

RAYOS CONTRA CANCER

Education | Clinic Development | Research

Education

Our growing RCC teams have been productive finishing up a Head and Neck Contouring curriculum in the Philippines, launching a 2D to 3D EBRT curriculum in the Middle East and North Africa, and a new IMRT 2.0 curriculum (starting last week)! See on pages 1 and 2.

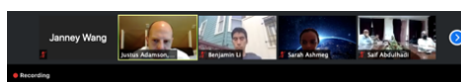
Research

Three papers with RCC volunteers as lead authors have been accepted for publication. *Impact of a SBRT/SRS longitudinal telehealth training pilot course in Latin America*, and *COVID's Impact on Radiation Oncology: A Latin American Survey Study* were both accepted for in print publication in October and can already be found online. You can read about RCC's SBRT/SRS pilot curriculum and COVID-19's impact on Latin American oncology clinics, and *one more publication*, on page 3.

Clinic Development

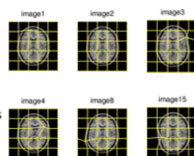
Through RCC University, California Northstate University COM has begun the early planning process of designing a radiation therapist-tailored "Advanced IMRT" curriculum. One goal of RCC University is for the chapter to facilitate more meaningful and personal connections with partner clinics. Read about this story on page 3.

RCC Launches 2D to 3D EBRT Curriculum



Deformable Registration: A Caution!

- Many different algorithms exist, with varying levels of accuracy
- Results from deformable registration are very difficult to verify
- Registrations can be prone to errors and not robust to large changes in anatomy
- Rigid registration is what is almost always used clinically
- Best practice is to select an appropriate region of interest for rigid registration & ignore areas outside of it



RCC Image from: Park, Hyunjin, et al. "Target Selection Method in Atlas Construction based on Multidimensional Scaling."

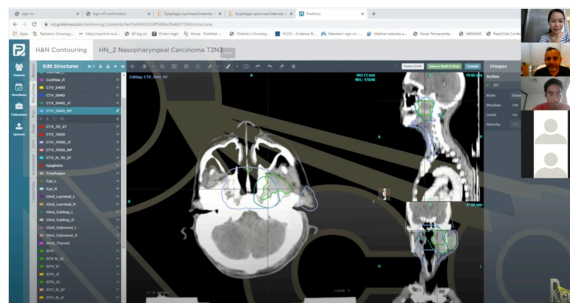
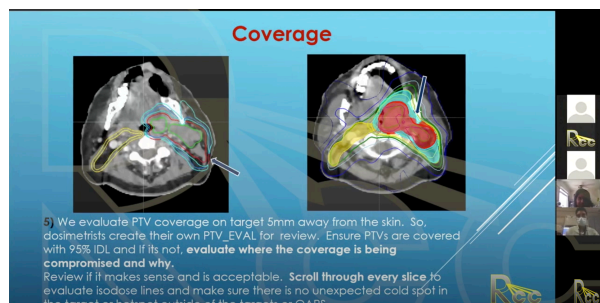
We are excited to share our progress with the RCC 2D to 3D EBRT curriculum! With 26 sessions planned, the curriculum will run from the grand opening on August 27th, 2020 till December, 2020.

Over two hundred Radiation Oncologists/Residents, Medical Physicists, Dosimetrists, and Radiation Therapists registered from eight clinics. The clinics are: Centre Hospitalier Universitaire Mohammed VI - Centre régional d'oncologie in Morocco; Rizgary Oncology Center and Oncology and Nuclear Medicine Hospital in Iraq; Azal Hospital and National Oncology Center in Yemen; Alexandria University Hospital in Egypt; Khartoum Oncology Hospital, Merawi Oncology Center, and Medani National Cancer Institute in Sudan. Training sessions are being conducted once to twice a week following the ECHO model and incorporated ProKnow, a cloud-based software allowing clinics to upload sample treatment plans.

All recordings of sessions are available on our YouTube channel: www.youtube.com/c/rayoscontracancer



Head and Neck Contouring Curriculum Complete!



With the help of students at the UCSF School of Medicine in San Francisco, CA, the brand new RCC Head & Neck Contouring curriculum completed with great success on August 28th, 2020. The curriculum features 13 sessions, educational review of contouring on ProKnow, and more. Eight cancer centers in the Philippines participated in the curriculum: Jose Reyes Memorial Medical Center, The Medical City, St. Luke's Medical Center, Perpetual Help, Makati Medical Center, Cardinal Santos Medical Center, Philippine General Hospital, and University of Santo Tomas.

