

## Brooklyn College Cancer Center Annual Report June 2022

### Introduction of BCCC-CURE

The Brooklyn College Cancer Center for CommUnity Outreach, Research, and Education (BCCC-CURE) was approved by the CUNY Board of Trustees in November of 2019. It was established virtually in September of 2020. The Brooklyn College Foundation provided a generous seed grant of \$250,000 for two years. The mission of the center is to enhance the lives and care of patients affected by cancer with a special focus on Brooklyn residents. Through this center, Brooklyn College (BC) seeks to expand its fundamental (basic and applied) research on cancer and combine research forces with local (NYC) cancer treatment centers and hospitals, and Brooklyn communities, while delivering first-class educational opportunities to our undergraduate and graduate students. Brooklyn College prides itself as an engine of socioeconomic mobility that serves a highly diverse community with transformative, distinctive, and affordable educational opportunities. BC has a student enrollment of 17,811 students—14,970 undergraduates and 2,841 graduates—who come from 143 nations and speak 92 languages. We have a special commitment to serving immigrants and first-generation college students, and other underrepresented students from diverse communities that make up our borough, city, and state.

BCCC-CURE scientists conduct research to understand the causes and mechanisms of cancer and to develop potential treatments for cancer patients. We are interested in developing tools and computational methods useful in medical diagnoses and treatments. Community-based patient support and cancer prevention are also areas of interest for BCCC-CURE researchers. As the focus of BCCC-CURE is on Brooklyn residents, we are initiating new modes of translational cancer research in the borough through partnerships with Brooklyn and NYC medical centers. Translational research is the “bench-to-bedside” model that transforms the findings of fundamental research into actual medical practice and treatment. Several of our faculty members are funded by the National Institutes of Health, other federal agencies and private foundations to conduct cancer or cancer-related research. The cancer researchers at BCCC-CURE (see profiles in our web site<sup>1</sup>) collaborate with many prestigious cancer centers, medical schools, and universities in New York, across the U.S., and overseas.<sup>2</sup> Brooklyn College is at the core of multiple community outreach efforts led by scientist and students alike, creating and maintaining broad collaborative educational and community-based programs with local schools and organizations within our area. Specific goals for community outreach include public seminars (science, resources); information on treatment options, access to clinical trials, prevention, supportive care, aftercare; and medical-translation training. Lastly, the educational mission of BCCC-CURE is to educate STEM professionals to improve cancer outcomes through research, education, and outreach. We offer a wide range of educational opportunities in the classroom (degree programs, seminars, and workshops), the laboratory (research opportunities), and the community (internships, translational training).

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<sup>1</sup> BCCC-CURE. (2022). *Research*. <http://bccc.blog.brooklyn.edu/research/>

<sup>2</sup> BCCC-CURE. (2022). *Collaborating institutions*. <http://bccc.blog.brooklyn.edu/research/collaboration/>

As of June 2022, the Brooklyn College Cancer Center leadership includes Prof. Maria Contel, PhD, as Director and Research Area Leader, Prof. Jennifer Basil, PhD, as Associate Director of Community Outreach, and Prof. Brian Gibney, PhD, as Associate Director of Education. The Director and Associate Directors receive 8 and 6 hour of reassigned time per year respectively (teaching load at Brooklyn College is at 18 hours per year for the two academic semesters Fall and Spring or 6 three-credit courses). The BCCC-CURE Team also includes Ms. Ana Bartolome (Operations Manager and Community Outreach and Engagement Coordinator, part-time 15 hours per week) and Sheena Philogene (Assistant Professor and Science Librarian with a commitment of 6 hours per week during the Fall and Spring semesters). We have additional support from the web designer Ms. Leonora Kissis from the Brooklyn College Information Technology Services. BCCC-CURE has currently one office intern (6h/ week in Spring and Fall semester).

