## **Business Plan** Comprehensive Cancer Center of the University of Puerto Rico



Marcia Cruz Correa MD, PhD, AGAF, FASGE Executive Director CCCUPR May 31, 2021



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## **Executive Summary**

The Comprehensive Cancer Center of the University of Puerto Rico, energetically and enthusiastically, continues to develop and strengthen the three pillars for cancer eradication in Puerto Rico: research, education and medicine based on scientific evidence. In our 2019-2020 Annual Report, we presented the achievements of the programs: Cancer Control and Population Sciences, promoting proven prevention and early detection strategies, Cancer Biology and its translation to the clinic and Cancer Medicine, incorporating clinical research in an innovative service focused on the needs of the patient.

During the 2019-2020 period, we received the impact of the COVID-19 pandemic. Nonetheless, our hospital and research team continued to provide clinical services supporting clinical, basic and translation research. The CCCUPR Hospital participated in COVID-19 vaccination efforts in collaboration with the Puerto Rico Department of Health and provided vaccines to over 3000 individuals. We worked hard with the challenges that managing the pandemic brought to our daily lives and developed a robust system to continue serving the community of patients, including the integration of telemedicine, and the cancer researchers and students we serve.

The achievements in each of the Divisions that make up CCCUPR have been extraordinary, promoting significant impacts in all areas that affect our population, this being the leading cause of death in Puerto Rico. During this period, oncology and radiotherapy medical services have been extended in PR and the Virgin Islands. A substantial increase was demonstrated in the number of patients evaluated at the CCCUPR Hospital and at the Radiotherapy Center. Likewise, contracts were achieved between multiple health plans in Puerto Rico and the CCCUPR Hospital.

Scientific proposals were submitted for the evaluation of the impact of COVID-19 and funds were obtained to support the impact of the pandemic in Puerto Rico. Research and mentoring opportunities continued to be offered to students, and multiple scientific papers were presented. The excellent work and commitment of each of the employees, health professionals and researchers are the engine of the Comprehensive Cancer Center of the University of Puerto Rico. United we will continue working to have a greater impact on the entire population and promote evidenced based health policies, as outlined in its Enabling Law. We are grateful to all the patients and families who have placed their trust in our institution and committed to providing them with the excellent service they deserve.



## Act No. 230 of August 26, 2004

On August 26, 2004, Act No. 230 was signed. It created the Comprehensive Cancer Center of the University of Puerto Rico, a public corporation with the objective of dealing with cancer, the first cause of death on the Island.

The purpose of the Center, established by law, is to be primarily responsible for implementing public policy regarding the prevention, guidance, research, provision of clinical services and treatments related to cancer in Puerto Rico.

The main objective is to coordinate and integrate educational, community, clinical and research resources to attack cancer in PR - a disease that affects nearly 16,000 Puerto Ricans annually.

## Mission & Vision

#### Mission

- Provide the best care service to cancer patients using techniques that integrate research with prevention, early detection, treatment, and quality of life throughout the continuum of cancer care.
- Eradicate cancer in Puerto Rico using a multidisciplinary research model that encompasses basic, clinical, and epidemiological or population sciences.

#### Vision

- Create a core of scientists who work together to develop prevention, early detection, treatment, and quality of life programs.
- Obtain US National Cancer Institute designation.



## **Cancer in Puerto Rico Summary**

- 1st cause of death
- Over 72,000 survivors
- 16,344 new cases annually
- 5,052 deaths annually
- Affects both men and women

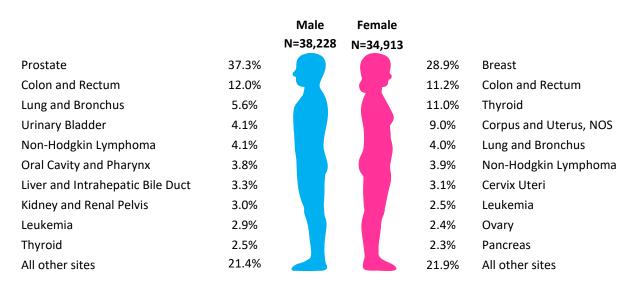


• Associated with certain exposures such as HPV, obesity and smoking

#### Cancer incidence 2014-2018

During the 2014-2018 period, <u>73,141</u> people were diagnosed with invasive cancer in Puerto Rico: 38,228 (52.3%) men and 34,913 (47.7%) women. On average 7,646 men and 6,983 women were diagnosed with cancer annually in Puerto Rico.

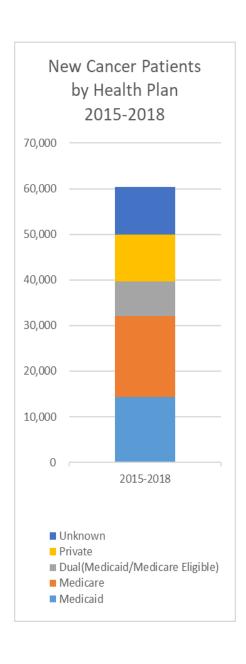
In men, the most diagnosed cancer was prostate cancer (37.3%), followed by colon and rectal cancer (12.0%) and lung and bronchi cancer (5.6%). In women, breast cancer was the most diagnosed (28.9%), followed by colon and rectal cancer (11.2%) and thyroid cancer (11.0%). The ten most frequent types of cancer diagnosed by sex during this period are:

