **Due dates**

28 February if starting at the beginning of the year.

**31 August** if starting mid-year.

# Learning

## **Professional experience**

These requirements can be completed in any sequence over the course of training.

#### **Professional experience**

#### **RACP** trainees

• Complete at least 36 months of relevant professional experience in approved rotations.

#### **RANZCR** trainees

Complete at least 24 months of relevant professional experience in approved rotations.

#### Location of training

- Complete training in at least 2 different accredited training settings.
- Complete at least 24 months of training in accredited training settings in Australia and/or Aotearoa New Zealand.
- Training at non-accredited settings can only be undertaken for non-core rotations.

#### **Experiential training**

#### **RACP** trainees

Complete at least 36 months full-time equivalent (FTE) of relevant professional experience in approved rotations, including:

- Minimum 24 months FTE in accredited core nuclear medicine training positions.
- Maximum 12 months FTE in approved non-core training positions.

#### **RANZCR** trainees

• Complete at least 24 months FTE of relevant professional experience in approved rotations, in accredited core nuclear medicine training positions.

#### All trainees

- Minimum 15 days FTE of paediatric training
- Minimum 20 days FTE of positron emission tomography (PET) training

# **Rotation plan**

#### Requirement

1 x rotation plan per rotation.

#### **Description**

The rotation plan is a work-based tool to document details of a training rotation and how a trainee intends to cover their program learning goals over the rotation period.

#### **Purpose**

The rotation plan helps trainees evaluate their learning gaps, curriculum needs, and local opportunities to meet expected standards. It is validated by College staff to ensure it aligns with the professional experience requirements for the program.

#### How to complete it

Trainees can submit a rotation plan in TMP under the training plan tab.

Trainees undertaking their first rotation of their training program must select the following checkbox, 'The rotation start date is also the start date of my Training Program' to record the start date for their training program.

If a trainee is expecting a learning goal to be covered during a rotation, select 'yes' for 'coverage offered' and outline the learning opportunities available. See this <u>completed</u> <u>rotation plan</u> for examples of the learning opportunities that may be available for each learning goal.

This information will be used by supervisors and overseeing RACP training committee to determine the relevance of the rotation to the program's professional experience requirements.

Trainees should upload a copy of the position description and any other supporting information that outlines the training position being undertaken. This should include regular/weekly activities that the trainee will be undertaking during the rotation (e.g. timetable).

Trainees can also set custom goals to define personal objectives that they want to achieve during the rotation. These goals should be measurable and align with the trainee's professional objectives, skill gaps, or personal interests.

Trainees need to nominate their rotation supervisors in the plan, and they will need to approve the plan in TMP via 'my assigned actions'.

For more information on how to complete a rotation plan review the training resources.

#### **Due dates**

**28 February** for rotations in the first half or whole of the year.

**31 August** for rotations in the second half of the year.

## Radionuclide therapy/theranostics learning package

#### Requirement

Complete the radionuclide therapy/theranostics learning package by the end of Advanced Training.

#### **Description**

To complete the radionuclide therapy/theranostics learning package, trainees must:

 Complete 5 days on-site experience in a service that delivers radionuclide therapy/theranostics beyond radioactive iodine

#### **AND**

 Attend at least 2 multidisciplinary meetings which discuss the delivery of high dose radionuclide therapy/theranostics

#### **AND**

- Complete **one** of the following:
  - Completion of a theranostics training course
  - Complete 5 additional days on-site experience in a service that delivers radionuclide therapy/theranostics beyond radioactive iodine (at the discretion of involved training settings)
  - Attend an additional 8 multidisciplinary meetings which discuss the delivery of high dose radionuclide therapy/theranostics

#### **Purpose**

Completion of this learning package helps trainees achieve competency in the radionuclide therapy/theranostics learning goals.

#### How to complete it

Trainees will need to provide evidence of course completion via TMP assessment requirements tab.

Trainees can use the logbook template (under development) to record data and reflect on workplace experiences. The logbook can be submitted via <a href="MP">TMP</a> under the assessment requirements tab.

# Bone densitometry training

#### Requirement

Complete bone densitometry training by the end of Advanced Training.

## **Description**

To complete bone densitometry training, trainees must:

 Attend the annual 2-day practitioner course on bone densitometry run by the <u>Australian</u> and <u>New Zealand Bone and Mineral Society</u> (ANZBMS) and pass the course examination.

