

Radiation Therapy PD Pathway

Radiation therapy is the treatment of cancer and other diseases with high energy X-rays. Radiation therapists are involved in all aspects of a patient's journey through their radiation therapy including:

- guiding and supporting patients and their carers through the radiation therapy process
- looking after patient positioning and stabilisation
- using simulators and/or CT scanners to delineate areas for treatment and areas to be avoided
- planning and dosimetry of treatment
- administration of radiation treatment

Speciality areas include brachytherapy, stereotactic radiotherapy, image guided radiotherapy and intensity modulated radiotherapy. In addition to these technical roles, there are opportunities to take on additional responsibilities in education, research or management roles.

Radiation therapists require scientific skills and knowledge as well as strong interpersonal skills, compassion and the ability to work as part of a team.

Find out how some Australian radiation therapists have developed their careers in a range of settings.

Professional development requirements for individual radiation therapists will depend on their role and career goals.

A range of grants and fellowships are available to radiation therapists to support professional development activities.

Where are you in your career?

▶ New to radiation therapy

If you have recently qualified, you may find it helpful to start with activities that will provide you with experience in different technologies as well as general information about cancer, its diagnosis and management. Your professional development year will have given you some exposure to radiation therapy practice. Gaining experience across a broad range of areas and in different settings will provide you with a better understanding of the needs of patients with cancer and may help guide your decisions about future career directions.

Tips from Radiation Therapists

▶ Make a plan

Developing a plan about where you want your career to take you and what you need to do to get there will help ensure that your learning experiences are relevant and useful.

"From a young age, I actively went about looking at and planning what I would be doing with my career. That's really important. You'll probably change direction along the way, and that's fine, but you need to have a plan that can be flexible enough to change. Don't think 'I'll see about it next year'." **Rhonda, Project Director, Cancer Redevelopment, WA**

"Choose the continuing professional development opportunities that will help you to get to where you want to be. It's like when you're in high school and you choose the subjects you study to help you get to University. That approach shouldn't stop there." **Rhonda, Project Director, Cancer Redevelopment, WA**

▶ Find a mentor

A mentor is a colleague who can provide you with individual advice, feedback and support. Mentors can be a great source of encouragement and inspiration. Clinical educators can also be a great source of information and advice. [Click here](#) for tips on finding a mentor.

"I've actively sought mentors. In Canada, I rang someone I thought was a good manager and asked them to be my mentor – and they were tickled pink! You need to seek out mentors. If you can find someone who can mentor you through, it's very valuable." **Rhonda, Project Director, Cancer Redevelopment, WA**

"It's easier if you can see someone else doing the job before going down a particular path." **Georgina, Clinical Tutor and Research Radiation Therapist, NSW**

"Radiation therapy has come along in leaps and bounds and [the clinical educator role] has been excellent for junior staff and for staff in general. To have a mentor to take the time to help you plan or learn different techniques has made a world of difference." **Rodney, Senior Radiation Therapist and Clinical Educator, NSW**

▶ Gaining experience

Gaining experience in different aspects of radiation therapy can be valuable in helping you develop your skills and in guiding your future career decisions. Seek and take advantage of all opportunities as they arise. Have a proactive discussion with your Supervisor or Chief about opportunities and make your interest known within your workplace. Talk with other radiation therapists working in the cancer area and visit different departments. Consider taking on roles in different treatment settings, departments and locations to gain exposure to a variety of approaches. A good grounding in a range of basic skills will stand you in good stead for more specialist roles in the future.

"It was good to work in some other departments and realise that there are other ways of doing the same thing." **Georgina, Clinical Tutor and Research Radiation Therapist, NSW**

"I actively took up opportunities to be able to do education – first within the cancer centres, helping students, mentoring students, unpaid. That helped me to move that way so that when opportunities became available to teach formally I had some experience. You have to start by looking for opportunities that will help you to get where you want to go." **Rhonda, Project Director, Cancer Redevelopment, WA**

"The biggest tip I could give is learn the basics. It's such a rapidly developing field but the basics are still the same. It doesn't matter if you're doing the simplest of plans or an IMRT plan. The whole theory is still to get the highest dose to the tumour with the least dose to the healthy tissue. As long as you learn the basics, those principles will stand you in good stead, no matter what new development comes along." **Rodney, Senior Radiation Therapist and Clinical Educator, NSW**

"There's still a sense that you want people to come into the profession who are dedicated to the clinical contact and develop their clinical skills and you gradually build that up before they go into the research area." **Georgina, Clinical Tutor and Research Radiation Therapist, NSW**

▶ Self-directed learning on cancer terminology

Options for self-directed learning may include cancer and radiation therapy text books and journals and cancer websites. Take the time to read journals that are circulated within your department and ask others what they have found helpful. Good introductory cancer websites can be found in our section on [Fundamentals of Oncology](#).