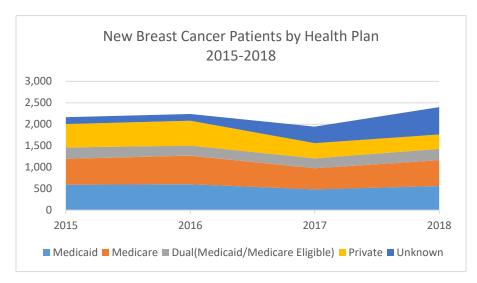


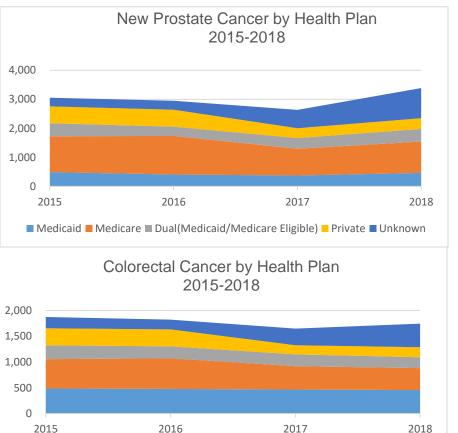


## Puerto Rico Statistics by Health Plan 2015-2018

2015





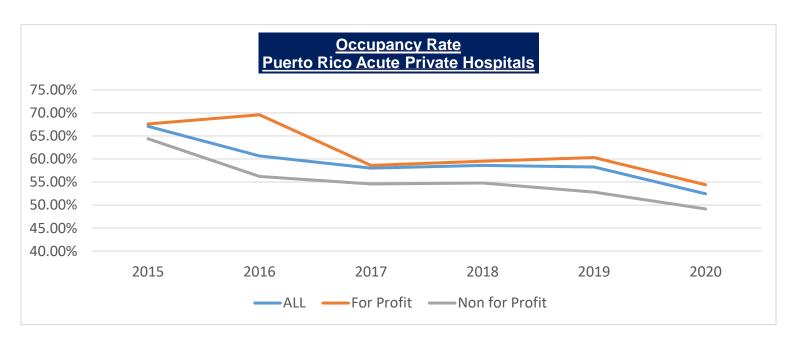


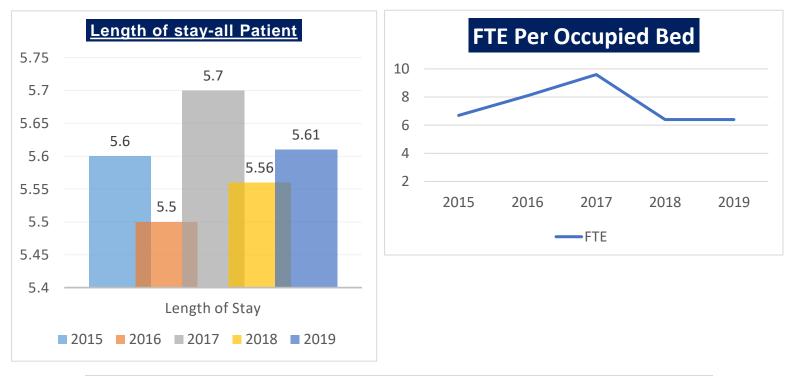
Medicaid Medicare Dual(Medicaid/Medicare Eligible) Private Unknown

2018



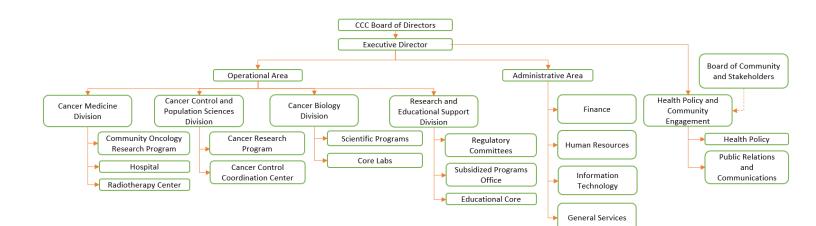
# Utilization Statistics Based on Medicare Cost Report (Acute Hospital)







# **Organizational Chart**







## **Board of Directors**

The Comprehensive Cancer Center of the UPR is governed by a Board of Directors of nine members: four ex-officio members: including the President of the UPR, Rector of the Medical Science Campus of the UPR, Dean of the School of Medicine of the UPR and Secretary of the PR Department of Health; and five citizens who have demonstrated commitment to the fight against cancer, appointed by the Governor of Puerto Rico. All members serve for established periods of time.



Dr. William Méndez Latalladi Acting President



Dr. Jorge Haddock Acevedo President of University of Puerto Rico



Dr. Carlos Mellado Secretary of Puerto Rico Health Department



Dra. Wanda Maldonado Chancellor, University of Puerto Rico Medical Sciences Campus



Dr. Ramón González Castaing Member representative of the Puerto Rican League Against Cancer



Dr. Agustín Rodríguez Dean of Medicine, University of Puerto Rico Medical Sciences Campus



Dr. Noridza Rivera Rodríguez Member of Research Community



Mr. Juan Abrams Quiñones Patient Survivor



Dr. Víctor Vázquez Rodriguez Member of Research Community



Lcdo. Javier Tirado-Polo Director of Federal Funds Management and Priority Objective Execution, AAFAF



## **Our Leadership Team**



Marcia Cruz Correa, MD, PhD, AGAF, FASGE Executive Director



Guillermo Tortolero Luna, MD, PhD Epidemiologist Cancer Control and Population Sciences Director



Elba Caraballo Rivera, PhD, MSC Research and Educational Director



Marta Sánchez Aracil, MPH Office for Community Engagement & Patient Advocacy



Lourdes Feliciano López, MD Medical Director UPRCCC Hospital



Luis Santos Reyes, MD Gyn-oncologist Medical Staff President UPRCCC Hospital



Diego Zavala, PhD Puerto Rico Central Cancer Registry Director



Carlos Chévere Mouriño, Radio-oncologist Medical Director Radiotherapy UPRCCC



# **Cancer Medicine Division**

## **UPRCCC** Hospital



The Hospital of the Comprehensive Cancer Center of the University of Puerto Rico (CCC), started to provide services to patients on June 1, 2018. The Hospital of the CCC was conceptualized as a world-class hospital for cancer patients in Puerto Rico to have access to the best treatments, comparable to those sought by many in the United States.

The Hospital has various *centers of excellence*: radiotherapy, infusion (chemotherapy), medical imaging and services specialize in screening, early detection, and diagnosis of breast cancer; nuclear medicine and endoscopy units, interventional radiology services, as well as clinical and pathologic laboratories.

In addition, it has outpatient clinics with medical staff specialized in various types of cancer including breast, gastroenterology, gynecology, head and neck, lung, urologic and behavioral oncology. Our achievements are the result of efforts made with the health plans and efficiently restructuring the billing cycle. Currently, we have contracts with multiple health plans.

• In **October 2019**, the Hospital obtained the accreditation of the "Deemed Status Medicare" (CMS), allowing to meet the requirements for contracting the products that serve VITAL (Medicaid) patients and expand services.



- From 2018 to October 2020, 38,941 thousand patients have been treated under various services. June 2018 June 2019 Multidisciplinary Clinics: 13,082 Imaging / Procedure Center: 13,876 Emergency Room: 2,437 Infusion Unit: 2,607 Lab: 6,147 Admissions: 792
- Currently the Hospital is a Medicare provider, including some Advantage insurances; has reached agreements with the major private health insurance companies, and the four that manage Vital, the Puerto Rico Health Reform patients. Continuing efforts to contract with all local health insurance companies. Status as of May 25, 2021 is as follows:

Commercial Insurance Companies					
ACAA – Lab and Imaging ambulatory services	Active				
Corvel	Active				
MCS	Active				
Triple S	Active				
CFSE – Lab and Imaging ambulatory services	In negotiations.				
First Medical / IMC	Approved by both parties. To be signed in June, 2021.				
MAPFRE	Approved by both parties. To be signed in June, 2021.				
United Health	Approved by both parties. To be signed in June, 2021.				
Veterans Affairs (VA)	Approved by both parties. To be signed in June, 2021.				
Comprehensive Human Services (Federal inmates, MDC)	In negotiations.				
Humana	In negotiations.				
Physician Correctional (Puerto Rico inmates, DCR)	Proposal sent, awaiting response.				
PSM (Menonita)	Proposal sent, awaiting response.				



Vital (PR Health Reforma)						
First Medical / IMC	Active					
PSM (Menonita)	Active					
Triple S	Active					
MMM-MSO	Approved by both parties. To be signed in June, 2021.					

Medicare and Medicare Advantage						
Medicare A&B	Active					
MCS	Active					
Triple S	Active					
Humana	In negotiations					

• We have a Patient Satisfaction Survey where we collect information about our services. Patients have evaluated us with 98% satisfaction. Our commitment is to Quality and Excellence: Quality in services achieving the highest standards for the treatment of health conditions and Excellence in offering the best treatments supported by the best clinical equipment and the most advanced technology to treat cancer and other complex diseases.