BCCC-CURE has 22 faculty members (with 16 specifically focused on cancer and cancer-related research), 4 postdoctoral fellows, 35 doctoral students, 8 masters students and full-time research assistants, and over 40 undergraduate research students/assistants. In addition, we train an average of 40 undergraduates per year through partnerships with medical schools in medical translation, shadowing, and lay health advocate programs. Membership is open to all Brooklyn College principal investigators who may want to get involved 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. Faculty members, Michael Menser, PhD (Philosophy Department) and Michelle Greene, PhD (Health and Nutrition Sciences) are community partners for BCCC-CURE and we are collaborating with the Immigrant Student Success Office, the Brooklyn College Haitian Institute, and the Brooklyn College Caribbean Program. We have collaborated on specific events across schools. We are currently expanding the number of researchers and faculty community and education partners and considering membership for other Brooklyn CUNY schools (Medgar Evers College, City Tech and Kingsborough Community College).

### **Main Outcomes for the Second Year (June 2021 to June 2022)**

At the time we elaborated the plan, we were uncertain of how the pandemic would influence the return to campus and many of the proposed activities. While Brooklyn College was not open to the public during Fall of 2021 (many classes were still on line) during Spring of 2022, the number of courses in person has been increased and outside visitors showing proof of vaccination in advance have been allowed to enter the campus. We have therefore run events in a hybrid format (most of the speakers in the Fall and all of the speakers in the Spring gave seminars in person) and we have run symposia virtually. We still have not been able to do the in-person inauguration of the Center which we anticipate for Fall of 2022. We summarize the main achievements of the center in this period below.

General Functioning of the Center

- Establishment of interim office (June 2022). In conjunction with college facilities design of the renovation of the office, purchasing furniture, computers, and supplies.
- Web site weekly updates.
- Processing paperwork for reassigned time for Director/Associate Director, salary supplement for Librarian, part-time Operations Manager, stipends Director/ Associated Directors summer 2021.
- Design of a variety BCCC-CURE fliers for publicity, fund raising purposes and announcements. Running social media accounts (FB, Twitter and Instagram).
- Meetings with BC administrators as needed.
- Weekly meetings for the BCCC-CURE Team and weekly office hours for Director/Associate Directors. Establishment of a group in Teams (Microsoft) to work virtually.
- Overseeing plans for construction of permanent office space, a state-of-the art teaching laboratory and renovations of labs of two BCCC-CURE members which are under way (starting in 2022-2023).
- Interviews on BCCC-CURE for Brooklyn College Alumni Magazine, Craig Pulse, Hispanic Federation, and others as needed.
- Providing information of BCCC-CURE to administrators for multiple purposes when required.
- Preparation annual report second year and one meeting with the Advisory Board (December 2022).
- Design of third year plan and budget.
- Supervision of three interns in the virtual office (summer 2021, Fall 2021, and Spring 2022).

Partnerships, Fund Raising, and Center Grant Submissions

- Establishment of a formal partnership with SUNY Downstate Health Sciences University.
- Establishment of new partnerships with Tisch Cancer Center Institute at Mount Sinai, and Weill Cornell Medicine.
- Continuing partnerships established with Maimonides Medical Center, the CUNY Advanced Science Research Center (ASRC), the CUNY Graduate Center, and Memorial Sloan Kettering Cancer Center.
- Establishment of formal partnerships with Community Organizations in Brooklyn and New York City (see community outreach outcomes).
- Several preliminary meetings to establish the Brooklyn Cancer Consortium (and idea and effort lead by BCCC-CURE with SUNY Downstate Health Sciences University, Maimonides Medical Center, One Brooklyn Health, and Kings County Hospital). We anticipate the establishment of this consortium in 2022-2023.
- Fund raising efforts in 2021 in collaboration with Brooklyn College Foundation: \$242,000 raised from donors (including \$42,000 for summer research internships for undergraduate students for summer 2021 and 2022).
- Research/Identification of Foundation Grants in collaboration with Brooklyn College Foundation for specific center projects.
- Grant submitted to New York Community Trust (February 2021). Title: "Addressing Cancer Disparities in the Haitian/Caribbean Communities in Brooklyn". Amount: \$287,567 for three years. This grant was not awarded and unfortunately, we didn't receive feedback.