"Your degree gives you the background knowledge, like fundamentals of cancer and radiation therapy, and that grounds you. And you have clinical placements so you have time in a department where you see it come together in a work sense. However, the majority of things you need to learn, you learn on the job. You need to learn the ability to direct your learning, to communicate with and learn from colleagues, and to be able to look after yourself so you can learn on the job." **Georgina, Clinical Tutor and Research Radiation Therapist, NSW**

▶ Workshops/seminars

Workshops and seminars may be available through a range of avenues. Ask colleagues about local talks or professional development sessions being given in your department, hospital or local area. If you have access to a Clinical Educator, it is likely that you will have regular education sessions within your department. You may also find external events valuable. For example, The Cancer Council in each state and territory often run workshop and seminars on a range of cancer topics.

The Australian Institute of Radiography runs seminars and conferences for Radiation Therapists Their website and professional magazine has listings of educational events available in each state.

"We have a weekly 1-hour education session. Once a month it's dedicated to research and the other weeks it varies. We can discuss care and nursing strategies, psychosocial issues, computer applications or techniques of delivery, or the session might be dedicated to tumour sites, or just the role of education. It's at quite a basic level but it keeps everyone up to date so you know what the emerging areas are." **Georgina, Clinical Tutor and Research Radiation Therapist, NSW**

▶ Journal clubs

Journal clubs provide a valuable way to learn new information and network with colleagues. Publications of interest are reviewed in a small group setting, providing the opportunity to learn new information and practise presentation skills in a familiar environment.

▶ Use your colleagues

Multidisciplinary care is becoming a fundamental part of the delivery of best practice in cancer care. Being a member of a multidisciplinary team can be a valuable source of information and can provide ongoing learning opportunities.

To access the Cancer Learning Multidisciplinary Toolkit, [click here](#)

"Multidisciplinary learning across groups is important. You need to understand the roles within the team and what other people know. By knowing each other's role, it builds mutual respect." **Rhonda, Project Director, Cancer Redevelopment, WA**

"At larger centres you tend to want people to specialise in certain methods but in smaller centres if you're going to introduce a technique you want everyone to learn how to do it. At my centre we do IMRT and everyone does it – so graduates who have left university are expected to come to the department and learn that skill. Mostly you learn these skills from another staff member – but there's never much time for the stages of learning! Or you can go to conferences. There are some international conferences and training events that are really well structured but generally you have to learn it on the job." **Georgina, Clinical Tutor and Research Radiation Therapist, NSW**

▶ Interest groups and organisations

Involvement in local, state-based, national or international networks or special interest groups can be a valuable source of information and ongoing learning. Ask colleagues about local groups.

For more information about national and international groups, [click here](#).

"If I was going to encourage people I would tell them to get involved in the profession and be enthusiastic." **Rodney, Senior Radiation Therapist and Clinical Educator, NSW**

▶ Taking the next step

If you are considering working in a more specialised role, whether it be specialising in a particular technique, or moving into an education or research role, you will benefit from training in the particular aspects of care or approaches you will be involved in. This may involve undertaking a course or gaining practical experience in your area of interest. You may decide to do a postgraduate qualification such as a clinical diploma or graduate certificate in your particular area of interest.

Tips from Radiation Therapists

▶ Get involved in networks and groups

Involvement in local, state-based, national or international networks or special interest groups can be a valuable source of information and ongoing learning. Ask colleagues about local groups.

For more information about national and international groups, [click here](#).

"[The AIR CPD program] encourages you to undertake professional development, plus it's really good personally to keep on top of things – and it keeps it interesting. The field is developing so rapidly that you really do need to keep on top of things." **Rodney, Senior Radiation Therapist and Clinical Educator, NSW**

"If you want to be in a career 35 years down the track that you started in then you have to be actively involved because that's where the job satisfaction comes from." **Rhonda, Project Director, Cancer Redevelopment, WA**

"Being part of a network is a great way of finding out what's good and what's worth your time." **Georgina, Clinical Tutor and Research Radiation Therapist, NSW**

▶ Attend conferences

Attendance at relevant state-based or national conferences can be a valuable way to learn new information and to network with colleagues. Conferences include broad cancer conferences, such as the annual COSA conference, radiation therapy conferences, such as the AIR national conference, or specialty conferences focusing on a particular technique such as brachytherapy.

For conference listings, [click here](#).