## Hospital UPRCCC Team Leaders



Luis Santos Reyes, MD Gyn-oncologist President of the Medical Staff



Director Jorge Billoch Lima, MD Pathology Director

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Alexis Cruz Chacón, MD Medical Oncologist Industry Sponsored Research Director



Yamil Castillo, N



Alexandra Deyá, MD Medical Oncology Director of Infusion Center



Yamil Castillo, MD ENT Director of Head & Neck Cancer

Luis Báez Vallecillo, MD

**Medical Oncologist** 

Multidisciplinary

**Outpatient Clinic** 



Pablo Mojica, MD Surgical Oncologist Director of Esophago-Gastric Surgery

Nicólas López, MD Director of Surgery, Colorectal Surgery & Robotic Surgery



Sharee Umpierre, MD Gyn-Oncology Director





Saisha Muñiz Alers, MD Pediatric Medical Oncologist Director of Adolescent & Young Adult Service

María Ramos, MD Palliative Medicine

Maribel Tirado, MD Medical Oncologist Director of Internal Medicine





José Maldonado, MD Director of Radiology Department



Nelson Guilbe, MD Director Operating Rooms & Anesthesia



Ginés Martínez MD Endoscopy Unit Director



Priscila Magno, MD Therapeutic Endoscopist, Gastro-Oncology Director



Jorge Gutiérrez, MD Emergency Medicine



## Ongoing & Projected Clinical Units

Current Services	
Radiotherapy Center	Gyn - Oncology
8 Surgical Rooms	Gastro - Oncology
Head & Neck Oncology	Neuro - Oncology
Malignant Hematology	Medical Oncology
Psychology & Behavioral Therapy Services	Clinical Trails (NIH/Industry)
Colorectal Surgery Program	Palliative Care Service
Endoscopy Unit	Interventional Radiology
Advanced Imaging Center	Infusion Center
Oncology Emergency Room	Women's Imaging Center
Short Term Priorities	
Da Vinci Surgical Unit	Dental Oncology Clinic
Ambulatory Transfusion Center	Malignant Thoracic Surgery Clinics
Cancer Prevention Clinic	Cardio Oncology Program
Mid Term Priorities	
Outpatient Clinic Building	Palliative Care Inpatient Unit and Intrahospital Hospice
Radiotherapy & Gamma Knife Facilities	NCI Designation



#### **Clinical Research Unit**

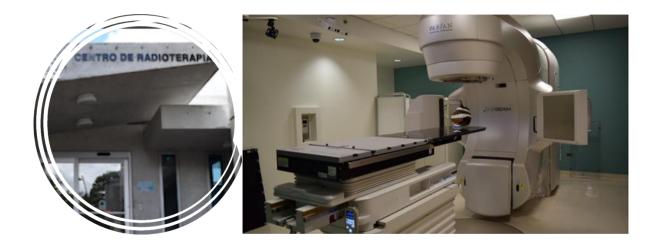
CCCUPR serves eighteen (18) research projects that are funded with federal and/or external funds with a total of \$4,738,426. These approved funds are distributed between the Cancer Biology Division, the Division of Cancer Medicine, and the Cancer Control and Population Sciences Division. In addition, there are eight (8) clinical studies funded by the pharmaceutical industry which add to a total of \$3,615,432. Researchers from these three divisions have forty-six (46) publications, three (3) articles with recognition, plus two (2) patents.

- All Faculty is oriented in clinical research.
- NCI protocols are in place in multiples areas: breast, gastrointestinal, genitourinary, head and neck, lung, screening, and Covid-19.
- Pharma Division has studies in hematologic malignancies and gynecologic malignancies.

DIVISION	PROPOSALS SUBMITTED	PROPOSALS GRANTED	GRANT FUNDS	PUBLICATIONS
Cancer Biology	6	4	\$227,416	25
Cancer Medicine		2	\$912,716	4
Population Sciences	4	12	\$3,598,294	17
Private Funds Clinical Trials (Pharmaceuticals)	N/A	8	\$3,615,432	
TOTAL	10	26	\$8,353,858	46



#### Radiotherapy Center



The Radiotherapy Center, with advances in technology and accuracy in radiation therapy administration, offers the highest quality of service and treatments, maintaining a high success rate.

Our clinics include multidisciplinary evaluations attended by radiation oncologists, neurosurgeons, and anesthesiologists. In external radiotherapy we have conventional radiotherapy (3D), intensity modulated radiation therapy (IMRT) and image-guided radiation therapy (IGRT).

Internal radiation therapy includes brachytherapy for gynecologic cancers (HDR) and for prostate cancer (LDR). We also have real-time breathing-guided positioning therapy (RPM), full body irradiation (TBI), electron beam therapy (EBT), stereotactic intracranial radiosurgery (SRS), stereotactic body radiosurgery (SBRT), plus fast arc with 360-degree rotation around the body, optical surface monitoring system (OSMS) and Calypso System.

The Radiotherapy Center has focused on offering an image of collaboration, commitment and quality in the services it offers. During the first quarter of 2019-2020 versus 2018-2019, there was an increase in services offered to patients. It is important to highlight the brachytherapy studies conducted with an increase of 158% and the increase in patients cared for the coordination.



## **Cancer Biology Division**



P R O M I C Puerto Rico OMICS Center

**Cancer Biology Division** - Provides support for basic and translational research to contribute to the fight against cancer in Puerto Rico. This division has ten (10) research laboratories, shared with the Medical Science Campus and the University of Puerto Rico Campus. In addition, it has the following programs: Cancer Genetics, Immuno-oncology and "Core Facilities".

The main core facilities include the following:

- Tissue Biobank Puerto Rico's first tissue and organ repository ("CCCUPR Research Biobank") established in 2012 of which the first years focused on infrastructure development. The first samples were received in 2015. This facility aims at obtaining high-quality specimens with associated clinical information. Dr. Edna Mora, Professor in surgery at the UPR Medical Sciences Campus, directs the Biobank, hence, facilitates the investigation, evaluation and cancer control processes, under the highest standards of professional ethics. The Biobank facilitates clinical, molecular and translational research through the transfer of biological samples. The main objective of Biomedical Research is to translate the results obtained in research by focusing on the knowledge of diseases, development of new diagnoses and effective treatments that improve the health and quality of life of patients. Through research and the efforts of all professionals, we can advance in the treatment of the disease, its diagnosis, the improvement of prognoses and/or prevention.
- Puerto Rico OMIC Center (PROMIC) Established in 2016 the OMIC Center of Puerto Rico (PROMIC) offers Genomics and Proteomics services. PROMIC's primary goal is to facilitate cancer research by providing cutting-edge technologies, in areas including genomics, transcriptomics, metabolomics, and proteomics. The fundamental principle is



to integrate the laboratory in the clinic, thus promoting the development of new approaches for the detection, prevention and treatment of cancer.

