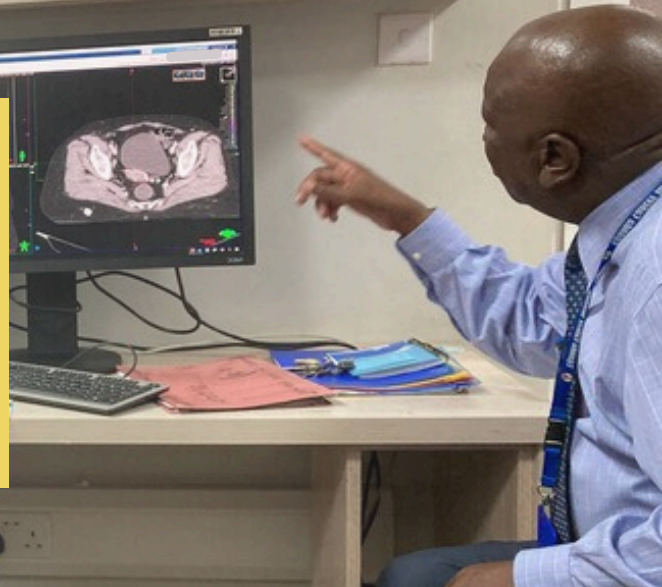


DECEMBER 2024

RAYOS CONTRA CANCER

Biannual Newsletter



Message from Ben

DEAR FRIENDS, VOLUNTEERS, & RCC SUPPORTERS,



Rayos Contra Cancer is alive and well! Did you know that 44/48 weekends this entire year, we had at least 1 training program occurring, and at times up to 4 at the same time? (6/29/24: Pelvic Contouring in South/Central Asia; Treatment Plan Evaluation in North Africa; H&N Contouring in Latin America; and a side operation to support Libya's 2D to 3D EBRT transition). This is a huge accomplishment and a testament to the spirit and mission of RCC that you hold in your hearts.

I would especially like to thank and acknowledge Emily Kruse, who many of you have met by now, as she is rocking her pivotal role as Program Manager for our organization. Emily is now approaching the end of her 2nd year with RCC; she has helped conduct 10 programs and onboarded dozens of new supporters and hundreds of new participants. We both welcome all of the new RCC champions and look forward to supporting global radiotherapy with you!

As you can see, we have so many accomplishments to highlight, and our goal is to inform you on a global level about our operations, celebrate our diversity of experiences, and show how everything (and everyone) is coming together to create an educational platform that may be the next best thing since cheese (at least, for radiotherapy centers). To that end, we held our first ever "RCC Volunteer Awards Night" on 6/28/24 (yes, one day before 6/29/24) (see p6) to celebrate all the ways RCC volunteers have made these initiatives possible.

As I thought about this, I reflected on my favorite things in life. Many circle around "tradition." So, it is my wish that we plant the seeds for an organization filled with traditions of service, teamwork, thoughtfulness, and excellence. Cheers to the traditions we foster with RCC!

-Ben

President & Executive Director



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Course Review

TREATMENT PLAN EVALUATION

From April to June 2024, RCC conducted a pilot course on treatment plan evaluation for medical physicists, dosimetrists, and radiation oncologists in North Africa. We covered all aspects of plan evaluation, including:

- CT simulation
- Scan image review
- Image registration
- Contour evaluation
- Beam arrangement
- Plan optimization

And, we included disease site-specific lectures covering every type of plan you may encounter from head to toe! #ambition

Over 300 participants enrolled in the course, and results from the 186 participants who completed all course assessments are shown in the table below. Volunteers and participants alike contributed a tremendous amount of effort by creating and reviewing example plans in ProKnow and delivering or attending comprehensive lectures across 14 sessions. We extend a big ‘thank you!’ to everyone involved in the course!

n = 186	Pre-Course	Post-Course	% Change	p-value
Avg. Confidence (out of 5)	2.27	3.7	63.00%	p < 0.01
Avg. Multiple Choice Test Score	41.60%	48.60%	16.83%	p < 0.01

“I don’t think you (RCC team) truly know the effect you had in my knowledge, practice, ethics, and most importantly my patients experience and outcomes. It’s beyond words.”

- MEDICAL PHYSICIST PARTICIPANT



YouTube Update!

The [videos](#) from the Treatment Plan Evaluation course are now available on RCC’s YouTube channel



HEAD & NECK CONTOURING

RCC’s first program made specifically for radiation oncologists in Latin America took place throughout June to September 2024. The program aimed to strengthen radiation oncologists’ capacity to contour and evaluate plans for head & neck cancer patients with precision, confidence, and integrity. This would result in improved patient outcomes.