"The National conference is annual and is really good to keep up to date with new developments plus to see where everybody else is heading in Australia and New Zealand. There are also conferences aimed at specific techniques for people specialising in those." **Rodney, Senior Radiation Therapist and Clinical Educator, NSW**
"Attending COSA gives you a broader view of the whole field than just the radiotherapy field." **Sue, Radiation Therapy Centre Manager, VIC**

▶ Ask questions

Asking questions and challenging accepted approaches, even though it may push you outside your comfort zone, can be a great way to learn and progress and to develop yourself both professionally and personally.

"You've always got to be on the look-out for new things. Don't necessarily disregard them as not being directly related to your practice. Some things can seem pretty obscure when you first look at them. You think 'I won't need that.' But in radiotherapy we need to keep broadening and understanding the full spectrum of cancer care."
Sue, Radiation Therapy Centre Manager, VIC

"Ask questions – ask people why things work for them and how they do things. Share information and others will share information with you – it's what makes the profession worthwhile and that's where power that supports the managers comes from."
Rhonda, Project Director, Cancer Redevelopment, WA

▶ Attend workshops and short courses

For more information about radiation therapy- and cancer-specific workshops and courses, [click here](#). Individuals working in clinical research are likely to be invited to attend start-up meetings or investigator meetings at which information about the trial and the protocol will be provided. Short courses on clinical trials management and good clinical practice can be very valuable to provide an overview of the trials process.

▶ Undertake a postgraduate qualification

Relevant postgraduate qualifications, such as a graduate certificate or graduate diploma can be a valuable way to find out more about particular areas of care and will help you in your career progression. Talk to colleagues or professional bodies for more information.

"The Graduate Diploma in Public Health gave a really good grounding in doing literature reviews, an introduction to statistics, epidemiology, quantitative and qualitative research."
Georgina, Clinical Tutor and Research Radiation Therapist, NSW

▶ Undertake self-directed learning in your area of interest

A range of sources of information are available including websites, journals, textbooks, and interactive CD-ROMs. Clinical practice guidelines are also available for a range of cancer types.

For more information, [click here](#).

"Reading journals is very important. I joined the American Society to get their journals. They have a self-directed learning guide in them, which helps to add to your CPD points. It broadened my knowledge – because there were things in there that were not necessarily radiation therapy specific but related subjects that helped you understand cancer diagnosis more and how colleagues in other allied health fields worked and therefore a broader understanding of how the health system worked."
Rhonda, Project Director, Cancer Redevelopment, WA

▶ Think about training in non-clinical skills

In addition to your cancer skills and knowledge, you may also identify other general skills that will help you in your role. Training may include communication skills training or presentation skills training. For more information, [click here](#).

"AIR has used Commonwealth Government funds to offer things like Train the Trainer programs. They won't be teaching technical skills but giving people skills and tools in communicating, giving feedback, supervising each other and looking after your learning. And they're helping people access them wherever you live around the country."
Georgina, Clinical Tutor and Research Radiation Therapist, NSW

An important aspect of training for all oncology health professionals is self-care. To access a list of self-care resources, [click here](#).

▶ Advanced practice

If you are working at or considering moving into an advanced role in radiation therapy or cancer care, such as a management role or a specialist role, your professional development needs will become more specific.

Tips from radiation therapists

▶ Participate in research projects

Some departments have designated Radiation Therapy Research positions that will provide the opportunity to have an active role in research. Even if there is no dedicated position, your department may allocate project time for to allow radiation therapists to work on research or in-house projects.

The Australian Institute of Radiography Research Seminar brings together Radiation Therapists involved in research around Australian and New Zealand to share ideas and participate in networking activities.

▶ Give presentations or get involved in organising relevant state-based or national conferences
Giving presentations at national and international conferences can help you learn while also sharing knowledge with others. Being involved in the organising committees for conferences can be rewarding and can help you develop new networks.

For conference listings, [click here](#).

"Conferences still remain a good way of finding out what's happening currently outside your own practice." **Sue, Radiation Therapy Centre Manager, VIC**

▶ Undertake relevant postgraduate qualifications
Relevant postgraduate qualifications, such as a Masters degree or PhD can be a valuable way to develop your skills in an area of interest to you. Such qualifications can help you focus on a particular aspect of cancer management or help you develop your research or leadership skills.

For a list of relevant postgraduate courses, [click here](#).

"I found the Masters in Applied Science really useful. I'm really pleased I did it. It's given me a lot more skills – it's about more than just current technologies – it gives you analytical skills. It's a lot more far ranging." **Sue, Radiation Therapy Centre Manager, VIC**

▶ Undertake training in leadership, education and mentoring skills
In addition to your cancer skills and knowledge, you may also identify other general skills that will help you in your role. You may decide to take on an additional role, such as that of an educator or team leader.
For more information, click here.

