

AUGUST 2025

RAYOS CONTRA CANCER

Biannual Newsletter

Message from Ben

DEAR FRIENDS, VOLUNTEERS, & RCC SUPPORTERS,



The mission of Rayos Contra Cancer is to transform radiation therapy for cancer patients worldwide. We do so by equipping clinicians in limited-resource settings with the knowledge and tools to deliver equitable, high-quality care. In this newsletter, we celebrate 3 more training programs that we have just completed, helping hundreds of clinics and thousands of patients who will get better care now (p2-4). We are so excited to share these updates with you, and we also wanted to share that there is much more behind the scenes and beneath the surface that is happening now...

We are entering a period which I call, the **“World of Education”** in radiation oncology. As we think of how a clinician learns and applies knowledge, there are **two forms of learning: synchronous and asynchronous**. Synchronous involves learning in real-time with others, while asynchronous involves independent study or knowledge retrieval / reference by using saved resources. Both types of learning are valuable and have their time and place when it comes to empowering clinicians.

I hope that some of the excerpts in this newsletter help you recognize how **our efforts within RCC are all interconnected and now strengthening both fronts at once** (p5). This new World of Education is young and exciting to explore, and there is a lot more to come, especially in the domain of asynchronous materials and tools. In the coming year, we will push ourselves to think beyond what has been done and move knowledge more efficiently and effectively than ever before (p6 Sneak Peek). As the pace of cancer cases continues to grow, it is a worldwide call to action to do our part.

Thank you to all of our volunteers who have embraced this call to action, to be builders, and to bravely pioneer the World of Education.

-Ben
President & Executive Director

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Course Review #1

THE TRANSITION FROM 2D TO 3D EBRT IN AFRICA

From September 2024 to April 2025, we partnered with the the African Organization for Research and Training in Cancer (AORTIC) to deliver a virtual training course focused on the transition from 2D to 3D external beam radiation therapy (EBRT). The course was designed for radiation oncologists, medical physicists, dosimetrists, and radiation therapists/technologists. Spanning 23 sessions, this course is RCC's longest program, covering topics such as acceptance & commissioning, CT simulation, contouring, treatment planning, and delivery.

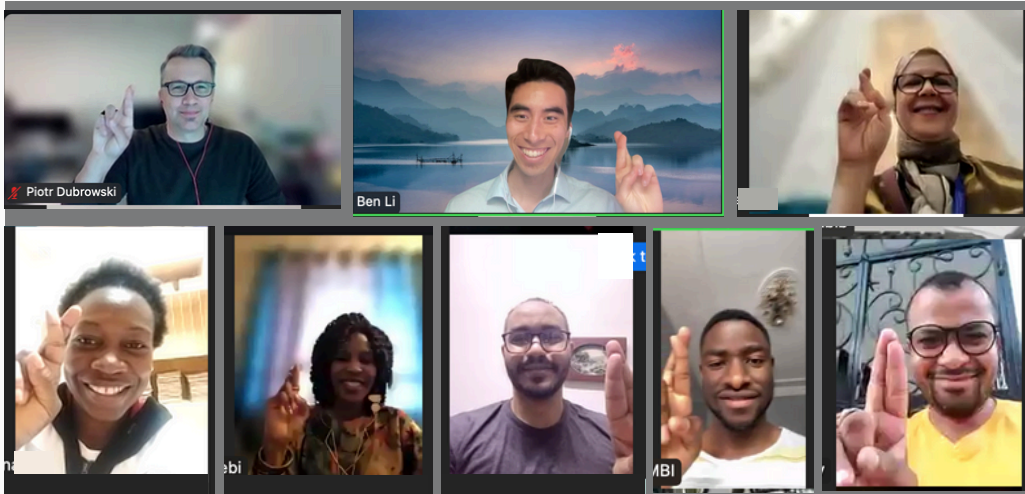
The course drew over 900 radiotherapy professionals from across Africa (and several countries in other world regions), representing more than 240 cancer centers! Approximately 30% of centers were transitioning from 2D to 3D EBRT or planning to transition at the beginning of the course—highlighting the course's relevance and impact in advancing cancer care capabilities.

