UNIVERSITY OF PUERTO RICO
COMPREHENSIVE CANCER CENTER

[COE-CTO-CRTEC -Executive Office]
FY 2023 – 2024 Progress Report

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Centro Comprensivo de
CÁNCER
Universidad de Puerto Rico

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Summary:

The Office of Cancer Research Training and Education Coordination (CRTEC) is committed to providing quality education and training in cancer research to leverage opportunities for students, scientists, and faculty across the UPRCCC. Efforts are aimed at addressing 4 areas of significant impact in education and training on cancer research as part of the institutional strategic plan: (1) CRTEC Educational Training Program: thorough coordination of training and educational activities in cancer biology, cancer medicine and cancer control, population sciences among other transdisciplinary topics related to cancer research (2) Educational Research Experiences: Create, promote, and preserve educational programs that foster and strengthen cancer research for the current and next generation investigators. (3) Community Initiatives: Engage interest of middle and high school students on professional careers in science/ cancer research (4) Facilities, Technology and Evaluation Tools: Maximize the use of facilities, support researchers and students with resources to carry out their research work and development of assessment instruments to keep track of professional growth. CRTEC efforts during FY 23-24 resulted in 40 educational activities offered either by the office or collaboratively and supported 4 Educational Research Experiences including the Cancer Prevention and Control (CAPAC) Research Program, whose 2024 cohort of 26 students is currently in progress. Also, in partnership with the School of Nursing of the University of Puerto Rico (UPR)-Medical Sciences Campus (MSC), the UPRCCC-MSC Nursing Cancer Research Experience debuted this summer with 4 students enrolled. Additionally, Postdoctoral partnerships with VCU-BRIDGE and Cold Spring Harbor Laboratory were established, which offer combined experience between institutions and are currently enhancing the professional growth of 3 postdoctoral investigators. Around 30 middle and high schools' students were impacted with talks and activities offered by CRTEC this year. Career progress assessment instruments were developed and are in the implementation phase, and a Study Room for students was set up in the "*Centro de Investigación y Desarrollo"* (CID) building.

Introduction to Report:

The Office of CRTEC responds to the need of the UPRCCC to direct efforts to foster the research careers of investigators at all career levels and providing education and training activities for students across the spectrum of academic levels. CRTEC's main objective is to introduce and encourage the next generation of trainees to pursue careers in cancer research, nurture the careers of junior, mid-level and senior faculty, increase the participation of individuals from underrepresented backgrounds in cancer research, and provide education and training activities to students, young researchers, and faculty. The office's staff is composed of an Associate Director (Ana P. Ortiz, MPH, PhD), Administrative Assistant (Leidi Garabito, BOS), a Research Scientist (Mrs. Daisy González, MS), and two Coordinators (Mr. Wilfredo Morales, MPH and Mrs. Yannira Campos Mercado, MBA).

Office of CRTEC

Mission

The UPRCCC has a strong track record in research training and mentoring of students and faculty from PR and the US. The Office of Cancer Training and Education Coordination (CRTEC) of the UPRCCC is strongly committed to providing and continuing to expand cancer education, training, and research opportunities for students, research staff, and faculty. Our mission is to:

- Serve and improve the care of cancer patients by fostering the careers of cancer researchers and care providers, and aspiring young scientists in clinical and translational research, cancer control and population sciences, and clinical care.
- Support the recruitment and career development of trainees from all under-represented backgrounds.
- Create, integrate, and coordinate cancer education, training, research, and mentoring activities and programs for students and faculty within the UPRCCC, leveraged by the academic and research environment, and resources available in the UPRCCC, the UPR and other partnership institutions in PR and globally.
- Support the sustainment and development of cancer-focused training programs for trainees at all levels, from diverse disciplines and backgrounds, focused on developing among them the skills needed to work successfully on cancer research, prevention, and treatment.

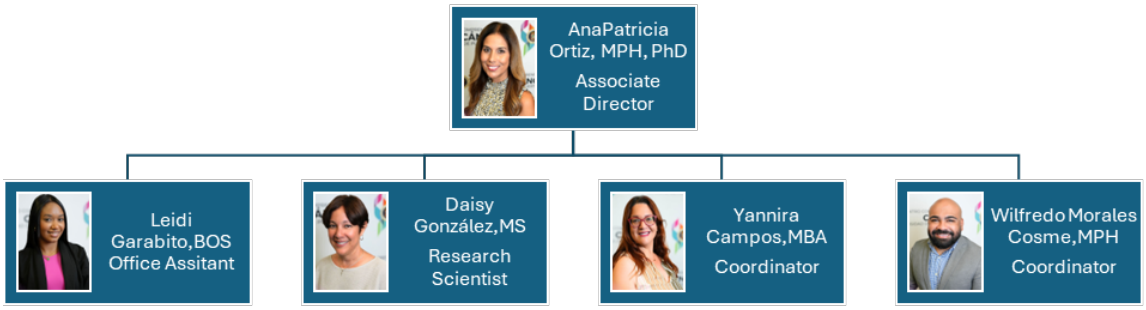
Vision

The UPRCCC vision is to provide the best care and service to cancer patients and create a core of scientists who work together to develop programs for prevention, early detection, treatment, and quality of life. Our Office will educate and train the next generation of scientists and researchers in clinical, translational, and population cancer research to minimize impact and help eradicate cancer in Puerto Rico. The activities of CRTEC support cancer research exposure, education, and career development across the spectrum of educational levels.

The office aims to provide resources for training in, and conduct of, cancer research by enhancing the career development of all trainees' levels that will result in a future productive cancer researcher/ or health care professional to the community. We serve as nurturers of cancer researchers and healthcare professionals who will provide quality care as partners in alleviating the burden of cancer in Puerto Rico as stated in our institution's mission and strategic goals towards receiving NCI’s official designation as a Comprehensive Cancer Center.

Objectives

Organizational chart



Ana Patricia Ortiz, PhD, MPH. Associate Director, Faculty Lead Investigator, and Professor
Dr. Ana Patricia Ortiz has over 20 years of experience in cancer research, academia and leading research and training programs. Currently, she serves as the Principal Investigator of the Cancer Prevention and Control (CAPAC) Research Training Program, among other research projects. She oversees the office to ensure compliance with the goals and objectives of the Office of CRTEC and of the UPRCCC and promotes cancer research training and education efforts among the scientific community.

Leidi Garabito, BOS. Office Assistant
Leidi Garabito holds a bachelor's degree in office systems administration from the University of Puerto Rico, Bayamón. She supports and assists CRTEC's staff with the administrative component of the office. Documentation has been submitted to the Office of Human Resources for her reclassification as Administrative Assistant, the position originally approved for the Office.

Daisy González, MS. Research Scientist
Mrs. Daisy González has over 20 years of extensive experience in data analysis, continuous process improvement, and quality assurance. Her experience repertoire includes the pharmaceutical industry, the UPRCCC, and the Mental Health and Anti-Addiction Services Administration (ASSMCA, by its acronym in

Spanish). In collaboration with the Associate Director and Coordinators, Mrs. González is on top of the day-to-day workload of the office, assuring compliance with the established work plan. Daisy contributes to the development of scientific manuscripts, performs statistical analysis, supports the development of evaluation tools for CRTEC's activities, and contributes to educational initiatives and training programs that support cancer research training and education for UPRCCC students and researchers.

Yannira Campos, MBA. Coordinator
Mrs. Yannira Campos has over 15 years of experience working in Graduate Medical Education Programs. She contributed to the development of the Cancer Research Experience (CRE) Program and the Office of CRTEC. Mrs. Campos coordinates educational seminar series, workshops, the Cancer Research Experience Program, and promotes research educational activities. She monitors the CRTEC budget expenses, processes CRE student applications, helped develop the IDP (Individual Development Plan) and productivity assessment tools for Postdoctoral fellows and Research Scientists, processes purchase requisitions, coordinates the UPR-MSC Nursing School Summer Research Program, provides administrative support to the CAPAC Research Training Program, addresses requests from student researchers, and coordinates recruitment for the VCU/CCCUPR BRIDGE postdoctoral fellowship program.

Wilfredo Morales Cosme, MPH. Coordinator
Mr. Wilfredo Morales Cosme has 10 years of experience working in outreach educational and research training programs and managing federal grants at the UPR-MSC. He has contributed to the development of the Office of CRTEC, coordinates educational seminar series, workshops, the Cancer Research Experience Program, and promotes research educational activities. Additionally, he serves as a liaison between the Office of CRTEC and the UPR-MSC, processes CRE student applications, helped develop the IDP (Individual Development Plan) and productivity assessment tools for Postdoctoral fellows and Research Scientists, processes purchase requisitions, provides administrative support to the CAPAC Research Training Program, addresses requests from student researchers, coordinates recruitment for the Cold Spring Harbor Laboratory VISTA Postdoctoral Fellowship Program, and helps recruits mentors for the Superpowers Workshops. He also coordinates the UPR-MSC Nursing School Summer Research Program.

Progress towards established goals and objectives:

To facilitate the implementation of proper strategies to address and reach our office goals, CRTEC staff delineated a logic-model to define activities and key performance indicators that would help us achieve our office purpose.