"As I've moved into management, I've completed different management courses. Some have been work-sponsored, some outside work. Management is not like maths – there are a lot of concepts and so every time you go to a course you hear something you've heard before but you also learn something new. So they're always a valid thing to continue to do." **Sue, Radiation Therapy Centre Manager, VIC**

"I try to do a workshop that takes a couple of days at least once a year and a more structured learning experience about once every 5 years. For example, I did the Advanced Management Program, which was a full semester through the Australian Institute of Management." **Rhonda, Project Director, Cancer Redevelopment, WA**

"I did a 1-day management course when I became senior because your role changes. You need to be able to manage people. It's not necessarily about being the best IMRT planner. You need to be able to manage people with different personalities and different skill levels." **Rodney, Senior Radiation Therapist and Clinical Educator, NSW**

▶ Networking
Networking will continue to be important, regardless of what level you are at. Local, national and international networks provide a valuable way of sharing ideas and information.

"There's a radiation therapists Chief's group. It's a network and lots of information about conferences comes through on that mailing list." **Sue, Radiation Therapy Centre Manager, VIC**

▶ Case studies

Find out about what radiation therapists do in cancer care, how they have built their careers in cancer care and what professional development activities they have found useful:

▶ Georgina Neill, Clinical Tutor and Research Radiation Therapists in a regional area of NSW

Role	Clinical Tutor and Research Radiation Therapist Coordinates clinical education of students, graduates and staff Coordinates research amongst radiation therapists; may undertake research projects or help other staff design and undertake projects Still has patient contact (requirement for maintaining accreditation): 1 day per fortnight – works with student/graduate to maintain clinical skills <i>"In the past, radiation therapists have rostered in the delivery of treatment. Although they've had roles in collecting data they mostly haven't had roles directly connected to research. It's been changing over the past 5 years"</i>
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	<p>or so because of the availability of postgraduate studies – so now you can develop research skills. There are also more research positions being created. They provide non-clinical time for research. There are at least 10–20 radiation therapists around the country doing PhDs. So it's gradually happening."</p>
Pathway	<ul style="list-style-type: none"> • 3-year degree • Professional development year • 3-years in a radiation therapy role • Travelled overseas and worked as a locum in the UK • Returned to Australia to a private radiation therapy centre and developed an interest in education and research • Took a 12-month clinical education role • Moved to a permanent clinical education and research role <p>"It was good to work in some other departments and realise that there are other ways of doing the same thing." "There are benefits to working in a small department because you get exposure to a range of experiences and experienced colleagues who can mentor you."</p>
Post-graduate training and courses	<ul style="list-style-type: none"> • Graduate Diploma in Public Health (included an education subject) • Currently enrolled in a Masters in Health Science Education <p>"I'm slowly working my way through education subjects. You get you to find out how adults learn, and how you commit yourself to life-long learning and what you can do to stay up to date because there's a huge amount of change in how cancer treatments are delivered."</p>
Group and networks	<p>Member of:</p> <ul style="list-style-type: none"> • AIR (Australian Institute of Radiography) • NSW Radiation Therapy Educators Group • NSW Radiation Therapy Research Group
What helps?	<ul style="list-style-type: none"> • Actively seeking out different experiences in different settings. • Being aware that you may need to move around to get the experiences you need to get to where you want to go. • Attending weekly education sessions • Reading relevant cancer and radiation therapy journals • Attending conferences: <ul style="list-style-type: none"> ○ National conference (AIR) ○ State level meetings and workshops • Visiting websites: <ul style="list-style-type: none"> ○ eViQ ○ AIR ○ NBOCC ○ National Cancer Institute (US site) ○ ASTRO ○ ESTRO <p>"In some places, there's only one radiation therapy centre so you can't just up and move into different roles. If you work in a regional or rural centre your options can be limited if the department doesn't offer a range of roles." "It's hard if your department doesn't have professional development funding and you need to gain specialised knowledge from somewhere else, because you have to pay for workshop fees and travel. Because people are reliant on what they can learn on the job, we all have to know about how we learn and share that knowledge"</p>

▶ Rodney Hammond, Senior Radiation Therapist and Clinical Educator in a metropolitan hospital in NSW

