Brooklyn College Cancer Center Annual Report June 2024

BCCC-CURE Personnel 2023-2024

BCCC-CURE leadership this past year included Prof. Maria Contel as Director and Research Area Leader, and Prof. Jennifer Basil as Vice-Director. The Director and Vice-Director have received 8 and 6 hours of reassigned time respectively during this year (teaching load at Brooklyn College is at 18 hours per year for the two academic semesters Fall and Spring or 6 three-credit courses). BCCC-CURE Team has included Ms. Ana Bartolome (Operations Manager and Community Outreach and Engagement Coordinator) part-time 15-30 hours per week depending on the semester, and Prof. Sheena Philogene (Assistant Professor and Science Librarian) with a commitment of 6 hours per week during the Fall and Spring semesters. BCCC-CURE had one paid office intern 10 hours per week during the Fall and Spring semesters. ITS provided technical/website support when required. Prof. Brian Gibney (who became Interim Dean of Science at the CUNY Graduate Center) has continued his role as key collaborator in the American Cancer Society Institutional Grant (Contel is principal investigator and Basil is key collaborator).

As of June 2024, BCCC-CURE has twenty-five faculty members (with sixteen specifically focused on cancer and cancer-related research) and a clinician scientist partner (affiliated with Memorial Sloan Kettering Cancer Center). In addition to the Clinician Scientist partner, we have recruited five new faculty members (four assistant professors and one associate professor) in the areas of Biology, Chemistry (nanotechnology) and Public Health. The center has affiliated four postdoctoral fellows, twenty doctoral students, five master's students, three full-time research assistants, and over forty undergraduate research students/assistants. In addition, we train an average of forty undergraduates per year through partnerships with medical schools in health education, shadowing, and lay health navigation programs. Membership is open to all Brooklyn College principal investigators (PIs) who may want to get involved in cancer-related research projects as well as PIs from partner/collaborating institutions. We currently have three main areas of research: 1) Cancer Biology and Biochemistry; 2) Drug Development and Delivery; and 3) Patient Oriented Research (broadly defined). Faculty belong to the School of Natural and Behavioral Sciences, mostly to the Departments of Chemistry and Biology, with members from the Departments of Health and Nutrition Science, Psychology, and Computer Science. We have two research and education partners: BC Natural and Behavioral Sciences (NBS) Dean Peter Tolias and CUNY GC Interim Dean of Science Brian Gibney. Faculty member Michael Menser, PhD (Philosophy Department) is a community partner for BCCC-CURE and we are collaborating with the Immigrant Student Success Office, the Brooklyn College Haitian Institute, and the Brooklyn College Caribbean Program, BC Health and Wellness Services Office, and BC Health Clinic. We have collaborated on specific events across schools.

Main Outcomes for the Fourth Year (June 2023 to June 2024)

During this year, we have mostly run in person events.

General Functioning of the Center

- Recertification of the Brooklyn College Cancer Center by CUNY for five years in December of 2023.

- Generation of job description for a *Brooklyn College full-time line (Higher Education Associate)* for BCCC-CURE (Operations Manager and Community Outreach Coordinator). Manage search. The job was offered to Ana Bartolome who will start in summer of 2024.
- Generation of job description for a clinician scientist position at BCCC-CURE (will be assigned to one of the partner departments). Search is ongoing and we will start reviewing applications in September of 2024.
- Creation and distribution of newsletter bulletin (every 6 months, January and June 2024 attached as appendix).
- Website weekly updates.
- Processing paperwork for reassigned time for Director/Vice-Director Director, part-time Operations Manager.
- Processing paperwork related to American Cancer Society (ACS) DICR IDG Grant, and sub-awards at the Research Foundation (including summer 2023 and 2024 salaries of key collaborators, salaries for research assistants, and all expenses). We have set-up individual accounts for sub-awards of Pilot grants (2023 and 2024), and Clinician Scientist, as well as managed the research foundation accounts for all payments from this account for the center (interns, research assistants, organization of trainings and seminars).
- Processing paperwork for all seed grants, internships, travel grants, and mentoring fellowships for 2024 for the Gray Foundation grant.
- Processing paperwork related to all activities organized and funded by Foundation Grants/ BCF (food, travel, stipends, materials, etc.).
- Design of a variety BCCC-CURE fliers for publicity, fundraising purposes, and announcements.
- Running social media accounts: FB, Instagram, and Twitter (X).
- Meetings with BC administrators as needed.
- Weekly meetings for the BCCC-CURE Team and weekly office hours for Director/Vice-Director.
- Overseeing plans for construction of permanent office space, a state-of-the art teaching laboratory and renovations of labs of two BCCC-CURE members with undefined start date.
- Providing information on BCCC-CURE to administrators when required.
- Participation in three recruiting events at Brooklyn College (Undergraduate Students Open House Fall 2023 and Spring 2024, and Graduate Students Open House in Spring of 2024).
- Providing support/sponsorship in the organization of certain events and lectures from different departments (e.g. Friedman Lecture).
- Preparation of the fourth annual report and one meeting with the Advisory Board (July 2024).
- Design of fifth year activities plan along with a budget for the next year.
- Supervision of two office interns (Summer 2023, Fall 2023, and Spring 2024).