- Immunology Core Established in 2020, the core of cancer immunology aligns with the development of a robust program that provides basic testing services of immunology, flow cytometry and cell sorting. The Core is an integral part of the clinical and translational research platform, and can support correlative studies in patients participating in clinical trials.
- **Puerto Rico Tissue Engineering Core** Established in 2021, it is the first and only Core Laboratory in Puerto Rico and the Caribbean dedicated to creating and developing a stem cell biobank with the capacity to derive organoids *in-vitro* of multiple organ tissues. Organoids are currently used in biomedical research to:
  - Examine organ development and tissue morphogenesis.
  - Build up *in-vitro* disease models
  - Potentially form complex tissues for transplantation.
  - Study the sensitivity and toxicity of different drugs.
  - Maintain an inventory of biological samples to establish organoid focusing on enteroids.

The CCCUPR Basic and Translational Sciences Program brings together a large group of researchers who carry out studies for the prevention, detection and treatment of cancer in Puerto Rico. Our research ranges from the molecular level to the development of new drugs and innovative treatments in order to provide the best care to patients and thus fulfill our mission to eradicate cancer in our population. The Cancer Biology Division's team consists of 14 researchers focused in the areas of colorectal cancer and microbiome, ovarian cancer, breast cancer, head and neck cancer, and prostate and penile cancer.

The Division's activities during Fiscal Year 2019-2020 are highlighted below:

- Nine (9) active studies and multiple collaborative studies with the UPR Medical Science Campus
- Three (3) articles with PROMIC recognition
- Four PROMIC poster presentations with recognition
- Six (6) proposals submitted
- Mentoring was offered to 139 undergraduate and graduate students from the UPR and other academic institutions in PR
- Fifty-one (51) presentations were made in scientific forums and twenty-five (25) publications were published in scientific journals



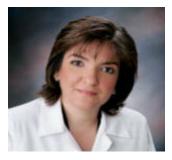
#### Investigators



Elba Caraballo, PhD UPRCCC GI Cancer Biomarkers



Magaly Martínez, PhD UPR- MSC Prostate Cancer



Edna Mora, MD UPRMSC Breast Cancer



María del Mar González, PhD UPRCCC GI Cancer -Microbiome



Marcia Cruz-Correa, MD-PhD UPRMSC GI Cancer Genetics



Pablo Vivas-Mejía, PhD UPRMSC Ovarian Cancer



Josué Pérez, PhD UPRCCC Bioinformatics



Stephanie Dorta,PhD UPRMSC Cancer Immunology



Jacqueline Flores, PhD UPR-MSC Neuroblastoma





Loyda Melendez, PhD UPRMSC Immunology and Proteomics



Horacio Serrano, MD UPRMSC Quantitative Proteomics



Gabriel Luis Barletta, PhD UPRH Drug Delivery of Nanotechnology



Esther A. Peterson, PhD UPRRP Breast Cancer



Gerardo Morell, PhD UPRRP Biomedical applications of Nanotechnology



Brad R. Weiner, PhD UPRRP Biomedical applications of Nanotechnology



# Cancer Control and Population Sciences Division





**Cancer Control and Population Sciences Division** is responsible for the development of epidemiological, behavioral science, and quality of life and cancer treatment research in Puerto Rico. In addition, this Division is responsible for implementing programs based on scientific evidence for the prevention and control of cancer in the population. The staff of the Central Cancer Registry of Puerto Rico (RCCPR), under the direction of epidemiologist Dr. Diego Zavala, has increased the investigations carried out by his working team with the information collected by the Registry. In addition, the RCCPR continues to expand the distribution of cancer information through different means, as well as increasing registry data utilization by local, national, and international researchers.

During 2016-2017 fiscal year, the RCCPR estimated incidence projections, prevalence, and survival of certain tumors for the 2015-2025 period. The Central Cancer Registry of Puerto Rico, attached to the CCCUPR, received the highest certification granted by the North American Association of Central Cancer Registries (NAACCR) for meeting the integrity standards of case verification, quality, and timeliness in updating cancer incidence and mortality data in Puerto Rico.

The Puerto Rico Breast and Cervical Cancer Prevention and Early Detection Program (PRBCCEDP) provides breast and cervical cancer screening and diagnostic services to low-income women 21-64 years of age that do not have private health insurance nor Plan Vital. In addition, this program provides educational activities for health professionals and the community in general. The program has maintained a network of health professionals to provide the services and has expanded its network of collaborators. During 2016-2017 fiscal year, 350 women participated in the Program. Of these, 284 received cervical cancer screening and/or cancer diagnosis services and 183 received breast cancer screening and/or cancer diagnosis services. Furthermore, the Program carried out 10 activities for community groups and two activities for health professionals. In addition, the Program developed an educational module on breast cancer for health professionals.



## Investigators



Guillermo Tortolero MD, PhD UPRCCC Cancer Control and Population Sciences



Ana Patricia Ortiz PhD MPH UPRMSC Cancer Epidemiology



Karen Ortiz OrtizDrPH UPRCCC Cancer Registry



Vivian Colón Lopez PhD MPH UPRRCM Cancer Epidemiology



## **UPRCCC Competitive Advantage**

# Research & Education

- •Health Care Professionals Puerto Rico
- •Affiliated to UPR MSC
- •Lead science, translate
- to practice & policy

#### Oncology Specialized Hospital & Radiotherapy

- •Center of Excellence
- Quality/Metrics
- •Integration of clinical research

#### **Cancer Public Health Policy**

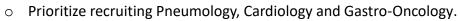
- •Department of Health
- •PR Cancer Registry (CDC/HHS)



# Strategic Plan

## Hospital

I. **Recruit physicians and expand the range of specialists** that can provide direct service to inpatients and outpatients.



- Strengthen collaboration agreements with the Medical Sciences Campus, particularly the Intramural Practice Plan, and establish the scope of viable services for the Hospital.
- Develop the CCCUPR Hospital's Intramural Practice Plan to include services of external physicians, not affiliated with the Medical Sciences Campus (RCM) or in Ad Honorem agreement.
- II. Develop and implement an **integrated communications campaign** that includes advertising, digital media, and public relations to promote prevention, early detection and specialized treatment health services programs offered at the Hospital.
  - Establish collaborative alliances with municipalities, and community-based organizations.
  - Coordinate advertising with municipalities to promote awareness of services available.
  - Develop initiatives with medical associations and health professionals to promote outpatient equipment and specialized services offered at Hospital to promote patients' referrals.
    - Generate a Health Prevention and Early Cancer Detection Clinic for Private Companies, Government Agencies and the public.



\$3.8M

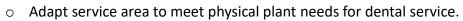
Annually



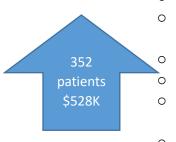
• Implement communication and education plan for the public through traditional and digital media and community impact initiatives.



III. Develop an innovative **Outpatient Dental Oncology Clinic** in collaboration with the School of Dental Medicine of the Medical Sciences Campus.



- Acquire and install specialized dental service equipment.
- Establish related policies and procedures.
- Educate medical personnel on referral process.
- Inform general staff and oncology patients about the availability of this specialized service.
- Notify community oncologists about the availability of the specialized service.
- IV. Implement robotic-assisted surgery with the Da Vinci surgical system, a minimally invasive surgery.



