

F
Y

2
0
2
2



RESEARCH CATALOG



OCTOBER 2022

PREFACE

FY 2022 RESEARCH CATALOG

The external resources identified in the *Research Catalog* are an indication of the national competitiveness of the universities in the state of Mississippi and of the quality research and sponsored programs they conduct. These resources provide essential funds to the state's public universities which strengthen the research, teaching, and service missions of the universities.

The *Research Catalog* is mandated by the State through the University Research Center Act of 1988 (§ 37-141-17). The publication lists the funding amounts by the sources of funding and by the university disciplines receiving the funding. It is designed for use by state policy makers, the educational community, economic developers, and the general public as a resource to:

1. Assist in developing strong legislative funding support for research,
2. Improve the regional, national, and international image of Mississippi universities as research institutions,
3. Encourage continued and expanded external funding support for state university research and sponsored programs, and
4. Enhance further development of technology transfer and practical applications of research which impact the state's economy.

The *Research Catalog* includes only external awards and non-appropriated state awards for research and sponsored programs. External funds for student financial aid are not included in the totals.

For more specific information about university research programs, contact the designated research official listed for each university. For additional information about the Research Catalog, contact:

Office of Strategic Research
3825 Ridgewood Road
Jackson, MS 39211
Phone: (601) 432-6445
www.mississippi.edu/research

**BOARD OF TRUSTEES
STATE INSTITUTIONS of HIGHER LEARNING**

Thomas Duff, President
Hattiesburg

Dr. Alfred E. McNair, Jr., Vice President
Ocean Springs

Dr. Ormella Cummings
Tupelo

Dr. Steven Cunningham
Hattiesburg

Teresa Hubbard
Oxford

Jeanne Carter Luckey
Ocean Springs

Bruce Martin
Meridian

Chip Morgan
Leland

Powell “Gee” Ogletree, Jr.
Ridgeland

Hal Parker
Bolton

Gregory Rader
Columbus

Dr. J. Walt Starr
Columbus

Dr. Alfred Rankins, Jr.
Commissioner of Higher Education

INSTITUTION EXECUTIVE OFFICERS

Dr. Felecia M. Nave, President
Alcorn State University

Dr. E. E. Caston, Interim President
Delta State University

Mr. Thomas K. Hudson, President
Jackson State University

Dr. Mark E. Keenum, President
Mississippi State University

Ms. Nora R. Miller, President
Mississippi University for Women

Dr. Jerryl Briggs, President
Mississippi Valley State University

Dr. Glenn Boyce, Chancellor
University of Mississippi

Dr. Joseph Paul, President
University of Southern Mississippi

Dr. LouAnn H. Woodward, Vice Chancellor for Health Affairs
University of Mississippi Medical Center

Dr. Keith Coble, Vice President
Agriculture, Forestry and Veterinary Medicine
Mississippi State University

TABLE OF CONTENTS

Preface.....	i
Board of Trustees.....	ii
Institutional Executive Officers.....	iii
Table of Contents.....	iv
System Summary.....	1
System History.....	2
System Trend of Federal Funding.....	3
Federal Funding in Descending Order.....	4
System Trend of Non-Federal Funding.....	5
Alcorn State University.....	6
Delta State University.....	7
Jackson State University.....	8
Mississippi State University.....	9
Mississippi University for Women.....	11
Mississippi Valley State University.....	12
University of Mississippi with the University of Mississippi Medical Center.....	13
University of Southern Mississippi.....	15
IHL Executive Office.....	17
UNIVERSITY RESEARCH GROUPS.....	18
Mississippi University Research Authority (MURA).....	19
Mississippi Research Consortium (MRC).....	20
Mississippi Education and Research Group (MERG).....	21