Quantitative results from 386 participants demonstrated clear gains in both confidence and knowledge:

Measure	Pre-Course	Post-Course	% Change
Average Confidence <i>(1 = least, 5 = most)</i>	3.15	4.04	28.25%
Knowledge Score <i>(out of 100)</i>	56.7	69.46	22.50%

The largest increases in confidence were seen in commissioning linear accelerators and treatment planning systems. Knowledge gains were most notable in CT imaging.

Congratulations to all participants for their commitment to advancing cancer treatment across the continent. RCC is grateful for AORTIC's partnership and for the enthusiasm and dedication of the learners throughout this landmark training effort.



“Huge thanks to RCC for the 2D to 3D EBRT course! As someone just starting out in medical physics, I went from ‘beam me up’ to ‘beam me precisely’ in just a few months. The course was a fun mix of learning how radiotherapy works and realizing how careful you need to be with every step. Ready to move from trainee to ‘I got this!’”

- MEDICAL PHYSICIST PARTICIPANT, BANGLADESH

“As a radiation therapist this training has significantly enhanced my understanding of 3DCRT, and I am excited to apply what I've learned in my practice. Am now able to do 3D treatment planning”

- RADIATION THERAPIST PARTICIPANT, MALAWI



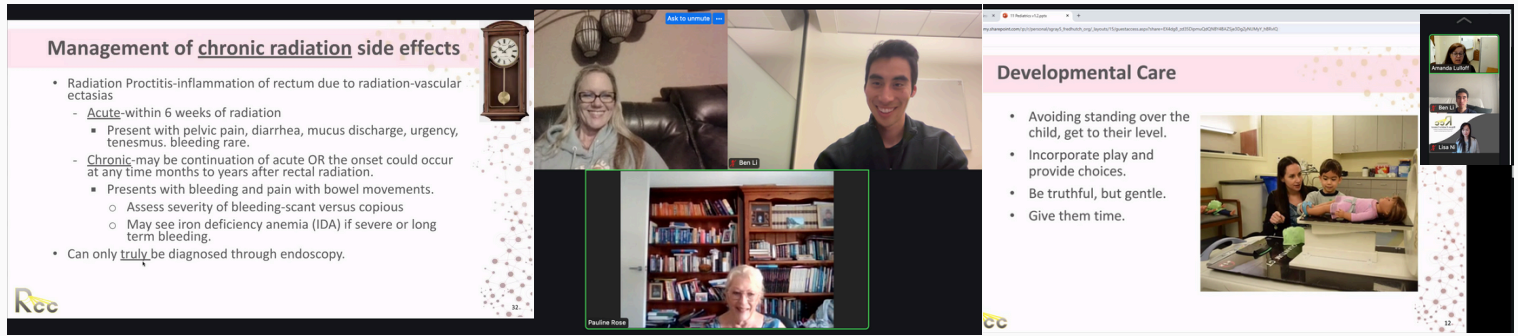
YouTube Update!

The videos from the 2024 course on Head & Neck Contouring in both [English](#) and [Spanish](#) are now available on RCC's YouTube channel.



Course Review #2

NURSING IN RADIATION ONCOLOGY: MASTERING DERMATITIS AND BEYOND



This past May, Rayos Contra Cancer (RCC), in partnership with the Elekta Foundation, University of Washington, and BIO Ventures for Global Health, concluded its first-ever online course dedicated to Nursing in Radiation Oncology. Designed for practicing nurses across Africa, the 14-session course supported over 400 participants across 30+ countries.

The course featured expert-led sessions from nurses, radiation oncologists, and allied health professionals on topics ranging from disease-specific care (e.g., breast, CNS, pediatric, and GI cancers) to symptom management and psychosocial support. The course focused on practical skills and included documents and resources on caring for radiotherapy patients.