\$257k

- Complete equipment acquisition process.
- Acquire materials and accessories required for the different surgeries to be performed.
- $\circ$   $\;$  Update and train hospital staff including physicians.
- Establish related policies and procedures.
- Integrate surgery residency programs of the School of Medicine of the Medical Sciences Campus (RCM).
- Establish a plan for government allocation of resources within the special fund category (similar to liver-transplant allocations).



- V. Develop and maintain a multidisciplinary research program on infectious diseases associated to cancer development with an emphasis on cancers related to Human Papilloma Virus (HPV).
  - Understand the role of infectious diseases in cancer in Puerto Rico's population.
  - Work towards eliminating HPV associated cancers.
  - $\circ$   $\;$  Increase HPV vaccination according to current recommendations.
  - Increase the percentage of women receiving cervical cancer screening consistent with current medical recommendations.
  - Evaluate the quality of treatment and follow-up of pre-cancerous cervical lesions.
  - Reduce cancer disparities associated with infectious agents in Puerto Rico.

#### VI. Develop a Cancer Prevention and Early Diagnosis Clinic.



1,400

patients

\$210k

annually

- Recruit internal medicine physicians.
- Create special packages for group testing.
- Promote as a prevention center.
- Establish agreements with Municipalities and Agencies for cancer prevention.

#### VII. Develop a Palliative Medicine Unit and Intrahospital Hospice.



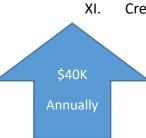
- Develop service logistics.
- Establish related policies and procedures.
- $\circ$  Train staff on the scope of service as well as managing the death process.
- Negotiate rates with health plans. It is innovative and not available in Puerto Rico.





#### VIII. Implement Cloud Service to maximize information systems infrastructure resources.

- Subsidize information systems expenses through federal funds as part of the services provided in research programs and population sciences.
- Prepare a cost analysis of the service, estimate utilization and include in research proposals.
- IX. Complete implementation of **Electronic Health Record (EHR) integrated with financial system** including applications and databases of related providers (third party vendors) and training medical personnel and faculty.
  - Place EHR in production during FY2022.
  - Ascertain compliance with CMS.
  - Maximize revenue cycle, particularly billing accuracy, and patient care.
- X. Develop a **Rotating Internship Program** for the Graduate Medical Education for the professional development of doctors in Puerto Rico.
  - Establish a Rotational Internship Program supported by the Medical Staff.
  - Develop the program's logistics.
  - Establish related policies and procedures.
  - Obtain approval from the Puerto Rico Medical Discipline and Licensing Board (JLDM).



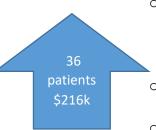
- I. Create a **Central sterilization unit** to offer services to external entities.
  - Develop operational internal policies and procedures as well as for billing cycle.
  - Coordinate service agreements with external entities.
  - Provide service to external entities.



XII. Create new **outpatient transfusion services** within the Hospital's Ambulatory Infusion Center by integrating blood transfusion and derivatives services with infusion services.



- Develop service logistics.
- Establish related policies and procedures.
- Negotiate fees with health plans, as it is innovative and not available in Puerto Rico.
- XIII. Implement Information Systems Security to protect data access and management, as well as the infrastructure where it is stored and processed.
  - Perform a Risk Assessment.
  - Develop a Business Continuity Plan.
  - Perform a Business Impact Analysis.
  - Recruit IT Security Officer and Data Administrator.
- XIV. Achieve interoperability of Electronic Medical Record (EHR).
  - Integrate interoperable tools as required by law to ensure health information exchange for continuity of patient care and public health.
- XV. Develop **Medical Tourism** to attract oncology patients from Latin America, where they do not have related specialized services and in the United States where the cost of treatment is higher.



- Create the Office of Medical Tourism at CCCUPR through a collaborative agreement with the Department of Economic Development and Commerce (DDEC) whereas the DDEC delegates in the CCCUPR creating the Office and Advisory Council.
- Obtain Certification pursuant to the new Medical Tourism Act, become part of the provider network and participate in promotions.
- Train staff on the importance of managing international patients.
- Advertise and announce CCCUPR in markets through a Promotion and Public Relations Program.



- XVI. **Restructure Hospital's Revenue Cycle** by integrating the Radiotherapy Center's billing personnel.
  - Reengineer registration and billing processes.
  - Train and reclassify staff.
  - Identify opportunities to maximize revenue.
  - Contract with external billing company to provide support for collections and recovery for services provided.
  - Contract with health insurance companies to expand Hospital services and increase patient revenue.
  - Maximize efficiency in the billing cycle and reducing health plans denials.
- XVII. **Participate in the 340B Program (Drug Pricing Program Outpatient Services) by obtaining** Certification to purchase prescription drugs at a lower cost.
  - Achieve outpatient service level metrics required to qualify for the program.
  - Prepare and process application with supporting documents.
  - Establish mechanisms to keep separate financial information for outpatient and in-patient services to ensure compliance with eligibility requirements on an ongoing basis.
- XVIII. Obtain designation by the **National Cancer Institute** (NCI)
  - Request by FY 2022-2023 a federal proposal to obtain grant through the National Institutes of Health (NIH), specific mechanism to apply for applying for the designation of Cancer Center by the NCI.
  - Establish Interagency collaboration with RCM-UPR, Department of Health, ASES, ASEM, and various national organizations and Cancer Centers (MD Anderson, Cold Spring Harbor, AACR, among others).
  - Develop the Tumor Board in the Hospital, which provides the integration of medical specialties in the discussion of cancer cases to improve the quality of patient service.
  - Submit a grant through the P30 Mechanism.
  - Establish partnerships with other institutions and be able to meet the requirement to receive at least \$10 million annually in external funds (NIH) for cancer research.



- XIX. Develop **outpatient specialty pharmacy services**, for the community at large, with the expectation of integrating the benefits/savings of the 340B Program.
  - Develop the concept and determine whether to outsource service to private entity or manage internally.
  - Obtain Certificate of Need and Convenience for Community Pharmacy Service.
  - Integrate space within the design of the new building of administrative offices and outpatient clinics.

#### Radiotherapy

#### I. Extend Radiotherapy service hours.



- Reorganize staff schedules to cover additional hours.
- If necessary, recruit any necessary staff.
- Increment service hours from 7:30am to 7:00pm, as opposed to the original 3:30pm.
- II. Begin construction of the Radiotherapy Center and Gamma Knife, outpatient clinics expansion and parking building.
  - Coordinate design of all projects by Architectural firm.
  - Obtain permits.
  - Perform bidding process including related documents, instructions to bidders, special conditions, etc., evaluation, award and contracting.
  - Coordinate project management and construction of administration building, parking, bridge, radiation therapy building and Gamma Knife building.
  - Inspect Construction.
  - Savings in Rent \$220k annually and projected increment of \$1.4M in Net Patient Revenue.





#### Research

- I. Submit a Proposal through the COBRE mechanism in January 2022. CCCUPR will be able to improve the research base, infrastructure, and basic capabilities as it moves toward submitting a competitive application for an NCI support grant. In addition to the focused and structured mentoring this mechanism offers, it will provide the opportunity for researchers to obtain independent national funding. The results of these projects will result in the development of new and better therapies for cancer patients by promoting Translational Cancer Collaborative research at CCCUPR.
- II. **Recruit two Researchers** in the Division of Cancer Control and Population Sciences specializing in Epidemiology that will reinforce the researcher's portfolio at the Center.

