

IMPACT

Influencing Models of Practice with
Advanced Competency in Therapeutic Radiation

Volume 7, Issue 2

Fall 2023

Greetings from the “Editors-in-Chief”

Carrie Lavergne (Durham Regional Cancer Centre) Co-chair, CSRT Community of Practice

Kitty Chan (Princess Margaret Cancer Centre) Co-chair, CSRT Community of Practice



Hello, and welcome to the fall edition of the IMPACT newsletter! We hope that everyone had a wonderful summer. Summers always go so quickly, and never feel quite long enough!

We are using this newest IMPACT newsletter to transition our Editor-in-Chief from Kitty Chan to Carrie Lavergne. Kitty has been instrumental as our Editor-in-Chief of the IMPACT newsletter since 2020, expanding both the scope and readership of the newsletter. We are so grateful for her leadership, organization and commitment to the IMPACT newsletter, ensuring we continue to advocate and communicate about advancing practice in radiation therapy. I am confident that you will continue to see her name in our newsletter in the near future. I know (and am grateful) that she will remain an important and active member of our CSRT community-of-practice,

and continue to work tirelessly in her role, and in promoting awareness of advanced practice radiation therapy. In this issue, you will read:

- Feature: Stereotactic Radiation Therapy and the Role of the AP Radiation Therapist
- CAMRT Update: Clarifying Job Titles for Advanced Practice in Canada
- CSRT Spotlights
- APRT International Community of Practice (iCoP) corner

We are fortunate to have many CSRT spotlights in this newsletter, including introductions of three new CSRTs in Ontario: Devin Hindle (Princess Margaret Cancer Centre), Vejitha Raveendran (Southlake Regional Cancer Centre) and Tracey Clarke (Juravinski Cancer Centre); and sendoffs to three retiring CSRTs: Julie Blain, Biu Chan and Lilian Doerwald-Munoz in Ontario. We want to extend our congratulations and best wishes to both the new and retiring CSRTs.

If you are reading IMPACT for the first time, please email impact.RTCoP@gmail.com to subscribe to our bi-annual newsletter. You can also email us if you have an advanced practice story to share. You may also access previous IMPACT Newsletters [here](#).

About Us

The Clinical Specialist Radiation Therapist (CSRT) role was introduced by HealthForce Ontario in 2006. Subsequently, the CSRT Community of Practice (CoP) was formed in 2015 to facilitate initiatives to ensure cancer patients in Ontario, Canada receive the highest quality of care and to advocate for a collective CSRT/APRT identity. There are currently **23** CSRT positions in **11** cancer centres in the province of Ontario, Canada. There are also **7** APRT(T) - Advanced Practice Registered Technologist (Radiation Therapy) in Canada who are currently practicing in different capacities.

Feature

Stereotactic Radiation Treatments and the Role of the Advanced Practice Radiation Therapist

Melissa O'Neil, Palliative & Stereotactic Body Radiotherapy CSRT

London Regional Cancer Centre, London, Ontario, Canada



Melissa O 'Neil

Stereotactic Body Radiotherapy (SBRT) and Stereotactic Radiosurgery (SRS) are highly conformal, radiation treatment planning techniques that maximize the dose to a target volume while minimizing the dose to nearby organs at risk.¹ SBRT/SRS radiation doses are biologically equivalent to standard 5-7 week treatment courses but are delivered in less fractions (usually 1-5). These treatments are generally well tolerated, with reduced side effects compared to conventionally fractionated radiotherapy resulting from improved normal tissue sparing.

Shorter regimens can reduce financial toxicity and treatment burden for patients, and improve patient throughput in busy radiotherapy departments. SBRT/SRS is safe and effective in a number of settings. Intracranial SRS is the standard of care in the management of a limited number of brain metastases. SBRT is also the standard of care for patients with inoperable, early-stage, non-small cell lung cancer, high-risk prostate cancer, and inoperable primary kidney cancer. Recent clinical trials² have demonstrated SBRT can prolong survival for patients with a limited number of metastatic disease sites.