- LOI for Grant submitted to the Cabrini Foundation (LOI/preliminary grant June 2021, Final submission by invitation in August of 2021). Title: "Addressing Cancer Disparities in the Latino Communities in Brooklyn". Amount: \$136,323 for one year. Possibility of yearly renewals. We were not invited to apply. We have resubmitted a LOI in May of 2022.  
This grant has a research, education and community outreach components that includes the establishment of cohorts of students of Hispanic descent as health ambassadors in their communities, as well as the incorporation of underrepresented students in STEM/Biomedical labs and some small grants for researchers to pilot health-disparities component in their research.
- Submission of white paper to the Gray Foundation for funding possibility for a grant linking research in BRCA-mutated cancers (breast and ovarian) and education/community outreach activities with Afro Caribbean students from Brooklyn College. Gray Foundation is interested after follow-up meeting with the CEO and President from this Foundation. We have hopes to be able to submit a full grant in 2022-2023.
- Exploration of different federal grants: a) U54 FIRST grant, along with the administration of BC it was decided not to proceed as other CUNY centers were applying and were better positioned to be successful e.g. CCNY in Collaboration with MSKCC; b) training T34 Bridge to Baccalaureate Program. Unfortunately, the closest Community College, Kingsborough Community College, already has a bridge grant with Medgar Evers College and they didn't feel they would have enough students for a second program, most other community colleges at CUNY have established these programs already with other senior colleges. We approached Guttman college and initiated the process but only 0.5% of our students transfer from Guttman and it was deemed that the justification for NIH was weak; c) RCMI grant with SUNY Downstate (finally SUNY Downstate decided to apply on their own as the time was very limited, less than a month).

### Research

- Incorporation of two new BCCC-CURE principal investigators. Three PIs left the center as their research is not aligned with cancer-focused aspects and it will not align in the future. We have 22 principal investigators at present with 16 currently involved in cancer and cancer-related research.
- Running Scientific seminars series on Fridays at 12:30 PM. This year we had 15 Scientific Seminars (14 external speakers/1 internal BC speaker) on a variety of topics and from very prestigious universities and medical centers (see appendix). 12 seminars were hybrid with speakers coming to visit campus in person and meeting with faculty and students and three were virtual. Most were very well attended (the attendance of the in-person component was limited to 20 participants).
- Organization of four virtual Symposia: a) First Brooklyn Breast Cancer Symposium (October of 2022) and b) Second Brooklyn Colorectal Cancer Symposium organized with Maimonides Medical Center and featuring talks from Brooklyn partner Institutions and MSKCC Two other scientific/educational symposia organized with the CUNY ASRC are described in the research/education section (see appendixes for all symposia fliers).
- Identification of funding opportunities for different research fields in the cancer areas (both individual and institutional) including conversations with program officers from NIH. Dissemination of this information to all cancer researchers on a bi-weekly basis by email and updates on the web site.

- Eight federal grants (NIH and NSF) submitted in Spring of 2022 for cancer and cancer-related research by BCCC-CURE investigators (combined total of \$5.2 M requested that would come to Brooklyn College if awarded).
- Two new federal grants (NIH) awarded in this period to BCCC-CURE investigators (\$942,000).
- Publication of 40 articles by BCCC-CURE principal investigators and 3 US patents issued.
- Update of the web site with news (grants, publications, patents, awards, etc from BCCC-CURE members). Publicizing scientific achievements/events in social media.
- Researching and mining data on cancer disparities in Brooklyn to write grant proposals.
- Update of the “Brooklyn Health Map” by BCCC-CURE reference/library support member Ms. Sheena Philogene. The map can be found on this page: <http://sunsp.net/demo/p/> . It is a full dashboard looking at various aspects of health on the census tract, zip code, and neighborhood income level.
- Two general meetings with BCCC-CURE principal investigators in Fall of 2021 and in June of 2022.
- Participation of the BCCC-CURE director in a faculty search (Cancer Biology) to assist the Biology Department.