Table 1: CRTEC Logic Model

RESOURCES/INPUT	ACTIVITIES/PROCESS	OUTPUT	OUTCOMES	GOALS/IMPACT
-Training Resources. -Educational Activities focused on cancer research.	**CRTEC Training Program** -Cancer-related training, research and education in cancer biology,	-Number of educational and training activities -Number of trainees per session	SHORT TERM OUTCOMES: Trainees acquire tools and knowledge to boost	

- -Travel funds for educational purposes.	cancer medicine and population sciences; HPV Interest Group, AHEAD Interest Group, Workshops, etc. -Travel funds to assist local or international professional meetings. -Budget to cover speaker travel expenses	-Participants satisfaction with trainer and educational activities content -Number of students and faculty supported with travel funds -Number of Grant applications -Number of training grant applications	their cancer research career. LONG TERM OUTCOMES: Career development and improvement of students, staff, and faculty as cancer researchers. Increase faculty grants applications rate.	-Career development of students, staff, and faculty as cancer researchers and/or health professionals with a focus on cancer prevention and control, and oncologic care researchers.
-Identify Funding opportunities -Grant submissions - Internship Coordinator -Mentors' availability -Research opportunities.	**Summer and Internship Programs**: -CAPAC Research Training Program -Research education Program on Microbes, Infections and Cancer (REPMIC) -Nursing School Summer Research -Postdoctoral Program -Collaborations with other institutions for postdoctoral experiences -Cancer Research Experience (CRE)	-Number of participants per program -Program completion rate -Satisfaction with hands-on experience -Overall program enjoyment and evaluation -Scholarly Productivity/ Scientific Products (Presentations, manuscripts, etc) -Number of students advancing their careers in cancer research (PhD or DrPh)	SHORT TERM OUTCOMES: Increase understanding of cancer research and intention to enroll in PhD Program LONG TERM OUTCOMES: Increase the number of students pursuing doctoral degree and/or academic and professional careers in cancer research	-Serve as a coordination center for all training and educational activities in the UPRCCC.
-Facilities and Technology tools. -Faculty, and Postdoctoral investigators evaluation tools development	**Additional Support and Resources:** **-**Career progress assessment and support at all career levels -Research Software Programs for faculty	-Number of mentored researchers/ scientists -Compliance with IDP (ONLY FOR POST-DOC's)	SHORT TERM OUTCOMES Expand individual's expertise in cancer research. LONG TERM OUTCOMES: Fosters	- Support the development of the next generation of cancer

-Grants	and students (Endnote, PRISM, STATA) -Institutional Financial support to cover activities that enhance career development of students, postdoc investigators and faculty (E.g. poster printing or for publishing purposes.)	-Postdoc/Trainee Annual Assessment progress evaluations -Identify workspaces for trainees -Budget allocated to support faculty with resources for mentoring purposes -Budget allocated to support trainees with resources for career enhancement activities	the growth of promising researchers and defines future career paths.	researchers and health care professionals.
Involvement of middle-school and high school students	**Community Initiatives:** Cultivate interest in cancer research to middle and high school students by acquiring a vision about the work of CCCUPR's Cancer Research scientists.	-Number of activities -Number of students impacted	SHORT TERM OUTCOMES: Meet researchers, mentors, and CCCUPR's Cancer Research community. LONG TERM OUTCOMES: Consider a professional career related to cancer prevention and control.	
Assumptions: Speaker's availability, Schedule adequacy, Funding External factors: Environmental, Political, people health emergencies				

Table 2: Activities Achieved

Educational Seminars/ Conferences/ Workshops	40 (activities offered either by CRTEC Office, Educational Interest Groups or Shared Resources Office)
Meetings and Special Sessions with Faculty & Postdocs	5
Postdoctoral Programs Collaborations	2
Educational Research Training Programs	4
Additional Support for Infrastructures and Resources	**Infrastructure:** -1 study and work area for students

(February 2024 –June 2024: Budget allocation of $43,000)	**Resources for students, postdoctoral fellows, research scientist and faculty:** -4 laptops (for students, postdoctoral investigators, and researchers) -12 EndNote licenses -1 NVivo license -5 GraphPad PRISM licenses -7 Acrobat Pro licenses -5 Grammarly licenses -3 one-year licenses STATA -1 paid fee for a postdoctoral fellow's journal publication **Financial support for:** -2 Postdoctoral Fellows Career Enhancement Workshops (Dr. Jessica Hernandez/ Dr. Jorge Viera) -1 Career Enhancement Workshop that impacted students, postdoctoral fellows, research scientist and faculty (AI & ML Workshop) -2 Educational Interest Groups' activities. (AHEAD Interest Group/ HPV Interest Group) -1 Research Educational Program activity. (CAPAC) -Conference attendance of 5 students, 4 research scientists and 3 faculty members. (*VI Conferencia de Salud Publica)*
Community Initiatives	2

Scheduled Activities Status:

Most activities were performed as scheduled.

Strategies used to achieve the proposed activities:

Although the Office of CRTEC was created during FY 23-24, the plan outlined was delineated to satisfy compliance with PAR-21-321 for Cancer Center Support Grants (CCSGs). As an office, we have developed a logic model and KPIs to fulfill our long-term goals as a training and education coordination center to better serve our institutions' mission and vision as a Comprehensive Cancer Center.

Activities behind schedule:

- Travel and Conference Reimbursement Policy for Students. This document was developed by the Office of CRTEC and is waiting for final feedback and approval from the Office of Finance and Division of Administration.
- CRTEC's presence on the UPRCCC web page. Documentation was submitted to the company in charge of the process.

Table 3: CRTEC KPIs

1 CRTEC Training Program: Educational and Training Activities (*Ensures that UPRCCC employees are in touch with the latest cancer continuum related information and/or technologies*)
1.1 Number of educational and training activities per FY
Total number of scheduled educational and training activities for the referenced FY. Data sourced from CRTEC office.
1.2 Number of trainees per session
Total number of attendees per training session. Data is sourced from Training Roster or attendance list from Zoom or Teams platform. *We are currently working in modifying the registration process of training activities to collect data related to the trainees' profile as to map sociodemographic attributes of all trainees such as gender, race, ethnicity, etc. Also, a target attendance rate will be developed based on this FY baseline.*
1.3 Participants satisfaction with speaker and educational activities
Assess trainees' satisfaction with the speaker's performance and the workshop/seminar or educational activity. Markers from good to excellent will be considered to establish satisfaction. Data is sourced from CRTEC's Evaluation form for Workshop, Seminars and Activities. We recently started collecting this information; thus, a limited number of evaluations have been assessed.
1.4 Number of students supported with travel funds
Number of Travel Support Requests approved. Data is sourced from CRTEC Office.
1.5 Number of educational training grant applications / Number of educational training grant approved
Number of educational training grants applications submitted/ Number of educational training grant approved (NOA from the NIH or other institutions)
2 Cancer Research Summer and Internship Educational Programs (*Support the advancement of future generations of cancer researchers and healthcare professionals to enhance cancer research initiatives and improve cancer care)*
2.1 CAPAC Summer Program // REPMIC Postbaccalaureate Program
NUMBER Of APPLICATIONS RECEIVED: Number of applications received per year. NUMBER OF PARTICIPANTS: Number of participants by race/ethnicity and gender. APPLICANTS DIVERSITY/ APLLICANTS WITHIN MINORITY GROUPS: Percent of Females and Underrepresented Minorities (Hispanics, Black African American, Two or more races, etc.) calculated by number of Females or Underrepresented individuals divided by the total of applicants. ACCEPTANCE RATE: Applicants accepted: Percentage of summer applicants accepted in the program. COMPLETION RATE: The number of trainees in the CAPAC cohort who successfully complete the program is divided by the total number of trainees in the cohort. SATISFACTION WITH HANDS-ON EXPERIENCE & OVERALL PROGRAM ENJOYMENT: Data is sourced from trainees' assessment surveys and mentors' ratings of the summer experience. SCHOLARLY PRODUCTIVITY/SCIENTIFIC PRODUCTS (PRESENTATIONS, MANUSCRIPTS, ETC): Number of publications and posters per trainees for a given year.

NUMBER OF STUDENTS ADVANCING THEIR CAREERS:
Data is sourced from trainees' follow-up assessment surveys from previous cohorts.

2.2 Nursing Cancer Research Experience (NSSRP) and Cancer Research Experience (CRE)

NUMBER OF PARTICIPANTS:
Number of mentees by race/ethnicity and gender.

SCHOLARLY PRODUCTIVITY/SCIENTIFIC PRODUCTS (PRESENTATIONS, MANUSCRIPTS, ETC):
Number of presentations or posters per trainees for a given year.

NUMBER OF POTENTIAL CLINICAL GROUPS SERVING AS MENTORS
Total of clinical groups serving as potential mentors. Mentors by rank, race/ethnicity, and gender.

RATE OF MENTORING
The number of clinical research groups serving as mentors in the UPRCCC is divided by the total number of potential clinical research groups serving as mentors.

2.3 Strategic Partnerships/ Postdoctoral Program Collaborations

INSTITUTIONAL:
Number of partnerships with structured teaming efforts, including defined purpose and timeline (MOU)

NUMBER OF PARTICIPANTS:
Number of participants by cohort, race/ethnicity, and gender.

3 Additional Support and Resources (*Support the career development of postdoctoral fellows and trainees, and provide the necessary infrastructure to further advance cancer research endeavors and enhance cancer care)*

3.1 Evaluation Forms Development for Faculty, Researchers and Students

Data obtained from the Office of CRTEC indicates the total number of evaluation tools created for faculty, researchers, and students to streamline their evaluation processes and track progress in their professional careers.

For the next year, institutionalization, use and compliance of these tools will be tracked as Number of mentored researchers/scientists/students' compliances with IDP, etc & Postdoc/Trainee Annual Assessment progress evaluations.

3.2 Facilities and Technology Support

STUDENT WORKSPACE/ STUDY ROOM AVAILABILITY
Enable an area as a study room or workspace for students.
Data is sourced from CRTEC office, indicating available spaces for students.

ROOM UTILIZATION RATE
This metric examines whether we are making the best use of the study room space and keeping it as full as possible.
We are currently tracking students' room use by means of a room logbook.

SOFTWARE PROGRAMS FOR STUDENTS, RESEARCH SCIENTISTS, POSTDOCTORAL INVESTIGATORS AND FACULTY (Endnote, PRISM, STATA, etc)
Data is sourced from the Office of CRTEC, counts software licenses bought and provided to UPRCCC faculty, researchers, and students.