Role	<ul style="list-style-type: none"> • Senior Radiation Therapist and Clinical Educator • Organises in-services and workshops • Responsible for continual professional development activities for department
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	<ul style="list-style-type: none"> Acting Head of Treatment (maternity cover) <p><i>"It's a really good mix of dealing with people and patients but also using cutting edge technology. Once you're involved it's an exciting field to be in. You're helping people through probably the toughest time in their life and you're making it somewhat bearable and hoping to achieve positive outcomes. It's a pretty special thing when you can give someone hope."</i></p>
Pathway	<ul style="list-style-type: none"> 3-year Bachelor of Applied Science plus Honours year Professional development year Roles as a radiation therapist in the UK Role outside radiation therapy for a company that builds the equipment used in radiation therapy Moved back to radiation therapy and worked through a range of roles and grades to current position
Post-graduate training and courses	<ul style="list-style-type: none"> Mainly on-the-job training Range of courses and activities Attended a 1-day management course <p><i>"There's now something on nearly every weekend now. It's really exploded since we became a degree – things have really taken off."</i></p>
Group and networks	<p>Member of:</p> <ul style="list-style-type: none"> AIR NSW Clinical Educators Group <p><i>"Meeting other educators regularly is a great opportunity to pick up on other techniques centres are using to educate staff."</i></p>
What helps?	<ul style="list-style-type: none"> AIR CPD program encourages continual learning and development activities Attending conferences Reading journals Spectrum (monthly journal from AIR) provides good information of what's new Visiting websites, eg eviQ Getting involved in the profession and being part of a network <p><i>"If you go to one workshop often people will often talk about the next one coming off. It's a bit of a small world radiation therapy – word gets around."</i></p>

► Sue Young, Radiation Centre Manager in a private radiation therapy centre in Victoria

Role	<ul style="list-style-type: none"> Radiation Centre Manager (private) Manage 14 radiation therapists (personnel management) Some administrative roles within the centre – 3 CNS, 3 Admin, 3 Oncologists, Physicist (disciplinary team) <p><i>"It's a changing area – particularly the technical aspects of radiation therapy have changed radically over the past 20 years."</i></p>
Pathway	<ul style="list-style-type: none"> Qualified through Peter MacCallum Cancer Centre and RMIT Range of roles at Peter MacCallum Cancer Centre, including Deputy Charge and Acting Charge roles
Training and courses	<ul style="list-style-type: none"> Study around technical assessments required to apply for promotion Basic computer course and organised a 1-day seminar on radiation therapy computing

	<ul style="list-style-type: none"> • Completed variety of management courses – some work-sponsored and some not. Some through work – seminars and training days. • Completed Masters in Applied Science by course work through University of Sydney
Group and networks	<p>Member of:</p> <ul style="list-style-type: none"> • AIR • Radiation Therapists Chiefs Group <p><i>"Meeting other educators regularly is a great opportunity to pick up on other techniques centres are using to educate staff."</i></p>
What helps?	<ul style="list-style-type: none"> • Self-directed learning: <ul style="list-style-type: none"> ○ in public centres - access through the cancer library to current journal articles by registering to be on the circulation list ○ private/rural centres – more difficult but can be accessed via other means, eg through AIR • Attending and speaking at conferences – started with small local conferences • Useful journals: <ul style="list-style-type: none"> ○ International Journal of Radiation Oncology, Biology and Physics ○ Radiation Oncology ○ American Association of Medical Dosimetrists – has a technical radiotherapy journal ○ Journal of Clinical Radiotherapy • Useful conferences: <ul style="list-style-type: none"> ○ AIR ○ ASMR conference ○ Queensland conference – organised by the Queensland branch of AIR ○ Specialised conferences in brachytherapy – annual for those interested ○ ASTRO and ESTRO ○ COSA <p><i>"I put a lot of details about conferences up on the notice board - even if I don't attend personally. It's helpful for people who might not be part of the Institute."</i></p> <p><i>"It can be difficult to access journal articles if you're in a rural area. The AIR has started to develop a library to fill that gap for rural-based practitioners."</i></p>

► Rhonda Coleman, Project Director for Cancer Redevelopment in WA and Acting Manager of the WA Cancer and Palliative Care Network

Role	<ul style="list-style-type: none"> • Project Director, Cancer Redevelopment, WA • Seconded as Acting Manager of WA Cancer and Palliative Care Network • Role involves developing state-wide cancer services <p><i>"Radiation therapists are very privileged. There are very few people who every day of their lives can help people. When you can cure patients, it's a wonderful thing to be part of that. With the patients you can't cure – you can still give them a better quality of life. And when you have a terrible day, remember that you are one of the fortunate few that has a job that you enjoy and that you can help people every single day. When you remember that, it's what keeps you going. My focus has changed but the original intent is still there for me now at a policy level even though I don't interact daily with patients – hopefully I can still make a difference for patients with cancer."</i></p>
Pathway	<ul style="list-style-type: none"> • Trained as a radiation therapist • Wanted to become an educator and sought opportunities to do education • Formal education roles in different places • Moved to Canada (chose location because it had educational opportunities coming up) • Undertook a project identifying areas for cancer improvement • Moved into Manager role