Partnerships, Fund Raising, and Center Grant Submissions

- Continuing partnerships with Maimonides Health, CUNY Advanced Science Research Center (ASRC), CUNY Graduate Center, SUNY Downstate Health Sciences University, Memorial Sloan Kettering Cancer Center, Memorial Medical Care, PC (a practice of MSK physicians), Tisch Cancer Center Institute at Mount Sinai, Mount Sinai Brooklyn, and Weill Cornell Medicine.
- Continuing partnerships (for educational/community outreach purposes) with Janssen (pharmaceutical companies of Johnson & Johnson) and Genentech.

- **Awarded Grant from the Gray Foundation** to support center operations and provide PIs and students cancer research awards for 2024 (\$100K for 2024).
- Started grant from the American Cancer Society Diversity in Cancer Research Institutional Development Grant Program (DICR IDG) titled "Supporting Cancer Research at Brooklyn College Cancer Center, a Highly Diverse Institution" (4 years, \$2.7M). The grant started on January 1st of 2023 but funds were received in May of 2023. In addition to \$75K to support cancer center activities, this grant provides funds to support: a) research activities for two clinician scientists that belong to, or collaborate with BCCC-CURE; b) three pilot grants per year for assistant professors, c) two postdoctoral fellows for two years, d) six master scholars funded for two years each (\$25K per year per scholar). We have awarded four pilot projects, two master scholarships and a clinician scientist sub-award.
- Awarded ACS DICR IDG Grant Supplement to fund 22 underrepresented undergraduate research students at BCCC-CURE for three summers (2024-2026) and training activities (total \$121,000). Established the first cohort of 6 students interning in summer of 2024, performing cancer research. Designed professional development for the students (weekly for 8 weeks in summer of 2024).
- Funds raised through philanthropy, including Giving Tuesday 2023: \$3,500.

Research

- Organization of the on-site visit of the American Cancer Society DICR IDG Grant Program Officer, mentor of the grant and members of different ACS Departments in NY (May 13th). The team met with the ACS grant team (Contel, Basil, and Gibney), NBS Dean Tolias, and with 2023 and 2024 sub-awardees who presented talks on their research. They also met with the new cohort of summer 2024 undergraduate students.
- Supported by the American Cancer Society (ACS) DICR IDG Grant, establishment of the *BCCC-CURE Molecular Modeling Laboratory for Cancer Therapeutics* (led by Associate Prof. Emilio Gallicchio and Prof. Shaneen Sing from the Chemistry and Biochemistry, and Biology departments respectively).
 - https://bccc.blog.brooklyn.edu/research/molecular-modeling-laboratory/
- Establishing and publishing calls for 2024 for the sub-awards of the ACS DICR IDG Grant for: a) Pilot Grants, b) Clinician Scientist, c) Postdoctoral Fellows, d) Masters Scholars, as well as: e) summer research undergraduates:
 - (https://bccc.blog.brooklyn.edu/research/funding-opportunities/american-cancer-society-dicridg-grant/)
- Elaboration of first year report for the (ACS) DICR IDG Grant.
- Meeting with collaborators at SUNY Downstate Health Sciences University and MSKCC to recruit suitable clinician scientists for the grant. We selected three candidates from MSK and two were invited to apply.
- Traveling to a meeting for ACS DICR IDG grantees and sub-awardees in Atlanta (October 12-13, 2023). PI Maria Contel, key collaborator Brian Gibney, and sub-awardees Ryan Murelli and Devorah Kletenik.
- Quarterly meetings with the ACS DICR IDG Grant mentor Dawn Hershman, MD, MS, FASCO (American Cancer Society Professor of Medicine and Epidemiology, Deputy Director, Herbert