3.3 Training Grants Submitted and approved

Data is sourced from CRTEC office, count of grants submitted and/or approved during the FY.

3.4 Institutional Financial Support

BUDGET ALLOCATION TO SUPPORT AND ENHACE THE CARREER DEVELOPMENT OF STUDENTS/ RESEARCH SCIENTISTS/ POSTDOCTORAL INVESTIGATORS AND FACULTY

Amount allocated for:

- Workshop & Conferences from external sources//
- Acquisition of equipment to support CRTEC office operations, students, research scientist, postdoctoral investigator, and faculty
- Support for Educational Research Interest Groups
- Materials and Supplies
- Travel and Conference expenses
- Promotional Material for CRTEC Office

STUDENTS/RESEARCH SCIENTISTS/ POSTDOCTORAL INVESTIGATOR/ FACULTY IMPACTED WITH BUDGET
Data is sourced from CRTEC office, count of students, research scientist, postdoctoral investigator and faculty impacted by:

- workshops and conferences offered by CRTEC office
- acquisition of equipment
- Educational Interest Groups (number of activities offered during FY)
- Material and supplies
- Travel and Conference expenses
- Number of students/ individuals recruited because of CRTEC promotional material

4 Community Initiatives (Encourage interest in cancer research to middle and high school students by engaging their interest towards the work is done by CCCUPR's Cancer Research scientists).

4.1 Number of activities aimed to middle and high school students per FY

Data sourced from CRTEC Office counts the total number of activities for the referenced FY.

4.2 Number of students per activity

Data sourced from CRTEC Office counts the total number of students impacted per activity for the referenced FY.

Achievements progress toward established KPIs

1. **CRTEC Training Program: Educational and Training Activities (*Ensures that UPRCCC employees are in touch with the latest cancer continuum related information and/or technologies*)**

   1.1 *Number of educational and training activities per FY*

   CRTEC Office successfully offered 40 educational activities, including collaborations between Cores from Shared Resources and Educational Interest Groups such as AHEAD and HPV Interest Group.

   1.2 *Number of trainees per session*

   For educational activities and workshops, CRTEC counts on an average of 15 participants per activity. For those activities that we provide support and collaboration (E.g. AHEAD Interest Group/ HPV Interest Group and VCU's educational workshops) counts with an average of 49 participants per activity.

   1.3 *Participants satisfaction with speaker and educational activities*

   Trainer Excellence: Trainee evaluation results are displayed in 5 levels of satisfaction, which describe the Trainer communication and teaching skills. Level 1 is the lowest (the trainer was not able to execute the workshop or course successfully and must improve on his or her communication and teaching skills), and Level 5 is the highest (the trainer has exceeded expectations and can be regarded as needing no improvement in the Trainer Excellent component). From the beginning of the

implementation of our educational activities/workshops assessment tool, in terms of trainer excellence the level of success by overall average obtained was 4.8.

Quality of Workshop/Course: Trainee evaluation results are displayed in 5 levels of satisfaction, which describe the Workshop/Course trainee satisfaction. Level 1 is the lowest (the workshop or educational activity was poor or did not meet the expectations or objectives), and Level 5 is the highest (the workshop or educational activity was exceptional and meet the expectations or objectives and can be regarded as needing no improvement). From the beginning of the implementation of our educational activities/workshops assessment tool, in terms of quality of educational activity/ workshop the level of success by overall average obtained was 4.7.

1.4 *Number of students supported with travel funds*

The CRTEC team is working on an SOP (Standard Operating Procedure) to allocate travel funds for students that are participating in research activities within CCC. This is one of the areas that our Office should target, as recommended in the P30 grant guidelines. In collaboration with the finance department, SOP will be completed and implemented during the first trimester of FY 2024-2025. CRTEC is looking forward to impacting external students not employed by CCC who are currently completing educational research experiences within the institution and might need financial support for career enhancement activities.

For FY 2023-2024, CRTEC received 3 travel fund requests.

Funded: Jessica Hernandez, Postdoctoral Fellow, received $1,000 as travel fee coverage for a poster presentation "Facing a positive result of the genetic test for hereditary colorectal cancer syndromes" at the 49th The Oncology Nursing Society's Congress in Washington, D.C.

Not funded: Two other requests could not be supported, given that the FY cycle ended before the travel dates for which support was requested. These individuals were recommended to perform their request again for the new FY funding period.

1.5 *Number of educational training grant applications / Number of educational training grant approved*

Research Education Program on Microbes Infections and Cancer (REPMIC) PAR-22-134 by the National Institute of Allergies and Infectious Diseases received a score of 17. The grant was funded as of August 1, 2024 (

In addition, the extension of the CAPAC Research Training was obtained, after a score of 17 on its evaluation process. The grant was funded as of September 1, 2024 (NCI, grant (5R25CA240120-06).

2. Cancer Research Summer and Internship Educational Programs (***Support the advancement of future generations of cancer researchers and healthcare professionals to enhance cancer research initiatives and improve cancer care)***

Table 4: CAPAC Summer Program Outcomes

Eligible Applications received (2023 Cohort)	92
Applicants 'diversity/ Applicants 'within minority groups	URM Hispanics: 90% Gender: Female (cis gender) 71% Transgender (M-F) 1%
Acceptance Rate	Applicants accepted 27.2%
Number of Participants	URM – Hispanics: 24 Gender: Female (cis gender): 18
Completion Rate	100%
Satisfaction with Hands-on Experience & Overall Program Enjoyment	96% Trainees expressed to be "Satisfied to Highly satisfied with the hands-on research experience. 100% rated CAPAC Program as "Successful to Very Successful"
Scholar Productivity (CAPAC 2022 Cohort)	15 (60%) trainees presented at scientific conferences 26 Abstracts submitted, 22 accepted (85% acceptance rate) 7 manuscript submissions in peer- reviewed journal, 6 are under revision
Number of Students Advancing their Careers (2021,2022,2023 Cohorts)	6 students are currently enrolled in DrPH/ PhD

Table 5: Nursing Cancer Research Experience (NCRE) and Cancer Research Experience (CRE)

Number of Participants	NCRE – 3 CRE – 65
Scholarly Productivity	NCRE – 2024 cohort recently completed program, waiting for outcomes CRE - Not available
Number of Potential Clinical Research Groups (with nurses) or Faculty Serving as Mentors	NCRE – 3 (PR NCOPR/ CAMPO/ ALL of US) CRE- 29 mentors
Rate of Mentoring by Clinical Research Group (with nurses) or Faculty	NCRE- 67% CRE – Not available

Table 6: Strategic Partnerships/ Postdoctoral Program Collaborations

Number of Institutional Partnerships / Collaborations	4 Partnerships/ Collaborating Institutions: -MD Anderson Cancer Center (MDACC) -Virginia Commonwealth University Massey Cancer Center (VCU) -Cold Spring Harbor Laboratory (CSHL) -University of Puerto Rico Medical Sciences Campus/ Nursing School
Number of participants	-MDACC – multiple students are being supported by this partnership. -VCU – 2 -CSHL – 1 (1 pending acceptance) -RCM Nursing School – 3

3. **Additional Support and Resources (*Support the career development of postdoctoral fellows and trainees, and provide the necessary infrastructure to further advance cancer research endeavors and enhance cancer care)***

3.1 Evaluation Forms Development for Faculty, Researchers and Students
For FY 2024-2025, institutionalization, use and compliance of these tools will be tracked as Number of mentored researchers/scientists/students' compliant with IDP, Postdoctoral Progress Report /Trainee Annual Assessment and entrance /exit survey evaluation.

3.2 Facilities and Technology Support
Student Workspace/ Study Room Availability
In collaboration with the Office of Shared Resources, the institution enabled an area as a study room or workspace for students. The study room/workspace is located at the CID building, it offers 10 sitting spaces with private desks and 2 computers available for students. Bulletin board and a marker board are also available within this room for student use.

Room Utilization Rate
Room logbook since October 2023 shows that around 60 students use the Study room/ Workspace. Nonetheless, this may be an underestimation, as some students may have signed the logbook.

Computers & Software programs for students, research scientists, postdoctoral investigators, and faculty

- 4 laptops (for students, postdoctoral investigators, and researchers)
- 12 EndNote licenses
- 1 NVivo license
- 5 GraphPad PRISM licenses
- 7 Acrobat Pro licenses
- 5 Grammarly licenses
- 3 one-year licenses
- 1 paid fee for a postdoctoral fellow journal publication

Barriers encountered

Complexities in the purchase and payment processes result in delays in obtaining necessary items and services.

Delays in the reclassification of the Office Assistant to Administrative Assistant.

Mandatory OATRH Approval for Workshops and Training Courses: The mandatory requirement for OATRH approval for scientific workshops and training courses has led to significant delays in conducting these activities as per the established work plan. The approval process through OATRH often spans several months, hindering the timely execution of requests for scientific courses of investigators and postdocs.

Approval Process for IT Electronic Devices Purchase: As the Research Training and Education Office, the acquisition of research software and computers to support research training endeavors requires approval,

leading to prolonged timelines. The protracted approval process can take several months to navigate, impacting the efficiency of research-related activities.

Office Space for CRTEC Staff: The necessity for dedicated office space for CRTEC staff members within the workspace is crucial for enabling direct, efficient, and swift communication. Despite leveraging communication tools such as Zoom, Microsoft Teams, emails, and calls, the lack of physical proximity hinders seamless interactions as elaborated above.

Services

CRTEC serves as a coordination center for all training and educational activities, providing services to investigators, research scientists, and students, such as:

- Cancer Research Training Programs
- Research Workshops
- Seminars
- Postdoctoral Fellowship Programs
- Resources to Support Research Training
- Support for Educational Interest Groups

For more information, please see Table 2: Activities Achieved.