### Education

- Medical Interpretation Training course to Brooklyn College students offered in both Fall 2021 and Spring 2022 in collaboration with Memorial Sloan Kettering Cancer Center. 19 students were trained Fall 2021 and Spring 2022.
- Organization of two scientific symposia with the CUNY Advanced Science Research Center The ‘Nanoscience Approaches to Cancer’ symposium was held in October 2021 and the ‘Diverse Approaches to Cancer Therapy’ symposium was held in February 2022. Both were very well attended (>70 participants).
- Implementation of a system to facilitate pairing of Brooklyn College undergraduates with shadowing opportunities at BCCC-CURE medical institution partners. Worked with Maimonides to launch a shadowing program for Summer 2022. The first cohort of students (6) was selected and started the formal program in June 2022.
- Working with SUNY Downstate Health Sciences University on a Clinical Medical Technologist degree program.
- Continuing the update of the web site and social media with educational opportunities for students.
- Continuing with seminars to student’s organizations to raise awareness of research possibilities at BCCC-CURE for undergraduate students. Offered two career seminars in the BCCC-CURE seminar series.
- Organizing summer research internships for undergraduate students (2022). Administered the Stacey & Michael Garil Summer Research Internship Program for summer undergraduate research experiences at Brooklyn College in Summer 2021 and 2022 (total of 11 students).
- Participation of the BCCC-CURE Associate Director for Education in a search for a new Pre-Health Advisor

### Community Outreach

- Continuing discussions with a number of community organizations and individuals involved in community outreach efforts in Brooklyn and New York City.

- Continuing collaborations with: Maimonides Community Outreach and Engagement: screenings and clinical trials, Caribbean Women’s Health Association; Global Women’s Health Initiative (Dr. Christina Pardo, SUNY Downstate); Memorial Sloan Kettering Cancer Center (Dr. Abraham Aragonés, focus Cancer Disparities), CUNY Graduate Center, Public Health Program; Kingsborough County Cancer Center; Brooklyn College Haitian Institute, and Brooklyn College Caribbean Studies Program.
- Establishment of the following new formal partnerships with Societies and Medical Centers: American Cancer Society, Leukemia and Lymphoma Society: NYC Metro Outreach (Ms. Jennifer Shah), One Brooklyn Health, and Brooklyn Community Collaborative, The HEAT Clinic at SUNY Downstate, Tisch Cancer Center at Mount Sinai, Aid for Aids International, National Association of Hispanic Nurses, Weill Cornell Translational Science Center, NYU Langone Health Center: Perlmutter Cancer Center, Aid for Aids International, the National Association of Hispanic Nurses, and Coalition of Concerned Medical Professionals.
- Finalizing partnership with the Arthur Ashe Institute (Faven Araya).
- Submission of one internal grant (Weill Cornell Clinical & Translational Science Center – Pilot Award- Special Populations, Dr. Erica Phillips PI) IMPACT (BCCC-CURE Subcontract: \$7,656.00 reassigned time coordinators; In addition, students will be compensated \$25 an hour with an anticipated time commitment of approximately three – 2hr training sessions) to fund courses to have Brooklyn College Students certified as Lay Health Advocates.
- In collaboration with the Tisch Cancer Center at Mount Sinai, launching the first cohort (6 students) in Lay Health Navigator Program at Brooklyn College (June 2022).
- Attending the 2022-2024 CHNA leadership Forum at Memorial Sloan Kettering Cancer Center in May of 2022. Dr. Jennifer Basil was an invited panel member.
- Establishing new community partnerships with: Mixteca, and the Haitian Community Coalition, food pantry and community (Flatlands Reformed Church).
- Continuing, and establishing new partnerships with different Brooklyn College Department and offices: BC Health and Nutrition Sciences Department , BC Immigrant Student Success Office, BC SAIL - BC Clubs, BC Personal Counseling Office, BC Health and Wellness Center, BC Disabilities Office, BC Health and Nutrition Sciences Department, BC SEED Dept and Phys Ed Teacher Ed, BC Women’s Center, BC Music Department, and the BC Graduate Center Worker Education.
- Organizing a virtual panel on “Health Disparities and Women of Color” (Dr. M Horlyck Romanovsky, (BC); Lucette Jefferson, PMHNP (BC); Lynette Leepack, MPH, PMHNP (Breast Cancer Navigator, Maimonides Medical Center)).
- Organizing a large in-person community outreach event on campus: the first Annual BCCC-CURE Health and Wellness Fair (04/26/2022) with the participation of over 300 people (students, members of staff and faculty members) during a half day. This event included: tabling from community, hospital, college partners, student clubs interested in health; in-person fitness, nutrition, self-defense, creative and wellness activities; on-site COVID testing and inoculation and HPV testing; and a 4-h Panel on Maintaining Health, Nutrition, and Cancer Screenings Post-Pandemic.
- Co-organizing the Haitian Community Coalition Wellness Fair (04/30/2002) with over 100 participants.
- Organization of two virtual community outreach talks from Brooklyn College members on “Screening and Clinical Trials” for faculty and staff and “Importance of Screening in Young People



for Cervical, Breast, Lung and Skin Cancer” for BC students (imparted by Jody Steinhardt, MPH, CHES, MCS), Maimonides Cancer Center.

