



National Institutes of Health
Turning Discovery Into Health



Paving the Path to Excellence and Innovation

for Historically Black Colleges and Universities

a White Paper from the National Institutes of Health

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INTRODUCTION

For more than 150 years, Historically Black Colleges and Universities (HBCUs) have served this country as engines of economic growth, cultural diversity, and academic achievement. In particular, these venerable institutions have made a significant impact on advancing public health. From graduating overwhelming percentages of African-Americans into medical practice, to conducting breakthrough research in everything from cancer to genomes, HBCUs' ongoing contribution to American public health is undeniable.

But for all the progress and diversity HBCUs bring to American health, their partnerships with the National Institutes of Health (NIH)—the world's largest public funder of biomedical research—have been historically limited: HBCUs have not secured more than 1% of the NIH's annual acquisition award funding. Increasing that number would not only enable the NIH to be in compliance with [Executive Order #13779](#) (for all Federal Agencies to support excellence and innovation within HBCUs), it would also advance the NIH's mission to help the American people live their longest, healthiest lives.

The Small Business Program Office of the NIH has created a Strategic Plan, *Paving the Path to Excellence and Innovation*, to lift that 1% funding number to 2%. In this paper, we'll provide some context for that plan, including:

- Why HBCUs are vital to the NIH
- What's hindering more HBCU and NIH partnerships
- How the SBPO can help HBCUs win more NIH contracts

Let's start by taking a look at the HBCUs and NIH's shared century-plus tradition of advancing healthcare.

Part I

Why HBCUs are vital to the NIH



HBCU Hampton University is home to the world's only free-standing proton beam cancer treatment center. ¹

Both HBCUs and the NIH share a long history of successful advancements in healthcare. Founded in 1887 (one year after the first HBCU, incidentally), the NIH is the world's largest public funder of biomedical research. The agency invests more than \$32 billion a year to improve human life—and reduce sickness and disability. It's devoted to exploring every possible avenue to helping people live their longest, healthiest lives.

HBCUs share a similar tradition of contributing to the nation's

public health—as well as diversifying the healthcare profession. The Morehouse School of Medicine, founded in 1975, is recognized as being among the nation's leading educators of primary care physicians. Clark Atlanta University is home to the largest, most comprehensive academic prostate cancer research enterprise in the United States.² And according to a report from the National Science Foundation, Howard University is the top generator of African-American undergraduates earning

science and engineering Ph.D.s, yielding 220 in 2013—just one graduate shy of the 221 that Stanford, Harvard, MIT, and Yale produced: *combined*.³

Furthermore, 92% of the nation's African American graduating medical students come from two HBCUs: Xavier University and Howard University.⁴

Then there's the matter of elevating health for underserved communities. Take Houston's Prairie View A&M University, for instance. It houses one of America's oldest historically black colleges of nursing, founded over 100 years ago. As is the case with many other healthcare graduates of HBCUs, graduates of this school tend to serve in lower-income areas. These areas need the most help, and elevating their community's healthcare resources benefits us all.

In addition, HBCUs have made significant strides—explicitly for NIH's mission. For instance, a partnership between Hampton

University and the National Cancer Institute, part of the NIH, resulted in a \$2 million award from the Commonwealth of Virginia to assist in further developing research resources at Hampton's Proton Therapy Center. Hampton is the first HBCU to gain acceptance into the program; what's more, it's the only HBCU to establish one of our nation's 27 proton therapy centers.

The point? HBCUs advance the mission of NIH both directly and indirectly. Now the sad news: it's well-documented that these institutions are struggling to find sustainability. They are under a great deal of pressure to merge with other universities, or shut down altogether—thereby eliminating a rich and powerful contributor to NIH's mission.

At 1% of NIH funding, it's clear that HBCUs are not getting the opportunity to collaborate with the NIH to the degree that they should—nor is the NIH (or the nation) experiencing the full benefit of what HBCUs can offer to continue to advance public health.

Part II

What's Hindering HBCU and NIH Partnerships?



With 20,000 employees and 27 separate Institutes and Centers, navigating the procurement process at the NIH can be particularly daunting.

HBCUS have limited capacity to pursue contracts

Securing government funding is a complex and protracted process. Navigating that process can be doubly difficult for HBCUs. Like most academic institutions, these schools are renowned for their research and educational programs—not their ability to skillfully navigate the marketplace to win business.

The NIH's Small Business Program Office (SBPO) exists to guide entities like HBCUs through this complex process.

But many HBCUs either don't know the SBPO exists, or aren't properly informed about its services. Additionally, the current processes HBCUs use to are better suited to pursue and manage grants than contracts.

These complications are exacerbated by the fact that most HBCUs lack a dedicated acquisition resource. In many cases, it's up to the research faculty to manage the procurement process on their

own. They have competing priorities and limited time and resources. Typically, they aren't trained on how the process works. As a result, many opportunities to collaborate get missed, become stalled, or are lost in the shuffle.

The SBPO has experienced challenges in scaling its efforts.

The SPBO is a small unit tasked with a massive job—acting as the chief liaison between the NIH and countless potential partners. Like a Hollywood talent agent, they're the people with the inside connections, the industry knowledge, and past experience to help companies and schools (like HBCUs) navigate the partnership process—from identifying the right opportunities to, ideally, securing funding.