- Irving Comprehensive Cancer Center, Director of Breast Oncology, Columbia University Medical Center).
- Quarterly Meetings with ACS DICR IDG Grant Officer and team to validate selection of sub-awardees and discuss research building capacity.
- Regular meetings with ACS DICR IDG Grant mentoring team to organize mentoring/training activities for the first year of the grant and with the selection committee.
- Meetings with the ACS DICR IDG Grant sub-awardees (two-three times per year). Providing mentoring and advice for Assistant Professors and new faculty from the center (including grant submissions).
- Selection of ACS DICR IDG Grant sub-awardees (this involves external and internal review).
- Recruitment of external reviewers for each sub-award.
- **Recruitment of ACS interns** (BC underrepresented undergraduate students) and their mentors. Selection of 6 students for first cohort (Rukayat Agbona, Janette Arellano, Yassir Azzam, Nitu Farhin, Rebecca Turay, and Sophia Kebadze.) Each student receives \$5,000 and professional development activities during summer of 2024.
- Recruitment and selection of ACS BC Masters Scholars for the first cohort. 2 students were selected (Joyce Escatel, master's in Psychological Research, and Marina Krupitskaya, master's in Health Informatics) and will receive \$25,000/year for two years to conduct their studies and cancer research.
- **Two pilot grants** (\$40K) awarded on second round (2024) for two BCCC-CURE investigators (Assistant Prof. Murat Cevher, Biology Department, and Assistant Prof. Ankit Jain, Chemistry and Biochemistry Department). A third professor (Assistant Professor Garumma Feyissa, Health and Nutrition Science Department) was provided ample feedback and invited to resubmit his proposal.
- Dr. Florence Liu (MSK) was awarded one of the *clinician scientist sub-awards* (\$600,000/4 years) which requires working/collaborating with BCCC-CURE 20% of the time.
- Organization of on-site visit for the Gray Foundation (December 6th, 2023). Principal investigators for 2023 BRCA-Cancer Seed Grants presented talks on their research, and the Gray Foundation team met the BCCC-CURE team and Ludovic Leroy (Interim Assistant Vice President for Marketing & Communications/Director, Strategic Partnerships and Institutional Support). They also met with graduate and undergraduate students who received different awards from the Foundation in 2023.
- Establishing calls for different awards through the 2024 Gray Foundation Grant: a) BCCC-CURE Seed BRCA-Related Cancers Research Grants, b) Summer Doctoral Student Mentoring Initiative Research Grants, c) Summer Research Internships for Undergraduate Students, d) Travel Grants for Students and Postdocs to attend conferences, and e) (new) Summer Research Internships for High-School students.
- Selection of awardees for the grants above (two experimental seed grant awardees (\$12K x2) Prof. Maria Contel (Chemistry & Biochemistry Department) and Prof. Aneta Mieszawska (Chemistry & Biochemistry Department), and two computational/data analysis grant awardees (\$5k x2) Prof. Sheena Philogene (Library) and Prof. Shaneen Singh (Biology Department); five summer undergraduate research interns, three spring or summer high school students interns, three doctoral students summer mentors, five awards to graduate and undergraduate students to travel to National Conferences.

- **Recruitment of four faculty to join BCCC-CURE**; three Assistant Professors: Prof. Murat Alper Cevher (Biology Department), Prof. Ankit Jain (Chemistry and Biochemistry Department) and Prof. Garumma Feyissa (Health and Nutrition Sciences Department), and one Associate, Prof. Enrique Pouget (Health and Nutrition Sciences Department).
- **Establishment** of a new **group** of BCCC-CURE principal investigators (**Patient Facing Cancer Researchers**) in Spring of 2024 (Prof. Cheryl Carmichael, Prof. Garumma Feyissa, Prof. Margrethe Horlyck-Romanovsky, Prof. Devorah Kletenik, Prof. Kiyoka Koyzumi, Clinician Scientist Florence Lui, Prof. Sheena Philogene, Prof. Enrique Pouget, and Prof. Laura Reigada).
- Running *scientific seminars* series on Fridays (or Thursdays) at 12:30 PM. This year we had eight Scientific Seminars (six external speakers/two internal BC speaker) on a variety of topics and from very prestigious universities and medical centers. Five seminars were delivered in person and three were hybrid with speakers coming to visit campus in person and meeting with faculty and students. (See appendix I).
- Organization of the First Brooklyn Blood Cancer Symposium Organized by Brooklyn College Cancer Center (BCCC-CURE), Memorial Medical Care, PC, & Memorial Sloan Kettering Cancer Center (MMC, PC and MSKCC) with the collaboration of Maimonides Cancer Center, New York City Blood Specialists (NYCBS) & Brooklyn Cancer Center, and SUNY Downstate Health Sciences University. (See appendix I).
- Organization of a half-day in-person Training: "Funding Opportunities for Brooklyn College Principal Investigators & Researchers: A Workshop on IP Creation and Tech Transfer". Organized by BCCC-CURE in collaboration with different CUNY Innovation and Entrepreneurship Offices & Programs (ASRC-CAT, CUNY Technology & Commercialization Office, iCorps Program). Nineteen researchers attended the training.
- Organization of a hands-on "Theory and Practice NMR Course for Synthetic Chemists" course (24 hours) for Principal Investigators and Researchers, postdocs, doctoral students, and advanced undergraduate students from the department of Chemistry and Biochemistry. Eighteen researchers participated. This training took place May 28th June 5th of 2024 (4 h/day) and was imparted by Dr. Esteban Urriolabeitia from the Spanish National Research Council-University of Zaragoza (Spain). Dr. Urriolabeitia also set-up specific experiments in the instrument for investigators and provided extensive one-on-one consultations. Participants received a certificate and completed a survey which demonstrated their high satisfaction.
- Participation in the Symposium "The Future of Cancer Care" organized by American Cancer Society on November 16th of 2023 (Hard-Rock Café in Manhattan).
- Identification of funding opportunities for different research fields in the cancer areas (both individual and institutional) including conversations with program officers from NIH and PCORI. Dissemination of this information to all cancer researchers monthly by email and website updates.
- Engaging in conversations with different researchers to offer support on grant submissions.
- 15 federal grants (NIH and NSF) <u>submitted</u> in this period by BCCC-CURE investigators.
- 6 **new federal grants** awarded in this period to BCCC-CURE investigators.
- **Publication** of 41 articles by BCCC-CURE principal investigators, 14 conference abstracts, and 1 US patent issued.
- Four doctoral students performing their doctoral research with BCCC-CURE members graduated.
- Update of the website with news (grants, publications, patents, awards, etc. from BCCC-CURE members). Publicizing scientific achievements/events in social media.

