



Summit on Building STEM Capacity Within HBCUs
Hosted by Spelman College
August 25, 2023 | 10:30 am - 3:00 pm

Workshop Summary and Readout

The STEM Opportunity Alliance (SOA) and our host Spelman College convened academic, philanthropic, and governmental leaders on advancing equity and excellence in the STEM ecosystem by bolstering research and innovation at historically Black colleges and universities (HBCUs). This convening brought together leaders from across the nation and enabled them to network, identify barriers to STEM equity at HBCUs, and provide input on the framework for the national strategy for achieving STEM equity and excellence.

Motivation and Goals:

SOA partners gathered at an HBCU, Morgan State University, in February 2023 for the first in a series of gatherings aimed at co-constructing the national strategy for advancing equity and excellence in STEM. At Morgan State, participants identified and discussed the many barriers precluding members of historically excluded and marginalized communities from prospering in the STEM field and brainstormed ways to fix them. In that meeting, it became apparent that further conversations were necessary to fully explore the need for developing additional STEM capacity and research infrastructure at HBCUs. HBCUs are a critical piece of the higher-education ecosystem and are instrumental in producing a large share of Black STEM professionals.

To meet the need for further conversation around HBCUs' critical role in driving STEM equity and excellence, SOA and Spelman College collaborated to convene HBCU leaders, HBCU focused organizations, philanthropies, and government officials for in-depth conversations to identify:

- **Barriers to building STEM research capacity** at HBCUs, particularly related to federal policy and grant funding (both federal & private);
- **Successful strategies** that HBCUs have used to expand STEM research and innovation capacity; and
- **Meaningful metrics** to illustrate whether barriers to building STEM research and innovation infrastructure at HBCUs are being successfully eliminated.

Key Themes:

Participants had robust discussions about the importance of increasing infrastructure capacity and research capabilities at HBCUs. Key themes from the conversation included:

- All MSIs are vitally important institutions that take up important space in the education sphere. However, it will be important to understand that HBCUs and their students have their own unique histories that impact their needs and reputations. Given this, approaches for HBCUs and other MSIs should be tailored to the unique complexities and barriers impacting these institutions and their students.
- Building increased infrastructure and capacity at HBCUs will require the involvement of additional industry partners. Industry partners should work with university officials to build relevant career pathways that can introduce students to promising sectors in the STEMM field. The creation of the career pathways will look different across HBCUs due to the differences in institutional capacity, students served, and the mission of the institution.
- Research environments are just as important as scientific output. The STEMM ecosystem must embrace HBCU laboratories and regard them as legitimate and important sources of innovation.

Implications for a National STEMM Equity Strategy:

The discussions held at this summit elevated important implications for the work that SOA partners will undertake in the coming years to build greater equity in STEMM. As such, the upcoming National Strategy for STEMM Equity and Excellence must reflect key themes and specific needs and strategies discussed in the summit, including:

- Review panels for grants are in need of greater diversity. As it stands, the vast majority of PIs granted funding are white. Adding more perspectives and voices may help to ensure that PIs from a wider variety of backgrounds and with different interests are selected.
- State and federal officials must commit to increasing federal and state funding to HBCUs with the aim of increasing these institutions' STEMM degree production among students from historically excluded and marginalized populations.
- Greater investment should be made in the research and innovation infrastructure of HBCUs' research centers to make them more robust.

Next Steps:

Importantly, participants communicated the urgent need to create processes and infrastructure needed to facilitate the coordination of strategies to improve research infrastructure and capacities at HBCUs, and to work together to turn this discussion into action. SOA will continue to leverage its position and partnerships to provide a space for individuals and organizations committed to advancing STEMM equity and excellence at HBCUs, and support field efforts to advance dedicated efforts on this important issue.