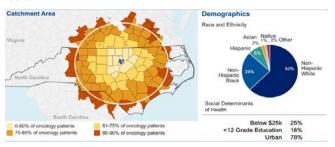
Introduction

We developed BASIC Engage: Engaging Community
Partners and Basic Scientists in Collaborative Research to
build infrastructure to facilitate community and basic
science research collaborations to address the burden of
cancer in Duke Cancer Institute's (DCI) catchment area,
with funding provided by an NCI Community Outreach and
Engagement supplement.

Catchment Area

The DCI Catchment Area and demographics are shown below.



At DCI from 2014 to 2019, breast and prostate cancer were the most commonly diagonosed, and lung and pancreatic cancer were the most fatal. Significant Black and White mortality disparities are observed for all cancers as well as breast, colorectal, liver, and pancreatic cancer specifically.

Within North Carolina, prostate cancer incidence and mortality rates exceed national averages. Eight counties in our institution's catchment area are in the highest risk tier for prostate cancer. The prostate cancer incidence rate for Black men in North Carolina is higher than for White men, and the prostate cancer mortality rate is higher than for White men.

Consistent with national statistics, lung cancer is responsible for the largest number of deaths from cancer within North Carolina. A number of the counties within North Carolina that have the highest incidence of lung cancer are within DCl's catchment area. Black people have the highest number of deaths per 100,000 persons for lung and bronchus cancer.

Community Engagement Focus

Given the burden of prostate and lung cancer within DCI's catchment area, the recognition that the local county community health assessment and the DCI Community Advisory Council (CAC) have highlighted prostate and lung cancer as priorities for collaboration, and knowing that prostate and lung cancer researchers, including trainees, within the DCI have expressed interest in community stakeholder engagement, we focused BASIC Engage on prostate and lung cancer, with a core emphasis on community engagement and collaborations in research.

At a Glance

Despite the overwhelming contributions that both basic science and community-engaged research have on improving population health, they are often viewed as separate endeavors, leading to a lack of transdisciplinary collaboration that has the potential to bolster research and improve population health. Consequently, the overarching goal of our work was to enhance and extend DCI's longstanding and robust community engagement and outreach infrastructure and its basic research infrastructure to build capacity to facilitate rigorous, high-impact community and basic science research collaborations.

Collaborators

To accomplish our goal, we collaborated with diverse stakeholders in the community, across Duke, and nationally. The CAC was pivotal in the development and implementation of the program. The Black Men's Health Initiative, led by Demetrius Harvey, a DCI CAC member, is a core partner focused on prostate cancer and has served as a patient and community advocate. Likewise, The Men's Health Council of Durham County, comprised of over 100 men who serve as community and patient advocates, partnered on developing lung and prostate cancer collaborations. The Lung Cancer Initiative Inc. is a North Carolina-based advocacy and funding organization focused on reducing the burden of lung cancer across the state. Their director of community programs serves on the DCI CAC and engaged their team and patient and community advocates to fully participate in BASIC Engage.

Like many other research programs within the DCI, the Genitourinary (GU) and Thoracic research teams have had significant interests in building their ability to collaborate with their community. We engaged several DCI research programs in broader BASIC Engage programming, while inviting six research scientists in prostate and lung cancer to participate in every aspect of the program and work closely with community partners to discover research alignment. Scientists included faculty, research associates, and postdoctoral fellows.

Lastly, we identified a strong evaluation team, ETR Services, LLC, to evaluate our program and work with DCI to identify barriers, facilitators, and recommendations to sustain the program.

The Approach

BASIC Engage has six core program activities that were implemented in one year.

BASIC Engage: Six Core Program Activities	
	BASIC Engage kickoff
M	Integration of conferences, seminars, and retreats
	Researcher and Community Training and Education
	Collaborative workshops
(1)	Developing a Funding Repository
	Evaluation

Project Activities and Outcomes

- 1. The BASIC Engage Program Kick-Off was co-hosted by the DCI CAC and included both scientists and community stakeholders. The session included a lecture focused on race, ancestry, cancer, and the critical need for community and research partnerships to advance health equity, given by Dr. Clayton Yates from Tuskegee University. The lecture was followed by a community and research scientists panel and group discussion. This program also incorporated key aspects of Research 101 and Community Engagement 101 training for both scientists and community members to build knowledge around key concepts. Outcome: 45 attendees
- 2. Integrated Seminars, Conferences, and Retreats
 Critical to this process is ensuring that program
 activities are sustainable and well-integrated in the
 DCI. We were therefore intentional in leveraging other
 entities across the DCI capitalizing on existing
 community engagement activities and building local
 and national conference partnerships. We co-hosted
 several conferences, seminars, and retreats with the
 DCI. These conferences became open to the broader
 community, and we specifically asked speakers to be
 relevant to a broader lay audience. An example of a
 co-hosted session is the DCI 2020 Cancer Disparities
 Lecture Series. In each case, we had a national
 leader present followed by a question-and-answer
 session with scientists and community. Speakers

included Dr. Melissa Davis at Weill Cornell Medicine, Dr. Robert Winn at Virginia Commonwealth University, and Dr. Scarlett Gomez at the University of California San Francisco. **Outcome**: ~250 attendees