Survey results show a positive effect of the course:

- 9.78 / 10.0 in response to the question, “How likely are you to recommend the course to a colleague?”
- +31% increase in confidence
- +13% increase in knowledge

We’re grateful to our partners, dedicated volunteers, and participants for making this course possible and helping elevate radiotherapy nursing across the continent. We especially want to thank the lead educator for the course--Sunshine Gray, MSN, RN, OCN at the Fred Hutch Cancer Center--for her incredible work to make this course a success!



Lead educator,
Sunshine Gray

“Our center will soon be commissioned, and thanks to my participation in this course, we are well-prepared to start strong. We are committed to providing the highest quality care to our patients, particularly in managing radiotherapy-induced skin dermatitis and other symptoms Management.”

- NURSE PARTICIPANT,
NIGERIA



Course Review #3

HDR BRACHYTHERAPY IN SOUTHEAST ASIA

From October 2024 to March 2025, medical physicists and physics residents in Southeast Asia participated in a course on High Dose Rate (HDR) brachytherapy. Implementing HDR brachytherapy is an extremely important process in developing a center of excellence; however, it can be a very complicated technique with important details that, if not executed perfectly well, can compromise the entire team effort.

Throughout the course, participants learned about topics such as facility design, receipt of a radioactive source, commissioning, quality assurance, applicator selection, simulation, and treatment planning.

The 233 participants who completed the pre- and post-course requirements achieved a +21% increase in knowledge across all concepts. We observed increased confidence scores in all the above domains, except for commissioning, shielding calculations, and measuring field sizes, which tells us that more work is needed to improve these domains on the ground.



“We are currently putting up our brachytherapy facility. Having attended this course allowed me to making better decision-making from choosing the appropriate source, shielding design, licensing requirements, and many other takeaways that are very valuable to a relatively new medical physicist like me.”

- PHYSICS PARTICIPANT, PHILIPPINES

VOLUNTEER / PARTNER INITIATIVES

Supporting education in Ukraine

Since March 2025, RCC has had the honor of joining the [Help Ukraine Group \(HUG\)](#) and [Swecare](#), a nonprofit in Sweden, to coordinate educational efforts through several training programs for Ukrainian radiotherapy professionals.

As Swecare reported in this [press release](#) describing the collaboration, Ukraine faces the double burden of war and cancer, highlighting the need for investment in Ukraine’s radiotherapy workforce. With support from Swecare, HUG and RCC are in the process of providing training courses on SBRT, research methodology, the transition from 2D to 3D external beam radiation therapy, treatment plan evaluation, and contouring, among other educational initiatives.

Join the global radiotherapy community in celebrating
[World Radiotherapy Awareness Day](#)
on September 7th

Collaborating on training in Nigeria (continued from previous newsletter)

In the last [newsletter](#), we highlighted RCC’s collaboration with BIO Ventures for Global Health (BVGH) through BVGH’s training program for radiation oncologists, medical physicists, radiotherapists, and nurses across Nigeria.

As BVGH reaches the end of the first year of the training program, we are in search of volunteers to mentor clinics on contouring. The mentorship will take place virtually via Zoom and utilize RCC’s ProKnow platform.

If you are a [radiation oncologist](#) or [at least a fourth year radiation oncology resident](#) and would like to learn more about this virtual volunteer opportunity, please email emily@rayoscontracancer.org.

Volunteer Spotlight

Volunteers across RCC's world of education

RCC's volunteers not only teach and moderate weekly course sessions but also design curricula, build new learning tools, and measure the impact of our programs. In this issue, we're excited to spotlight some of the incredible people behind RCC's global education!

EARLY BUILDERS

We welcome several new RCC volunteers who are helping with building asynchronous materials and resources that will be put to use by thousands of RCC participants in the near future! This has involved dozens of hours of reviewing prior RCC lectures, curating knowledge from volunteer educators, and collaborating on new educational innovations.

- Anika Patel
- Dr. Sayeh Fattahi
- Dr. Keerthiga Karthikeyan
- Dr. Gokula Krishan
- Dr. Leora Brazg Farro
- Global Coalition for Radiotherapy, Residents Group

And special thanks to Grace Redmond (Severna Park HS) who has committed dozens of hours improving [RCC's global database](#).