SBRT/SRS programs require precision planning, multimodality image guidance, sophisticated immobilization and treatment delivery platforms, and multidisciplinary collaboration. As in other areas of clinical complexity, integrating the unique clinical, technical, and professional competencies of the Advanced Practice Radiation Therapists (APRTs) profile within the SBRT/SRS multidisciplinary team has

proven beneficial for patients and systems alike. For this edition of IMPACT, Melissa has spoken to a couple of her fellow SBRT/SRS APRTs to spotlight their roles, research, and contributions to their centres and communities of practice.



Lori Holden

Lori Holden (Odette Cancer Centre) is one of the first advanced practitioners in Canada as well as one of the first to earn APRT(T) certification with the CAMRT. As an SRS APRT, Lori's clinical practice involves supporting patients before, during, and after their Gamma Knife treatment, and acting as a key contact in the SRS multidisciplinary team.

Saher Ali (SBRT CSRT at Odette Cancer Centre) and Melissa focus their clinical practices behind the scenes, “quarterbacking” the management of these complex and often multi-site cases and

coordinating the efforts of the MDT in the delivery of standardized, safe, and efficient stereotactic radiotherapy.

SBRT/SRS APRTs require strong technical competency and advanced oncologic, radiobiological, and dosimetric knowledge. Lori, Saher, Melissa and their counterparts are integral members of their program development and implementation teams, frequently reviewing simulation, planning, and treatment delivery protocols, and continually evaluating emerging evidence and technologies to optimize all aspects of SBRT/SRS treatment.



Saher Ali

Research, mentorship, and education also comprise core professional elements of Lori, Saher, and Mel’s practices. Lori’s research and publications have focused on Gamma Knife treatment techniques and outcomes, and she is currently mentoring colleagues in a research initiative evaluating immobilization devices. Saher provides ongoing staff education and guidance on student research projects and is a co-investigator on a retrospective review of toxicity rates for patients receiving SBRT in combination with targeted drug agents. Lastly, Mel was recently a faculty presenter at the American Society for Radiation Oncology’s annual meeting, speaking at a Practical Radiation Oncology session about the practical aspects of delivering SBRT/SRS treatment in community practice.



SRS/SBRT Advanced Practice Radiation Therapist

References

1. Sahgal A, Roberge D, Schellenberg D, et al. The Canadian association of radiation oncology scope of practice guidelines for lung, liver and spine stereotactic body radiotherapy. Clin Oncol (R Coll Radiol). 2012;24(9):629-639. doi:10.1016/j.clon.2012.04.006
2. Palma DA, Olson R, Harrow S, et al. Stereotactic ablative radiotherapy versus standard of care palliative treatment in patients with oligometastatic cancers (SABR-COMET): a randomised, phase 2, open-label trial. Lancet. 2019;393(10185):2051-2058. doi:10.1016/s0140-6736(18)32487-5

CAMRT Update

Clarifying Job Titles for Advanced Practice in Canada

Laura Zychla, Manager, Professional Practice and Research
Canadian Association of Medical Radiation Technologists



In the beginning, there was a project and that project has had many wonderful lasting effects on the Canadian and international landscape. It is time to update some of those effects using our modern perspective.

The Ministry of Health and Long-Term Care's advanced radiation therapy practice project, with support from Cancer Care Ontario and radiation therapy trailblazers, ignited the creation of Clinical Specialist Radiation Therapist (CSRT) roles. At that time, there was much discussion on what the role titles should be for the project and how to best represent the advanced work being evaluated. What practice domains were radiation therapists to conduct advanced work in? Was the clinical domain the primary domain? How can the four pillars of advanced practice be represented by a job title? The CSRT title was chosen based on the best available information at the time by the leaders in the advanced practice movement. A rightful choice at the time.

