



SESSION II

Federal Support for STEM Research at HBCUs – Needs, Opportunities, & Challenges

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National Science Foundation



Department of Defense



National Institute of Standards & Technology



National Aeronautics & Space Administration

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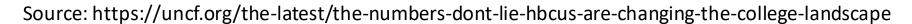
Dr. Michael New

Deputy Associate Administrator for Research, Science Mission Directorate

HBCU Value Proposition

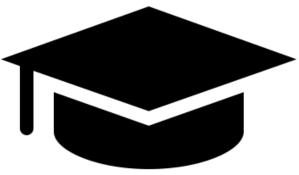
According to the United Negro College Fund, HBCUs make up less than <u>5%</u> of U.S. colleges & universities

• Yet HBCUs award more than **25%** of the bachelor's degrees to black students in STEM fields



According to the American Institute for Research, more than 1/3 of Blacks who received a STEM PhD earned their undergraduate degrees at an HBCU.

 However, most of these students went on to earn their graduate degrees from PWIs



Source: https://www.air.org

Trends in Federal Sources of R&D Expenditures

NSF Higher Education R&D (HERD) Data R&D Expenditures from Federal Sources (\$000)

	2010	2019	Difference	Change
All Institutions	\$37,477,582	\$44,455,265	\$6,977,683	19%
HBCUs	\$475,051	\$371,149	-\$103,902	-22%
HBCU % of total	1.27%	0.83%	-0.43%	-34%

- An unfavorable trend for HBCU receiving Federal Research Funding continues
- Science & Engineering represents 94% of total R&D expenditures

FY 2018 Science & Engineering Obligations by the Numbers

	Total Dollars	Significance	
All Institutions	\$35,301,384,600		
All Historically Black Colleges & Universities (HBCUs)	\$319,684,000	0.9% of total federal government funding	
Top Institution			
John Hopkins University	\$1,821,980,800		
Top HBCU			
North Carolina A&T University	\$24,231,000		
#100 Institution			
Univ. of Texas Health Science Center	\$87,620,700	~ 4 times more than highest HBCU	
#33 Institution			
Case Western Reserve University	\$318,699,200	Slightly less than all HBCUs combined	

Business Case

"HBCUs are underutilized national resources"



to maintain US global competitiveness, it is in our national best interest for HBCUs to receive a greater share of federal research dollars

Charge to Panel....



Please provide an overview of your agency's research funding opportunities for Institutions of Higher Education.

- Are there opportunities targeted specifically for HBCUs?
- Is MSU currently engaged with your agency?
 - o If so, how?
 - If not, how can MSU and other HBCUs/Minority Serving Institutions better position themselves to engage?
- Are there new upcoming research funding/workforce development opportunities in STEM that HBCUs and other minority institutions should be aware of?

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