#### OR

 Be involved and supervised in the reporting of a minimum of 200 bone mineral density scans, and record them in a logbook.

#### **Purpose**

Completion of the course or logbook is essential for trainees to demonstrate a fundamental level of bone densitometry clinical exposure and knowledge. Many Nuclear Medicine specialists perform bone densitometry routinely in clinical practice.

#### How to complete it

Trainees will need to provide evidence of course completion via TMP assessment requirements tab.

Trainees can use the logbook template (under development) to record data and reflect on workplace experiences. The logbook can be submitted via <a href="IMP">IMP</a> under the assessment requirements tab.

## Paediatric case report

#### Requirement

1 x paediatric case report, by the end of Advanced Training.

This case report forms part of the paediatric training professional experience. Trainees are required to submit, in PowerPoint format, a case report of a patient they may have been involved in while training in Paediatric Nuclear Medicine.

#### **Purpose**

A paediatric case report is a learning activity that demonstrates the trainees' approach to an interesting or unusual paediatric patient case. The case report will not focus solely on the clinical and imaging aspects of the case but will also consider wider issues of paediatric nuclear medicine, including the disease process in paediatric patients, imaging evaluation skills, and literature review skills related to the patient condition.

#### **Description**

In a paediatric case report, trainees will:

- Develop a clinical question which requires an answer to inform how the nuclear medicine study will address the patient's diagnosis and treatment
- Research and critically appraise evidence related to the patient condition or situation
- Apply relevant evidence to the patient case, diagnosis or situation which helps to validate their approach and decisions.

#### How to complete it

Trainees are required to submit their paediatric case report for review by the Committee for Joint College Training (CJCT) in Nuclear Medicine using the <u>template</u>.

The paediatric case report <u>coversheet</u> should be completed and uploaded into <u>TMP</u> under the assessment tools tab.

The Committee for Joint College Training (CJCT) in Nuclear Medicine will review and provide feedback on the paediatric case report using a <u>review sheet</u>.

For more information on how to complete a case report review the training resources.

#### Resources

Paediatric case report template

Paediatric case report coversheet

Paediatric review sheet (for CJCT use)

## Cardiac cases logbook

#### Requirement

1 x logbook of cardiac cases (minimum 300 cases), completed over the course of Advanced Training.

#### **Description**

The logbook is a learning tool that helps trainees capture data about and reflect on specific workplace experiences. The logbook tool is currently under development.

#### How to complete it

Trainees can use the logbook template (under development) to record data and reflect on workplace experiences. The logbook can be submitted via <a href="MP"><u>TMP</u></a> under the assessment requirements tab

# Positron emission tomography logbook

#### Requirement

1 x positron emission tomography (PET) logbook (minimum 300 scans), completed over the course of Advanced Training.

#### **Description**

The logbook is a learning tool that helps trainees capture data about and reflect on specific workplace experiences. The logbook tool is currently under development.

## How to complete it

Trainees can use the logbook template (under development) to record data and reflect on workplace experiences. The logbook can be submitted via <a href="MP">TMP</a> under the assessment requirements tab

#### Courses

#### **RACP Advanced Training Orientation resource**

#### Requirement

1 RACP Advanced Training Orientation resource, completed during the first 6 months of the specialty foundation phase.

#### **Description**

This resource is designed to orient trainees to Advanced Training. It covers areas such as transition to Advanced Training, training and assessment, and trainee support. It is a 'one-stop shop' trainees can return to if they ever want to find a useful resource, or need a refresher on the supporting resources, policies, and systems available to them.

Estimated completion time: 1–1.5 hours.

#### **Purpose**

The resource is intended to support trainees to successfully navigate their transition to Advanced Training and prepare for unsupervised practice as a specialist physician.

#### How to complete it

Trainees can complete the <u>Advanced Training Orientation resource</u> on RACP Online Learning.

Trainees will receive a certificate of completion on RACP Online Learning when they complete the resource. Completion of this requirement will automatically update in <u>TMP</u>.

#### **RACP Supervisor Professional Development Program**

#### Requirement

1 x RACP Supervisor Professional Development Program (SPDP), consisting of 3 workshops, completed by the end of Advanced Training.