- Services available to investigators within FY 2023 – 2024.
  Cancer Research Experience (CRE) Matching potential volunteer students with UPRCCC's mentors for cancer research experience.
- Serves as recruiters for postdoctoral positions with collaborating institutions.
- 65 students have applied to the Cancer Research Experience (CRE).
- 4 postdoctoral candidate files were reviewed and recommended for interviews for postdoctoral fellowship positions at collaborating institutions.

- New services added during the Fiscal year
  To further their missions as institutions that foster the nurturing of the next generation of cancer research scientists, the UPRCCC, Virginia Commonwealth University/ Massey Cancer Center (VCU), and Cold Spring Harbor Laboratory (CSHL) agreed to a collaborative partnership to further enhance our offerings in cancer research education. The collaboration includes the establishment of educational initiatives offered by either institution to develop and strengthen cooperative relationships. With CRTEC leading these partnerships, our principal areas to collaborate was on the development and implementation of bidirectional educational experiences focused on post-doctoral fellows on providing career enhancement activities and joint mentorship for professional advancement in their cancer research careers. For this purpose, CRTEC serves as a recruiting office for potential postdoctoral candidates interested in advancing their careers in cancer research by participating in a postdoctoral fellowship established collaboratively between each institution. For FY 2023-2024, our Postdoctoral fellowship parentship with VCU recruited two postdoctoral candidates who are completing a hybrid program between both institutions. CSHL Postdoctoral fellowship partnership is currently in the selection process, two candidates were recommended.

Scientific outcomes:

Table 7: Grants Submitted and Funded

Principal Investigator	Agency	Grant #	Expected contribution to grant	Number of trainees per year
Ana P. Ortiz– PI/ Marievelisse Soto Co-PI	National Cancer Institute (NCI)	5R25CA240120-06 (Period: Sept 1, 2024-Aug 31, 2029) Total funds: $2,159,950	Continuing building the next generation of cancer researchers by running the Cancer Prevention and Control (CAPAC) Research Training Program in Puerto Rico by 4 additional years.	25
Ana P. Ortiz– PI/ Marievelisse Soto Co-PI	National Institute of Allergy Infectious Diseases (NIAID)	1R25AI183304 – 01 (Period: Aug 1, 2024-June 30, 2029) Total funds: $1,853,572	Train the next generation of cancer researchers with a special focus on the relationships between microbes, infections, and cancer.	10

Capacity Building Initiatives

CRTEC capacity-building initiatives were described in Appendix 1.

Strategic Collaborations:

Virginia Commonwealth University – Bidirectional Research Program to Increase Diversity and Equity in Cancer Research (BRIDGE) Postdoctoral Fellowship. This research opportunity is a collaborative effort between VCU Massey Cancer Center and University of Puerto Rico, Comprehensive Cancer Center. The UPRCCC CRTEC office oversees recruitment Postdoctoral fellow's candidate, evaluate, and recommend them as potential candidates to VCU and support Postdoc research training track. The program has a duration of two years with two training tracks, Cancer Biology & Translational Sciences and Cancer Prevention and Control Track. This program promotes the exchange of knowledge and supports faculty collaboration between institutions.

Cold Spring Harbor Laboratory Cancer Center- Visionary Initiative for Scientific Training & Advancement (VISTA Scholar Program). This experience is a Postdoctoral Fellowship where applicants are within two years of cancer research training in Cold Spring Harbor Laboratory Cancer Center facilities. The UPRCCC CRTEC office oversees recruitment Postdoctoral fellow's candidate, evaluate, and recommend them as potential candidates to VCU and support Postdoc research training track. This program promotes the exchange of knowledge and supports faculty collaboration between institutions.

University of Puerto Rico, Medical Sciences Campus, School of Nursing- Nursing Cancer Research Experience Program is an eight weeks (about 2 months) summer research program at bachelor levels student is participating in clinical cancer research projects such as: All of Us, CAMPO, and N- CORP at the UPRCCC Hospital. This research experience allows the participant to develop research skills, enhance critical thinking and encourage the application of theoretical knowledge in clinical settings. CRTEC as office: this program helps promote clinical cancer research among nurses, thus developing the next generation of cancer researchers and health care professionals.

Puerto Rico Department of Education- We had 17 students and 4 teachers from public schools from Cataño and San Juan attending to 2nd UPR Comprehensive Cancer Center Scientific Congress. They expose scientific and clinical topics on cancer, poster sessions and talks with health care personals on Cancer field. CRTEC office made the approach to the high school, coordinated the attendance, and followed up during the congress.

Super-Powers Program with MD Anderson Cancer Center- "Super-Powers Career Skills for Mentoring the Next Generation of the Health Science Workforce" is an R01 grant from MD Anderson Cancer Center, UPRCCC CRTEC serves as the partner office, acting as both the recruitment center and workshop resource. This project aims to compare the effectiveness of workshops on two topics relevant to trainee research career success, using data collected over time through online surveys completed by participating mentors and trainees. Mentors attend one online workshop on topics tailored for faculty research mentors, while trainees attend separate workshops designed for doctoral students and postdoctoral fellows pursuing research career paths. UPRCCC CRTEC has recruited 40 mentors from fall 2023 to the present. (Grant #: 1R01GM147064, Contact PI: Dr. Shine Chang, MD Anderson Cancer Center.)

Users' or community members satisfaction:

To evaluate our users/trainees' satisfaction, the use of the Workshop/Course Evaluation Instrument was implemented on March 20, 2024 (See Appendix 2). The findings were summarized in the attached Evaluation Report (Refer to Appendix 3). However, overall, trainers' performance was rated as exceeded expectations and Workshops/Courses were rated as Good to Excellent. The Practical Advice Component is identified opportunities for enhancing our training program. All courses were evaluated as useful for the career development or increase in knowledge of trainees, except the AI & ML course whose assessment showed lack of relevance of the educational activity content for some trainees. The Office of CRTEC will coordinate future training considering the suggestions of attendees.

Future plans and goals:

Opportunities:

- Organize educational activities offerings to investigators, scientists and junior faculty of the UPRCCC, focusing on trainee satisfaction of educational offerings
- Support funding for individuals in training for professional meetings.
- Continue support to educational programs

- Continuing our collaborating efforts with the external partners such as to continue supporting post-doctoral students career path growth.
- To enhance the research experience, we will equip the desktop computers in Study Room 206 with research software licenses such as STATA, PRISM, NVivo, and EndNote. Additionally, we will ensure that the new study room at the Science Trust is suitable for students by providing computers and the software licenses mentioned above.
- Continued with technology support to investigators, scientists and junior faculty of the UPRCCC.
- Include community underrepresented minorities (URM) in education and training activities.
- Improve professional and/or technical skills of CRTEC Staff

Strategic Initiatives:

- Develop the FY2024-2025 training plan
- Increase collaboration with external resources to diversify our portfolio of educational offerings.
- Continuous assessment of educational activities evaluations.
- Networking with potential partners collaborators.
- Establish a budgeting plan that includes expenses and financial commitments to training activities, travel expenses and technologic assistance, optimizing the use of resources in the office.
- Develop a pilot plan that addresses impacting community URM in education and training activities
- Identify CRTEC staff potential areas of improvement

Goals and Targets:

- Provide 20 training activities, including scientific seminars, short courses and workshops, considering suggested topics from trainees.
- Achieve trainees' satisfaction with trainers and workshops or courses.
- Continue collaboration with existing partnerships (VCU & RCM-Nursing School) and successfully support the implementation with Cold Spring Harbor partnership.
- Ensure the best funds utilization such as to ensure an efficient operation of the office of CRTEC and effective contribution in meeting the office goals.
- Expose High School public school students to careers in cancer research to inspire them to pursue related careers

Appendix:

Appendix 1

Activity	Current Status	Completion Date	Collaborations	Responsible Person
Educational Seminars/Conferences				
1-Cuidado Informado en Trauma (HPV Interest Group) Resource: Juan F. Rivera, PhD	Completed	Sept/ 15/23	CRTEC	HPV Interest Group CRTEC Staff
2- Disparities in the Cancer Continuum Resource: Yashira Negrón, PhD	Completed	Sept/20/23		CRTEC Coordinators
3- Cultural Competency and sensitivity in society and research / clinical setting Resource: Juan Negrón, PhD	Completed	Oct/4/23	CAPAC	CRTEC Coordinator
4-Preliminary Results of the PRESTIS Pragmatic Trial: A prospective evaluation of self-sampling to increase participation in cervical screening (HPV Interest Group) Resource: Jane Richards, PhD	Completed	Oct/20/23	HPV Interest Group MDACC	HPV Interest Group
5-Los Determinantes Sociales de la Salud: Un análisis desde el Contexto de Puerto Rico (AHEAD Interest Group) Rsource: Marinilda Rivera Díaz MSW, PhD	Completed	Oct/25/23	AHEAD Interest Group	AHEAD Interest Group
6- Developing a Career in Cancer Research. Resources: Ilka Ríos, MD / Reynold López, MD	Completed	Oct 27/23	MD Anderson / U54 UPR RCM	CRTEC Coordinator
7- Reading and Interpreting Genetics and Genomics Test Report Resource: Yashira Abril Negrón, PhD	Completed	Nov/1/23		CRTEC Coordinator
8-Training to be a physician-scientist: from the bench to the bedside and back to the lab. Resource: Rocio Rivra, MD, PhD	Completed	Nov/15/23		CRTEC Coordinator
9- Implementation and evaluation of multiple recruitment research strategies for persons living with HIV in CAMPO clinical trials in the Puerto Rico site. Resource: Carlos A. Solá, MS	Completed	Nov/17/23	HPV Interest Group	HPV Interest Group
10-Cáncer, disparidad y equidad: Una perspectiva desde los Determinantes Sociales de la Salud Resource: Marievelisse Soto, DrPH	Completed	Nov/29/23	AHEAD Interest Group	AHEAD Interest Group
11-Intellectual Property Right/APA workshop reference Resource: Arleen García, MIS	Completed	Dec/1/23		CRTEC Coordinator
12- Statistical Modeling and Machine Learning algorithms for Non- Small Cell Lung Cancer: An Open Data-data Analysis for survival prediction. Resource: Brenda Torres, PhD	Completed	Dec 12/23	Shared Resources Division/	CRTEC Coordinators