Thanks to the efforts of our educators, these high quality videos are currently being viewed by radiation oncologists and residents around the globe, with over 500 RCC YouTube subscribers.

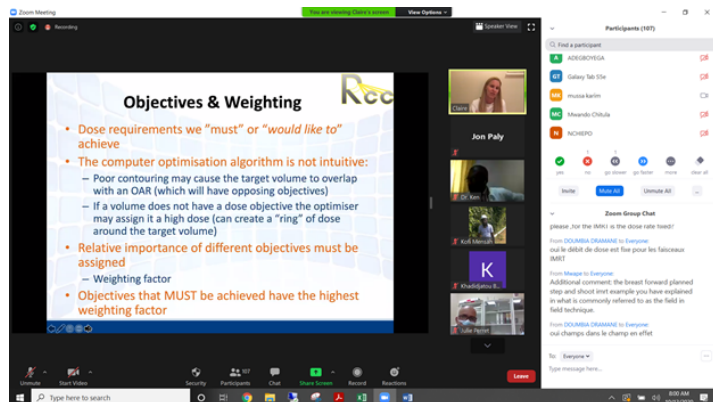
View the playlist of the curriculum recordings at: https://www.youtube.com/playlist?list=PLO7opt4dQZO7DUNoI59WyDoyf2bBx_NYJ

Coloquios de Braquiterapia Initiative Maintaining Momentum

One of the new initiatives of RCC is the Coloquios de Braquiterapia initiative; it has the mission of making it known that brachytherapy is more than just a treatment used for cervical cancer. Brachytherapy can improve outcomes, reduce costs, and has many diverse applications that can be learned and expanded to regions in need. Our effort in Latin America is the first of multiple phases helping to raise practices and perspectives to a new level. The Coloquios are on a roll and have completed 13 sessions now with no plans to slow down! Our audience is growing and beginning to engage educators and participants in Europe, as well as conversations for industry alliances to strengthen RCC's mission. We would like to especially recognize Dr. David Martinez and Dr. Apolo Salgado for leading the series!

IMRT 2.0 Curriculum off to Exciting Start

On October 12 our IMRT 2.0 curriculum for English speaking clinics kicked off to an amazing start with **285 participants!** The curriculum is designed for clinicians navigating the transition from 3D



RT to IMRT, a crucial point in the development of a high-quality IMRT program. Ensuring safe, proper, and consistent methods for implementation, commissioning, simulation and motion management, treatment planning, and QA are all essential components. It is the first step needed to ensure that treatment contours and plans are being applied correctly to patients as intended. We believe at the end of this course, physicists and clinicians will have a clear overview and understanding of the

implications of transitioning to IMRT at their center, the tools, resources, and documents to do so, and access to a network of educators to provide continued support after the telehealth component of training is complete. We would like centers to learn the best habits for high-quality IMRT, and to be able to teach these to other centers! Over twenty centers will be participating from select regions.

Partnership Update: Project ECHO

RCC is excited to announce a new addition to the team! On October 1st, Clayton Richards began with Project Echo as an Operations Specialist, and is focusing on RCC full time! Between Clayton and Diana, whom we have been working with, we believe this project will be managed beautifully with a mix of ECHO experience, Spanish proficiency, and knowledge of medical school administration!



RCC University Grows

Continuing with our RCC University initiative, we are bringing more medical students into our organization, and helping them develop leadership skills and radiation oncology experience by spear-

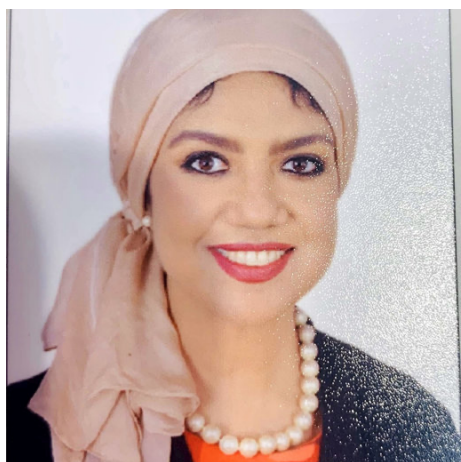
heading one of our telehealth curriculums. Currently, students from the California Northstate University College of Medicine plan to help launch the Radiation Therapist - Advanced IMRT curriculum in Latin America.