- Organization of virtual community outreach talk “HPV and Cervical Prevention” from Dr. Abraham Aragones, Memorial Sloan Kettering Cancer Centers).
- Organization of community outreach events as part of the virtual Symposia on the First Brooklyn Breast Cancer Symposium (October 2021, “Taking Charge of your Breast Health During a Pandemic” (with Dr. Donna Massel; Dr. Jessica Torrente, and Dr. Joshua Feinberg) and the Second Brooklyn Colorectal Cancer Symposium (March 2022, “Debunking Myths about Colorectal Cancer”) in collaboration with Maimonides Medical Center (with Dr. Rebecca Rhee, Dr. L Sutton and Dr. Meredith Pittman).

### **Challenges & Opportunities**

Despite of the continuing pandemic and restrictions in terms of in-person activities, we were able to advance with most of the activities proposed in May of 2021. We continued to meet virtually with the leadership and teams of medical institutions, community groups, funding agencies, and private foundations 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 virtual and hybrid scientific talks, symposia and community outreach events which were well received by engaged audiences as exemplified by the well-attended Second Brooklyn Colorectal Symposium with Maimonides Medical Center in Spring of 2022 and the two virtual symposia organized with the ASRC. The community outreach components of these events were recorded and are available on the BCCC-CURE website. We look forward to the opportunity to offer these symposia and community outreach events in-person (hybrid modality) in Fall 2022. We held our first community outreach events in person in Spring of 2022 (in campus and outside) and they were a success (ca. 200 participants per event). We will also continue working with our partners to maintain and increase the extramural educational opportunities for Brooklyn College students. The demand for such experiences has been impressive (>100 students applying to some of the programs). Again, the challenge here it to scale up to meet the overwhelming demand for this training and the need for medical interpreters in the clinics of Brooklyn. However, we found that the medical translation program provided by MSKCC had a lower participation in Spring 2022. This is due to the return of students to in person classes and scheduling conflicts. To address this issue, MSKCC will be providing the medical translation program on campus in Fall of 2022 and Spring of 2023.

BCCC-CURE has been able to submit a pre-proposal for a private foundation grant this year and we anticipated submitting a second one shortly after further conversations with another. We have found that foundations do not usually provide feedback when applications are not funded. We have decided to use a more targeted approach with foundations and establish relationships with them before applying for grants. We were also involved in several federal grant preparations that for reasons beyond BCCC-CURE were not submitted. We will continue to engage with our partners at NCI-designated medical institutions to build the collaborations necessary for successful future grant proposals. We are more limited since we are not a medical school or have a strong public health component in our program, so these partnerships and the obtaining of preliminary data are key to prepare for strong U54 NIH applications (RCMI format). Unfortunately, NIH is not running preparatory grants (P20 style) as they did before so we need to apply for larger and more complex grants. Our efforts to engage with alumni benefactors were more successful

this year (a big campaign in November of 2021). We are working on prospectuses for additional fundraising campaigns to support BCCC-CURE and its activities including postdoctoral research fellowships and graduate student fellowships and money to support infrastructure and instrumentation updates.

The growth of BCCC-CURE over the second year is the result of the tireless efforts of the Director and Associate Directors to this project through reassigned time ( $\frac{1}{3}$  teaching load for the Director,  $\frac{1}{4}$  for each Associate Director) and summer stipend (the equivalent of 7 days) which will continue for the Director and Associate Director of Community Outreach. Brooklyn College is providing some reassigned time to the Associate Director of Education (to couple the activities of BCCC-CURE with other health-related educational components) and we are solely budgeting for a summer stipend for him this year (equivalent of 17.5 days) to compensate for the coordination duties with undergraduate summer programs. What we have realized this second year is that the activities of BCCC-CURE truly necessitate that the part-time Operations Manager position be made a full-time position to: a) our day-to-day operations in our physical office, b) to support larger and more complex BCCC-CURE grant submissions, c) to manage these grants as they materialize, d) to communicate with our community partners and students, e) to participate in different community outreach free trainings provided by partners, f) to provide supervision to office interns (Brooklyn College students who can benefit from this experience). This need is even more acute if we proceed with the Brooklyn Cancer Consortium project. The BCCC-CURE team continues working hard to raise funds.