- Research and data mining on cancer disparities in Brooklyn to write grant proposals.
- One general meeting with BCCC-CURE principal investigators, December 2023.

Education

- Hosting nine scientific seminars with renowned researchers in the field. Most of these seminars were joint with various BC Departments. (See list below and fliers can be found in the appendix.)
- Organization the Third cohort of Colorectal Cancer Summer Internship at Maimonides Medical
 Center. Nineteen students applied in Spring of 2024 and four students will complete a monthlong shadowing experience in June and present their experiences at BCCC-CURE in July.
- Establishment of the *Memorial Sloan Kettering Clinical Oncology Open Learning Program (COOL)* for *BCCC-CURE Students*. Twenty-four students applied in Spring of 2024 and two selected students will receive the summer shadowing and training opportunity.
- Facilitate appointment of four students to be part of the *Data Collectors Program*, IMPACT Project at Weill Cornel Medicine.
- Continuing the update of the website and social media platforms: Facebook, Instagram, and X
 (Twitter), with educational opportunities for students and coordinating with the Office of PreHealth Profession Services to announce opportunities for students. These include summer
 internships, career seminars, internal and external scholarships, health education opportunities
 and events.
- Organized a *Career Seminar for BC students* on November 16, 2023: "Health and Biomedical Opportunities at BCCC-CURE and SUNY Downstate Health Sciences University," which included a networking lunch. Hosted by: Prof. Jennifer Basil and Ms. Ana Bartolomé. Event attended by about 35 BC students.
- Organization of an *Education Information Session* on February 15, 2024: "Health and Biomedical Summer Opportunities at BCCC-CURE and Maimonides Health," which included a networking lunch. Hosted by: Prof. Jennifer Basil and Ms. Ana Bartolomé. Event attended by about 24 BC students.
- Continuing to organize summer research internships for undergraduate students through the ACS and Gray Foundation Grants.
- Organization of an 8 week-long Capacity Building and Career Readiness Training for all cancer research interns in summer of 2024 by CUNY Graduate Center Interim Dean of Sciences, Brian Gibney.

Community Outreach

- Continuing to share resources with community organizations and individuals involved in community outreach efforts in Brooklyn and New York City.
- Continuing partnerships with medical organizations: Maimonides Community Outreach and Engagement: screenings and clinical trials; Brooklyn Health Disparities Center and Downstate Center for Community Health Promotion and Wellness; Memorial Sloan Kettering Cancer Center Community Outreach; American Cancer Society; Leukemia and Lymphoma Society; The HEAT