With over 600 participants enrolled in the course and an average of 360 participants attending each weekly Zoom session, this course was one of RCC’s largest! Volunteer educators did a fantastic job of teaching course material and developing creative methods to engage learners.

The hard work paid off as the course received the highest recommendation score of any RCC program to date: 9.9/10.0! We appreciate the efforts of all volunteers and participants involved in the course to enhance care for head & neck cancer patients all across Latin America.

“I am very grateful for the teachings I have received...it has allowed us to improve the contouring of lymph node levels, to objectively define the OARs of the head and neck with their dose limits and to update ourselves on the therapy for H&N tumors.”

- RADIATION ONCOLOGIST PARTICIPANT (TRANSLATED)

Course Review

CONTOURING PELVIC MALIGNANCIES

During an overlapping time period in April to July 2024, radiation oncologists and residents in South & Central Asia participated in a course on contouring pelvic malignancies.

The course provided participants with an in-depth conceptual and technical review on avoiding common errors in contouring for the pelvic lymph nodes and cervical, endometrial, prostate, bladder, rectal, anal, and vulvar cancers (yes, all of them!). Sessions provided practical demonstrations and examples so that trainees could develop greater awareness of anatomy and superior contouring skills.

The 140 participants who completed the pre- and post-course requirements achieved a +26% increase in confidence and a +22% increase in knowledge across contouring for all pelvic malignancies. This was a tremendous milestone in our path to further democratize expert-level knowledge.

VOLUNTEER / PARTNER INITIATIVES

Advancing Radiotherapy in Libya

From February to June 2024, over 50 participants across Libya joined a course on the transition from 2D to 3D External Beam Radiation Therapy (EBRT). The course was organized, coordinated, and led by AAPM Global Clinical Education and Training Committee members, and sessions were supported by bilingual (English/Arabic) moderators and educators from both AAPM and ASTRO.

This initiative would not have been possible without the efforts of many volunteers, who customized RCC presentations to create a curriculum tailored to Libyan centers. Together our efforts have made a significant impact on radiotherapy professionals in the region!

Collaborating on Training in Nigeria

We are proud to feature RCC's collaboration with [BIO Ventures for Global Health](#) (BVGH) on BVGH's in-person IMRT training program for radiotherapy professionals in Nigeria. To measure the program's impact, RCC volunteers helped create multiple-choice exams that assess participants' knowledge before and after the training.

This partnership underscores the importance of collective efforts in advancing radiotherapy education and care. We would like to send a heartfelt 'thank you' to our partners at BVGH and volunteers, including [Kevin Risolo](#), [Peter Sandwall](#), [Jill Chapman](#), [Claire Dempsey](#), [Clare Monk](#), [Trevin Trotman](#), and [Kara Banson](#)!

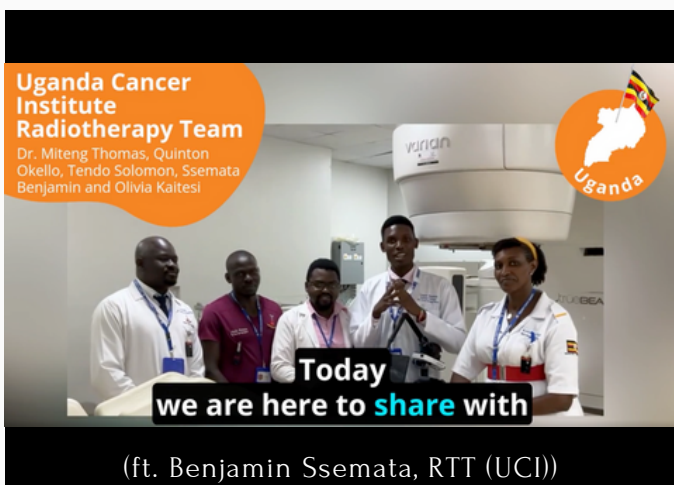
Additionally, RCC volunteers and partners have been instrumental in promoting high-quality education regionally and internationally. We have seen team members grow into leadership roles, amplifying RCC's mission and increasing its representation in communities around the globe. Thank you for your dedication and impact--you are shaping the future of global radiation oncology education!

Follow-Up on “Documents in Radiation Oncology” Course

Building upon Rayos Contra Cancer’s pilot training program “Documents in Radiation Oncology” (see our [Spring 2024 newsletter](#))...