MISSISSIPPI INSTITUTIONS OF HIGHER LEARNING

FY 2022 Research Catalog - IHL System Summary

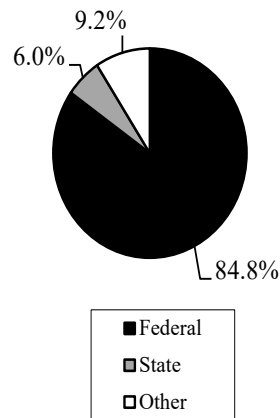
Dr. Alfred Rankins, Commissioner

Period Covered: July 1, 2021 - June 30, 2022

University	Federal*	State/Local	Private/ Corporate/Other	Total Funding Awarded
ASU	\$20,356,021	\$1,809,765	\$2,479,705	\$24,645,491
DSU	\$4,163,554	\$524,459	\$1,445,923	\$6,133,936
JSU	\$86,257,738	\$6,662,096	\$8,764,261	\$101,684,095
MSU	\$224,241,395	\$7,493,955	\$19,171,480	\$250,906,830
MUW**	\$145,000	\$5,295,231	\$60,500	\$5,500,731
MVSU	\$20,632,624	\$743,448	\$1,586,821	\$22,962,893
UM/UMMC	\$139,982,045	\$3,606,518	\$27,574,093	\$171,162,656
USM	\$75,080,048	\$14,660,454	\$1,718,988	\$91,459,490
Exec. Office	\$7,738,207	\$413,867	\$0	\$8,152,074
SYSTEM	\$578,596,632	\$41,209,793	\$62,801,771	\$682,608,196

University	Total Research Projects Supported*
ASU	46
DSU	42
JSU	182
MSU	965
MUW**	11
MVSU	25
UM/UMMC	659
USM	306
Exec. Office	6
SYSTEM	2,242

Percent of Funding Sources



*Includes federal HEERF/CARES funds disbursed from multiple agencies.

** MUW amount includes funds for the Mississippi School for Math and Science.

MISSISSIPPI INSTITUTIONS OF HIGHER LEARNING

System History - Research and Sponsored Programs

Total External Funding Five-Year Comparison

University	FY 2018	FY 2019	FY2020*	FY 2021*	FY 2022*
ASU	\$13,024,178	\$15,596,654	\$32,310,993	\$52,691,221	\$24,645,491
DSU	\$4,993,152	\$3,761,373	\$5,589,152	\$15,535,871	\$6,133,936
JSU	\$26,242,939	\$25,837,499	\$54,370,695	\$96,362,070	\$101,684,095
MSU	\$197,478,484	\$210,700,057	\$260,095,082	\$334,019,338	\$250,906,830
MUW**	\$5,109,048	\$5,069,273	\$7,644,973	\$19,645,022	\$5,500,731
MVSU	\$7,400,959	\$8,455,354	\$15,293,881	\$29,592,299	\$22,962,893
UM/UMMC	\$134,735,332	\$133,749,642	\$153,685,366	\$242,380,932	\$171,162,656
USM	\$70,285,398	\$72,672,919	\$75,450,103	\$122,583,637	\$91,459,490
Exec. Office	\$5,091,348	\$2,626,739	\$2,142,455	\$3,862,398	\$8,152,074
SYSTEM	\$464,360,838	\$478,469,510	\$606,582,700	\$916,672,788	\$682,608,196

Percent Change in Total External Funding

University	FY 2018 to FY 2019	FY 2019 to FY 2020	FY 2020 to FY 2021	FY 2021 to FY 2022
ASU	19.8%	107.2%	63.1%	-53.2%
DSU	-24.7%	48.6%	178.0%	-60.5%
JSU	-1.5%	110.4%	77.2%	5.5%
MSU	6.7%	23.4%	28.4%	-24.9%
MUW**	-0.8%	50.8%	157.0%	-72.0%
MVSU	14.2%	80.9%	93.5%	-22.4%
UM	-0.7%	14.9%	57.7%	-29.4%
USM	3.4%	3.8%	62.5%	-25.4%
Exec. Office	-48.4%	-18.4%	80.3%	111.1%
SYSTEM	3.0%	26.8%	51.1%	-25.5%

Percent Change in Total Projects Supported

Fiscal Year	# of Projects	% Change
FY 2018	2,470	2.6%
FY 2019	2,607	5.5%
FY 2020*	2,020	-22.5%
FY 2021*	2,115	4.7%
FY 2022*	2,242	6.0%

*Includes federal HEERF/CARES funds disbursed from multiple agencies.