			Biostatistics and Bioinformatics Core	
13-Liquid Biopsy in Precision Oncology Resource: Yashira Abril Negrón, PhD	Completed	Dec/13/23		CRTEC Coordinator
14- B cell Characterization in Anti-PD-1 Resistance in HPV+ Oral Tumors Resource: Jorge Galán BS	Completed	Dec/15/23	HPV Interest Group	HPV Interest Group
15- Cancer Control Program. Resource: Marta Sánchez	Completed	Jan/ 19/24	Programa de Control Comprensivo del Cáncer/ CRTEC	HPV Interest Group
16- NCI Funding Navigation with VCU's Massey Comprehensive Cancer Center. Resource: Rosuany Vélez, PhD/ Heidi Sankala, PhD	Completed	Jan 16/24	VCU Massey Comprehensive Cancer Center	CRTEC Coordinator
17- Scientific Communication Resource: Nancy Cardona, DrPH	Completed	Feb 7/24		CRTEC Coordinators
18- Investigación en Inequidades de salud y sus aplicaciones en la prevención y control de cáncer. Resource: Ivette López, PhD, MPH	Completed	Feb 16/24	CRTEC	HPV Interest Group
20- Climate Impact Across the US Resource Pablo Méndez, PhD	Completed	Feb 22/24		CRTEC Coordinators
21- Análisis Exploratorio del Proceso para Recopilación de Datos sobre Determinantes Sociales en los Centros de Salud Primaria en Puerto Rico. Resource: Darielys Cordero- Rosario DrPH, MPH	Completed	Feb 28/24	CRTEC	AHEAD Interest Group
22- The Latino Cancer Institute- Title: At the Table" Resource: Ysable Duron	Completed	Mar 15/24	CRTEC	HPV Interest Group
23-Determinantes Sociales de la Salud y las Inequidades en la Supervivencia de Mujeres con Cáncer de Cuello Uterino en Puerto Rico: Un Estudio Mixto desde la Teoría Ecosocial. Resource: Mariela Alvarado DrPH, MPH	Completed	Mar 27/24	CRTEC	AHEAD Interest Group
24- Essential Elements for Manuscript Publication: Responsible Authorship and Main Elements of a Manuscript Resource: María González Pons, PhD	Completed	Apr 3/24		CRTEC Coordinators
"Demographic of Cancer: from the basics to its application" Resource: Viviana De Jesús, PhD	Completed	Apr 11/24		CRTEC Coordinators
19- Reading and Interpreting Genetics and Genomics Test ReportResource: Yashira Negrón Abril, PhD	Completed	Apr 17/24		CRTEC Coordinators
25- Sociedad Americana Contra el Cáncer en Puerto Rico: Estadísticas, Servicios y Política Pública. Resource: María Cristy	Completed	Apr 19/24	CRTEC	HPV Interest Group
27- Intervenciones estructurales para lograr la equidad en salud en Puerto Rico. Resource: Carlos Rodríguez Díaz, PhD, MPHE, MCHES	Completed	Apr 24/24	CRTEC	AHEAD Interest Group

28- Accelerated aging in cancer patients with HIV. Resource: Anna Coghill, Moffit Cancer Epidemiology Program, Moffit Cancer Center	Completed	May 1/24	CRTEC	Dr. Ana Patricia Ortiz
30- Interplay between human papillomavirus and penile cancer microbiota Resource: Magaly Martínez, PhD	Completed	May 17/24	HPV Interest Group	HPV Interest Group
31- Análisis de los Determinantes Sociales de la Salud que inciden en la Continuidad del Cuidado de Cáncer de Mama en Muejeres Diagnósticadas en Puerto Rico entre 2012-2016. Resource: Axel Gierbolini, DrPH	Completed	May 29/24	CRTEC	AHEAD Interest Group
34-Actualización de cánceres asociados al VPH. Laura Patricia Mendoza, PhD	Completed	Jun 21/24	CRTEC	HPV Interest Group
35-Acceso y Disponibilidad a Servicios de Salud como Determinantes en la Producción de Inequidades en Salud: Un estudio cualitativo desde la perspectiva de pacientes con enfermedad renal crónica en etapa terminal en informantes claves de en Puerto Rico. Resource: Idxián González- Terrón DrPH, MS	Completed	Jun 26/24	CRTEC	AHEAD Interest Group
Meetings/Special Sessions with Faculty/Postdocs				
1- CRTEC Meet & Greet	Completed	Sep/27/23		CRTEC Coordinator
2 -CRTEC Faculty Meeting	Completed	Dec/6/23		CRTEC Coordinators Dr. Ana P. Ortiz
3- Postdoctoral Meeting with CRTEC Staff	Completed	Dec 21/23		CRTEC Coordinators
4- Individual Meetings with Faculty and Postdocs	Ongoing	Ongoing		Dr. Ana Ortiz & CRTEC Staff
Educational Courses/Workshops				
1- Grants Writing Workshop Resource: Stephanie Newton	Completed	Oct/24/23	Scientific Editing and Communication Core Services	CRTEC Coordinator
4-Introduction to R/ Data Management /Data Visualization Resources: Yakshi Ortiz & Liliana Castro, Biostatistics and Bioinformatics Core Students	Completed	March 6, 14 & 20, 2024	Biostatistics and Bioinformatics Core	CRTEC Coordinators
2-Fair Data and AI/ Machine Learning Applied to Cancer Prevention. Resource: Dr. Abiel Roche Lima	Completed	May-July 2024	UPR-MSC CAPAC	CRTEC Coordinators
5-Advanced Topics in Cancer Research: Cancer Genetics	Completed	May 20-24, 2024	U-54 UPR &MDACC	CRTEC Coordinators
6-" Clear Scientific Writing" Stephanie Newton Shannalee Martínez, PhD	Completed	May 22/24 June 5/24 June 12/24	CRTEC	Scientific Editing Core

Postdoctoral Programs/Collaborations				
1- Cold Spring Harbor Cancer Center (VISTA Postdoctoral Program)	Active Postdoc Program Application Deadline: March 1, 2024	Collaboration established since November 2023	Cold Spring Harbor Shared Resources Division	UPR-CCC CRTEC Staff & Cold Spring Harbor CRTEC Staff
2- VCU (BRIDGE Postdoctoral Program)	Active 2 students enrolled in the program	Collaboration established since July 2023	VCU Massey Cancer Center	UPR-CCC CRTEC Staff & VCU CRTEC Staff
Educational Research Training Programs (R25s) & other programs				
1-CAPAC Summer Research Training Program	Active since 2021 Currently in 4th Cohot	Last year of first cycle Summer 2024. Submission for new cycle (2024-2029) funded. NOA received.	CRTEC	Ortiz AP/ Soto-Salgado M CAPAC Staff
2-REPMIC Postbacc Program	Pending	Grant submission July 2023. Score (17) received on Dec 2023. Funded on Aug 1, 2024. NOA received.	CRTEC	Ortiz AP/ Soto-Salgado M CAPAC Staff
3-RCM Nursing School Summer Cancer Research Experience	Active Since 2024 Currently in 1st Cohort	June 3 2024 July 26 2024	UPR/MSC Nursing School	CRTEC Coordinators
Infrastructure and Monitoring Accomplishments				
1-Student Evaluation Process policy	On development	To be announced (TBA)		CRTEC
2-Travel and Conference Reimbursement Policy	On development	TBA	Finance Office Maricarmen Ortiz	CRTEC
3-Cancer Research Experience Application Platform (for students)	Completed	May 2024-Ongoing		CRTEC

4-Student Study Room	Completed	October 2023	Shared Resources Division	CRTEC
5-Student Tracking Forms: • Student Entrance Survey • Student Exit Survey • Investigator Survey (to assess the students working in their labs/research)	On development		Currently under revision by CRTEC Research Scientists	CRTEC
6-Evaluation Forms • Individual Development Plan (for faculty, postdocs and other trainees) • Trainee/Postdoctoral Annual Progress Report • Postdoctoral Annual Self-assessment • Postdoctoral/Trainee Assessment Form (to be completed by the primary research mentor)	Completed	May 2024	Mr. Jorge Rodriguez gave feedback	Dr. Ortiz CRTEC Coordinators
7-Operational Budget Defined	Ongoing Waiting for Budget Allocation FY 2024-2025	January-June 2024	Finance Office	Dr. Ortiz CRTEC Coordinators
8- Administrative Support to the CAPAC Research Training Program	Ongoing		CRTEC	CAPAC Staff
9- Recruitment of Scientist: Daisy Gonzalez		March 2024		Dr. Ortiz
Community Initiatives				
1-Scout Troop	Completed	October 2023		Dr. Ortiz
2- Students participating at the 2nd Annual Scientific Congress UPRCCC	Completed	April 25-26 2024		CRTEC Coordinators

Appendix 2

Workshop/ Seminar or Activity Evaluation Form

Workshop/ Seminar/ Activity name:

Date:

Please select the description that most closely represents your experience of this workshop / seminar or activity.