As time progressed and the three practice domains of clinical, technical and professional (research, education and leadership) gathered momentum, "Clinical Specialist" became too narrow, not paying homage to the additional duties encompassing the role. With the creation of advanced practice certification through CAMRT and with the support of many cancer centers and advanced practice leaders participating, a more formal title was bestowed – Advanced Practice Registered Technologist (Radiation Therapy) (APRT(T)). However, it is appreciated that not all radiation therapists who are working to build an advanced practice role in radiation therapy will be certified APRT(T)s when developing or taking on a new position.

All of this begs the question, how can we move forward collectively to ensure an accurate understanding of advanced practice role titles by radiation therapists, employers, healthcare professionals and the public in a manner that is clear and concise? We should want clarity and recognition for advanced practice roles across Canada.

CAMRT will be releasing a position on the use of job titles for advanced practice positions, reinforce the use of APRT(T) for individuals in certified job titles, and recommend that the APRT(T) candidate title be used by individuals undergoing the certification process. In clarifying the intent and use of the APRT(T) title, and suggesting strategies to facilitate the journey towards consistent uptake of a clear standard for advanced radiation therapy practice, we hope to continue to build a standard and system-wide understanding of the APRT(T) role title, and enhance its uptake for the benefit of patients across Canada. Furthermore, the CAMRT is updating the Advanced Practice Framework which addresses the current opportunities and challenges experienced by MRTs looking to develop and sustain advanced practice roles in the current healthcare environment.

Our People: New CSRTs Spotlight



Devin Hindle, CSRT - Head and Neck
Princess Margaret Hospital, Toronto, Ontario, Canada

Born and raised in Halifax, Nova Scotia, Devin graduated from the radiation therapy program through University of Toronto and The Michener Institute of Education at UHN in 2017. He has been practicing at Princess Margaret Cancer Centre ever since, focusing on CT simulation, treatment planning and treatment delivery of head and neck oncological sites. He is passionate about providing compassionate, supportive care and education to patients that experience such a challenging burden of symptoms and treatment-related side effects. With his experience in research and education, he is excited to collaborate with the CSRT CoP to help advance care for head and neck patients.



Vejitha Raveendran, CSRT - Palliative Care
Southlake Regional Cancer Centre, Newmarket, Ontario, Canada

Vejitha began her career at Southlake Regional Cancer center in 2010. Since 2014, she has held the position of Professional Resource Therapist, and has led both the Pelvis and Thorax site teams. She is knowledgeable in CT simulation, treatment delivery and treatment planning and a champion for evidence based practice. She completed her Masters of Science in Palliative and Supportive care in 2019 from Sheffield Hallam University, UK and hopes to continue to be an advocate for patients in her new role.



Tracey Clarke, CSRT - Head and Neck
Juravinski Cancer Centre, Hamilton, Ontario, Canada

Tracey completed her Radiation Therapy training at McMaster/Mohawk in 2011 and has worked at the Juravinski Cancer Centre since then. In recent years, she became an instructor at McMaster/Mohawk in the Medical Radiation Sciences program. Tracey is currently working towards her MSc in Advanced Clinical Practice in Radiotherapy and Oncology through Sheffield Hallam University in the UK. Tracey is looking forward to collaborating with the CSRT CoP to improve patient care and develop new ideas. Tracey is currently working with the multi-disciplinary team to improve the patient's dental care while having radiation therapy and her goal is to be a part of developing and implementing AI for planning Head and Neck patients at the Juravinski Cancer Centre.

Our People: Retiring CSRTs Spotlight



Julie Blain, CSRT, Palliative Radiation

Walker Family Cancer Centre, Niagara Health, Ontario, Canada

In Julie's words, "I am fortunate to have had a very rewarding career in Radiation Therapy and I am so grateful and appreciative for the opportunity to be a CSRT for the past 15 years."

Advanced practitioners should be innovative, resourceful and collaborative and require mentorship and support from the Radiation Oncology and Radiation therapy teams. I truly hope that future CSRT/APRT's appreciate all that I have contributed professionally for the success of this exciting role."



Biu Chan, Head & Neck CSRT

Princess Margaret Hospital, Toronto, Ontario, Canada

Biu began his radiation therapy career in Hong Kong in 1987, after graduating from the College of Radiographers UK. He moved to Canada and began working as an MRT(T) in 1990. Biu was one of our inaugural CSRTs, beginning in 2007 with a focus in target visualization and delineation, in the head and neck site.