#### III. Expand clinical studies through the NCORP project.

- Establish new collaborations in programs that have active protocols in the areas of breast, gastrointestinal, colorectal, genitourinary, head and neck cancer, neoplasia, molecular profiling, and tissue procurement, among others.
- IV. Promote our "Core facilities" in Basic Sciences among the differnt natural sciences programs of the UPR's campuses to support Clinical and Translational Research, including the Biobank, Immunology Core and the Tissue Engineering Core (Organoids).

#### V. Expand clinical trials to other Hispanic minorities.

- Create collaborations with minority groups in the United States such as, Cold Spring Harbor Lab Cancer Center - Northwell Health Affiliation in New York, NY and the Silvester Cancer Center in Miami, FL.
- VI. Integrate in the Science District through the Puerto Rico Science, Technology & Research Trust to conglomerate research resources related to cancer, which serve as an economic and social development engine and provide CCCUPR's researchers eligibility to enjoy the tax exemptions provided by participation in the Science District, which will help us retain and recruit high-caliber researchers.
- VII. Increase the rate of recovery of indirect costs from grants.
  - Negotiate with the applicable entities within the National Institutes of Health.



- VIII. Strengthen the integration of cancer related clinical, research and educational resources at the University of Puerto Rico, especially the clinical faculty of different schools within the Medical Sciences Campus and cancer research programs of all campuses, as provided in our enabling law.
  - Establish collaborative agreements, services, education, and training.
  - IX. Increase the portfolio of external funds for research in number and value.
    - Increase the number of proposals submitted for external funds.
    - Increase the amount of funds granted for research.
    - Identify and circulate funding/grant opportunities to the CCC research community on a regular calendared schedule.
    - Diversify extramural research funds.
  - X. Promote **basic and/or translational research programs** of excellence in the Cancer Biology Division.
    - Develop Program of Cancer Genetics and Cancer Immunology.
    - Provide support to our current productive faculty to improve their competitiveness in research by promoting scientific communities, encouraging interdisciplinary collaboration and strategies to receive external funds.
  - XI. Develop, maintain, and monitor the **Core Lab Facilities Program**.
    - Provide services and technologies that enable cutting-edge research projects to be carried out to the faculty and collaborators of the CCCUPR through the "Core Facilities" (PROMIC, Immunology Core, Biobank and the "Tissue Engineering Core").
- XII. Strengthen the Educational Core of **Research and Education** to train professionals and "scholars" of all levels.
  - Develop Office of Graduate Medical Education.
  - Establish internship program in basic clinical, translational, and epidemiological research.
  - Implement online platform to request interns in the area of cancer research.
  - Develop basic courses in cancer biology, epidemiology, experimental design, and statistical analysis.
  - o Develop continuing education courses for the Medical Staff. (CME)
  - Establish productivity metrics from innovative training and mentoring experiences for researchers and students at all stages of their careers.





## **Proposed Timeline**

First	Year
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Imp	act

	STRATEGY	FY2022	FY2023	FY2024	FY2025	FY2026	(000's)
	HOSPITAL	1 12022	1 12020	112021	1 12020	112020	(000.0)
	Recruit physicians and expand the range of specialists that can						
Ι	provide direct service to inpatients and outpatients.						\$ 3,80
	Develop and implement an integrated communications campaign						
	that includes advertising, digital media, and public relations to						
Π	promote prevention, early detection and specialized treatment						
	health services programs offered at the Hospital						2,00
	Develop an innovative Outpatient Dental Oncology Clinic in						2,00
III	collaboration with the School of Dentistry of the Medical						
	Sciences Campus.						30
	Implement robotic-assisted surgery with the Da Vinci surgical						50
IV	system, a minimally invasive surgery.						50
	Develop and maintain a multidisciplinary research program on						50
v	infectious diseases and cancer with an emphasis on cancers						
•	related to Human Papillomavirus (HPV).						20
VI	Develop a Cancer Prevention Clinic.						1,00
	Develop a Palliative Medicine Unit and Intrahospital Hospice.						1,00
	Implement Cloud Service to maximize information systems						1,20
VIII	infrastructure resources.						Compliance
	Complete implementation of Electronic Health Record (EHR)						Compliance
	integrated with financial system including applications and						
IX	databases of related providers (third party vendors) and training						
	medical personnel and faculty.						Compliance
	Develop a Rotating Internship Program for the Graduate Medical						Compliance
	Education for the professional development of doctors in Puerto						
~	Rico.						Policy
	Create a Central sterilization unit to offer services to external						TOICY
XI	entities.						4
	Create new outpatient transfusion services within the Hospital's						
XII	Ambulatory Infusion Center by integrating blood transfusion and						
7111	derivatives services with infusion services						5
	Implement Information Systems Security to protect data access						
хш	and management, as well as the infrastructure where it is stored						
Am	and management, as well as the impasticative where it is stored and processed.						Compliance
XIV	Achieve interoperability of Electronic Medical Record (EHR).						Compliance
2117	Develop Medical Tourism to attract oncology patients from Latin						compliance
XV	America, where they do not have related specialized services and						
21.1	in the United States the cost of treatment is higher.						20
	Restructure Hospital's Revenue Cycle by integrating the						20
XVI	Radiotherapy Center's billing personnel.						50
	Participate in the 340B Program (Drug Pricing Program –						
	Outpatient Services) by obtaining Certification to purchase						
	prescription drugs at a lower cost.						30
xvm	Obtain designation by the National Cancer Institute (NCI)						Policy
	Develop outpatient specialty pharmacy services, for the						roncy
XIX	community at large, with the expectation of integrating the						
711/1	benefits/savings of the 340B Program.						50
	oononorouvingo of the orob i rogiani.					Sub-Total	



	STRATEGY	FY2022	FY2023	FY2024	FY2025	FY2026	First Year Impact (000's)
	RADIOTHERAPY						
Ι	Extend Radiotherapy service hours.						1,800
	Begin construction of the Radiotherapy Center and Gamma						
II	Knife, administrative offices, outpatient clinics expansion and						
	parking building.						1,400
						Sub-Total	3,200

	RESEARCH		
Ι	Submit a Proposal through the COBRE mechanism.		
Π	Recruit two Researchers in the Division of Cancer Control and Population Sciences specializing in Epidemiology		
III	Expand clinical studies through the NCORP project		
IV	Promote our "Core facilities" in Basic Sciences among the differnt natural sciences programs of the UPR's campuses to support Clinical and Translational Research, including the Biobank,		
V	Expand clinical trials to other Hispanic minorities		
VI	Integrate in the Science District through the Puerto Rico Science, Technology & Research Trust		
VII	Increase the rate of recovery of indirect costs from grants.		
VIII	Strengthen the integration of cancer related clinical, research and educational resources at the University of Puerto Rico, especially the clinical faculty of different schools within the Medical Sciences Campus and cancer research programs of all campuses		
IX	Increase the portfolio of external funds for research in number and value.		2,900
X	Promote basic and/or translational research programs of excellence in the Cancer Biology Division.		
XI	Develop, maintain, and monitor the Core Lab Facilities Program.		
XII	Strengthen the Educational Core of Research and Education to train professionals and "scholars" of all levels.		
		<b>Sub-Total</b>	2,900
			¢ 16.600

