RCC’s Mission
Rayos Contra Cancer (RCC) is a 501(c)(3) non-profit organization whose mission is to create sustainable access to timely, high-quality, and affordable radiation treatment for cancer in limited-resource settings globally. RCC has a clinic-centric approach, working with existing radiotherapy clinics to enable the local resources that are already in place. RCC currently focuses on education and training programs in areas where support is otherwise scarce for radiation therapy. In addition, RCC supports opportunities for clinic development and research and has developed a network of affiliate academic centers, over 100 volunteers, and over 200 U.S.-based radiation oncology professionals with vocal interest in helping future efforts.

Education and Training Programs
RCC creates, administers, and measures longitudinal curriculum programs to clinics with functional medical equipment, but gaps in education and training. RCC is the only certified radiation oncology program of Project ECHO (Extension for Community Health Outcomes), a tested model for using telementoring to empower medical experts in underserved communities. RCC’s education and training programs connect its pool of volunteer experts to cohorts of clinics who share a need for specific medical education and training. These experts work to improve the quality of treatments provided at each center. We facilitate multi-institutional collaboration, mobilize medical professionals and students, and incorporate cloud-based technology in our initiatives.

RCC produces original educational materials, leveraging practical experience from well-respected experts by topic and catered to those in limited-resource settings. Each curriculum has been developed by a lead educator and several supporting educators who teach sessions during a longitudinal telehealth program. Each session is 1 hour, typically given 1-2 times per week over the span of 3 -4 months. We foster an intimate, peer-to-peer learning environment whereby discussion is encouraged among all clinics in real time.

Current curriculum offerings:

- Stereotactic Body Radiotherapy (SBRT) / Stereotactic Radiosurgery (SRS)
  - Lead Educator: Indrin Chetty, PhD, FASTRO
  - Supporting Educators: 15
  - Sessions: 12; Version 2.0: 15

- High Dose Rate (HDR) Brachytherapy
  - Lead Educator: Adam Shulman, MS, DABR
  - Supporting Educators: 13
  - Sessions: 19
In its first four cohorts, RCC has completed education and training for 25 clinics in 13 countries, impacting the care of over 15,000 cancer patients per year. We encourage department-wide participation and require official endorsement from clinic administration. Participants have included medical physicists, radiation oncologists, residents, and technologists. Among our first four cohorts, 231 individuals have participated (38, 31, 14, 148) and 87 of these (14, 24, 12, 37) successfully attended ≥70% sessions within the curriculum. Every clinic has demonstrated improvements in all measured competencies, based on pre- and post-training participant assessments measuring confidence and knowledge improvements.
After each clinic’s telehealth training, we strive to complete a 1-2 week onsite training visit, subject to funding for a volunteer educator’s travel costs. To date, 4 clinics have received onsite training, and 8 additional clinics have onsite training visits that are currently being planned (pending COVID-19 pandemic).

How it works:

Using our established curriculum materials, we train clinics in cohorts based on shared levels of experience and needs. Below is an illustrative process for each program:

Future Plans:
- Leverage talented volunteers to full capacity
- Scale existing programs to more regions and more clinics
- Improve curricula and assessment methods
- Develop new programs, particularly for contouring and for radiation therapists
- Structure greater partnership activities

Partnership Activities

RCC operates several productive partnerships that bolster its mission. RCC’s network of volunteer educators extends to both academic and private radiotherapy practices throughout the United States.

RCC University, Training Medical Student Leaders. Partners: American Medical Association, Project ECHO
RCC’s formation of Latin American Residents in Radiation Oncology (LARRO)
  - Residency Training Registry in Latin America. Partners: LARRO
  - Brachytherapy Colloquium Series. Partners: LARRO, Instituto Nacional de Chile
Coordinated Partnership for Equipment and Shipping. Partners: Radiating Hope & Flexport
Latin America Collaborative Study-1 (LACOS-1). Partners: ProKnow
ChartRounds LATAM support. Partners: ChartRounds.com
Non-Profit Consulting for Clinic Development. Partners: Project Pyramid (Turner Family Center)
Artificial Intelligence Perspectives and Needs Assessment. Partners: MAIA Labs
# Index of Clinics

## Latin American Clinics

### Argentina
- Hospital Marie Curie, Buenos Aires: **IMRT ECHO**
- Instituto de Oncología Ángel H. Roffo, Buenos Aires: **LACOS-1**