Through the Radiomics research project, Biu created the Head and Neck RADCURE dataset onto The Cancer Imaging Archive (TCIA) to facilitate future research projects. He fed and trained machine learning AI module with his consistent head and neck organs at risk (OAR) sets. The first version of an in-house AI auto-contouring tool will deploy soon.

Biu states that *"It has been an amazing journey being a CSRT in the past 15 years. It was full of learning, exploring, trying, re-trying and hardworking but definitely rewarding seeing the efforts actually benefiting the patients we care. Reflecting on the job, one thing I learned was that CSRTs while trying to find ways to better serve our patients, are also exploring and developing new career paths for radiation therapists at the same time."* After retirement, Biu is looking forward to having more time to travel and reunite with family and friends internationally.



Lilian Doerwald-Munoz, APRT(T), Head & Neck CSRT

Juravinski Cancer Centre, Hamilton, Ontario, Canada

Lilian is one of our earliest CSRTs in the province, since 2008. She obtained her APRT(T) certification in 2018. She was a member of the multi-disciplinary H&N team at the Juravinski Cancer Centre. Her role included H&N DST coordinator, new patient triaging, and managing multi-disciplinary consults for all H&N cancer patients. Lilian also ran her own independent radiation review clinic where she reviewed the side effects experienced by patients, and she will surely be missed by her radiation oncology colleagues. Over the years, she has witnessed the transition from paper prescription to all-electronic charting. She had medical directives for obtaining consent for

H&N radiation treatment, creating a care plan in the radiation-therapy electronic medical record (RT-EMR) system, and ordering diagnostics tests including blood work and imaging.

Her advice to the upcoming APRTs: *"Know your stuff, work hard to keep up-to-date about the literature regarding your site, and perform at least at a resident level. Be proactive on patient issues, look at problems from all sides and advance your clinical skills within a clear and concise scope of practice to promote team cohesiveness. Also, be an example for your colleagues, facilitate service improvements and enhancements while continuing to prove the model and value of Advanced Practice in Radiation Therapy"*.

APRT International Community of Practice (iCoP) Corner

Natalie Rozanec, Co-chair, APRT iCoP

Southlake Regional Cancer Centre, Newmarket, Ontario, Canada



The APRT International Community of Practice (iCoP) has continued to keep busy over the summer! We are continuing to grow, now with 54 members from 15 countries around the world. We are always happy to welcome new members, so if you are interested in joining us, or would like to register for our new webinar/podcast series, please send an email to: aprticop@gmail.com. Our most recent podcast in June 2023 featured Kelly Linden, CSRT (Palliative), who shared her experiences on improving access to radiotherapy in northern Canada. Her talk, "Working Together to Provide In-Territory Cancer Services to Northern Canadian Communities: Exploring an Advanced Practice MRT(T) Role" can be found at: <https://www.buzzsprout.com/2147651>.

Our next podcast will be available on Oct. 11, 2023, where Talkmore Karumekayi will share his experiences with radiation therapy treatment and advanced practice in Africa. We are continuing to

work on several research initiatives, examining and working to establish an international set of clinical workload code capture for APRTs, thematic analyses of APRT job descriptions, and starting work on a position paper to build international consensus and define advanced practice radiation therapy. We look forward to seeing everyone again at the LT-WRAP conference in Singapore! We look forward to many new and exciting initiatives over the upcoming year.

The banner is for the Toronto RTi3 2024 conference. It features the text 'TORONTO RTi3 2024' in large, bold, dark blue letters. To the right of this, a blue circle contains the text 'MARCH 22-23'. In the top right corner, there is a logo for 'RTi3' with the words 'INQUIRE INSPIRE INNOVATE' to its right. Below the main text, there is a decorative line of blue dots connected by lines, resembling a network or molecular structure. At the bottom right, there is a quote: 'Canada's premier annual meeting for the Radiation Therapy community.'