#### **Description**

The SPDP consists of 3 workshops:

- Educational Leadership and Management
- Learning Environment and Culture
- Teaching and Facilitating Learning for Safe Practice

See <u>Supervisor Professional Development Program</u> for more information on the program.

## **Purpose**

This requirement aims to prepare trainees for a supervisory/educator role in the workplace and supports trainees' learning aligned with the "team leadership" and "supervision and teaching" learning goals.

# How to complete it

#### Register for a supervisor workshop.

Trainees can complete the SPDP in three ways:

- Virtual workshops
- Face-to-face workshops
- Online courses.

Workshops are free and presented by volunteer Fellows trained in SPDP facilitation.

# RACP Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety resource

#### Requirement

1 x Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety resource, if not completed during Basic Training.

Trainees must complete the resource by the end of their Advanced Training however it's recommended they complete it before the specialty consolidation phase.

#### **Description**

The Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence and Cultural Safety resource teaches best practice medicine for Aboriginal, Torres Strait Islander and Māori patients through reflection on the trainee's own cultural values and recognition of their influence on professional practice.

Estimated completion time: 2 hours.

#### **Purpose**

This resource supports trainees' learning aligned with the "professional behaviours" learning goal. Specialist training requires trainees to:

- examine their own implicit biases
- be mindful of power differentials
- develop reflective practice
- undertake transformative unlearning
- contribute to a decolonisation of health services for Indigenous peoples

#### How to complete it

Trainees can complete the <u>Australian Aboriginal</u>, <u>Torres Strait Islander and Māori Cultural</u> <u>Competence and Cultural Safety resource</u> on RACP Online Learning.

Trainees will receive a certificate of completion on RACP Online Learning when they complete the resource. Completion of this requirement will automatically update in the Training Management Platform.

#### **RACP Health Policy, Systems and Advocacy resource**

#### Requirement

1 x RACP Health Policy, Systems and Advocacy resource, completed by the end of Advanced Training.

#### **Description**

This resource has been designed for Advanced Trainees, as an introduction to health policy, systems, and advocacy.

Estimated completion time: 5 hours.

#### **Purpose**

The resource aims to support Advanced Trainees in meeting the health policy, systems, and advocacy professional standard and underpinning competencies outlined in their specialty curriculum, and to enable connections between Advanced Trainees' own practice and the nature and attributes of local, national, and global health systems.

#### How to complete it

Trainees can complete the <u>RACP Health Policy, Systems and Advocacy resource</u> on RACP Online Learning.

Trainees will receive a certificate of completion on RACP Online Learning when they complete the resource. Completion of this requirement will automatically update in the Training Management Platform.

# CT anatomy course (RACP trainees only)

#### Requirement

1 x CT anatomy course, completed by the end of Advanced Training.

#### **Description**

Examples of suitable CT anatomy courses include those run by <u>Radiopaedia</u> and the <u>Society of Nuclear Medicine and Molecular Imaging</u> (SNMMI).

#### **Purpose**

Hybrid imaging is a core component of the nuclear medicine curriculum and nuclear medicine practice, with interpretation of CT images part of daily nuclear medicine practice. Completion of a CT anatomy course assists trainees in developing an understanding of cross-sectional anatomy, which is critical for hybrid image interpretation.

#### How to complete it

Trainees will need to provide evidence of course completion via <a href="MP">TMP</a> assessment requirements tab.

## **Recommended resources**

- RACP Communication Skills resource
- RACP Ethics resource
- RACP Introduction to Leadership, Management and Teamwork resource
- RACP Research Projects resource
- RACP eLearning resources
- RACP curated collections

# **Teaching**

## **Supervision**

#### **Rotation supervisors**

Trainees are to have 2 x supervisors per rotation, including:

Minimum 1 x supervisor, who is a Fellow of the RACP or RANZCR in Nuclear Medicine

#### Nominating eligible supervisors

Trainees will be asked to nominate rotation supervisors as part of their rotation plan. Trainees are required to nominate eligible supervisors who meet the above requirements.

A list of eligible supervisors can be found on MyRACP. The list is not available for post-Fellowship trainees. Post-Fellowship trainees can contact us to confirm supervisor eligibility.

#### Research project supervisor

Trainees are to nominate 1 x research project supervisor over the course of Advanced Training. Recommended to be nominated before the specialty consolidation phase.