Rate the following statements on regards to the speaker:	Poor (1)	Fair (2)	Neutral (3)	Good (4)	Excellent (5)
1. Speaker's **knowledge** of subject					
2. Speaker's **delivery of material**					
3. The speaker's **teaching approach**.					
4. The **language utilized by the speaker** was understandable.					
5. I would like to attend another workshop, seminar or activity offered by this speaker			**Unsure**	**No**	**Yes**

Rate the workshop/ seminar or activity:	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1. The workshop/ seminar or activity offered **useful information and strategies.**					
2. The **length** of the session was appropriate for the material presented.					
3. The workshop/ seminary or activity met my expectations.					
4. The workshop/ seminary or activity **met the stated objectives.**					
5. Questions were answered to my satisfaction.					
	Poor (1)	**Fair (2)**	**Neutral (3)**	**Good (4)**	**Excellent (5)**
6. **Overall evaluation** of workshop/ seminar or activity					

7. Workshop/ seminar or activity changed my overall knowledge of the topic presented.	**Unsure**	**No**	**Yes**

Please use this space for additional comments or recommendations:

Suggested topics for future workshops/ seminars or activities.

Thank you for your time and effort in completing this survey; your input will help shape future workshops/ seminars or activities.

Workshops/Courses Evaluation Report

The Office of Cancer Research Training and Education Coordination (CRTEC)
University of Puerto Rico Comprehensive Cancer Center (UPRCCC)

The Office of Cancer Research Training and Education Coordination (CRTEC) of the University of Puerto Rico Comprehensive Cancer Center (UPRCCC) serves as a coordination center for most trainings and educational activities in the UPRCCC, including cancer-related training, research and education in Clinical & Translational Cancer, Cancer Medicine, and Population Sciences. This report presents the results of the evaluation of the workshops and courses offered during fiscal year (FY) 2023-2024 to the UPRCCC Community. The satisfaction level per educational activity were evaluated in three principal components: Trainer Excellence, Quality of Workshop/Course and Practical Advice.

Evaluation Process: The evaluation process is performed to ensure the effective and efficient delivery of educational activities; it does not only identify gaps but also uncovers opportunities to enhance training programs. This data is collected by conducting anonymous online surveys for trainees after the completion of the educational activity. The first component evaluated is the *Trainer Excellence* which aims to demonstrate that the Trainer has a good understanding of and effectively delivers the training material. The second component, *Quality of Workshop/Course*, aims to evaluate whether the educational activity achieves its intended objectives and expectations, and to determine if the training materials and resources are relevant. The third component's intention (*Practical Advice*) is to assess the relevance of the educational activity content and to identify opportunities for enhancing the training program. It serves as a needs assessment tool for acquiring new skills and increasing trainees' knowledge, thereby contributing to their professional development.

Component I – Trainer Excellence: Trainee evaluation results are displayed in 5 levels of satisfaction, which describe the Trainer communication and teaching skills. Level 1 is the lowest (the trainer was not able to execute the workshop or course successfully and must improve on his or her communication and teaching skills), and Level 5 is the highest (the trainer has exceeded expectations and can be regarded as needing no improvement in the Trainer Excellent component). This measure averaged all items results of the whole component.

Level of success	How does the trainer perform on each level of success?
1	The Trainer must improve on his or her communication and teaching skills and has not been able to discharge the duty assigned to him or her. There is evidence of unsatisfactory functioning.
2	The trainer has not fulfilled their role, and there is a lack of clarity or confusion. There may be some issues related to instructional materials, content knowledge, or activity design.
3	The Trainer trainer's performance is satisfactory but has room for improvement.
4	The Trainer has been able to clear trainee doubts and perform his or her task commendably.
5	The Trainer has exceeded expectations and can be regarded as needing no improvement.
Level of Success by overall average obtained: ____	

Also, to identify potential areas of improvement, the independent items of the component were assessed. Frequency and percentage results in the good to excellent scale were measured and presented for each item.

Survey Items with Good to Excellent Evaluation Results	Frequency	Percent
Knowledge of subject/topics presented		
Delivery of information		
Teaching approach		
Language utilized		
Overall Trainer Excellence (Good to Excellent)		

Component II – Quality of Workshop/Course: Trainee evaluation results are displayed in 5 levels of satisfaction, which describe the Workshop/Course trainee satisfaction. Level 1 is the lowest (the workshop or educational activity was poor or did not meet the expectations or objectives), and Level 5 is the highest (the workshop or educational activity was exceptional and meet the expectations or objectives and can be regarded as needing no improvement).

Level of Quality	How does the Workshop/Course execute on each level of success?
1	The Workshop/course must improve on its content and was not able to fulfill objectives and expectations. There is evidence of serious weaknesses across the board on crucial aspects
2	The Workshop/course lacks to fulfill objectives and expectations. There may be some issues related to content, or activity design and room for improvement.
3	The Workshop/course concepts, content, information, and objectives
4	The Workshop/course was beneficial and met objectives and expectations.
5	The Workshop/course provides relevant information and met the objectives, it has exceeded expectations and can be regarded as needing no improvement.
Level of Success by overall average obtained: ____	

Also, to identify potential areas of improvement, the independent items of the component were assessed. Frequency and percentage results in the good to excellent scale were measured and presented for each item.

Survey Items with Agree to Strongly Agree Evaluation Results	Frequency	Percent
The workshop/ seminar or activity offered useful information and strategies.		
The length of the session was appropriate for the material presented.		
The workshop/ seminary or activity met my expectations		
My questions were answered to my satisfaction.		
The workshop/ seminary or activity met the stated objectives.		
Overall Quality of Workshop/Course (Agree/Strongly Agree)		

Component III – Practical Advice: Trainees evaluate if the resources are practical tips that characterize important elements improving their learning and adequacy within their responsibilities. This component is measured by two questions and positive results are presented for each question. Additionally, an open-ended question about recommendations for future workshops, seminars or educational activities was included.

Practical Advice		
Overall evaluation of Workshop/Seminar or Activity	Frequency	Percent
Good/Excellent		
The workshop/ seminar or activity changed my overall knowledge of the topic presented		
Yes		

*Suggested topics for future workshops/ seminars or activities:*_____

Evaluation Report Executive Summary and Recommendations

The Office of CRTEC had offered 13 Educational Activities and 4 Workshops during FY 2023-2024 to comply with the objective of educating, training, and providing research opportunities to students, scientists, and faculty. in cancer biology, cancer medicine and population sciences. However, the use of the Workshop/Course Evaluation Instrument was implemented on March 20, 2024. Thus, a limited number of workshops and courses were evaluated during this FY. Among courses and workshops evaluated are R Basic and Data Visualization, Essential Elements for Manuscript Publication: Responsible Authorship and Main Elements of a Manuscript, The Demography of Cancer: From the basics to its application, Reading and Interpreting Genetics and Genomics Test Report, Artificial Intelligence (AI) & Machine Learning (ML) Applied to Minority Health Research, Grant Writing and Scientific Writing.

Methodology

The evaluation employed self-administered surveys using questionnaires with closed (Quantitative) and open questions (Qualitative). The Quantitative phase data collection consisted mainly of questions about Trainer Performance and Workshop/Course quality. The qualitative method captured principally recommendations for future educational activities, providing insights to understand how trainees felt about the educational activities, their unmet needs, and recommendations to improve. Data was collected using the Microsoft Forms platform. Three Components were evaluated: (1) Trainer Excellence (2) Quality of Workshop/Course, and (3) Practical Advice.

Components 1 & 2 - Two quantitative appraisals were performed for these two components: Level of Success and Independent Items evaluation. The Level of Success analysis procedure consisted in averaging all items values on each component. To evaluate the independent items of each component, frequency and percentage of the two highest levels of satisfaction were measured, 90% of positive responses were expected.

Component 3 – This component consisted of both quantitative and qualitative measures. Two closed ended questions measured adequacy of the workshop/courses in trainees career development, frequency and percentage of positive responses were presented. Also, open question responses that contemplated trainees needs of additional educational activities were summarized.

Results

In all the courses evaluated, the trainers obtained the highest score in the Level of Success Scale of the Trainer Excellence Component, which means that the trainers performance exceeded expectations. Similarly, the individual items of the Trainer Excellence Component were assessed, and more than 90% of the overall evaluation rated the Trainer as Good to Excellent. However, there were concerns regarding the teaching approach in the AI & ML course, whose item did not reach 90% of Good to Excellent score.

The Quality of Workshop/Course Level of Success Scale also obtained the highest score in all cases that means that all training provided relevant information, met the objectives, and exceeded expectations. Likewise, the individual items of the Quality of Workshop/Course Component were assessed, and more than 90% of the overall evaluation rated the Workshop/Course as Good to Excellent. The independent survey items evaluation showed that the length of the session was of concern in one of the training courses (R Basic and Data Visualization).

Furthermore, there were concerns regarding the item: “My questions were answered to my satisfaction” in the AI & ML course, whose score was below 90% of Good to Excellent satisfaction.

The Practical Advice Component is essentially an aid to identify opportunities for enhancing our training program. Some topics recommended by our attendees include: (1) Additional training in R software (2) Stata, Excel and Python programming (3) Data Visualization, Paper Tables and Figures good practices (4) Data Linkage (from different sources of database) (5) Public Use Cancer data sets (with PR data) (6) Demographic characteristics of cancer patients and those in cancer remission in PR (7) Broaden the topic about Reading and Interpreting Genetics and Genomics Test Report, including genetic testing (8) Bio-sketch (9) Detailed NIH proposal writing (10) citing (paraphrasing) strategies/ avoiding plagiarism (11) How to write scientific aims and (12) Writing sessions/retreat in group with a science writer. All courses were evaluated as useful for the career development or increase in knowledge of trainees, except the AI & ML course whose assessment showed lack of relevance of the educational activity content for some trainees.

Conclusions

Overall, the findings indicated that trainees were satisfied with CRTEC’s educational activities. A limitation of our results is the low number of activities evaluated, as well, some courses have limited feedback evaluations. For the current Fiscal Year, a feedback evaluation will be requested upon training completion and follow-up will be given to attendees that did not complete it. The Office of CRTEC will coordinate future training considering the suggestions of attendees.