TORONTO
RTi3
2024

MARCH
22-23

RTi3 | INQUIRE
INSPIRE
INNOVATE

*Canada's premier annual meeting for the
Radiation Therapy community.*

RTi3 abstract submission: <https://radonc.utoronto.ca/event/rti3-conference-2024>

Our Achievements

Period: July - November 2023

(Records 1st, 2nd and principal investigator work by members of CoP)

Awards, Grants & Academic Achievements:

- **Galapin, Madette** - Awarded MSc in Healthcare Quality, Queen's University, September 2023.
- **Holden, Lori** – Recipient of the Pamela Catton Award for Inter-Professional Education and Care, University of Toronto, Department of Radiation Oncology – October 2023.
- **Javor, Joanna** - Academic Appointment, Lecturer, University of Toronto, Department of Radiation Oncology. June 2023.
- **O'Neil, Melissa** - Awarded MSc in Advanced Clinical Practice in Radiotherapy & Oncology, Sheffield Hallam University. September 2023.
- **Schnikel, Lucas** – Awarded MBA in Innovation and Leadership; University of Fredericton. July 2023.

Posters & Workshops:

- **Galapin, Madette** et al. 2023. Filling the Gap: Improving communication between the dentistry and radiotherapy departments. Poster, CARO, September 2023.
- **Javor, Joanna, Kong, Vickie**, Rosewall, Tara. June 2023. Assessing the Current Same-Day Process for Palliative Radiotherapy: How Well Are We Doing? Barrie Rose Research Day Conference, Toronto ON. Poster.
- **Javor, Joanna, Kong, Vickie, Shessel, Andrea**, Safavi, A., Taylor, E., Tsai, J. June 2023 FAST-BLAST: Fast Bone Lesion SBRT Protocol. Barrie Rose Research Day Conference, Toronto ON. Poster.
- **Rozanec, Natalie** et al. 2023. Planning for the right care at the right time: Development and Implementation of an automated resuscitation status tool. Poster, CARO, September 2023.

Publications:

- **Ali, Saher**, Louie A.V., Tsao M.N. Severe kyphosis and stereotactic lung radiation therapy set-up: A case report and lessons learned. *Journal of Medical Imaging and Radiation Sciences*. 54(3): 566-571.
- **Chan, Kitty, Timotin, Emilia** et al. 2023. A two-center experience: The impact of COVID-19 on two brachytherapy programs in Ontario - virtual care, service suspension and radiation therapy workflow. *Journal of Medical Imaging and Radiation Sciences*, 2023;54(3):436-445.

Presentations:

- **Chan, Kitty**. Introduction of Brachytherapy Advanced Practice Radiation Therapy Roles in Canada. LTWRAP. November 2023, Singapore.
- **Chan, Kitty**. Quantifying Advanced Practice Clinical Workload: 2 Years of Data. LTWRAP. November 2023, Singapore.
- **Harnett, Nicole**. The Pursuit of Happiness: Chasing APRT. Keynote Speaker. LTWRAP. November 2023, Singapore.
- **Harnett, Nicole and Rozanec, Natalie**. Local Action, Global Impact: Establishment of an Advanced Practice International Community of Practice. LTWRAP. November 2023.
- **O'Neil, Melissa**. Setting up for Success. Oligometastatic Disease: Practical Aspects of Metastasis-Directed Therapy in a Community Practice. ASTRO, October 2023.
- **O'Neil, Melissa**. Diagnostic CT-Enabled Radiation Therapy (DART): Results of a Randomized Trial for Palliative Radiation Therapy. ASTRO, October 2023.
- **O'Neil, Melissa**. How the oligometas service has evolved and motion management at LRCP. Scottish Oligometastatic SABR Network. September 2023.
- **Rozanec, Natalie**. Not Just "Luck of the Draw": The Challenges in Building the Radiotherapy ACE (Access to Care for Everyone). OAMRT Radiation Therapy Symposium. October 2023.

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Special Thanks: CAMRT

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