EDUCATOR - DR. ANUJA JHINGRAN

Rayos Contra Cancer is proud to recognize Dr. Anuja Jhingran, Professor of Radiation Oncology at MD Anderson Cancer Center, for her remarkable dedication as a volunteer educator.

Dr. Jhingran has been a steadfast partner in our mission, contributing to 10 courses and teaching 17 sessions that have helped strengthen the skills of radiotherapy professionals around the world. Beyond her own teaching, she has generously introduced RCC to other expert educators who have become essential to our course development. She has also supported our partner organizations with international training, extending her impact far beyond the classroom. We are deeply grateful for the passion she brings to mentoring and for the global reach of her contributions. Thank you, Dr. Jhingran!

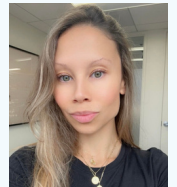


"All those sessions of Dr. Jhingran was the best. Would like attend some her sessions in the future."

RADIATION ONCOLOGY PARTICIPANT, BANGLADESH

COURSE DEVELOPERS - ELAINE HERBERT, RTT & ANGELA VERBECK, RTT

To create a new course on "Common Challenges for RTTs" in Latin America, Elaine (left) and Angela (right) have dedicated countless hours to designing curriculum, preparing materials, and providing example videos—work that made this tailored, high-quality program possible. Thanks to their efforts, RTTs across Latin America now have access to practical training that addresses the unique challenges of their region.



PUBLICATIONS / PROFESSIONAL CONFERENCES

Soha Ahmed (RCC Board Member) led the ICARO-4 conference in Vienna. Ben, David Martinez, Gustavo Sarria (former Board), and Layth Mula Hussein (former Board) all were part of this United Nations conference of leaders. (photo right)

Rohan Patel & Ben Li, [Evaluating Global Patient Education Models for Radiation Therapy in LMICs: A Survey-based Public Health Initiative](#).



Guide to RCC Courses - now available

We have a new resource available for those who would like to know more information about how RCC courses work. The [Guide to RCC Courses](#) (also available in [Spanish](#)) reviews common questions & answers about course structure, eligibility, enrollment, and more.

Sneak Peek

Three ongoing courses + new online learning platforms

The Transition from 2D to 3D External Beam Radiation Therapy in Ukraine



- One of RCC's foundational programs, this course is designed for radiation oncologists, medical physicists, and radiation therapists / technologists working in centers navigating the transition from 2D to 3D external beam radiation therapy.
- Over 200 participants from centers across Ukraine are enrolled in this current version of the course that takes place in 23 sessions between May and October 2025.

CNS Contouring for Adult & Pediatric Cases in the Middle East and Southeast Asia



- Designed in collaboration with the South East Asian Radiation Oncology Group (SEAROG) and the Pediatric Radiation Oncology Society (PROS), this course provides a framework for radiation oncologists and residents to evaluate and improve their contouring skills.
- The course teaches how to avoid common errors and provides tips for contouring brain metastases, gliomas, meningiomas, re-irradiation, and all major pediatric CNS cancers.

Common Challenges for RTTs in Latin America



- Building on RCC's previous course on IMRT for RTTs, this new program reviews common challenges RTTs encounter in the delivery of accurate radiotherapy for each disease site.
- The program is designed for radiation therapists (RTTs), especially those who may not have had formal training in radiation oncology during their licensure process.

New Online Learning Platforms



- Partnering with Dr. Matt Culbert, we're excited to launch a new learning tool that will expand access to structured, on-demand information on key topics in radiotherapy.
- RCC is also collaborating with an organization to pilot a learning management system that will streamline how participants engage with our courses and resources.

Interested in supporting RCC?

Join as a volunteer or refer a friend!

Click on the link below or scan the QR code to fill out the new volunteer form.

[New Volunteer Form](#)

Interested in helping in another way?

Visit our [Donation Page](#)!



If you want to join a program as a participant, please email info@rayoscontracancer.org