#### **Expenses (June 2021 -June 2022)**

- Part-time Operations Manager/Administrative Assistant (September 1<sup>st</sup>, 2021 - August31<sup>st</sup>, 2022, 15h/week plus fringe) \$35,436.63
- Salary supplement to Science Librarian for Library/reference support (6 h/ week for two semesters Fall 2021 & Spring 2022) \$13,000
- Reassigned time for Director and Associate Directors at reduced (adjunct) rate plus fringe (4 h/week and 3 h/week for two semesters Fall 2021 & Spring 2022, respectively) \$45,885
- Summer stipends (2021) to the Director and Associate Director (\$3,500 per person plus fringe) \$12,075
- Office set-up: projector, laptop, printers, refrigerator, coffee cart \$ 2698.85
- Seminars (lunch expenses speakers, travel expenses for one speaker) \$1245.54
- Community outreach events & publicity (printed fliers): \$4,393.27

Total = \$ 114,734.29

#### **Summary of Third Year Plan\***

##### General Functioning of the Center

- Generating the strategic plan of BCCC-CURE for the next 5 years as part of the CUNY re-certification plan for Centers (due in November 2022).
- Organization of the formal in person inauguration of the center (Fall 2022).
- Continue meetings with BC administrators, and the BCCC-CURE Team and weekly office hours for Director/Associate Directors.
- Organization of three Advisory Board meetings (one in July of 2022, one in December of 2022 and one in June of 2023).



- Securing a full-time position for Operations Manager.
- Setting-up two internships for the academic year in the office for Brooklyn College students. Providing a stipend (\$15/h for 6 h/week) to at least one intern in the center.
- 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 (starting in 2022-2023).
- Continue with work related to publicity of the center (fliers, web site, social media, presentations to potential partners and donors).
- Set-up of a newsletter (to be distributed twice a year) 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 paperwork for reassigned time for Director/Associate Director, salary supplement for Librarian, stipends Task Force summer 2022, hiring part-time Operations Manager/Administrative Assistant 2022-2023.
- Preparation of annual report (third year) and proposed plan/budget for the fourth year.

#### Partnerships and Center Grant Submissions

- Establishment of formal partnerships (with memorandum of understanding) with Memorial Sloan Kettering Cancer Center and SUNY Downstate.
- Creating the Brooklyn Cancer Consortium (in collaboration with SUNY Downstate Health Sciences University, Maimonides Medical Center, One Brooklyn Health and Kings County Hospital Center).
- Continue with the establishment of formal partnerships with Community Organizations in Brooklyn and New York City (see plans for community outreach).
- Identification of Federal grant opportunities for a realistic Spring-Summer 2023 center grant submission.
- Continue with the research/Identification of Foundation Grants for specific center projects.
- Work in the collaboration with the Gray Foundation to submit a grant proposal to fund a specific project linking BRCA-related cancer research and educational/community outreach component.

#### Research

- Update of profiles and directory on the web site. Incorporation of interested researchers from other institutions (Brooklyn senior and community college principal investigators).
- Continuing scientific seminars series on Fridays at 12:30 PM. We anticipate 6 seminars per semester (Fall 2022 and Spring 2023). Bringing speakers from industry and training seminars for researchers.
- Set-up of a Drug Development short course (15 hours) for Principal Investigators and Researchers (postdocs, doctoral students and advanced undergraduate students from the departments of Biology, Chemistry and Health and Nutrition Sciences). This training (hybrid modality) will take place in Fall of 2022 and will be imparted by Dr. Benjamin Blass from the Feels Cancer Center at Temple University. Participants will receive a certificate.
- Organization of a second edition of the Brooklyn Symposium on Breast cancer (October 2022) and a third edition of the Brooklyn Symposium on Colorectal Cancer (March 2023) with our Brooklyn partners and some external invited speakers. These events will be in person including the

showcase of research by members and partner, and an educational component for undergraduate students. We will have participation of community members in the community outreach component.