- Victor Ekpo (medical physicist, ASI Ukpo Hospital, Nigeria) reported that his center was successfully able to start using the EMR software, MOSAIQ, in their department, which they had not been able to leverage until taking the course.
- Agnes Ewongwo (Stanford rad onc resident, PGY5) visited Cameroon Oncology Center, another pilot course center, while visiting her own family in Cameroon. She now is able to strengthen a link for remote support as young staff rise to the challenge, being the lone radiotherapy center in their country.
- In May 2024, multiple team members had the chance to visit Uganda Cancer Institute (UCI), a third participating center. The visit was sponsored by the University of Washington (where Ben and Emily both work!) as part of their commitment to ongoing global oncology efforts that continue to be much needed.
 - Team members (Ben, Emily, Eric Ford, Afua Yorke, August Anderson, and Caroline Colbert) joined to further a longstanding partnership between UCI and Fred Hutch Cancer Center to include radiation oncology as a key piece of this mission.
 - UCI implemented its very own Incident Learning System. We think this is the first one established in Africa! The team is motivated to gain experience and then help other centers establish their own.
 - UCI also has started to use standardized treatment plan instructions for all of their cervical cancer patients.
 - Volunteers from many other institutions are also supporting UCI’s path to reach a model of excellence as quickly as possible!

Together, these updates are helping to transform the entire radiotherapy system to create documented, more efficient, and more standardized care.



World Radiotherapy Awareness Day - a New Tradition

Since our visit, we wanted to highlight how UCI has taken the podium to help advocate for all other centers in LMICs and to give voice to our shared mission. This begins with a big new idea... World Radiotherapy Awareness Day.

- WRAD is announced, and Dr. Solomon Kibudde (UCI) [gives a speech](#) for the ages.
- WRAD will likely be celebrated on November 7th (Marie Curie’s birthday) in 2025.

We also must thank the Global Coalition for Radiotherapy (GCR) for helping link us all and orchestrate such an event.

Volunteer(s) Spotlight

Making the “Treatment Plan Evaluation” Course a Success

With this newsletter, we want to highlight and thank the incredible volunteers who made our Treatment Plan Evaluation course for medical physicists in North Africa a reality. Their dedication and teamwork turned a vision into a transformative learning experience for participants across the region.

The team worked tirelessly to coordinate topics, educators, and moderators, ensuring a seamless delivery of the course. Together, they developed comprehensive content, created example cases, and practiced presentations to ensure that participants received high-quality, practical education tailored to their needs.

Their efforts extended far beyond the lectures. The volunteer team answered participant questions, attended each other’s sessions to provide additional support, and worked collaboratively to grade over 300 ProKnow open-ended exam answers—providing detailed feedback to help participants strengthen their skills. After the course ended, team members participated in post-course calls to analyze the pilot course and identify ways to enhance this program for other regions.

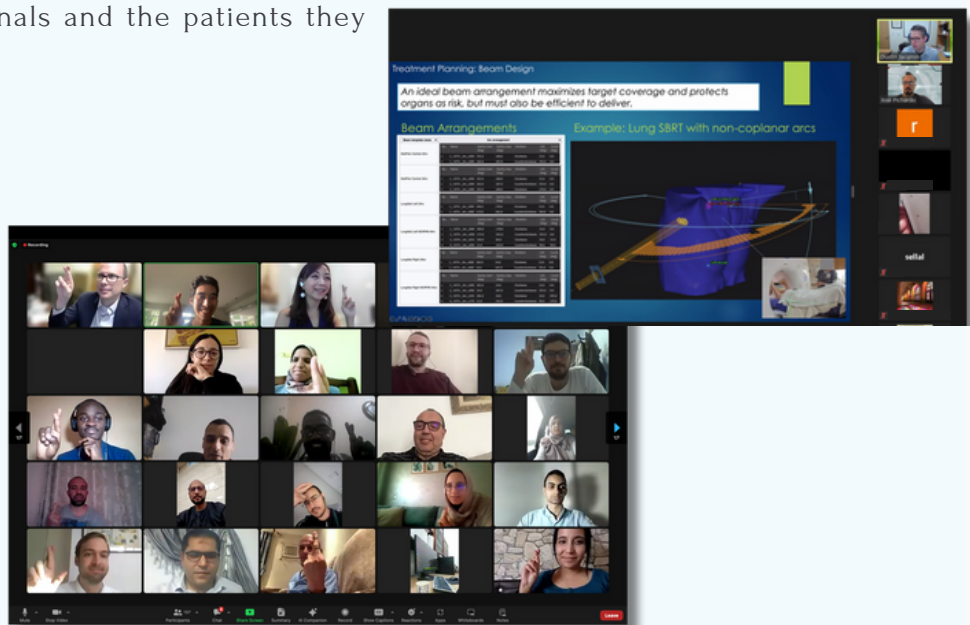
To our amazing volunteers: thank you for sharing your expertise, passion, and time to support this vital training. You are making a lasting impact on radiotherapy professionals and the patients they serve.

Thank you, team!