- Clinic at SUNY Downstate; Tisch Cancer Center at Mount Sinai; Weill Cornell Translational Science Center; NYU Langone Health Center: Perlmutter Cancer Center.
- Continuing partnerships with different Brooklyn College department and offices: BC Health and Wellness Services Office, BC Health and Nutrition Sciences Department, BC Immigrant Student Success Office, BC Health Clinic, BC Puerto Rican and Latino Studies, BC Haitian Studies Institute, BC Women's Center, and BC Alumni Association.
- Continuing to participate in *collaborations* with: New York State ACS HPV Coalition, Cancer Equity
 Accelerator Cabinet at Mount Sinai Tisch Cancer Center, Memorial Medical Care, PC (a practice of
 MSK physicians), Immigrant Health and Cancer Disparities (IHCD) Services at Memorial Sloan
 Kettering.
- Quarterly Meetings with New York State ACS HPV Coalition.
- Quarterly Meetings with Cancer Equity Accelerator Cabinet at Mount Sinai Tisch Cancer Center.
- Monthly meetings with Cancer Equity Accelerator Cabinet at Mount Sinai Tisch Cancer Center Risk Reduction, Early Detection & Screening Workgroup.
- Continuing to be part of the New York State HPV Collegiate Workgroup a collaboration started in 2023 by our Community Outreach Coordinator to foster comparative research studies over multiple universities across NYS and share materials to build awareness in the college-age community. This group is part of NYS ACS HPV Coalition with participation of the American Cancer Society, Syracuse University, St. Lawrence County Health Initiative, Inc., Stony Brook Cancer Center, Upstate Cancer Center, Merck, and Brooklyn College Health Clinic.
- Launch of the third cohort of six students of *Lay Health Navigator Program* at Brooklyn College (Winter/Spring 2024) in collaboration with the Tisch Cancer Center at Mount Sinai.
- Development of two cancer awareness month-long social media campaigns focused on cancer prevention and breaking misconceptions about colorectal and prostate cancer in the Black men, and about HPV vaccine and HPV-related cancers.
- Participation in the Brooklyn College Health and Wellness Fair for BC Students on the West Quad on September 19, 2023. Event attended by about 60 BC students.
- Participation in the *Community Outreach Cancer Screening Event* on September 22, 2023, coorganized by Memorial Medical Care, PC; Memorial Sloan Kettering Cancer Center, and the Brooklyn College Cancer Center. Free mammograms, prostate cancer testing, and general health screenings. In addition to health & wellness educational materials, and fun interactive activities for children (event attended by about 25 BC students and many other members of the neighborhood).
- Participation in the Panel discussion "Linking with our Community-Based Organizations" of the Second Annual Tisch Cancer Institute Community Outreach and Engagement Retreat on "Cultivating Community: The ABCs of Enhancing Equity in Cancer Research, Education and Outreach" on September 29, 2023. Event attended by about 60 BC students.
- Organization the Education Information Session "What Is the Brooklyn College Cancer Center (BCCC-CURE)? Where Can You Find Resources to Do Cancer Research?" on October 4, 2023, Hosted by: Dr. Lisa Millsaps-Graham. Event attended by about 24 BC students.
- Participation with a table in the American Cancer Society 21st Annual Making Strides Against Breast Cancer Walk at Coney Island Maimonides Stadium and boardwalk on October 22, 2023.

Events attended by at least 300 people and 10 BC students and faculty. BCCC-CURE raised \$500 for ACS.

- Organization of the Virtual Cancer Prevention Workshop "Cancer and Youth. How is that Possible? Learn About HPV and Vaping" on November 15, 2023. The event included Ms. Mikhalya Brown, Clinical Research Coordinator at Mount Sinai Hospital. The event was hosted by Dr. Lisa Millsaps-Graham (BC) and Ana Bartolome, through Brooklyn College Cancer Center and the BC Health Task Force Initiative as part of the BC Health and Wellness Series and the Graduate Center for Worker Education. Event attended by about 27 BC students.
- Organization of the Second Brooklyn College Staff Cancer Prevention Information Session with
 the participation of our health and community partners Maimonides Health, New York Cancer,
 Blood Specialists, Mount Sinai Tisch Cancer Center, American Cancer Society and Genentech; and
 followed by a Luncheon, on April 11, 2024, which included a Free Prostate Cancer Blood Test on
 site and information on free mammograms provided by New York Cancer and Blood Specialists.
 Event attended by 38 BC staff members 11 men screened for Prostate Cancer.
- Co-Organization of the 2024 BC Health and Wellness Fair: Healthy Isn't a Goal. It's a Way of
 Living on May 7, 2024. Co-hosted by BCCC-CURE and BC Office of Health and Wellness, including
 the participation of over 40 health providers from Brooklyn College and Brooklyn at large. Event
 attended by at least 100 BC students, staff, and faculty.
- Attending the *9th Annual Cancer Health Disparities Symposium* hosted by SUNY Downstate Health Sciences University, Brooklyn Health Disparities Center and Downstate Center for Community Health Promotion and Wellness (maria Contel and Ana Bartolome). BCCC-CURE member Margrethe Horlyck-Romanovsky, gave a seminar titled "Black New Yorkers and Cancer Risk: The Significance of Origin and Accounting for Lived Experiences in Disaggregated Analysis."
- Participation by Maria Contel in a panel discussion at the 7th Annual TRANSPORT (Translational Program of Health Disparities Research Training) Symposium, with the theme "Advancing Health Equity Research: Building Partnerships between Academia, Community, and Government" hosted by SUNY Downstate Health Sciences University, Brooklyn Health Disparities Center and Downstate Center for Community Health Promotion and Wellness.
- Attending the American Cancer Society's 16th Annual ACS CAN Research & Health Equity Event on September of 2023.
- Attending ACS CAN and NAACP community forum "Addressing the experience of a cancer diagnosis in Black and Brown community, beginning with a community forum in our community."
- Attending the Webinar Series to Promote Awareness on HPV and HPV-Related Diseases by the American Women Medical Association, Global Initiative Against HPV and Cervical Cancer, and Indiana University.

