

RAYOS CONTRA CANCER

Education | Clinic Development | Research

Education

Rayos Contra Cancer has finished its pilot SBRT/SRS Hypofractionation curriculum! Our educational seminars featured 10 speakers that presented topics of their expertise in SBRT/SRS. These hour-long presentations are followed by Q&A sessions, case-based review, and discussions for enhanced practical application. (pg.1)

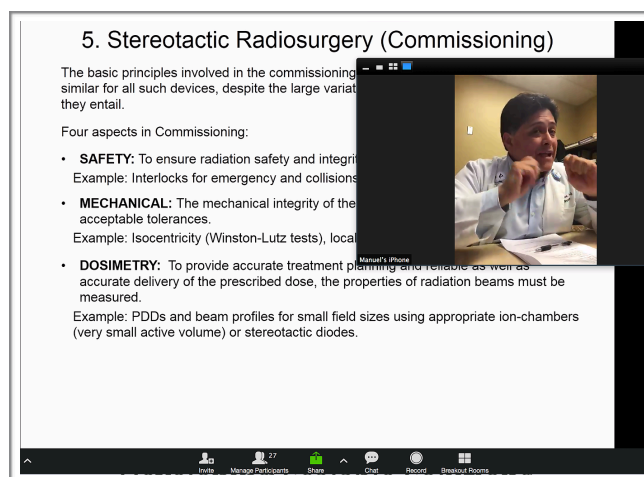
Research

We are proud to share our inaugural large-scale research initiative: Latin America Collaborative Project-1 (LACOS-1). We've partnered with experts located in 8 countries from 14 clinics to analyze the diversity in treatment patterns and provide valuable feedback on the efficiency, safety and quality of treatment plans. (pg.2)

Clinic Development

Rayos Contra Cancer is collaborating with Project Pyramid to show the economic implications for the transition from 2D to 3D treatments at Guatemala's National Cancer Institute, INCAN. (pg. 3)

Remote Education Development



This spring, Rayos Contra Cancer conducted a 12-week series of virtual classroom sessions focused on the medical physics of SBRT/SRS Hypofractionation. These were organized with Peru's National Cancer Institute (INEN) and two other centers (Clinica Delgado and Oncosalud), part of the AUNA network. All sides involved were excited by this successful proof of concept.

These sessions are powered by our enthusiastic medical experts who donate their time to benefit global oncology. These well-attended seminars average around 25 participants: all who are eager to reinforce their knowledge and provide their perspective in further discussions. Our engagement has led to productive ideas for research and project development. Repeat iterations of this curriculum will soon involve more centers.

In addition, a new series is under development with collaborators from New York University focusing on global health education and training for radiation therapists in Latin America.

As more curricula are planned, RCC's Project ECHO efforts will begin to extend to more regions. RCC is currently designing a HDR Brachytherapy curriculum for Africa and the Middle East.

Serguei Castaneda



Vice President

Dr. Castaneda is a 5th year Radiation Oncology Resident at Hahnemann Hospital. Originally from Colombia, he understands the potential for collaboration and connectivity to address gaps in care. He studied medicine at La Universidad de Antioquia. From there he was awarded post-doc fellowships at Massachusetts General Hospital and Boston University.

He serves as a leader on the ARRO Global Health Subcommittee and founded the Mutual Mentorship program that connects residents across the globe in radiation oncology. He is a member of ASTRO, is active with Radiating Hope, and is involved in research to improve radiotherapy in developing nations around the world.

Latin America Cooperative Study-1 (LACOS-1)

Latin American clinics are diverse in a multitude of facets: number of physicians, quality of equipment, training programs (or lack thereof), and especially radiation oncology treatment planning. The RCC LACOS-1 aims to capture these differences and analyze the best way to provide feedback on safety, quality and efficiency for each center.



Given the high prevalence of cervical cancer in Latin America, combined with an increased interest in advanced radiotherapy techniques for this disease, there is great room for improvements in treatment planning. RCC invited 14 clinics from 8 different countries to create contours and plans for locally advanced cervical cancer using IMRT/VMAT. Radiation oncologists and medical physicists from these clinics will develop treatment plans for each case of cervical cancer using their own software. After analyzing the differences between clinics, RCC can provide a specific template for clinics to plan and participate in relevant educational seminars. This feedback will help compare and improve upon their IMRT/VMAT treatments.

This study is made possible with ProKnow DS, which provides our participants with HIPAA compliant cloud-based radiation oncology software that provides a dynamic myriad of capabilities, including large data analysis. A total of 120 Latin American experts are involved in this effort, with whom we seek to establish an ongoing relationship after the conclusion of our study. We are already excited for LACOS-2, 3, and 4.

RCC Project Pyramid Team Visits INCAN



Project Pyramid is a Vanderbilt University Owen School of Business interdisciplinary program operated through the Turner Family for Social Ventures. Each year students are given the opportunity to gain hands-on experience to create solutions to real-world problems in poverty landscapes.

Advancements in equipment and treatment methods not only

require the support of physicians, but also governing bodies. Thus, RCC is developing an economic assessment of 3D vs. 2D external beam radiotherapy. This assessment will demonstrate the cost-effectiveness of the technology in a public system at Guatemala's National Cancer Institute, INCAN. Led by Santiago Peralta, a multidisciplinary team of students visited INCAN in early March 2019. They witnessed first-hand the strengths and challenges that the center faces. Later this spring, Project Pyramid will develop a framework for evaluating radiotherapy advancements in INCAN and other public systems in Latin America.

Our Partnerships: Radiating Hope

While training and education is an important part of clinical development, up-to-date equipments is equally critical for advanced radiation treatments. Thus, Rayos Contra Cancer has partnered with Radiating Hope to combine our efforts in global oncology.



Radiating Hope is a nonprofit organization focused on the same mission as Rayos Contra Cancer. They are 100% volunteer-run and utilize mountain climbing as a source of fundraising for cancer clinics and patients worldwide. Importantly, they comprise a network of specialists around the globe who help with the acquisition of radiotherapy equipment and technology that are essential for modern cancer therapy. As perfect complements, RCC is working with Radiating Hope to identify equipment needs in our partner clinics, including those who reach out to us. Through our remote educational programs and Radiating Hope's on-site development, we can achieve a higher quality, multi-dimensional support network for clinics in Latin America and beyond.

Rayos Contra Cancer Launches First Student Chapter

"I'm passionate about improving access to quality healthcare for underserved populations. Rayos Contra Cancer gives me the opportunity to make a meaningful impact in this space even as a first year medical student!" - Megan McLeod join the our mission in the fall of 2018. In her first year working with Rayos Contra Cancer, she has already been instrumental in coordinating SBRT/SRS curriculum calls.



Rayos Contra Cancer is proud to announce its inaugural medical student chapter-ship launched this year at Vanderbilt University Medical Center. The organization emphasizes that global health efforts are a collaboration. We believe that the inclusivity of physicians, residents, and medical students alike contribute to the sustainability and efficiency of all global health initiatives. Thus, we invite medical students to fulfill important roles in the organization and develop their own interest in global health. We are constantly looking for new individuals and institutions to spread our reach.

Stay tuned for more updates in our summer issue



In the coming months, we will work to scale and develop our current projects and incorporate new partnerships. Be sure to stay tuned for updates about our organization and global radiation oncology.

Please subscribe to our quarterly newsletters by visiting rayoscontracancer.org

Have a question or comment? Reach us at info@rayoscontracancer.org