Lindsey Olsen (U of Colorado)
Adam Shulman (Colorado -> Yale)
Brendan Burgdorf (Colorado)
Chunhao Wang (Duke)
Dustin Jacqmin (U of Wisconsin)
James Kavanaugh (Mayo)
Jose Carlos Pichardo (Locums)
Justin Roper (Emory)
Leah Schubert (Colorado)
Maura Kirk (Jefferson -> U Penn)
Minsun Kim (U of Washington)
Mu-Han Lin (UTSW)
Sean Berry (MSKCC)
Stephanie Bennett (BWH)
Sua Yoo (Duke)

“I’d like to extend my warmest thanks to the organizers and physicists for this wonderful initiative, which provides a wealth of very useful information to help patients receive safe and effective treatment. I hope to be among you in future sessions.”

- MEDICAL PHYSICIST PARTICIPANT



Volunteer Awards Night

JUNE 28, 2024

RCC hosted its first annual virtual Volunteer Awards Night! We recognized the incredible contributions of dedicated volunteers who have developed curricula, taught & facilitated live sessions with hundreds of participants, answered questions from professionals around the world, and supported RCC's growth.

We are truly grateful to all volunteers for being part of the RCC team and making it possible to achieve our mission of creating sustainable access to high-quality radiation treatment in limited-resource settings globally. We look forward to seeing you at the next awards night!



Congratulations to all of the 2022 - 2023 volunteer award winners for embodying the spirit of RCC!

Adam Shulman
Alejandro González-Motta
Angel Montero
Anuja Jhingran
Benjamin Ssemata
Bertha Garcia
Cesar Della Bianca
Claire Dempsey
Dante Roa
David Martínez
Elaine Herbert
Emily Hirata

Emma Holliday
Hiram Gay
Jill Chapman
Jon Paly
Jose Garcia Ramirez
Karina Ochandorena
Kevin Risolo
Lina Loaiza
Lindsey Olsen
Mac Longo
Maria Caicedo
Marissa Gayle

Michael Hermansen
Mustefa Mohammedsaid
Nahuel Díaz Giunta
Omar Vahidy
Parag Sanghvi
Piotr Dubrowski
Roberto C. Chumbimuni
Serguei Castaneda
Shada Wadi-Ramahi
Sharareh Koufigar
Soha Ahmed
Tomi Nano

PUBLICATIONS / PROFESSIONAL CONFERENCES

Balbach ML, Neely G, Yorke A, et al. Developing an educational "hub": impact of a distance-learning curriculum in a multinational cohort. *BMC Med Educ.* 2024;24(1):406. Published 2024 Apr 12. [doi:10.1186/s12909-024-05193-9](https://doi.org/10.1186/s12909-024-05193-9)

Maria Caicedo, MD, shared an analysis of RCC's [2023 Hypofractionation curriculum](#) at ESTRO in May 2024, focusing on education as a perceived barrier to the use of hypofractionation in Latin America.

At the SOMERA 2024 National Conference in Huatulco, Mexico, Ben was invited to present The Path and Future Direction of Rayos Contra Cancer. There, he heard many first accounts of the tremendous impact RCC has had for Mexico and all of Latin America!



Ben and Lacy Hubbard, President of the Elekta Foundation, pose at the 2024 ASTRO conference in Washington, D.C. in celebration of the Elekta Foundation's continued support of RCC and radiotherapy patients around the world!

RCC's 30th Course!

Thanks to the dedication of hundreds of volunteers & supporters and thousands of participants, RCC has conducted 30 courses since its inception in 2018!

We calculate patient lives impacted per year (PLIPY), and we estimate that the knowledge shared through these 30 RCC courses has benefited over 1,538,000 patient lives all over the world.

WE BROKE 1 MILLION!!

1,538,845

Estimated annual patient lives impacted by RCC programs

Sneak Peek



We have three ongoing or upcoming courses!

2D to 3D External Beam Radiation Therapy in Africa



- 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 900 participants from all over Africa and the world are enrolled in this current version of the course that takes place over the end of 2024 and beginning of 2025.

High Dose Rate Brachytherapy in Southeast Asia



- HDR brachytherapy is an important service for a radiotherapy center of excellence, and this program covers the HDR brachytherapy implementation process from facility design and receipt of a radioactive source to treatment planning and quality assurance.
- Medical physicists, physics residents, and additional participants in Southeast & South Asia have joined this two-part course taught by expert volunteer educators and conducted over the end of 2024 and beginning of 2025.

Nursing in Radiation Oncology: Managing Dermatitis & Beyond (anticipated in early 2025)



- We are very excited to announce the development of RCC's first course for nurses in radiation oncology!
- This program addresses the need for nurse education on the support of patients undergoing radiotherapy and the management of toxicities specific to radiation therapy.

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