Total \$ 16,690



## **Financial Projections**

## Hospital Projected Statement of Revenue and Expenses

	Actual	Y	TD Projected	Base Line	Post-Measures						
Revenue	FY 2020		FY2021	FY2022		FY 2022		FY 2023	FY 2024		FY 2025
Hospital Net Revenue	\$ 4,281,309	\$	5,622,857	\$ 5,688,225	\$	14,190,237	\$	22,257,649	\$ 52,194,576	\$	52,194,576
Clinics Net Revenue	\$ 2,092,621	\$	1,738,391	\$ 1,422,056	\$	5,659,027	\$	8,876,288	\$ 14,507,230	\$	14,942,447
GF Appropriations	\$ 1,086,867	\$	15,401,863	\$ 13,694,078	\$	13,694,078	\$	10,000,000			
Covid -19	\$ 6,494,534	\$	6,733,669	\$ -							
Total Hospital/Clinics Revenue	\$ 13,955,332	\$	29,496,780	\$ 20,804,359	\$	33,543,341	\$	41,133,937	\$ 66,701,805	\$	67,137,022
Less: bad debt expense (5%)	(612,868)		(368,062)	(355,514)		(992,463)		(1,556,697)	(3,335,090)		(3,356,851)
Net Revenue	\$ 13,342,464	\$	29,128,718	\$ 20,448,845	\$	32,550,878	\$	39,577,240	\$ 63,366,715	\$	63,780,171
Other non-patient revenue	\$ 63,991	\$	72,000	\$ 80,000	\$	153,810	\$	188,616	\$ 305,856	\$	307,851
Expenses											
Salaries	7,489,660.57		9,349,110.00	9,349,110.00	1	11,135,456.49	1	5,661,971.97	25,349,095.79		25,856,077.71
Supplies & Drugs	1,460,256.93		2,587,765.89	2,717,154.18		6,405,108.23		7,654,499.71	12,388,902.67		12,512,791.70
Professional Services	2,917,045.02		6,361,936.45	3,354,601.77		6,043,839.63		6,282,991.07	6,480,308.14		6,609,914.31
Purchased Services	2,053,549.51		6,029,939.00	2,053,549.51		5,728,442.05		6,192,364.67	6,386,835.63		6,514,572.34
Utilities	3,315,314.17		3,290,000.00	3,315,314.17		3,315,314.17		3,307,326.51	3,411,192.96		3,479,416.82
Other Expenses:	2,347,672.85		1,337,160.54	819,130.00		819,130.00		936,806.62	1,040,552.15		1,030,146.62
Total Hospital Operating Expenses	\$ 21,126,820	\$	28,955,912	\$ 21,608,860	\$	35,741,866	\$	43,263,271	\$ 60,280,329	\$	61,330,830
EBIDA	\$ (7,720,366)	\$	244,806	\$ (1,080,015)	\$	(3,037,177)	\$	(3,497,414)	\$ 3,392,242	\$	2,757,193

CCCUPR projects a 60% increment in FY 2022 after implementing its strategic plan. By fiscal year 2024 revenue post measures is projected at \$63.5 million.

As a startup operation, the CCCUPR maintains the minimum team required to achieve the projected increase in FY 2022 and reach self-sustainability by FY 2024.

In fiscal year 2022, CCCUPR will implement the electronic health record integrated with the revenue cycle. This will ensure timely billing, reduce margins of errors and increase collections. In addition, CCCUPR will attain savings in professional services through the practice plan of the medical team and cost containment measures in Purchased Services and Utilities.

To achieve self-sufficiency by FY2024 the CCCUPR will receive \$20 million from government appropriations, \$10M in FY2022 and FY2023, respectively, subject to completing EHR implementation in FY2022. CCCUPR will use these funds for Hospital Payroll and to complete recruitment of necessary specialized physicians to expand its services.



# Radiotherapy Projected Statement of Revenue and Expenses

	Actual YTD Projected			D Projected	Base Line	Post-Measures				
Revenue	]	FY 2020		FY2021	FY2022	FY 2022	FY 2023	FY 2024	FY 2025	
Net Patient Revenue - Radiotherapy Center	\$0	5,005,269	\$	4,940,618	\$4,940,618	\$7,429,330	\$8,837,621	\$9,450,159	\$9,817,045	
Less: bad debts	\$	(300,085)		(246,884)	(246,884)	(371,246)	(441,618)	(472,227)	(490,561)	
Total Operating Revenues	\$	5,705,184	\$	4,693,734	\$4,693,734	\$7,058,084	\$8,396,003	\$8,977,931	\$9,326,485	
Expenses										
Salaries	\$	747,882	\$	960,000	\$ 977,325	\$1,043,940	\$1,230,873	\$1,305,099	\$1,344,851	
Supplies	\$	35,618		39,681	47,915	52,587	55,303	60,054	63,290	
Drugs	\$	511		570	688	755	794	862	909	
Professional Services	\$	1,377,063		1,496,440	1,534,129	1,639,326	1,914,995	2,012,222	2,055,388	
Insurance	\$	-								
Purchased Services	\$	53,624		572,092	62,728	68,844	83,260	90,413	95,284	
Utilities	\$	82,055		101,600	95,984	105,344	127,403	138,348	145,802	
Repairs	\$	515,422		574,210	602,920	661,708	800,271	869,025	915,847	
Rent (Saving due to Capex)	\$	222,364		247,727	260,113	285,476	345,254	-	-	
Advertising	\$	-		-	-	-	-	-	-	
Travel Related Expenses	\$	-		-	-	-	-	-	-	
Taxes & Licenses	\$	19,533		21,761	22,849	25,077	30,328	32,933	34,708	
Other Expenses	\$	7,752		8,637	9,068	9,953	12,037	13,071	13,775	
Total Operating Expenses	\$.	3,061,825		4,022,717	3,613,719	3,893,009	4,600,516	4,522,028	4,669,854	
EBIDA	\$2	2,643,359	\$	671,017	\$1,080,015	\$3,165,075	\$3,795,486	\$4,455,903	\$4,656,631	

In the short-term, CCCUPR will *extend services hours* to expand its operations based on demand. During FY2024, the new radiotherapy facilities at the Hospital are included in its construction plans.