Opportunities & Challenges

We have been able to advance most of the activities proposed in June of 2023 and some new ones. We have received two grants (a three-year American Cancer Society DICR IDG Grant Supplement for Summer Research Internships for Underrepresented Undergraduate Students, and a 2024 Gray Foundation Operations Grant).

The large ACS grant (\$2.7 M for 4 years) is key for the growth and future sustainability of the center. In some cases, it has been hard to fill the sub-awards. The pilot grants are mostly for junior faculty, and we just started to hire new faculty in cancer research areas. We have been able however to award four pilot grants of the 6 we had for the first two years. As we do not have a medical school, filling the clinician scientist positions has been challenging. ACS allowed us to fill one of these positions with a clinician scientist from a partner institution who would collaborate with BCCC-CURE for at least 20% of the time (and we did). Brooklyn College allowed us to open a search for clinician scientists and, while the salary is not very competitive for medical doctors, we anticipate hiring in the areas of psychology or public health from clinician practitioners. The postdoc positions have been very hard to fill (as happens in many institutions like ours). This is because ACS has required postdocs to be US citizens or permanent residents. We were allowed to offer postdoc positions to International Scientists and we hope to fill the two postdoctoral position soon. The master scholars were hard to fill as two departments with the most researchers in the center (Chemistry and Biology) do not offer masters programs any longer. Fortunately, we have involved researchers in the patient facing cancer research groups and we have filled 2 of the 6 awards (we are expected to award two per year for three years). All in all, we are really benefiting from this award to build our cancer research capacity. As mentioned last year the outcomes expected at the end of the grant period (beginning of 2028) are:

- To have increased the number of cancer grants submissions to federal agencies (like NIH, DoD) and foundations (like American Cancer Society and Leukemia & Lymphoma Society) for principal investigators, but also institutional grants such as NCI Specialized Center—Cooperative Agreements (U54) in collaboration with partnering healthcare institutions. This DICR program grant will benefit 14 principal investigators (including two clinician scientists) and early career trainees that can also help build the research capacity at their hosts' groups.
- To jump-start the careers of BCCC-CURE junior faculty (existing and to be recruited) and the adequate establishment of their research laboratories. We expect this, along with the mentoring provided for teaching and service, to be highly beneficial for their successful promotion and tenure processes.
- A successful transition to cancer research careers for other trainees like the postdoctoral fellows (as independent investigators, or senior investigators in government agencies, biotechnology/pharmaceutical companies). A successful transition for master's scholars towards doctoral programs, and jobs at government agencies and biotechnology/pharmaceutical companies.
- The improvement of mentoring of junior and mid-career faculty and early career trainees involved in cancer and biomedical research at BCCC-CURE and at Brooklyn College in general.
- The increase of cancer research projects with clinical translational potential in some of the following areas: drug development, cancer disparities, and/or cancer control and prevention.

We have continued to meet virtually and in person, with the leadership and teams of medical institutions, community groups, funding agencies, private foundations, and companies to expand our network of willing partners. We now have the opportunity to use the natural connections with, and between, our partners to strengthen these relationships in furtherance of our mission. We have also held successful inperson and hybrid scientific talks, symposia, training workshops, and community outreach events which were well received. Our in-person office receives visits of students and staff on a weekly basis. Students have been getting information on different educational/research possibilities (including other programs on Campus). Furthermore, we organized our second event for BC staff in Spring of 2024 (as requested by BC staff members). We will continue with a similar number of activities in Fall of 2024 and Spring of 2025.

During the next year, we want to continue the extramural educational opportunities for Brooklyn College students through collaborations with our partners due to high demand. In addition, we want to continue supporting the development of courses/certificates connected to biomedical research.

We will continue our work on the specific aims of the institutional grant (ACS) to help build research capacity at BCCC-CURE and the college. We will further our collaboration with the Gray Foundation and apply for more funds for 2025. We will continue to engage with our partners at NCI-designated medical institutions to build the collaborations necessary for successful future grant proposals down the line (we are looking into U54 opportunities as we still do not have the capacity for other NIH center grants). The lack of appropriate facilities (especially in the Chemistry and Biochemistry Department) is a handicap to retain and recruit faculty members. Renovations are in the horizon, although the time is uncertain.

Supported by the Brooklyn College Foundation Office and BC President, we expect to participate in additional fundraising campaigns to support BCCC-CURE and its activities including increased reassigned time for Director and Vice Director, an endowed Chair in Cancer Research (Full/Associate Professor), postdoctoral research fellowships, graduate student fellowships, money to support infrastructure and instrumentation updates, and money to support more community outreach efforts while transitioning to grants focused on that area.