	<p>Returned to Australia and undertook a range of management roles</p> <p><i>"Keep focusing on why you're doing your career and you will want to keep improving your educational skills. It's life-long learning but you need to think about what you're doing and why – don't just do things because you have to tick a box."</i></p>
Post-graduate training and courses	<ul style="list-style-type: none"> • Adult Education Certificate • Range of workshops and more formal courses, eg a course on Departmental Management <p><i>"I rarely expect the employer to pay [for courses/workshops] – it's a bonus if they do. Although they're expensive, it's what keeps you informed about new practices. What you learned years ago has changed and you need to keep up to date. I've always done this throughout my career and it's helped me get to where I am today."</i></p>
What helps?	<ul style="list-style-type: none"> • Self-directed learning: • Reading journals • Attending workshops and courses • Being engaged in the profession • Sharing knowledge and information with others • Having a plan to guide you • Having a mentor to inspire and support you

Conference / event listings

▶ Australian

AIR – Australian Institute of Radiography

<http://www.air.asn.au/conferences.php>

COSA – Clinical Oncological Society of Australia

<http://www.cosa.org.au/asm.html>

TROG – Trans-Tasman Radiation Oncology Group

<http://www.trog.com.au/Default.aspx?tabid=120>

Cancer Council Australia (and state/territory groups)

<http://www.cancer.org.au/Home.htm>

National Breast and Ovarian Cancer Centre

<http://www.nbocc.org.au/our-organisation/news-and-events/news-events>

RANZCR – Royal Australian and New Zealand College of Radiologists

<http://www.ranzcr.edu.au/newsandevents/calendar/index.cfm>

▶ International

International Society of Radiographers and Radiological Technologists

http://www.isrrt.org/isrrt/Calendar_EN.asp?SnID=264228511

ASTRO – American Society for Therapeutic Radiology and Oncology

<http://www.astro.org/Meetings/UpcomingMeetings/index.aspx>

ESTRO – European Society for Therapeutic Radiology and Oncology

<http://www.estro.org/Pages/default.aspx>

Organisations / networks

▶ Australian

AIR – Australian Institute of Radiography - <http://www.air.asn.au>

Australian body representing medical radiation scientists, including radiographers and radiation therapists. Provides continuing professional development and networking opportunities for members.

Website has links to international, national and state based groups.

COSA Radiation Oncology Group - <http://www.cosa.org.au/groups/radiation-oncology.html>

COSA is Australia's peak national body representing health professionals whose main work is cancer control.

TROG – Trans-Tasman Radiation Oncology Group - <http://www.trog.com.au>

Australia and New Zealand's specialist clinical research group for cancers that can be treated with radiotherapy. Website includes information about clinical trials and TROG activities and events.

RANZCR – Royal Australian and New Zealand College of Radiologists - <http://www.ranzcr.edu.au/>

Professional organisation for the promotion of the science and practice of the medical specialties of Radiology and Medical Imaging (Diagnostic and Interventional) and Radiation Oncology in Australia and New Zealand.

ASMR – Australian Society for Medical Research - <http://www.asmr.org.au/>

Professional society representing Australian health and medical research.

▶ International

International Society of Radiographers and Radiological Technologists

http://www.isrrt.org/isrrt/Default_EN.asp

International organisation with over 64 member organisations.

ASTRO – American Society for Therapeutic Radiology and Oncology

<http://www.astro.org/>

American Society representing radiation oncologists, radiation oncology nurses, medical physicists, radiation therapists, dosimetrists and biologists. Website includes continuing education resources and links to relevant publications and resources.

ESTRO – European Society for Therapeutic Radiology and Oncology

<http://www.estro.org/Pages/default.aspx>

European organisation for health professionals working in the field of radiotherapy and oncology. Website includes guidelines, publications and information about research projects.

AAMD – American Association of Medical Dosimetrists <http://www.medicaldosimetry.org/>

Courses and workshops

▶ Undergraduate courses

List of Australian Courses in Diagnostic Radiography and Radiation Therapy and the current accreditation status - <http://www.air.asn.au/accreditation.php>

▶ Postgraduate courses

This section lists relevant postgraduate qualifications. A range of other postgraduate qualifications, including PhDs, are also available that may be relevant for you. Talk to colleagues or professional bodies for more information

Graduate Certificate

Graduate certificate courses are typically 1-year courses and represent the baseline entry level programs for a Masters qualification. A number of institutions offer distance learning options.