TITLE	:	*R Basic and Data Visualization*
DATE	:	March 25, 2024
TRAINER(S)/RESOURCE(S)	:	Yakshi Ortiz & Liliana Castro
COORDINATED BY	:	The Office of CRTEC in collaboration with Shared Resources Core and the Biostatistics and Bioinformatics Core
PLACE	:	Conrado F. Asenjo Library (UPR RCM Library)
DURATION	:	6 hours (3 days, 2 hours each)
ATENDEES EVALUATIONS	:	14

Component 1 – Trainer Excellence:

Level of Success by overall average obtained: 4.7~5 = Trainer exceeded expectations and can be regarded as needing no improvement in the Trainer Excellent component.

Survey Items	Frequency	Percent
Knowledge of subject/topics presented		
Good/Excellent	14	100
Delivery of information		
Good/Excellent	12	85.7
Teaching approach		
Good/Excellent	13	92.9
Language utilized		
Good/Excellent	14	100.0
Overall Trainer Excellence (Good to Excellent)	**53/56**	**94.6**

Trainer Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within Component I was 4.7. Also, the evaluation of all independent items showed an average of 95% of all items evaluated as good to excellent, the "*Delivery of Information*" item received the lower score. However, both evaluation mechanisms showed that speakers have excellent communication and teaching skills; and the information was successfully delivered to the audience demonstrating ample knowledge of the topic presented.

Component 2 – Quality of Workshop/Course:

Level of Success by overall average obtained: 4.6~5 = The Workshop/course provided relevant information and met the objectives; it has exceeded expectations and can be regarded as needing no improvement.

Survey Items	Frequency	Percent
The workshop/ seminar or activity offered useful information and strategies.		
Agree/Strongly Agree	14	100
The length of the session was appropriate for the material presented.		
Agree/Strongly Agree	11	78.6
The workshop/ seminary or activity met my expectations		
Agree/Strongly Agree	13	92.9
My questions were answered to my satisfaction.		
Agree/Strongly Agree	14	100.0
The workshop/ seminary or activity met the stated objectives.		
Agree/Strongly Agree	13	92.9
Overall Quality of Workshop/Course (Agree/Strongly Agree)	**65/70**	**92.9**

Workshop Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Quality of Workshop/Course Component was 4.6. As well, the overall evaluation of all independent items showed that 93% of attendees rated as Agree to Strongly Agree the individual statements, however, the "*The length of the session was appropriate for the material presented*" item received the lower score (79%). Both evaluation mechanisms showed that the Workshop content was useful and appropriate, and fulfilled objectives and expectations.

Component 3 – Practical Advice:

Practical Advice		
Overall evaluation of Workshop/Seminar or Activity	Frequency	Percent
Good	14	100.0
The workshop/ seminar or activity changed my overall knowledge of the topic presented		
Yes	14	100.0

Suggested topics for future workshops/ seminars or activities: R: Statistical Analysis and Hypothesis testing, functions to perform statistical analysis and R shortcuts, maps, continuing education, designing graphics, designing data vectors and cleaning data matrixes (7/14=50%); Stata (4/14=29%); Excel, Matlab, Python (1/14=7%).

Practical Advice Evaluation Summary: The workshop described principles of R programming language and served as practical advice about how to address statistical analysis within cancer research. All attendees evaluated as good the activity and indicated that changed their knowledge of the topic. However, the principal recommendation (50% of attendees) was to extend the sessions' time and/or facilitate additional training in R Programming. Also, 29% of participants recommended training in Stata Software.

R Basic and Data Visualization: The Trainer Excellence, Quality of Workshop/Course and Practical Advice components were excellent. The primary concern was that the training contains an excessive amount of material covered within a limited timeframe. Thus, additional training in R software will be considered by the Office of CRTEC, as well as in Stata programming, as recommended by attendees.

TITLE	:	*Essential Elements for Manuscript Publication: Responsible Authorship and Main Elements of a Manuscript*
DATE	:	April 3, 2024
TRAINER(S)/RESOURCE(S)	:	Dra. Gonzalez Pons
COORDINATED BY	:	The Office of CRTEC
PLACE	:	UPRCCC Amphitheater
DURATION	:	1 hour
ATENDEES EVALUATIONS	:	27 (hybrid event: 14 attendees on-site, but quantity of online participants is not available)

Component 1 – Trainer Excellence:

Level of Success by overall average obtained: 4.9~5 = Trainer exceeded expectations and can be regarded as needing no improvement in the Trainer Excellent component.

Survey Items	Frequency	Percent
Knowledge of subject/topics presented		
Good/Excellent	27	100
Delivery of information		
Good/Excellent	27	100
Teaching approach		
Good/Excellent	27	100
Language utilized		
Good/Excellent	27	100
Overall Trainer Excellence (Good to Excellent)	**108/108**	**100**

Trainer Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Trainer Excellence Component was 4.9, and the evaluation of all independent items showed 100% of all items evaluated as good to excellent. Both evaluation mechanisms showed an outstanding performance of the speaker, the ways used for delivering information to the audience were exceptional, which demonstrated ample knowledge of the topic presented and exceptional teaching skills.

Component 2 – Quality of Workshop/Course:

Level of Success by overall average obtained: 4.9~5 = The Workshop/course provided relevant information and met the objectives; it has exceeded expectations and can be regarded as needing no improvement.

Survey Items	Frequency	Percent
The workshop/ seminar or activity offered useful information and strategies.		
Agree/Strongly Agree	27	100
The length of the session was appropriate for the material presented.		
Agree/Strongly Agree	27	100
The workshop/ seminary or activity met my expectations		
Agree/Strongly Agree	27	100
My questions were answered to my satisfaction.		
Agree/Strongly Agree	27	100
The workshop/ seminary or activity met the stated objectives.		
Agree/Strongly Agree	27	100
Overall Quality of Workshop/Course (Agree/Strongly Agree)	**135/135**	**100**

Workshop Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Quality of Workshop/Course Component was 4.9, and the overall evaluation of all independent items showed that all of attendees (100%) rated as Agree to Strongly Agree the individual statements. Both evaluation mechanisms showed that the Workshop content was exceptional and exceeded objectives and expectations.

Component 3 – Practical Advice:

Practical Advice		
The workshop/ seminar or activity changed my overall knowledge of the topic presented		
Yes	25	96.2
The workshop, seminar or activity experience will be useful to apply when working on my project or in my career development		
Yes	27	100.0

Suggested topics for future workshops/ seminars or activities: Data Visualization, Grant writing, Paper Tables and Figures good practices; Data Linkage (from different sources of database); Public Use Cancer data sets (with PR data).

Practical Advice Evaluation Summary: The educational activity serves as practical advice about the basics steps to write a manuscript. All attendees indicated that the topic will be useful in their career development.

Essential Elements for Manuscript Publication: Responsible Authorship and Main Elements of a Manuscript: The Trainer Excellence, Quality of Workshop/Course and Practical Advice components were exceptional. The attendees of the training were very pleased with the trainer and the information received.

TITLE	:	*The Demography of Cancer: From the basics to its application*
DATE	:	April 15, 2024
TRAINER(S)/RESOURCE(S)	:	Dra. De Jesus
COORDINATED BY	:	The Office of CRTEC
PLACE	:	UPRCCC Amphitheater
DURATION	:	1 hour
ATENDEES EVALUATIONS	:	10 (out of 21 attendees)

Component 1 – Trainer Excellence:

Level of Success by overall average obtained: 4.9~5 = Trainer exceeded expectations and can be regarded as needing no improvement in the Trainer Excellent component.

Survey Items	Frequency	Percent
Knowledge of subject/topics presented		
Good/Excellent	10	100
Delivery of information		
Good/Excellent	10	100
Teaching approach		
Good/Excellent	10	100
Language utilized		
Good/Excellent	10	100
Overall Trainer Excellence (Good to Excellent)	**40/40**	**100**

Trainer Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Trainer Excellence Component was 4.9 and the evaluation of all independent items showed 100% of all items evaluated as good to excellent. Both evaluation mechanisms showed an outstanding performance of the speaker, the ways used for delivering information to the audience were exceptional, which demonstrated ample knowledge of the topic presented and exceptional teaching skills.

Component 2 – Quality of Workshop/Course:

Level of Success by overall average obtained: 4.8~5 = The Workshop/course provided relevant information and met the objectives; it has exceeded expectations and can be regarded as needing no improvement.

Survey Items	Frequency	Percent
The workshop/ seminar or activity offered useful information and strategies.		
Agree/Strongly Agree	10	100
The length of the session was appropriate for the material presented.		
Agree/Strongly Agree	10	100
The workshop/ seminary or activity met my expectations		
Agree/Strongly Agree	10	100
My questions were answered to my satisfaction.		
Agree/Strongly Agree	10	100
The workshop/ seminary or activity met the stated objectives.		
Agree/Strongly Agree	10	100
Overall Quality of Workshop/Course (Agree/Strongly Agree)	**50/50**	**100**

Workshop Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Quality of Workshop/Course Component was 4.8, and the overall evaluation of all independent items showed that all of attendees (100%) rated as Agree to Strongly Agree the individual statements. Both evaluation mechanisms showed that the Workshop content was exceptional and exceeded objectives and expectations.

Component 3 – Practical Advice:

Practical Advice		
The workshop/ seminar or activity changed my overall knowledge of the topic presented		
Yes	10	100.0
The workshop, seminar or activity experience will be useful to apply when working on my project or in my career development		
Yes	9	90.0

Suggested topics for future workshops/ seminars or activities: Racialization approach within the Puerto Rican context; Demographic characteristics statistics of PR cancer patients.