We are very happy to report that Brooklyn College has created a full-time position at BCCC-CURE which was very much needed (Operations Manager and Community Outreach Community Coordinator) and that will start in Summer of 2024. In addition, since May 2024, we have been receiving support from the Brooklyn College Office of Research and Sponsored Programs to manage some of the most challenging post-award issues (such as set-up accounts).

This year the BCCC-CURE team has focused on setting-up sub-awards and perform the activities supported by our current institutional grants that were in the research proposals.

Expenses (June 2023 - June 2024) paid with BCF Brooklyn College Cancer Research Fund

Personnel:

Reassigned Time (Adjunct rate)	
Director, ACS PI, Maria Contel (Fall 23/Spring 24 - 8h)	\$20,448.00
Vice-Director, Jennifer Basil (Fall 23/Spring 24 - 6h)	\$15,336.00
Part-Time Operation Manager/Community Outreach Coordinator 30 h/w	veek
15 h NTA BC position	\$39,211.31
15 h part time Salary supplement BCF (Summer 23'/0.5 Fall 23')	\$7,086.87
Office Intern (Fall 23/Spring 24)	\$4,532.00
Non-Personnel	
Community Outreach Events	\$4,391.99
Office Expenses	\$4,496.64
Total:	\$95,019.85

Summary of Fifth Year Plan*

General Functioning of the Center

- Continue meetings with BC administrators, and the BCCC-CURE Team and weekly office hours for Director/Vice Director.
- Organization of two annual Advisory Board meetings (one in July of 2024, one in June of 2025).
- Filing a faculty line for a clinician scientist with research in cancer.
- Continuing to manage two internships for the academic year in the office for Brooklyn College students. Providing a stipend (\$16/h for 10 h/week) to at least one intern in the center.
- Setting up Federal Work Study opportunities for at least one student each semester.
- Continue overseeing plans for construction of office space, a state-of-the art teaching laboratory and renovations of labs of two BCCC-CURE members which are under way.
- Continue with work related to publicity of the center (fliers, website, social media, presentations to potential partners and donors).
- Fundraising for, and elaboration of a publicity short video about the center.
- Continuing the newsletter (to be distributed twice a year, January and July) for our members and partners.
- Continue with our visibility campaign in social media.
- Preparing an article on BCCC-CURE for the BC alumni magazine.
- Processing all paperwork related to personnel, and center activities.
- Preparation of annual report (fifth year) and proposed plan/budget for the fourth year.
- Update of profiles and directory on the website.

Partnerships and Center Grant Submissions

- Finalizing establishment of formal partnerships (with memorandum of understanding) with Memorial Sloan Kettering Cancer Center and SUNY Downstate.
- Continue with the establishment of formal partnerships with Community Organizations in Brooklyn and New York City (see plans for community outreach).
- Establish the framework with partners for a NIH U54 institutional grant application with one of our partners to be submitted in 2026.
- Work in collaboration with the Gray Foundation to renew the center grant proposal (specific project linking BRCA-related cancer research and educational/community outreach component) in 2025.
- Present a white paper on a project to fund Brooklyn College Undergraduate Students to serve as mentors of High School Students in Health Academies organized/supervised by the Arthur Ashe Institute.
- Fundraise with BCF for the next 3-5 years.

Research

- Select awardees for the ACS DICR IDG Grant Programs, a) Clinician Scientist (2025-2028), b) Postdoctoral Fellows (2024-2026), and c) Masters Scholars (second cohort 2025-2027).
- Select awardees ACS DICR IDG Pilot Grants (Third Year) in Spring of 2025 and Undergraduate Students Grants (Second Year).
- Assess ACS Grant (First year) and elaboration of annual report.

- Continue scientific seminars series on Fridays at 12:30 PM. We have planned 3-5 seminars per semester (Fall 2024 and Spring 2025) and a one-day Symposium on Health Disparities Through a Cultural Lens in December of 2024).
- Continue mentoring and training activities as part of the ACS DICR IDG Grant.
- Continue supporting grant submissions from BCCC-CURE members.
- Continue the update of the website with news (grants, publications, patents, awards, etc., from BCCC-CURE members). Publicizing scientific achievements/events in social media.
- Organize a Fall 2024 general meeting with BCCC-CURE principal investigators and social events for then end of the Fall and in Spring 2025.
- Continue a weekly coffee/tea hour for principal investigators and students.
- Fund-raise to set-up of annual research awards for BCCC-CURE members and students (best publication, best doctoral thesis dissertation, best presentation undergraduate research, etc.) to be coupled to a research day symposium showcasing research by BCCC-CURE members during the winter or summer.