### Bolivia
- Instituto Oncológico Nacional CPS, Cochabamba: **IMRT, IMRT for RTTs ECHO**
- Agencia Boliviana de Energía Nuclear, La Paz: **IMRT ECHO**
- Hospital de Clínicas, La Paz: **IMRT ECHO**
- Hospital Municipal La Portada, La Paz: **Coordinated Partnership for Equipment and Shipping**
- Oncoservice, La Paz: **IMRT ECHO**
- Centro Oncológico de Santa Cruz, Santa Cruz: **IMRT ECHO**
- Instituto Oncológico del Oriente Boliviano, Santa Cruz: **IMRT ECHO**

### Brazil
- Complexo Medico Delfin, Salvador: **LACOS-1**
- Centro de Oncologia Integrado, Rio de Janeiro: **LACOS-1**

### Chile
- Clínica Las Condes, Santiago: **LACOS-1**

### Colombia
- Clínica General del Norte, Barranquilla: **IMRT for RTTs ECHO**
- Clínica de Occidente, Cali: **SBRT/SRS ECHO**
- Clínica Somer, Medellín: **SBRT/SRS ECHO**
- Instituto de Cancerología AUNA, Medellín: **LACOS-1, IMRT for RTTs ECHO**
- Centro Hospital Universitario San Ignacio, Bogotá: **LACOS-1**
- National Cancer Institute (INC), Bogotá: **Coordinated Partnership**

### Dominican Republic
- CDD Radioterapia La Romana, Santo Domingo: **LACOS-1**

## African and Middle Eastern Clinics

### Egypt
- Alexandria University Hospital, Alexandria: **2D to 3D EBRT ECHO**
- National Cancer Institute, Cairo: **HDR Brachytherapy ECHO**

### Ghana
- Sweden Ghana Medical Centre, Accra: **HDR Brachytherapy ECHO**

### Iraq
- Baghdad Radiotherapy Center, Baghdad: **HDR Brachytherapy ECHO**
- Oncology and Nuclear Medicine Hospital, Mosul: **2D to 3D EBRT ECHO**
- Rizgary Oncology Center, Erbil: **2D to 3D EBRT ECHO**
- Zhianawa Cancer Center, Sulaymaniyah: **HDR Brachytherapy ECHO**

### Jordan
- King Hussein Cancer Center, Amman: **HDR Brachytherapy ECHO**

### Morocco
- Centre Hospitalier Universitaire Mohammed VI / Centre régional d’oncologie, Oujda: **2D to 3D EBRT ECHO**

### Mozambique
- Maputo Central Hospital, Maputo: **HDR Brachytherapy ECHO**

### Nigeria
- Lagos University Teaching Hospital, Lagos: **HDR Brachytherapy ECHO**

### Qatar
- National Center for Cancer Care and Research, Doha: **HDR Brachytherapy ECHO**
Ecuador
- Hospital de especialidades "Carlos Andrade Marin, Quito: LACOS-1
- Hospital Solca Nuclear, Quito: LACOS-1

Guatemala
- National Cancer Institute (INCAN), Guatemala City: 
  Non-Profit Consulting, IMRT for RTTs ECHO

Mexico
- IMSS UMAE 25/26, Monterey: LACOS-1

Peru
- National Institute of Neoplastic Diseases (INEN), Lima: SBRT/SRS, LACOS-1
- Clínica AUNA, Lima: SBRT/SRS ECHO, LACOS-1
- Clínica Renal y Oncología (CReO): SBRT/SRS ECHO
- Hospital Nacional Edgardo Rebagliatti Martins, Lima: SBRT/SRS ECHO
- Instituto de Oncología y Radioterapia - Clínica Ricardo Palma, Lima: SBRT/SRS ECHO

Sudan
- Khartoum Oncology, Khartoum: 2D to 3D EBRT ECHO

Yemen
- National Oncology Center, Sana’a: 2D to 3D EBRT ECHO

Zambia
- Cancer Diseases Hospital, Lusaka: HDR Brachytherapy ECHO

Asian Clinics
Nepal
- Kathmandu Cancer Center, Kathmandu: HDR Brachytherapy ECHO

Philippines
- Cardinal Santos Medical Center, San Juan: H&N CPE ECHO
- Jose Reyes Memorial Medical Center, Manila: H&N CPE ECHO
- Makati Medical Center, Makati: H&N CPE ECHO
- The Medical City, Manila: H&N CPE ECHO
- Perpetual Help, Calamba: H&N CPE ECHO
- Philippine General Hospital, Manila: H&N CPE ECHO
- St. Luke’s Medical Center, Makati: H&N CPE ECHO
- University of Santo Tomas, Manila: H&N CPE ECHO

Thank you for your interest in RCC! For additional information, feel free to contact us at info@rayoscontracancer.org.

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