Furthermore, we are pumped to onboard our *youngest branch yet*: the Vanderbilt University undergraduate RCC chapter! With fifteen regular members eager to help, the chapter already is hosting sessions of our 2D to 3D EBRT curriculum regularly and furthers our goal of building student interest in global oncology.



Volunteer Spotlight

Soha Ahmed and Shada Wadi-Ramahi



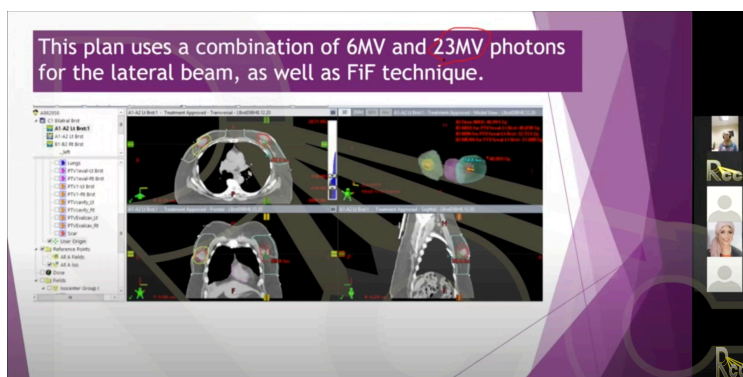
For this edition of our volunteer spotlight, we are happy to present not one, but two wonderful volunteers!

Dr. Soha Ahmed is a radiation oncologist at Aswan University, Egypt; she has been a RCC Liaison for 3 centers in Iraq and Egypt, linking RCC efforts to these clinics.

Dr. Shada Wadi-Ramahi is a medical physicist at University of Pittsburgh Medical Center; she has given feedback to fellow educators and has helped greatly with curriculum design.

Both Soha and Shada helped identify centers in need, made the connections for RCC to reach these centers, and have been involved as dedicated educators and session moderators, going above the call of duty and striving towards what they believe in.

Thank you, Soha and Shada, for everything you do for RCC!



RCC Publishes First Research

Impact of a SBRT/SRS longitudinal telehealth training pilot course in Latin America

This month's issue of Critical Reviews in Oncology/Hematology will feature work by many RCC volunteers including Benjamin Li, Gustavo Sarria, Jackie Hao, Serguei Castaneda, Oluwadamilola Oladeru, and Dante Roa, among others. Here, the team assesses the impact of our RCC SBRT/SRS pilot curriculum on two pilot clinics in Peru and found that conducting telehealth educational programs via virtual classroom sessions could indeed be a reliable method to augment training for SBRT and SRS. Read more about this work here: [SBRT/SRS Telehealth Training in LATAM](#).

COVID's Impact on Radiation Oncology: A Latin American Survey Study

Scheduled for in print publication in October, RCC volunteers David Martinez, Gustavo Sarria, Daniel Wakefield, Claudio Flores, Sameeksha Malhotra, Benjamin Li, Michael Ehmann, and David Schwartz' work in the International Journal of Radiation Oncology Biology Physics (IJROBP) highlights the impact of COVID-19 on oncology clinics in Latin America compared to those in Europe or the United States. The team found reports of reduced revenue, delays in treatment, staffing shortages, and shortages of personal protective equipment, to name a few of the metrics studied. You can read the full manuscript here: [COVID Impact on Rad Onc in LATAM](#).

JUST ACCEPTED: Impact of High Dose Rate Brachytherapy Training via Telehealth in Low- and Middle- Income Countries

Just last week we were notified by JCO Global Oncology of our acceptance of "Impact of High Dose Rate Brachytherapy Training via Telehealth in Low- and Middle- Income Countries" which was based on our HDR Brachytherapy curriculum. While not yet available online, this acceptance demonstrates the impact RCC has on the field of Radiation Oncology globally. You will be the first to know when this and all of our subsequent research is available!

Are you interested in helping as an educator? Click whether [Radiation Oncologist](#), [Radiation Therapist](#) or [Medical Physicist](#) and we can notify you with a future opportunity!

Are you interested in helping in another way? We have a [contact page](#) and a [donation page](#) and appreciate your solidarity with us.

Thanks to the combined efforts of many, **for every \$1 we raise, we help 1 cancer patient** in a limited-resource setting receive a better radiation treatment! Have a question or comment? Reach us at info@rayoscontracancer.org