Scaling success

Every year, the NIH's Small Business Program Office assists the Office of Small & Disadvantaged Business Utilization to meet—and exceed—federal statutory annual goals by allocating approximately 28% of its funding to the small business community. Now, the SBPO

needs additional support to extend that track record of success to better serve HBCUs.

The good news is that the SPBO has a strong track record of success. Not only does it currently meet its numbers, it has also proven itself a valuable strategic partner to HBCUs, most notably with Hampton University, the first HBCU inducted as an Associate Member of Quantitative Imaging Network (QIN) at the National Cancer Institute (NCI).

But the challenges SBPO faces are ones all too common to our digital era. Time-consuming manual processes, lack of automation, persistent network issues, and undocumented workflows all add up to the SBPO not being able to optimize their effectiveness and efficiency—especially when it comes to HBCUs.

The SPBO team has repeatedly proven its ability to help entities like HBCUs secure funding. But in order to scale those capabilities to the mutual benefit of HBCUs and the NIH, the SBPO must re-evaluate the tools, processes, and procedures it uses to carry out its mission—and keep pace with the digital era.

Relationships on all sides are strained

Strong teamwork is essential to the procurement process. But currently, the SBPO, HBCUs, and other businesses that could collaborate on grants and contracts all operate largely within silos. This leads to less-than-optimal levels of strategy, accountability, and collaboration—ultimately resulting in lost opportunities for all.

The culprits are those that tend to break down any relationship. These include poor communication, unclear expectations, and damaging habits. On the one hand, the SBPO frequently receives insufficient or simply unusable input data from HBCUs. Or, it gets stalled indefinitely waiting for an HBCU representative to take action.

On the other hand, HBCUs are often frustrated that SBPO acquisition officials don't provide enough information or guidance regarding the funding process. Roles are hazily defined, flexibility is limited, and all of this adds up to tensions and roadblocks that inhibit the SBPOs and HBCUs from collaborating effectively.

Footnotes

¹ Hampton University. (2019, August 19). *Hampton University Receives Approval for New MRI Machine for HUPTI* [Press release]. Retrieved from <http://news.hamptonu.edu/release/Hampton-University-Receives-Approval-for-New-MRI-Machine-for-HUPTI>

² Clark Atlanta University. (2019, April 12). *The Atlanta University Center Consortium Celebrates 90 Years of Collaborative* [Press release]. Retrieved from <http://www.cau.edu/news/2019/04/celebrates-90-years-of-collaborative-learning.html>

³ Fiegenger, Mark K., Proudfoot, Steven L. (2013). *Baccalaureate Origins of U.S.-trained S&E Doctorate Recipients*. Arlington, VA: National Science Foundation.

⁴ Gasman, M., Smith T., Ye C., Nguyen, T. (2017). *HBCU and the Production of Doctors*. Bethesda, MD: [National Center for Biotechnology Information, U.S. National Library of Medicine](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5488881/).



Part III: The Solution

How the SBPO Can Help HBCUs Win More NIH Contracts

The Small Business Program Office of the NIH has identified three key strategic goals—and accompanying initiatives—to address the challenges facing HBCUs and help them better partner with the NIH to generate new revenue streams and continue contributing to the advancement of public health.

Strategic Goal #1

Increase HBCUs' capacity to successfully compete for NIH contracts

Key Initiatives



Provide HBCUs with information about how Federal contracting works in the NIH context.



Provide guidance to HBCUs to assist them in streamlining and standardizing their internal research administration processes to reduce the number of stalled or lost opportunities.



Cultivate HBCU senior management's commitment and action to obtain contract awards from the Federal government.



Establish chains of communication between HBCUs and the SBPO to promote stronger relationships so HBCUs can take full advantage of the NIH's services.

Strategic Goal #2

Improve Collaboration Among HBCUs, NIH and Small Businesses

Key Initiatives



Define and standardize processes so HBCUs and businesses can more effectively communicate and collaborate to obtain Federal contract awards.



Leverage technology to enable transparency around streamlined processes and drive collaboration.



Define and standardize the SBPO's role as process subject matter experts and agents that partner HBCUs and businesses to effectively obtain Federal contract awards.

Strategic Goal #3

Improve the SBPO's efficiency, efficacy, and capacity to accomplish mission

Key Initiatives



Streamline key SBPO processes to eliminate bottlenecks, close infrastructure gaps, and increase overall operational efficiency.



Design and implement an automation strategy to eliminate manual tasks, speed throughput, and reduce project delays.



Document improved business processes and create standard operating procedures (SOPs) to enforce consistency and promote accountability.



Reduce or eliminate rework and errors in order to improve the quality of communication and delivery.



CONCLUSION

In the end, this white paper—and its companion Strategic Plan—is all about realizing untapped potential. There's a tremendous opportunity for HBCUs and the NIH to collaborate together to advance national priorities in health and biomedical research. Executive Order #13779 mandates it. The American public deserves it. And HBCUs and the NIH will be better for it. At the heart of it all, the Small Business Program Office can serve as a powerful leverage point to bring everything—and everyone—together to help HBCUs go from winning 1% to 2% of NIH funding year after year after year.

About the NIH Small Business Program Office

The National Institutes of Health (NIH) Small Business Program Office serves as a counsel and an advocate for small businesses at the NIH and represents NIH to the small business industry.