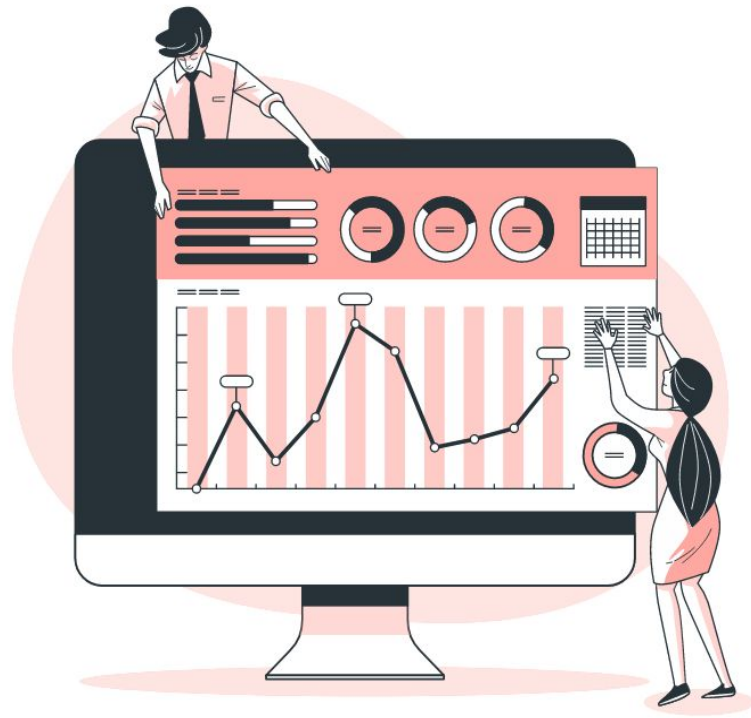


HBCU Collaboration Initiative

Jaegook (Alex) Kim
Fall 2022



HBCU: Historically Black Colleges and Universities

The Team



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About us/References



This project is from the HBCU Collaboration Team in the Getting to Know U Lab, a Vertically Integrated Project at Georgia Tech.

[Link](#) to learn more about the lab

If you wish to interact with the dashboards that are to be shown in the slides, you can accessed them through your Georgia Tech Login and [this link](#)

Purpose



To highlight potential opportunities for collaboration between Georgia Tech and HBCUs with key information about research activity, funding sources, and funding agencies.

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01 What are
HBCUs? Why
collaborate?

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01



What are HBCUs? Why collaborate?

Historically Black Colleges and Universities (HBCUs)

“Any historically black college or university that was established prior to 1964, whose principal mission was, and is, the education of black Americans”

- U.S. Department of Education (1)



Why collaborate?

- HBCUs have consistently produced leaders in their communities across the nation.
- Georgia Tech was recently awarded a \$995,550 grant from the National Science Foundation (NSF) to enable network and research enhancements for nearby HBCUs (2)
- Georgia Tech is invested to promote educational equality and opportunities to institutes with less resources