The research project supervisor guides trainees with their project choice, method, data analysis and interpretation, and quality of written and oral presentation.

More information about this role can be found in the Advanced Training research project guidelines.

# **Assessment**

# **Assessment blueprint**

This high-level assessment program blueprint outlines which of the learning goals *could be* and *will be* assessed by the assessment tools.

		Assessment tools						
Learning goals		Learning capture	Observation capture	Progress report	Research project	Paediatric case report	AANMS Basic Sciences Course	AANMS Continuous Assessment Program
1.	Professional behaviours	Could assess	Could assess	Will assess	Will assess	Will assess	Could assess	Could assess
2.	Leadership in the nuclear medicine department	Could assess	Could assess	Will assess	х	Could assess	х	Could assess
3.	Supervision and teaching	Could assess	Could assess	Will assess	Х	Could assess	х	Х
4.	Quality improvement	Could assess	Could assess	Will assess	Could assess	Could assess	Could assess	Could assess
5.	Clinical assessment and management, including prescribing radioisotopes	Could assess	Could assess	Will assess	х	Could assess	Could assess	Could assess
6.	Longitudinal care of patients, including those receiving Theranostics and transitions in care	Could assess	Could assess	Will assess	Х	Could assess	Х	Could assess
7.	Communication	Could assess	Could assess	Will assess	х	Could assess	х	Could assess
8.	Investigations and procedures	Could assess	Could assess	Will assess	Х	Could assess	Could assess	Could assess

	Assessment tools						
Learning goals	Learning capture	Observation capture	Progress report	Research project	Paediatric case report	AANMS Basic Sciences Course	AANMS Continuous Assessment Program
Scientific basis of nuclear medicine, including radiation safety	Could assess	Could assess	Will assess	х	Could assess	Will assess	Could assess
10. Cardiovascular nuclear medicine	Could assess	Could assess	Will assess	х	Could assess	Could assess	Could assess
11. Endocrine nuclear medicine	Could assess	Could assess	Will assess	Х	Could assess	Could assess	Could assess
12. Gastrointestinal nuclear medicine	Could assess	Could assess	Will assess	х	Could assess	Could assess	Could assess
13. Genitourinary nuclear medicine	Could assess	Could assess	Will assess	x	Could assess	Could assess	Could assess
14. Musculoskeletal nuclear medicine	Could assess	Could assess	Will assess	х	Could assess	Could assess	Could assess
15. Neurological nuclear medicine	Could assess	Could assess	Will assess	x	Could assess	Could assess	Could assess
16. Oncological nuclear medicine	Could assess	Could assess	Will assess	x	Could assess	Could assess	Could assess
17. Pulmonary nuclear medicine	Could assess	Could assess	Will assess	х	Could assess	Could assess	Could assess
18. Inflammation and infection	Could assess	Could assess	Will assess	Х	Could assess	Could assess	Could assess
19. Radionuclide therapies / Theranostics	Could assess	Could assess	Will assess	х	Could assess	Could assess	Could assess

#### Learning capture

#### Requirement

12 x learning captures per phase of training, minimum 1 per month.

Refer to RACP Flexible Training Policy for further information on part-time training (item 4.2).

#### **Description**

The learning capture is a work-based assessment that involves a trainee capturing, and reflecting on, professional development activities, including evidence of work-based learning linked to specific learning goals.

#### **Purpose**

The learning capture assists trainees to reflect on experiences, promotes critical thinking, and connects these to a trainee's learning goals and professional development. It is also a valuable mechanism for trainees to enhance their understanding of complex topics and less common experiences that may be difficult to encounter in traditional training.

## How to complete it

The learning capture is completed via TMP under the 'assessment requirements' tab.

For more information on how to complete a learning capture review the training resources

## **Observation capture**

#### Requirement

4 x observation captures per phase of training, minimum 1 every 3 months.

Refer to RACP Flexible Training Policy for further information on part-time training (item 4.2).

#### **Description**

An observation capture is a work-based assessment which provides a structured process for trainees to demonstrate their knowledge and skills in real-time workplace situations, while assessors observe and evaluate performance.

#### **Purpose**

The purpose of the observation capture is to assess skill development, track progress, and provide targeted feedback for improvement for trainees against specific learning goals.