Topics may include:

- Public Health
- Health Science (eg Education/Clinical Data Management, Medical Radiation)

- Applied Science (Radiation Therapy)
- Adult Education

Typical entrance requirements (will vary by institution):

- bachelors degree or graduate qualification from an approved institution in a relevant health, behavioural, social or biological sciences or equivalent
- bachelors degree or graduate qualification in an unrelated area and have completed at least one year full-time work experience in a relevant field at a level deemed appropriate by the Program Convenor.

Graduate diploma

Graduate diploma qualifications are typically shorter than Masters program and often have more flexible entry criteria. Some institutions offer part-time and distance learning options.

Topics may include:

- Public Health
- Health Science (eg Education, Clinical Data Management, Medical Radiation)
- Applied Science (Radiation Therapy)
- Training and Development
- Adult Education and Training

Typical entrance requirements (will vary by institution):

- Bachelor's degree in a health related field or
- approved post-secondary study plus relevant work experience or
- Graduate Certificate in Applied Science in the relevant field of study

Masters

A Masters qualification is typically 2 years in duration although many institutions offer part-time and distance education options.

- Public Health
- Health Science
- Applied Science (Radiation Therapy)
- Education (Adult Education)
- Technology (Information Technology)
- Diagnostic Radiography
- Radiation Therapy

Entrance requirements vary by institution and course.

▶ Other relevant courses

There are a number of short courses available on-line, in the work setting, and delivered by private companies. When considering the course to undertake you may want to consider the following aspects.

Your objectives for wanting to do the course, for example:

- to improve your clinical skills
- to expand knowledge (consider the specific areas of knowledge – does it relate to disease type, treatment type, the theory behind the treatment?)
- to find out the latest treatments or meet other clinicians in the same area (consider external conferences or workshops)
- to complete requirements for continuing professional development (CPD).

Criteria for assessing short courses

- Look at the names of the presenters, their qualifications, and publications – are they respected and known for the subject they are presenting?
- If there are a number of topics, are there a number of different presenters (it is unlikely that one person can be expert on all topics)?
- Consider the expertise of the organiser of the short course – are they clinicians, hospitals, companies such as drug or book companies?
- Consider the cost of the course – what does it include?
- Is there an assessment as part of the course? For any course to be recognised for prior learning there generally needs to be assessment of learning.
- If you need to complete the course for CPD does the course information indicate the number of points that are allocated for completion of the course? Is a certificate provided?
- Identify if there is a process for follow-up with lecturers if required following completion of the course.
- Does the course articulate to other courses?

▶ Short courses

Certificate IV Competency-based assessment and work-based training

Vocational training course offered through a variety of institutions

Peter MacCallum Cancer Centre

- Radiation Therapy Education - Students- <http://www.petermac.org/RadiationTherapyEducationStudents>
- short course program (see PDF) <http://www.petermac.org/ShortCourseProgramNursingEducation>
- graduate education program <http://www.petermac.org/GraduateNurseProgramNursingEducation>

Enhancing Clinical Training Skills for Radiation Therapists (ECTSRT)

This weekend training program is designed to assist Radiation Therapists to develop or enhance their clinical training skills for teaching and mentoring students and colleagues. It covers models such as the clinical learning environment, communication, teaching strategies, time managements and providing effective feedback. The course is run by the Australian Institute of Radiography (AIR) with funding from the Australian Government. Courses are available around Australia. Contact AIR for more information.

▶ Clinical trials

Information about clinical trials and good clinical practice is available through a range of not-for-profit and commercial groups and organisations. Talk to colleagues about what they have found helpful. Some possible links are provided below.

NHMRC Clinical Trials Centre

<http://www.ctc.usyd.edu.au/education/education.htm>

TROG

<http://www.trog.com.au/Default.aspx?tabid=72>

ARCS Australia

<http://www.arcs.com.au/>

Quintiles

<http://www.clinicalresearch.com/Professionals/Pages/healthpro.aspx>

▶ Workshops / seminars

The Cancer Council WA

Professional Development Program

<http://www.cancerwa.asn.au/professionals/>

The Cancer Council Queensland

Allied Health Professionals Oncology Group Forums

http://www.cancerqld.org.au/page/Need_support/Education_Programs/AHPOG

The Cancer Council Victoria

Short courses in Victoria on:

- BreastHealth
- Communication
- Sexuality and cancer
- Living with cancer facilitator education

http://www.cancervic.org.au/about-cancer/for-health-professionals/training_courses_and_education

▶ General skills

You may find it helpful to undertake training in a range of general skills. Courses on computing or information technology may be available through local area health services or your institution. Courses on statistics may be offered through TAFE or university settings.