We also collaborated with the DCI Office of Health Equity to participate in their series, *Conversations with Our Community*. During these sessions, our scientists in GU and Thoracic participated in the panels with our community partners. Likewise, the DCI Retreat planning team fully incorporated community sessions in the retreat, enhancing visibility of the program and the importance of community and scientist collaborations. **Outcome: ~300 attendees**

3. Researcher and Community Training and Education

Based on feedback from the CAC and DCI scientists, we developed specific training and education programs to build capacity of the researchers and community to effectively partner. These program activities had local and national engagement, providing our scientists and community stakeholders with opportunities to build knowledge and skills, while sharing their own expertise to a broader audience of researchers and community. This work provided critical opportunities for bidirectional co-learning.

The DCI partnered with Virginia Commonwealth University (VCU) Massey Cancer Center and the Clinical Translational Science Institute to co-host *Pathways to Trust*, a national two-hour community and researcher conference celebrating the life and legacy of Ms. Henrietta Lacks and the power of community engagement. The panel included community partners and scientists from Duke's BASIC Engage program, the Massey Cancer Center, and the CTSIs at both Duke and VCU. Key speakers included Ms. Veronica Robinson, great-grandchild of Henrietta Lacks, and Dr. Rueben Warren from Tuskegee University. **Outcome: 779 attendees**, including 311 from NC and 208 from VA, with 50 attendee recommendations for next steps.

We collaborated with Dr. Susanna Greer at the American Cancer Society and with Dr. Jory Weintraub and Dr. Karl Bates at Duke to build researcher capacity to communicate their research to diverse lay audiences.

We incorporated Research 101 for Stakeholders and Community Engagement 101 for Researchers covering topics such as the history and benefits of community engagement, power dynamics, and equity in research. **Outcome:** ~25 attendees

4. Workshop Collaborations

Two collaborative workshops were held via Zoom with research scientists and community-focused specially on aligning interests, goals, and research toward joint project and grant application development. **Overall Impact: 20 attendees, 4 new projects**

Next steps: Expansion of the program to become a sustainable joint DCI and Duke CTSI collaboration. Establishment of a sustainable funding repository. For example, the DCI Population Science Pilot Studies Request for Applications for the first time encouraged applicants to propose community engaged projects, providing an additional \$10,000 in funding and an extra page in the application to describe the community-engaged approach. The Duke CTSA has pilot funding awards for new and existing community and academic research partnerships. Funding ranges from \$1,500 for meetings to \$25,000 and \$50,000 for projects. Consultations are provided to determine best external mechanisms that might suit a given project.

5. Evaluation

A mixed-methods approach was applied to evaluate the impact of the program and solicit recommendations for capacity and sustainability. Insights were drawn from community partners (n=10) and DCI research scientists (n=49). Data will be used to enhance the program. Below are two quotes that capture community and researcher perspectives on engagement.

Implementation Guidance

Several learning lessons were identified that may serve as guidance for implementation of similar programs.

- Provide clear communication of value added and opportunities for collaborations. Meet with disease group leads and community partners to get insights and buy-in for the program.
- Leverage and integrate into existing activities such as CTSA, retreats, and community activities to maximize community and researchers' participation and enhance sustainability.
- Provide opportunities for facilitated dialogue with researchers and community, and ensure training is relevant to support bidirectional partnership, co-learning, and mitigating power dynamics.

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Everyone has a role to play. And it's a level playing field. Everyone's respected, everyone's an integral part to the research study, everyone's valued at the same level, and making it so everyone's at the table, everyone has a voice...

—Community advocate and partner

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Find Out More

To learn more about *BASIC Engage* and the Duke Cancer Institute's Community Outreach and Engagement, please visit our site at: http://www.dukecancerinstitute.org

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Community outreach and engagement (COE) activities across the translational research continuum

National Cancer Institute (NCI)-designated cancer centers' COE efforts should span all cancer center programs, including basic, clinical, translational, and population research. In FY20, NCI issued a call for Cancer Center Administrative Supplements to support COE activities that focus on either basic science or the translation of evidence-based interventions into community practice. The long-term goal of the supplement initiative is to build capacity for cancer centers' COE programs to adapt and implement evidence-based programs and successfully collaborate with cancer center investigators across research programs and in partnership with community members. To learn more, visit us at: https://cancercontrol.cancer.gov/research-emphasis/coe