#### How to complete it

Observation captures are completed via TMP under the 'assessment requirements' tab.

For more information on how to complete an observation capture review the <u>training</u> <u>resources</u>.

#### **Progress report**

#### Requirement

4 x progress reports per phase of training, minimum 1 every 3 months.

Refer to RACP Flexible Training Policy for further information on part-time training (item 4.2).

#### **Description**

A progress report is an assessment that documents trainees' and supervisors' assessment of trainee progress against the training program learning goals over a period of training.

## **Purpose**

Progress reports assess knowledge and skill development, track progress against the phase criteria, and provide targeted feedback for improvement.

#### How to complete it

Progress reports are completed via <u>TMP</u> under the assessment requirements tab.

Trainees must:

- self-assess against the program's learning goals
- record any leave taken during the covered training period
- provide summary comments about the rotation

For more information on how to complete a progress report review the training resources

# Research project

#### Requirement

1 x research project over the course of Advanced Training.

#### **Description**

The research project should be one with which the trainee has had significant involvement in designing, conducting the research and analysing data. Trainees may work as part of a larger research project but must have significant input into a particular aspect of the study.

Research projects are not required to be specialty-specific but are required to be broadly relevant to trainees' area of specialty. Broadly relevant can be defined as topics that can enhance, complement and inform trainees' practice in the chosen specialty.

Three research project types are accepted:

- research in:
  - $\circ\quad$  human subjects, populations and communities and laboratory research
  - o epidemiology
  - o education
  - leadership
  - o medical humanities
  - o areas of study which can be applied to care of patients or populations
- audit
- systematic review

The trainee must have a research project supervisor who may or may not be one of their rotation supervisors.

The research project is marked by the training committee as pass, fail or resubmit and trainees receive qualitative feedback about their project. The research project should be submitted for marking by the end of the specialty consolidation phase to allow time for resubmission in the Transition to Fellowship/Specialty Completion phase if the project is unsatisfactory.

#### **Purpose**

The research project enabled trainees to gain experience in research methods; in interpretation of research literature; in participation in research at some stage of their career; and to develop quality improvement skills. Submission of a research project provides evidence of the skills of considering and defining research problems; the systematic acquisition, analysis, synthesis and interpretation of data; and effective written communication.

#### How to complete it

Detailed information on how to complete the research project can be found in the <u>Advanced Training research project guidelines</u> and can be submitted via <u>TMP</u> under the assessment requirements tab.

There are 3 deadlines that must be followed when submitting an Advanced Training Research Project. Trainees can choose to submit their Research Project on any of these 3 dates during the year.

Australia: 31 March, 15 June, or 15 September.

Aotearoa New Zealand: 31 March, 15 June, or 15 December.

#### **AANMS Basic Sciences Course**

## Requirement

1 x Australasian Association of Nuclear Medicine Specialists (AANMS) Basic Sciences Course, completed by the end of Advanced Training.

#### **Description**

Satisfactory completion of the Basic Sciences Course includes a written assessment covering the curriculum in basic sciences. The open book written assessment, comprising 2 x 2-hour papers, will take place at the trainee's training setting and be supervised by their clinical supervisor.

For more information about the course, see the <u>AANMS website</u> or contact the <u>AANMS</u> <u>Secretariat</u>.

# **Purpose**

The Basic Sciences Course teaches the basic scientific principles relevant to the clinical applications of nuclear medicine.

It will provide trainees:

- an understanding of the theoretical principles of the basic sciences in nuclear medicine
- the ability to apply these principles in clinical nuclear medicine practice
- practical skills in instrumentation, computer analysis and radiopharmacy

#### How to complete it

Trainees will need to provide evidence of course completion via <u>TMP</u> assessment requirements tab.

# **AANMS Continuous Assessment Program**

#### Requirement

1 x AANMS Continuous Assessment Program (CAP) per 12 months FTE of core training.

# **Description**

A number of assessment types, which vary year-to-year, make up the CAP:

- written assignments
- online assessments
- format face-to-face assessments, for example an oral assessment task and/or the American Board of Nuclear Medicine Formative In-Training Examination

Details of the requirements and assessment dates for the current year CAP are listed on the AANMS <u>Trainee Resource and Education Centre</u> (TREC). The TREC is open to current nuclear medicine trainees only.