# Research Projections Projected Statement of Revenue and Expenses

	Actual	YTD Projected	Base Line		Post-M	easures	
Revenue	FY 2020	FY 2021	FY 2022	FY 2022	FY 2023	FY 2024	FY 2025
State Funds							
Commonwealth General Funds Appropriations	5,139,835	-	-	-	-	-	-
Commonwealth Clinic & Epidemiologic Research Development Fund	5,298,298	4,946,323	6,120,922	6,756,149	6,802,789	-	-
Commonwealth COVID-19 Funds	4,000	3,647	-	-	-	-	-
Grants or Federal Funds		-		-	-	-	-
Cancer Prevention & Control Programs	1,091,982	995,517	995,517	1,045,293	1,106,418	1,161,739	1,219,826
NCORP	802,809	731,890	731,890	768,484	813,422	854,093	896,798
PRCRCSP	289,887	264,278	264,278	277,492	293,719	308,405	323,825
YPREV	-	-	-	-	-	-	-
AMC Clinical Trials Consortium Study	211,226	192,566	192,566	202,195	214,018	224,719	235,955
Other Grants & Federal Funds	1,265,478	2,536,365	991,925	473,544	766,434		
Indirect Cost Reimbursement	228,722	208,517	208,517	218,943	231,746	243,333	255,500
Private Funds		-	-	-	-	-	-
Grants & Donations	27,137	24,740	24,740	25,977	27,496	28,871	30,314
Own Revenues		-	-	-	-	-	-
Banco Vida	52,840	48,172	48,172	50,580	53,538	56,215	59,026
Other Services Revenues	1,236	1,127	1,127	1,183	1,252	1,315	1,381
Other Grants & Programs	-	440,000	450,000	472,500	496,125	520,931	546,978
Total Operating Revenues	14,413,449	10,393,142	10,029,655	10,292,341	10,806,957	3,399,621	3,569,602
Expenses							
Salaries	5,670,822	4,470,000	4,775,918	4,775,918	5,014,714	5,265,450	5,528,723
Employee Benefits	1,413,528			-	-	-	-
Supplies	196,426	513,613	513,613	539,294	566,259	594,571	624,300
Drugs	-	-		-	-	-	-
Professional Services	1,415,236	1,881,563	1,881,563	1,975,641	2,074,423	2,178,144	2,287,052
Insurance	234,035	245,737	245,737	258,024	270,925	284,471	298,695
Purchased Services	306,275	1,009,476	1,009,476	1,059,950	1,112,947	1,168,595	1,227,025
Utilities	805,371	930,000	930,000	976,500	1,025,325	1,076,591	1,130,421
Repairs	264,971	194,754	194,754	204,491	214,716	225,452	236,724
Rent	132,817	97,621	97,621	102,502	107,627	113,008	118,659
Advertising	63,218	1,589	1,589	1,668	1,751	1,839	1,931
Travel Related Expenses	69,093	50,783	50,783	53,322	55,988	58,788	61,727
Taxes & Licenses	19,107	14,044	14,044	14,746	15,483	16,258	17,071
Other Expenses	75,142	314,556	314,556	330,284	346,798	364,138	382,345
Total Operating Expenses	10,666,043	9,723,736	10,029,654	10,292,341	10,806,958	11,347,306	11,914,671
EBIDA	\$ 3,747,406	\$ 669,406	\$ 0	\$ 0	\$ (0)	\$(7,947,685)	\$(8,345,069)



# CCCUPR Consolidated Projected Statement of Revenue and Expenses

		YTD Projected	Base Line	Post-Measures					
Revenue	FY 2020	FY 2021	FY 2022	FY 2022	FY 2023	FY 2024	FY 2025		
Hospital	\$ 13,406,455	\$ 29,200,718	\$ 20,528,845	\$ 32,704,688	\$ 39,765,857	\$ 63,672,570	\$ 64,088,022		
Radiotherapy	5,705,184	4,693,734	4,693,734	7,058,084	8,396,003	8,977,931	9,326,485		
Research - grants	14,413,449	10,393,142	10,029,655	10,292,341	10,806,957	3,399,621	3,569,602		
	33,525,088	44,287,593	35,252,233	50,055,113	58,968,817	76,050,123	76,984,109		
Expenses									
Salaries	13,908,365	14,779,110	15,102,354	16,955,315	21,907,559	31,919,644	32,729,651		
Employees Benefits	2,956,850	-	-	2,294,575	3,227,310	5,223,441	5,327,910		
Drugs & Supplies	1,692,813	3,141,630	3,279,370	6,997,744	8,276,855	13,044,391	13,201,290		
Professional Services	5,709,344	9,739,940	6,770,294	9,658,807	10,272,409	10,670,674	10,952,353		
Purchased Services	2,413,448	7,611,507	3,125,753	6,857,236	7,388,572	7,645,843	7,836,881		
Utilities	4,202,740	4,321,600	4,341,299	4,397,158	4,460,054	4,626,132	4,755,640		
Other Expenses	3,971,128	3,108,578	2,633,164	2,766,381	3,137,986	3,019,536	3,111,629		
	34,854,688	42,702,364	35,252,233	49,927,215	58,670,745	76,149,662	77,915,355		
EBIDA	(1,329,601)	1,585,229	0	127,898	298,072	(99,539)	(931,246)		

## Sustainability Analysis

By the end of fiscal year 2024, the Research Division of CCCUPR will not generate enough surplus to be sustainable assuming Commonwealth General Funds Appropriations will no longer be available by FY2024. If CCCUPR is not able to obtain additional grants in FY2024 and FY2025 This will create a burden upon the CCCUPR's Hospital and Radiotherapy divisions to compensate for the deficit in Research thereby creating a disadvantage as compared to privately held hospitals that do not have the responsibility to create *public health policy in cancer related* issues based on research and clinical trials. Unlike private hospitals, the CCCUPR has the legal responsibility of providing public services related to research, prevention, and education outreach, as well as the implementation of public health policies adopted by the Government of Puerto Rico. To address this deficit, the CCCUPR is working with the central government to identify a recurrent source of annual funding that can subsidize research operations. This strategy is consistent with the experience of successful cancer centers in the United States, which require and receive state funding for research support even after clinical operations become selfsufficient. This support is usually achieved either through general revenue fund appropriations or through legislation to appropriate proceeds from a recurrent revenue source, such as tobacco tax funds. Thus, it is vital for the research division to continue to receive support from the general funds to carry out the public health policy, training and research programs included in the law.



#### Debt Sustainability Analysis

During the Business Plan period, CCCUPR will not generate significant surplus to materially address long-term debt repayment. There is uncertainty in the surplus beyond the Business Plan period hence it cannot be concluded that any surplus will be unrestricted and available for debt service.

The consolidated financial debt at CCCUPR, as of FY 2021, totals approximately \$120.5 million, which is composed of:

- \$88.5 million Credit Agreement dated November 18, 2013, whereby GDB granted CCCPR a non-revolving credit facility in the principal amount for the construction and development of a 96-bed tertiary care clinical and hospital facility specialized in cancer treatment and prevention, purchase of machinery and equipment, payment of facilities maintenance and improvements thereon, and the payment of costs incurred in connection with this financing.
- \$32 million Credit Agreement dated August 7, 2013, whereby GDB granted CCC a non-revolving credit facility for the substantial renovation, repairs and improvements to the 11,313.31 square foot radiotherapy area of the hospital known as Hospital Oncológico Dr. Isaac González Martínez (the "Oncology Hospital"), a portion of which is in the basement of the Oncology Hospital and a portion of which is located in the basement of the CCCUPR.

The above credit facilities are classified as GDB Retained Loans pursuant to the Master Transfer Agreement dated November 29, 2020 between GDB and the GDB Debt Recovery Authority.