- Continue with the identification of funding opportunities for different research fields in the cancer areas (both individual and institutional) including conversations with program officers from NIH. Dissemination of this information to all cancer researchers on a bi-weekly basis by email and updates on the web site.
- Official launch of the “Brooklyn Health Map” on the BCCC-CURE web site and announcement to our partners.
- Set-up of a formal peer-review system for BCCC-CURE cancer-related grant submissions.
- Continuing the update of the web site with news (grants, publications, patents, awards, etc from BCCC-CURE members). Publicizing scientific achievements/events in social media.
- Organization of a Fall 2022 general meeting with BCCC-CURE principal investigators and end of the Fall social event and in Spring 2023.
- Organization of a weekly coffee/tea hour for principal investigators and a monthly research presentation for postdocs, graduate students and advanced undergraduate students (2-3 students per event).
- 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 summer.

### Education

- Continue to offer the Memorial Sloan Kettering Cancer Center’s Medical Interpretation Training course in Fall 2022 and Spring 2023. The course will be moved to Brooklyn College starting Fall 2022.
- Offering a formal Physician Shadowing Program for Brooklyn College undergraduates in collaboration with Maimonides Medical Center. Held a Student Medical Shadowing Information Session at the Second Brooklyn Colorectal Cancer Symposium in March 2022. The first Colorectal Cancer College Student Summer Shadowing Program is being offered to 8 students in June 2022.
- Offering Lay Health Navigator training to 6 Brooklyn College students in collaboration with The Tisch Cancer Institute at Mount Sinai School of Medicine in June 2022.
- Administer the Stacey & Michael Garil Summer Research Internship Program for summer undergraduate research experiences at Brooklyn College in Summer 2022 and 2023.
- Continue developing the proposal for a Brooklyn College bachelor’s degree in Clinical Medical Technology in collaboration with SUNY Downstate Health Sciences University.
- Organize two scientific symposia with the CUNY Advanced Science Research Center focused on nanoscience and structural biology.
- Continuing the update of the website and social media with educational opportunities for students.
- Continuing to try to pair students interested in cancer research with BCCC-CURE research opportunities.
- Develop a Medical Scribe Training Program for Brooklyn College students in collaboration with Maimonides Medical Center.

Research/Education

- Securing funds for summer internships for undergraduate student research (2023).
- Establish a new program for fellowships (postdoctoral, doctoral and master's students) through donations.
- Continuing with seminars to student's 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.
- Actively participate in two campaigns with the American Cancer Society: Making Strides March and ResearchHERS in October.
- Continue our established partnerships with the Leukemia and Lymphoma Society, NYC Metro Outreach, and Maimonides Community Outreach and Engagement including seminars and educational events.
- Formalize partnership with One Brooklyn Health, and Brooklyn Community Collaborative for community outreach and engagement.
- Expand our partnership with the MSKCC Disparity Office and the new MSKCC Center to open in Flatbush (close to the college) early in 2023.
- Expand our formal partnership with Cornell-Weill, Community Outreach and Engagement to train 40 certified Lay Health Advocates.
- In collaboration with Mt. Sinai, train 10 students to become Certified Lay Health Navigators.
- In collaboration with MSKCC (Dr. Abraham Aragones) establish training program for Community Health Workers.
- Expand our partnership with Haitian Community Coalition.
- Expand our collaboration with BC Health Services to provide vaccines, and screening to the Brooklyn College community.
- Organize at least 2-3 Public Outreach Seminars at community centers on the topics of cancer prevention, screening and free or low-cost treatments, e.g., Flatlands Reformed Church.
- Organize an outreach event in Fall 2023 as part of the Second Brooklyn Breast Cancer Symposium and -2-3 outreach in-person events in Spring of 2023 (one as part of the Third Brooklyn Colorectal Cancer Symposium).
- Organize and host the second BCCC-CURE Health and Wellness Fair at Brooklyn College and the Haitian Community Coalition Wellness Fair in Spring of 2023.

*\*The plans for the third year will be modified accordingly if some of the foundation grants submitted during the second/third year are awarded (to achieve the specific aims of the grants)*

**Appendixes**

- Budget for Third Year
- PDF for fliers for Scientific Seminars, Symposia & Community Outreach Events.
- Annual report (period August 2020-May 2021)