Trainees must complete all the CAP assessments set during their core training years. For part-time trainees, CAP assessments will be pro-rated to the amount of training they have been approved for, as outlined in the RACP Flexible Training Policy.

Trainees are not required to complete CAP assessments during their non-core training year.

For more information about the CAP, see the <u>AANMS website</u> or contact the <u>AANMS</u> Secretariat.

#### **Purpose**

The CAP is designed to:

- provide an objective measure of knowledge of material considered to be necessary for satisfactory performance as a Nuclear Medicine specialist
- act as a teaching aid to focus a trainee's learning on the areas of importance outlined in the Advanced Training in Nuclear Medicine curriculum standards
- provide objective feedback to trainees and their supervisors on the trainee's performance

#### How to complete it

Trainees will need to provide evidence of course completion via <u>TMP</u> assessment requirements tab.

# Roles and responsibilities

#### **Advanced Trainee**

#### Role

A member who is registered with the RACP to undertake one or more Advanced Training programs.

#### Responsibilities

- Maintain employment in accredited training settings.
- Act as a self-directed learner:
  - be aware of the educational requirements outlined in the relevant curricula and education policies
  - actively seek and reflect on feedback from assessors, supervisors, and other colleagues
  - plan, reflect on, and manage their learning and progression against the curricula standards
  - o adhere to the deadlines for requirements of the training program.
- Actively participate in training setting / network accreditation undertaken by the RACP.
- Complete the annual Physician Training Survey to assist the RACP and training settings with ongoing quality improvement of the program.

# **Rotation supervisor**

#### Role

A consultant who provides direct oversight of an Advanced Trainee during a training rotation.

#### Responsibilities

- Be aware of the educational requirements outlined in the relevant curricula and education policies.
- Oversee and support the progression of Advanced Trainees within the setting:
  - Assist trainees to plan their learning during the rotation.
  - Support colleagues to complete observation captures with trainees.
  - o Provide feedback to trainees through progress reports.
- Actively participate in rotation accreditation undertaken by the RACP.
- Complete the annual Physician Training Survey to assist the RACP and training settings with ongoing quality improvement of the program.

#### **Assessor**

#### Role

A person who provides feedback to trainees via the Observation Capture or Learning Capture tool. This may include consultants and other medical professionals, allied health professionals, nursing staff, patients and their families, administrative staff, and consumer representatives.

## Responsibilities

- Be aware of the learning goals of the training program.
- Provide feedback to support the progression of Advanced Trainees within the setting:
  - o Complete Observation Captures.
  - o Provide feedback on Learning Captures as required.

# **Progress Review Panel**

#### Role

A group convened to make evidence-based decisions on Advanced Trainees' progression through and certification of training.

More information on Progress Review Panels will be available in 2025.

#### Responsibilities

- Review and assess trainees' progress.
- Communicate and report on progression decisions.
- Monitor delivery of the Advanced Training program.
- Ensure compliance to regulatory, policy and ethical matters.

# **RACP** oversight committees

#### Role

RACP-administered committees with oversight of the Advanced Training Program in Australia and New Zealand. This includes the relevant training committee and/or Aotearoa New Zealand training subcommittee.

#### Responsibilities

- Oversee implementation of the Advanced Training program in Australia and Aotearoa New Zealand:
  - Manage and review program requirements, accreditation requirements, and supervision requirements.
  - o Monitor implementation of training program requirements.
  - o Implement RACP education policy.
  - o Oversee trainees' progression through the training program.
  - Monitor the accreditation of training settings.
  - o Case manage trainees on the Training Support pathway.
  - Review progression and certification decisions on application in accordance with the RACP Reconsideration, Review, and Appeals By-Law.
- Work collaboratively with Progress Review Panels to ensure the delivery of quality training.
- Provide feedback, guidance, recommendations, and reasoning for decision making to trainees and supervisors.
- Declare conflicts of interest and excuse themselves from decision making discussions when conflicts arise.
- Report to the overseeing RACP committee as required.

# Resources

# For trainees

- Education policies
- Trainee support
- <u>Trainee responsibilities</u>
- Accredited settings
- Training fees

# For supervisors

- Supervisor Professional Development Program
- RACP Research Supervision resource
- RACP Training Support resource
- RACP Creating a Safe Workplace resource