02

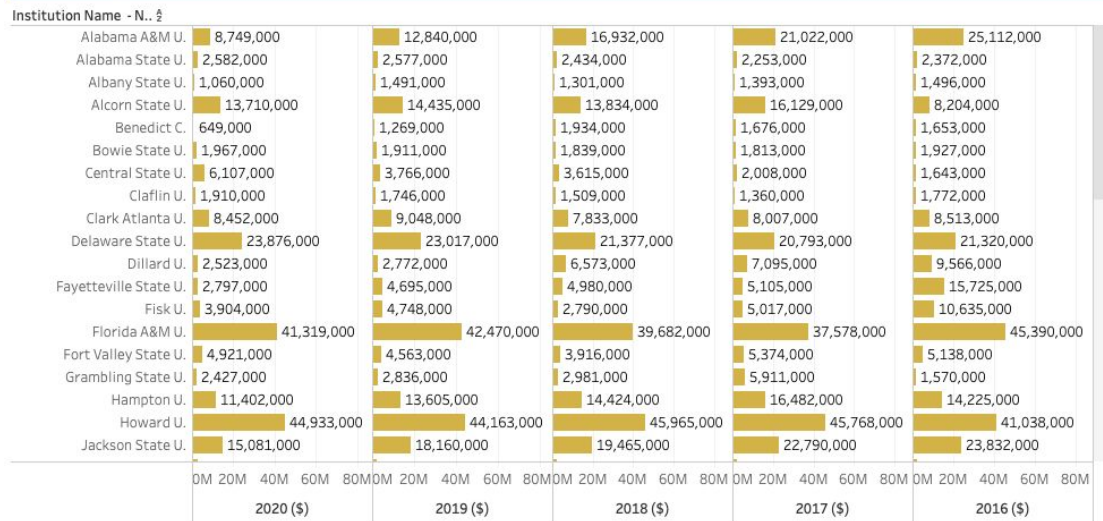
HBCU R&D Funding

\$1,048,988,000



HBCU Expenditures

Overall Expenditures



This dashboard shows:

How much funding does each HBCU receive for research per fiscal year(FY)?

[Dashboard Link](#)

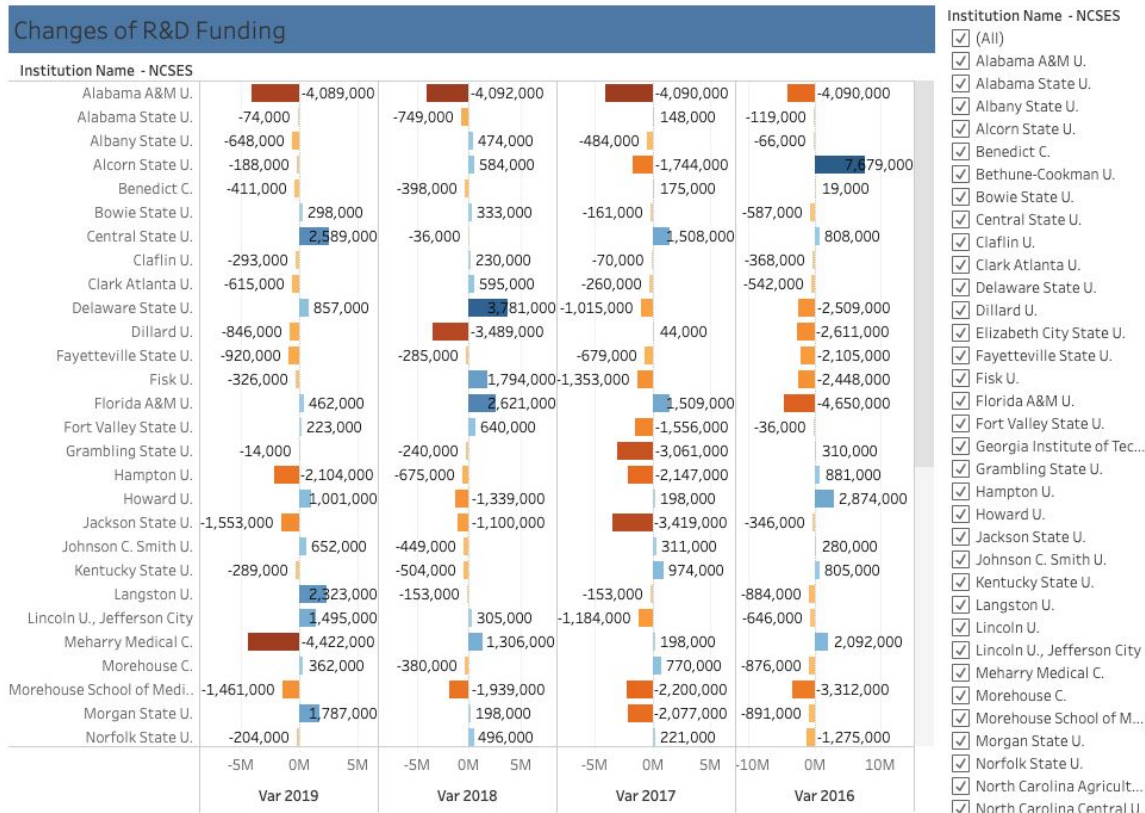


Changes in R&D Funding between FYs

This dashboard shows:

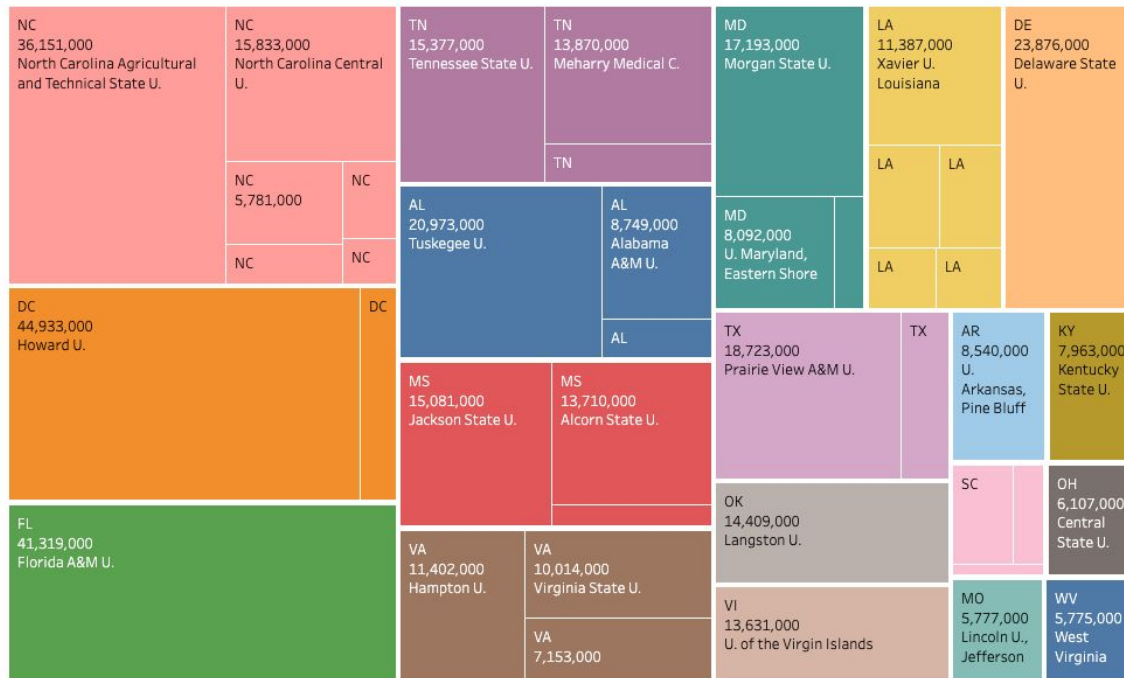
How much change in funding does each HBCU have per FY?

[Dashboard Link](#)



HBCU R&D Funding by State

Funding of HBCU by State



This dashboard shows:

- which states have the most funding for HBCUs
- which HBCUs have more funding proportional to other HBCUs

Notable findings:

- South Carolina, Louisiana, Kentucky states that are near Georgia and have low fundings

[Dashboard Link](#)

Institution Name - NCSES

(All)

State

(Multiple values)