Education

- Work with departments to support curriculum development for courses/certificates related to oncology/biomedical research and public health.
- In collaboration with our partners at Mount Sinai Tisch Cancer Center develop a cancer prevention training program for Community Health Educators.
- Continue offering the formal Physician Shadowing Program for Brooklyn College undergraduates in collaboration with Maimonides Health in June of 2025.
- Continue the shadowing program COOL with Memorial Medical Care, PC, a practice of Memorial Sloan Kettering physicians adjacent to the Brooklyn College campus, in June of 2025.
- Administer and evaluate the 2024 Summer Research Internship Programs, Doctoral Mentorship Program, and Travel Grants for Students.
- Continue the update of the website and social media with educational opportunities for students.
- Continue to try to pair students interested in cancer research with BCCC-CURE research opportunities.
- Continue to organize a yearly workshop for educational/research opportunities at Downstate Health Sciences University with our partners at this institution.
- Continue to pursue a development of the Medical Scribe Training Program for Brooklyn College students in collaboration with Maimonides Health.

Research/Education

- In addition to secured funds from ACS for summer internships for underrepresented students, secure funds for summer internships for undergraduate student research (2024).
- Establish a new program for fellowships (postdoctoral, doctoral, and master's students) through donations.
- Continue with seminars for student organizations to raise awareness of research possibilities at BCCC-CURE for undergraduate students.

Community Outreach

- Continue work with partners in the borough and identify new funding opportunities.

- Continue our established partnerships with the Leukemia and Lymphoma Society, NYC Metro Outreach, and Maimonides Community Outreach and Engagement, Mount Sinai Tisch Cancer Center, HPV Cancer Alliance, and ACS including seminars and educational events.
- Continue our partnership with the MSKCC Disparity Office and Memorial Medical Care, PC, a practice of Memorial Sloan Kettering physicians.
- Participate in a Mount Sinai Tisch Cancer Center Community Outreach & Engagement (COE) Retreat in September 2024.
- Participate in a Breast Cancer Awareness campaign with the American Cancer Society: Making Strides Walk in October 2024.
- Formalize partnership with Arthur Ashe Institute for community outreach and engagement.
- Formalize partnership with NYCHA Health Corps Program.
- Organize a *Nutrition Workshop* for Cancer Survivors in collaboration with Mount Sinai Tisch Cancer Center and the BC Health and Nutrition Sciences Department.
- Develop a formal partnership with the Brooklyn Chinese-American Association (BCA).
- Attend a Health and Wellness event organized by our partners at Haitian Community Coalition bringing cancer prevention materials in Haitian Creole and English.
- Develop a yearly *HPV Vaccination Program* for Brooklyn College students using the MSK mobile unit through our partnership with MSK's Immigrant Health and Cancer Disparities Service and City College of New York.
- Participate at least one *bilingual education sessions* on cancer prevention for Brooklyn Community through any of our partners community organizations.
- Collaborate in organizing a Community Outreach Cancer Screening Event on September 2024, co-hosted by Memorial Medical Care, PC, & Memorial Sloan Kettering Cancer Center (MMC, PC and MSKCC), New York City Blood Specialists (NYCBS) and the Brooklyn College Cancer Center. Free HPV vaccines, mammograms, prostate cancer testing, and general health screenings. In addition to health & wellness educational materials, and fun interactive activities for children.
- Organize the First BCCC-CURE Black Women's Cancer Prevention event with the collaboration of CUNY Haitian Studies Institute, the BC Women's Center, BC Caribbean Studies, BC Puerto Rican and Latino Studies, BC Women of Color Student Club, Mount Sinai Tisch Cancer Center, Maimonides Cancer Center, Young Survivor Coalition, American Cancer Society.
- Organize at the Third Health Information Session with Maimonides Health for BC Staff on Cancer Prevention, Treatment, and Clinical Trials in Brooklyn in Spring of 2025.
- Organize and co-host the BC Health and Wellness Fair at Brooklyn College Wellness Fair in Spring of 2025.

^{*}The plans for the fifth year will be modified accordingly if we fundraise for specific programs proposed.

Appendixes

- I. PDFs of Fliers for Scientific Seminars, Symposia, Trainings, and Community Outreach Events.
- II. 2023-2024 Sub-Awards Funded by the ACS DICR IDG Grant and Agenda for the On-Site Visit of the ACS DICR IDG Team.
- III. 2024 Awards funded by the Gray Foundation and Agenda of the On-Site Visit by the Gray Foundation.

Attachments

- Proposed Expenses 2024-2025 and Expenses for June 2023-June 2024 including Brooklyn College Foundation Brooklyn College Cancer Research Fund, Gray Foundation Grant, American Cancer Society Institutional Grant and Supplement
- Minutes Last Meeting (07/07/2023)
- News Bulletins January and June 2024

Annual reports for previous years can be found at: https://bccc.blog.brooklyn.edu/about-us/annual-reports/