Practical Advice Evaluation Summary: The educational activity serves as practical advice about the basics of demography. All attendees indicated that the activity changed their overall knowledge of the topic presented. However, there is a concern to know more about the demographic characteristics of cancer patients in PR.

The Demography of Cancer: From the basics to its application: The Trainer Excellence, Quality of Workshop/Course and Practical Advice components were exceptional. The attendees were very pleased with the trainer and the information received. However, it was expressed an interest to discuss in more detail the demographic characteristics of cancer patients in PR. Thus, the Office of CRTEC will coordinate an additional training session to respond to the requests of some participants.

TITLE	:	*Reading and Interpreting Genetics and Genomics Test Report*
DATE	:	April 17, 2024
TRAINER(S)/RESOURCE(S)	:	Dra. Yashira Negron
COORDINATED BY	:	The Office of CRTEC
PLACE	:	Virtual Training (Zoom)
DURATION	:	1 hour
ATENDEES EVALUATIONS	:	7 (out of 27 online attendees)

Component 1 – Trainer Excellence:

Level of Success by overall average obtained: 4.8~5 = Trainer exceeded expectations and can be regarded as needing no improvement in the Trainer Excellent component.

Survey Items	Frequency	Percent
Knowledge of subject/topics presented		
Good/Excellent	7	100
Delivery of information		
Good/Excellent	6	85.7
Teaching approach		
Good/Excellent	6	85.7
Language utilized		
Good/Excellent	7	100
Overall Trainer Excellence (Good to Excellent)	**26/28**	**92.9**

Trainer Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Trainer Excellence Component was 4.8. Also, the overall evaluation showed 93% of all survey items evaluated as good to excellent. Due to the small number of participants who provide feedback upon training completion, evaluation will not be performed.

Component 2 – Quality of Workshop/Course:

Level of Success by overall average obtained: 4.7~5 = The Workshop/course provided relevant information and met the objectives; it has exceeded expectations and can be regarded as needing no improvement.

Survey Items	Frequency	Percent
The workshop/ seminar or activity offered useful information and strategies.		
Agree/Strongly Agree	7	100
The length of the session was appropriate for the material presented.		
Agree/Strongly Agree	7	100
The workshop/ seminary or activity met my expectations		
Agree/Strongly Agree	7	100
My questions were answered to my satisfaction.		
Agree/Strongly Agree	7	100
The workshop/ seminary or activity met the stated objectives.		
Agree/Strongly Agree	7	100
Overall Quality of Workshop/Course (Agree/Strongly Agree)	**35/35**	**100**

Workshop Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Quality of Workshop/Course Component was 4.7, and the evaluation of all independent items showed that all of attendees (100%) Agreed to Strongly Agreed with the individual statements. Since a low amount of feedback was obtained for this course, the assessment will not be performed.

Component 3 – Practical Advice:

Practical Advice		
The workshop/ seminar or activity changed my overall knowledge of the topic presented		
Yes	6	85.7
The workshop, seminar or activity experience will be useful to apply when working on my project or in my career development		
Yes	6	85.7

Suggested topics for future workshops/ seminars or activities: Continue to expand the topic, including genetic testing.

Practical Advice Evaluation Summary: During this workshop there was a small number of attendees that provided feedback. In general, they classified the training as good and it was suggested to continue expanding information about the topic, including genetic testing. Due to the low number of attendees evaluations, measures of Practical Advice were not evaluated.

TITLE	:	*Artificial Intelligence & Machine Learning Applied to Minority Health Research*
DATE	:	April 16, 2024
TRAINER(S)/RESOURCE(S)	:	Dr. Abiel Roche Lima
COORDINATED BY	:	The Office of CRTEC
PLACE	:	UPRCCC Amphitheater
DURATION	:	1 hour
ATENDEES EVALUATIONS	:	15 (hybrid event: quantity of total online participants is not available)

Component 1 – Trainer Excellence:

Level of Success by overall average obtained: 4.8~5 = Trainer exceeded expectations and can be regarded as needing no improvement in the Trainer Excellent component.

Survey Items	Frequency	Percent
Knowledge of subject/topics presented		
Good/Excellent	15	100
Delivery of information		
Good/Excellent	14	93.3
Teaching approach		
Good/Excellent	13	86.7
Language utilized		
Good/Excellent	15	100
Overall Trainer Excellence (Good to Excellent)	**57/60**	**95.0**

Trainer Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Trainer Excellence Component was 4.8. Also, the assessment of all independent items showed an average of 95% of all items evaluated as good to excellent, the "*Teaching approach*" item received the lower score. However, both evaluation mechanisms showed that the speaker was knowledgeable, his use of language was suitable, and the information was adequately delivered to the audience.

Component 2 – Quality of Workshop/Course:

Level of Success by overall average obtained: 4.5~5 = The Workshop/course provided relevant information and met the objectives; it has exceeded expectations and can be regarded as needing no improvement.

Survey Items	Frequency	Percent
The workshop/ seminar or activity offered useful information and strategies.		
Agree/Strongly Agree	15	100
The length of the session was appropriate for the material presented.		
Agree/Strongly Agree	14	93.3
The workshop/ seminary or activity met my expectations		
Agree/Strongly Agree	14	93.3
My questions were answered to my satisfaction.		
Agree/Strongly Agree	13	86.7
The workshop/ seminary or activity met the stated objectives.		
Agree/Strongly Agree	15	100
Overall Quality of Workshop/Course (Agree/Strongly Agree)	**71/75**	**94.7**

Workshop Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Quality of Workshop/Course Component was 4.5, and the overall evaluation of all independent items showed that most attendees (94.7%) Agreed to Strongly Agreed with the individual statements; but the following statement: "*My questions were answered to my satisfaction*", received a low score (86.7%). However, both evaluation mechanisms showed that the workshop was good, offered useful information and met the stated objectives.

Component 3 – Practical Advice:

Practical Advice		
The workshop/ seminar or activity changed my overall knowledge of the topic presented		
Yes	10	66.7
The workshop, seminar or activity experience will be useful to apply when working on my project or in my career development		
Yes	12	80.0

Suggested topics for future workshops/ seminars or activities: R, Python and demographic statistics of people in cancer remission.

Practical Advice Evaluation Summary: Measures of this component were low, 66.7% and 80.0%, suggesting that the course was not useful and did not contribute to the career development or increase in knowledge of trainees at all. This could be related to the low Good to Excellent scores on "*Teaching approach*" of the Trainer and gaps in the Workshop since some attendees were neutral related to the following statement: "*Questions were answered to my satisfaction*".

AI & ML Applied to Minority Health Research: The Trainer Excellence and Quality of Workshop/Course were good; however, the course lacked practical advice on their career development or increase in knowledge for some attendees.

TITLE	:	*Scientific Writing*
DATE	:	June 13, 2024
TRAINER(S)/RESOURCE(S)	:	Dra. S Martinez & S Newton
COORDINATED BY	:	The Office of CRTEC
PLACE	:	UPR RCM Library/ UPRCCC Amphitheater/ RCM classroom #822
DURATION	:	6 hours (3 days, 2 hours each)
ATENDEES EVALUATIONS	:	12 (out of 14 attendees)

Component 1 – Trainer Excellence:

Level of Success by overall average obtained: 5~5 = Trainer exceeded expectations and can be regarded as needing no improvement in the Trainer Excellent component.

Survey Items	Frequency	Percent
Knowledge of subject/topics presented		
Good/Excellent	12	100
Delivery of information		
Good/Excellent	12	100
Teaching approach		
Good/Excellent	12	100
Language utilized		
Good/Excellent	12	100
Overall Trainer Excellence (Good to Excellent)	**48/48**	**100**

Trainer Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Trainer Excellence Component was 5. Likewise, the evaluation of all independent items showed 100% of all items evaluated as good to excellent. Both evaluation mechanisms showed an outstanding performance of the speakers, the ways used for delivering information to the audience were exceptional, which demonstrated ample knowledge of the topic presented and exceptional teaching skills.

Component 2 – Quality of Workshop/Course:

Level of Success by overall average obtained: 4.95~5 = The Workshop/course provided relevant information and met the objectives; it has exceeded expectations and can be regarded as needing no improvement.

Survey Items	Frequency	Percent
The workshop/ seminar or activity offered useful information and strategies.		
Agree/Strongly Agree	12	100
The length of the session was appropriate for the material presented.		
Agree/Strongly Agree	11	91.7
The workshop/ seminary or activity met my expectations		
Agree/Strongly Agree	12	100
My questions were answered to my satisfaction.		
Agree/Strongly Agree	12	100
The workshop/ seminary or activity met the stated objectives.		
Agree/Strongly Agree	12	100
Overall Quality of Workshop/Course (Agree/Strongly Agree)	**59/60**	**98.3**

Workshop Evaluation Summary: The Level of Success obtained from the total average of all items evaluated within the Quality of Workshop/Course Component was 5, and the evaluation of all individual items showed that more than 90% of attendees Agreed to Strongly Agreed with the individual statements. Both evaluation mechanisms showed that the Workshop content was exceptional and exceeded objectives and expectations.

Component 3 – Practical Advice:

Practical Advice		
The workshop/ seminar or activity changed my overall knowledge of the topic presented		
Yes	11	91.7
The workshop, seminar or activity experience will be useful to apply when working on my project or in my career development		
Yes	12	100.0

Suggested topics for future workshops/ seminars or activities: Biosketch, Detailed NIH proposal writing, citing (paraphrasing) strategies/ avoiding plagiarism, How to write scientific aims and Writing sessions/retreat in group with a science writer.

Practical Advice Evaluation Summary: The educational activity serves as practical advice about the basics steps to write a manuscript. All attendees indicated that the topic will be useful in their career development.

Scientific Writing: The Trainer Excellence, Quality of Workshop/Course and Practical Advice components were exceptional. The attendees of the training were very pleased with the trainer and the information received.