Sources of communication skills training include:

National Breast and Ovarian Cancer Centre Communication Skills Training Initiative

<http://www.nbocc.org.au/health-professionals/clinical-best-practice/communication-skills>

Cancer Council Victoria Cancer Clinicians Communication Program

<http://www.cancervic.org.au/vcccp> Pam McLean Cancer Communications Centre

<http://www.mcleancentre.org/>

Self-directed learning

▶ Online resources

Cancer Learning - <http://www.cancerlearning.gov.au/>

Interactive learning modules on:

- Multidisciplinary care
- Psychosocial care

Links to cancer education resources across a broad range of areas.

EdCaN learning resources

Case studies: http://www.cancerlearning.gov.au/edcan_resources/#/xml/module_3/casestudies/

Supporting modules:

- [The cancer journey and domains of specialist cancer nursing practice](#)
- [Population health concepts in cancer control](#)
- [The biology of cancer](#)
- [Cancer treatments:](#)
 - - Fundamentals of cancer surgery
 - - Fundamentals of radiotherapy for cancer
 - - Fundamentals of systemic cancer therapies
 - - Fundamentals of cancer biological and molecular targeted therapies
 - - Fundamentals of haematopoietic stem cell transplant
- [Supportive care](#)
- Culture-centred approach in cancer control for Indigenous Australians - coming soon

Clinician's Health Channel

<http://www.health.vic.gov.au/clinicians>

For health professionals in Victoria – provided by the Department of Human Services

CareSearch

<http://www.caresearch.com.au/Caresearch/Default.aspx>

Cancer Learning listing of Clinical Practice Guidelines

http://www.cancerlearning.org.au/find/evidtreat_rsrc.php

International Atomic Energy Agency Applied Sciences of Oncology course

<http://www.iaea.org/Publications/Training/Aso/register.html>

MacMillan Cancer Support

<http://www.macmillan.org.uk/Home.aspx>

British Columbia Cancer Agency

<http://www.bccancer.bc.ca/default.htm>

NHS Cancer Program

<http://www.cancer.nhs.uk>

National Cancer Institute Introduction to Clinical Trials

<http://www.cancer.gov/clinicaltrials/learning>

Radiologyinfo

<http://www.radiologyinfo.org/en/sitemap/category.cfm?category=onco&bhcp=1>

US-based site providing information about different radiology and radiotherapy techniques written for patients. Developed in collaboration with ASTRO.

Royal Adelaide Hospital Doctor's Guide to PET Imaging and Case Studies

http://www.rah.sa.gov.au/nucmed/PET/pet_docguide.htm

▶ Printed resources

The Cancer Council NSW - <http://www.cancerCouncil.com.au/editorial.asp?pageid=671>

Resources on:

- Cancer awareness (for Aboriginal and Torres Strait Islander Health Workers)
- Talking about sexuality, body image and cancer
- Managing cancer pain

▶ Journals

The Radiographer

<http://www.minniscomms.com.au/radiographer/>

Official journal of the Australian Institute of Radiography, open access

Spectrum

<http://www.air.asn.au/pubspect.php>

Monthly newsletter from the Australian Institute of Radiography

International Journal of Radiation Oncology, Biology, Physics

http://www.elsevier.com/wps/find/journaldescription.cws_home/525471/description

Official journal of the American Society for Therapeutic Radiology and Oncology (ASTRO)

Journal of Medical Imaging and Radiation Oncology <http://www.ranzcr.edu.au/journal/index.cfm>

Official journal of the Royal Australian and New Zealand College of Radiologists

Radiotherapy and Oncology <http://www.sciencedirect.com/science/journal/01678140>

Official journal of the European Society for Therapeutic Radiology and Oncology (ESTRO)

Radiation Oncology

<http://www.ro-journal.com/> **Medical Dosimetry** <http://www.medicaldosimetry.org/publications/journal.cfm>

Official journal of the American Association of Medical Dosimetrists

Grants/ fellowships/ scholarships

▶ Australian

Individual health services and institutions may provide an annual allowance to support professional development activities. Talk to your manager or colleagues for more information. In addition, individual grants, fellowships or scholarships may be available to support specific activities from other organisations.

Australian Institute of Radiography – travel and research scholarships

<http://www.air.asn.au/careerschol.php>

Cancer Institute NSW – education scholarships

http://www.cancerinstitute.org.au/cancer_inst/profes/scholarships.html

The Cancer Council Queensland

http://www.cancerqld.org.au/page/Need_support/Education_Programs/AHPOG

Other useful links

▶ Australian

Cancer Institute NSW eviQ Cancer Treatments Online website

<https://www.eviq.org.au/>

Australian New Zealand Clinical Trials Registry

<http://www.anzctr.org.au/>

▶ International

Radiation Therapy Oncology Group

<http://www.rtog.org/>

US-based site listing radiation therapy trials

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