03

Agency Fundings to HBCUs

Agency Fundings to HBCU in FY 2020

Agency Funding to HBCU in FY 2020

Institution Name - N..	DOD	ENERGY	HHS/NIH	NASA	Agency1 Non-Federal	NSF	Other Federal	USDA	Grand Total
Howard U.	2,569,000	225,000	20,121,000	188,000	15,677,000	4,974,000	1,179,000		44,933,000
Florida A&M U.	663,000	1,772,000	5,428,000	165,000	8,183,000	4,114,000	12,174,000	8,820,000	41,319,000
North Carolina Agricultur..	3,140,000	1,653,000	1,721,000	608,000	13,813,000	8,725,000	1,891,000	4,600,000	36,151,000
Morehouse School of Med..			22,489,000		7,313,000	11,000			29,813,000
Delaware State U.	315,000	269,000	4,775,000	1,057,000	11,187,000	2,456,000	491,000	3,326,000	23,876,000
Tuskegee U.	217,000		3,394,000	6,000	5,851,000	5,718,000	312,000	5,475,000	20,973,000
Prairie View A&M U.	1,410,000	205,000	128,000	520,000	9,474,000	1,904,000	137,000	4,945,000	18,723,000
Morgan State U.	1,572,000		4,554,000	3,707,000	3,092,000	2,357,000	1,859,000	52,000	17,193,000
North Carolina Central U.	66,000	141,000	8,172,000		3,046,000	3,329,000	1,069,000	10,000	15,833,000
Tennessee State U.	679,000	524,000	390,000	120,000	6,670,000	1,082,000	166,000	5,746,000	15,377,000
Jackson State U.	645,000	271,000	2,660,000	35,000	1,419,000	7,733,000	2,318,000		15,081,000
Langston U.	8,000		1,831,000	1,454,000	5,405,000	248,000		34,000	14,409,000
Meharry Medical C.	6,000		12,317,000		1,297,000		250,000		13,870,000
Alcorn State U.		52,000	107,000		6,687,000	74,000		6,790,000	13,710,000
U. of the Virgin Islands		104,000	1,775,000	790,000	1,844,000	4,492,000	1,408,000	3,218,000	13,631,000
Hampton U.	1,370,000	836,000	1,603,000	4,577,000	124,000	2,892,000			11,402,000
Xavier U. Louisiana	781,000		6,853,000	902,000	1,707,000	1,134,000	10,000		11,387,000
Virginia State U.	4,000	113,000	27,000	5,000	4,372,000	1,769,000	225,000	3,499,000	10,014,000
Alabama A&M U.	839,000	310,000	2,969,000	88,000	3,106,000	731,000	479,000	227,000	8,749,000
U. Arkansas, Pine Bluff	180,000		106,000	245,000	4,147,000	62,000	10,000	3,790,000	8,540,000
Clark Atlanta U.	709,000	239,000	2,570,000		3,128,000	1,765,000		41,000	8,452,000
U. Maryland, Eastern Shore			289,000	16,000	8,000	1,312,000	4,106,000	2,361,000	8,092,000
Kentucky State U.					3,507,000	157,000		4,299,000	7,963,000
Norfolk State U.	2,355,000	2,920,000	23,000		5,000	1,823,000	27,000		7,153,000
Central State U.				35,000	3,010,000	548,000		2,514,000	6,107,000
Winston-Salem State U.			1,596,000		1,283,000	1,729,000	1,120,000	53,000	5,781,000
Lincoln U., Jefferson City					2,141,000	251,000		3,385,000	5,777,000

Institution Name - NCSES

(Multiple values)

Agency1

(All)

This dashboard shows:

- How much funding does each HBCU receive from each agency?
- What is the grand total of funding?

Note:

- Blank cells mean no funding

Dashboard Link

Agency Fundings to by Field of Study

Agency Funding to HBCU by Field of Study

Institution ..	Broad Field	Field of Stu..	Agency1								Grand Total
			DOD	ENERGY	HHS/NIH	NASA	Non-Federal	NSF	Other Fede..	USDA	
Alabama A&M U.	Computer a..	Computer a..	99,000	8,000	14,000	3,000	67,000	96,000	12,000	2,000	301,000
	Engineering	Civil engine..	18,000	27,000	6,000	5,000	196,000	51,000	121,000	5,000	429,000
		Electrical, e..	299,000	59,000	22,000	14,000	191,000	137,000	22,000	1,000	745,000
		Mechanical ..	119,000	50,000	18,000	19,000	138,000	62,000	21,000	2,000	429,000
	Life sciences	Agricultura..	3,000	8,000	14,000	1,000	293,000	17,000	27,000	139,000	502,000
		Biological a..	48,000	26,000	879,000	5,000	417,000	86,000	32,000	28,000	1,521,000
		Health scie..	139,000	4,000	1,711,000	3,000	1,075,000	10,000	38,000	11,000	2,991,000
		Natural res..	15,000	7,000	3,000	1,000	52,000	10,000	20,000	20,000	128,000
	Mathemati..	Mathemati..	10,000	1,000	7,000	1,000	27,000	32,000	3,000	2,000	83,000
	Non-S&E fields	Business m..	1,000		1,000		63,000	3,000	7,000	1,000	76,000
		Communica..	1,000		1,000		16,000	2,000	1,000		21,000
		Education	2,000	1,000	12,000	1,000	74,000	31,000	67,000	1,000	189,000
		Humanities	1,000		1,000		37,000	1,000	4,000		44,000
		Law					14,000	1,000	4,000		19,000
		Other non-S..	3,000	1,000	9,000	1,000	71,000	7,000	16,000	7,000	115,000
		Social work			17,000		13,000		3,000		33,000
		Visual and ..					13,000	2,000			15,000
	Physical sciences	Chemistry	22,000	25,000	96,000	3,000	83,000	70,000	5,000	1,000	305,000
		Physics	42,000	92,000	11,000	20,000	72,000	82,000	11,000	1,000	331,000
	Psychology	Psychology	8,000		86,000	5,000	48,000	10,000	14,000	3,000	174,000
	Social sciences	Other socia..	5,000	1,000	31,000	5,000	80,000	10,000	26,000	2,000	160,000
		Political sci..	3,000		2,000	1,000	31,000	4,000	4,000		45,000
		Sociology, ..	1,000		28,000		35,000	7,000	21,000	1,000	93,000
	Total		839,000	310,000	2,969,000	88,000	3,106,000	731,000	479,000	227,000	8,749,000
Alabama State U.	Engineering	Electrical, e..							533,000		533,000
	Life sciences	Biological a..			631,000			1,116,000			1,747,000
		Health scie..									

Broad Field
(All)

Field of Study
(All)

Institution Name - NCSES
(All)

This dashboard shows:

- How much funding does each HBCU receive from each agency by field of study? By broad field?
- What is the total of funding for each department by the agencies?

Note:

- HBCUs that lack funding in STEM can be partnered with GT

[Dashboard Link](#)

Agency Fundings by Fields of Study - Tree Map

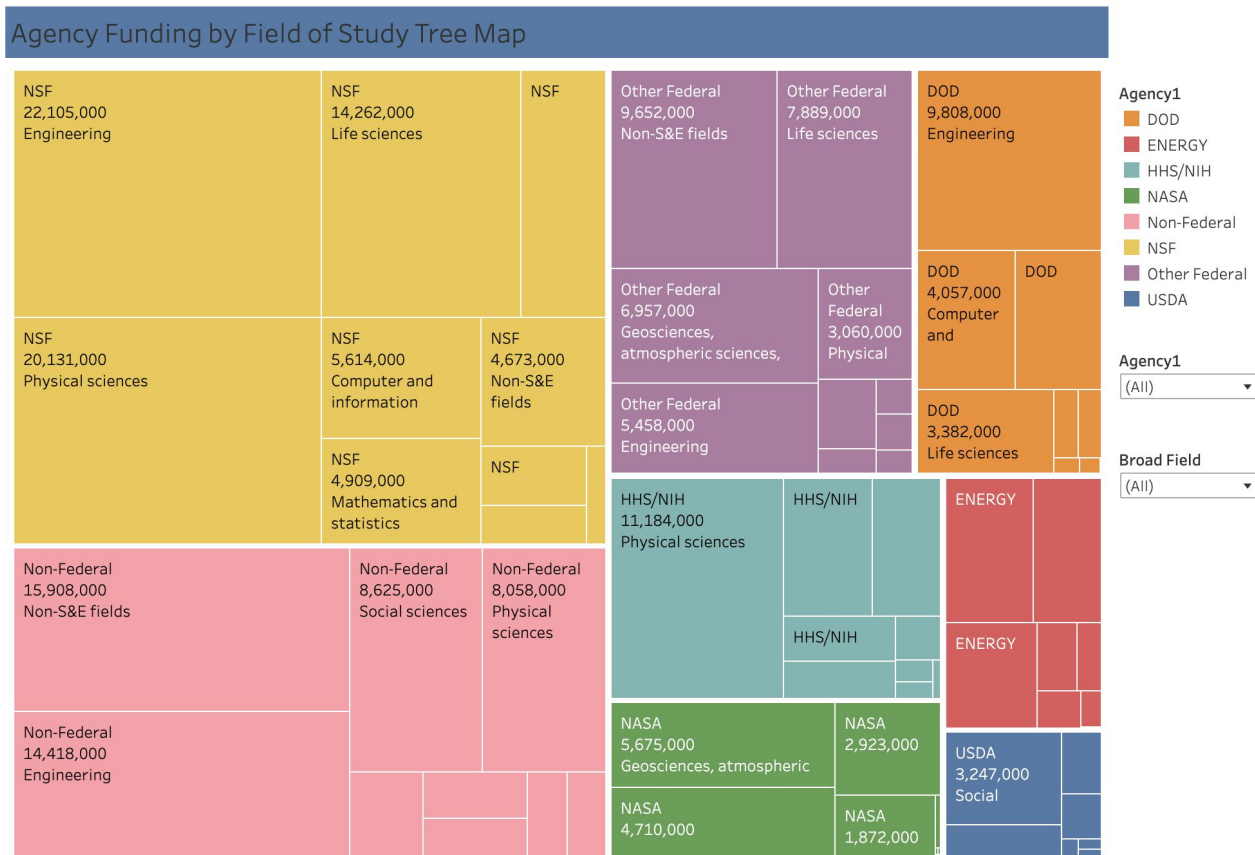
This dashboard shows:

- which agencies fund HBCUs the most
- which fields of study agencies fund the most

Note:

- STEM fields are always invested a lot more than any other field

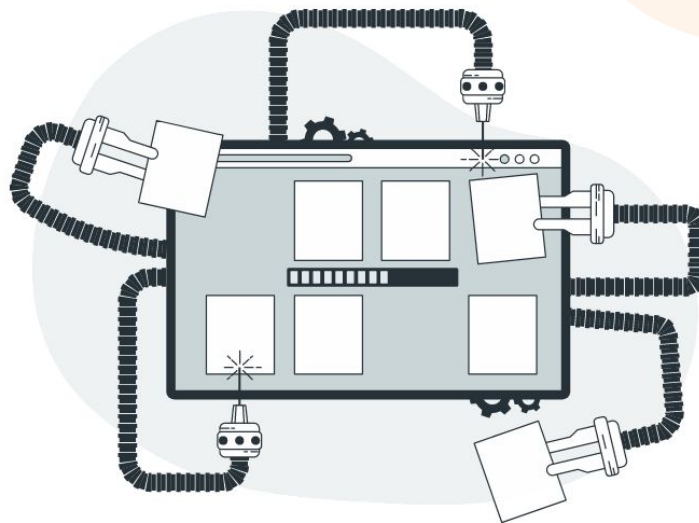
[Dashboard Link](#)



04 Moving Forward...



Future goals



Project 1

Add additional variables of publications and HBCU research interests into the dataset

Project 2

Create a new dataset that includes Minority Serving Institutions (MSI)

Project 3

Analyze which HBCUs research interests align with GT to find the most optimal HBCUs to collaborate with

Thank you!



**Questions? Feel free to
reach out!**

Email: alex.jg.kim@gatech.edu

Resources

All dashboards can be accessed through Georgia Tech Login and [this link](#)

Data Source for HBCUs

- National Center for Science and Engineering Statistics (NCSES)
- Higher Education Research and Development (HERD)
- Integrated Postsecondary Education Data System (IPEDS)
- Bureau of Labor Statistics

Citations

1. U.S. Department of Education. “What Is an HBCU? | White House Initiative on Historically Black Colleges and Universities.” Ed.gov, 2018, sites.ed.gov/whhbcu/one-hundred-and-five-historically-black-colleges-and-universities/.
2. Hill, Courtney. “Georgia Tech to Help Expand Research at Historically Black Colleges and Universities | News Center.” News.gatech.edu, 13 July 2022, news.gatech.edu/news/2022/07/13/georgia-tech-help-expand-research-historically-black-colleges-and-universities. Accessed 8 Dec. 2022.

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