** MUW amount includes funds for the Mississippi School for Math and Science.

**FY 2022 Research and Sponsored Programs
System Trend of Federal External Funding**

Funding Source	2020 Total*	2021 Total*	2022 Total*	% Change	
				2020-22	2021-22
Agency for Healthcare Research and Quality	\$0	\$600,000	\$3,000	--	-99.5%
Appalachian Regional Commission	\$190,573	\$0	\$1,971,728	934.6%	--
Central Intelligence Agency	\$0	\$0	\$215,000	--	--
Corporation for National & Community Service	\$1,514,738	\$1,318,590	\$1,339,997	-11.5%	1.6%
Corporation for Public Broadcasting	\$0	\$274,187	\$338,434	--	23.4%
Delta Health Alliance	\$24,784	\$0	\$0	-100.0%	--
Delta Regional Authority	\$0	\$250,000	\$0	--	-100.0%
Federal Aviation Association	\$0	\$0	\$121,763	--	--
Federal Communication Commission	\$1,000,000	\$0	\$0	-100.0%	--
Health Resource and Services Administration	\$10,119,404	\$14,527,496	\$23,053,011	127.8%	58.7%
HEERF/CARES	\$0	\$0	\$52,997,837	--	--
Hexagon	\$44,235	\$0	\$0	-100.0%	--
Institute of Museum and Library Sciences	\$0	\$23,994	\$50,000	--	108.4%
IREX-Global UG Exchange Program	\$0	\$0	\$29,001	--	--
Library of Congress	\$200,000	\$220,000	\$188,281	-5.9%	-14.4%
Military Suicide Research Consortium	\$0	\$14,825	\$0	--	-100.0%
Mississippi Band of Choctaw Indians	\$0	\$0	\$5,000	--	--
MS Delta National Heritage Area	\$0	\$15,000	\$0	--	-100.0%
National Aeronautics and Space Administration	\$3,746,195	\$9,579,306	\$5,519,558	47.3%	-42.4%
National Endowment for the Arts	\$11,000	\$8,100	\$25,000	127.3%	208.6%
National Endowment for the Humanities	\$401,657	\$452,863	\$70,400	-82.5%	-84.5%
National Geospatial Agency	\$357,500	\$368,614	\$270,020	-24.5%	-26.7%
National Historical Publications and Records Commission	\$16,859	\$0	\$0	-100.0%	--
National Institutes of Health*	\$65,486,833	\$75,445,117	\$72,971,924	11.4%	-3.3%
National Museum of African American History and Culture	\$0	\$0	\$128,250	--	--
National Park Service	\$864,926	\$832,411	\$400,000	-53.8%	-51.9%
National Science Foundation	\$26,875,017	\$25,769,262	\$33,496,480	24.6%	30.0%
National Security Agency	\$0	\$89,988	\$500,319	--	456.0%
Nuclear Regulatory Commission	\$0	\$54,000	\$0	--	-100.0%
Tennessee Valley Authority	\$70,000	\$130,000	\$583,000	732.9%	348.5%
U.S. Agency for International Development	\$5,761,803	\$2,630,348	\$1,374,006	-76.2%	-47.8%
U.S. Air Force	\$0	\$308,000	\$320,964	--	4.2%
U.S. Army	\$22,000	\$0	\$0	-100.0%	--
U.S. Army Engineer Research & Development Center	\$2,340,000	\$0	\$0	-100.0%	--
U.S. Department of Agriculture	\$80,862,571	\$82,297,433	\$80,624,509	-0.3%	-2.0%
U.S. Department of Commerce	\$50,093,767	\$33,671,025	\$32,290,133	-35.5%	-4.1%
U.S. Department of Defense	\$67,450,982	\$60,246,013	\$54,737,185	-18.8%	-9.1%
U.S. Department of Education	\$134,624,390	\$398,401,876	\$83,030,336	-38.3%	-79.2%
U.S. Department of Educational and Cultural Affairs	\$34,419	\$0	\$0	-100.0%	--
U.S. Department of Energy	\$10,973,647	\$8,247,533	\$14,208,395	29.5%	72.3%
U.S. Department of Health and Human Services	\$31,143,518	\$39,909,340	\$59,789,135	92.0%	49.8%
U.S. Department of Homeland Security	\$802,396	\$6,333,655	\$11,179,422	1293.3%	76.5%
U.S. Department of Housing and Urban Development	\$290,189	\$0	\$706,898	143.6%	--
U.S. Department of Interior	\$5,971,795	\$1,443,291	\$8,485,573	42.1%	487.9%
U.S. Department of Justice	\$192,634	\$1,524,991	\$3,340,016	1633.9%	119.0%
U.S. Department of Labor	\$6,444,086	\$5,960,713	\$9,544,675	48.1%	60.1%
U.S. Department of State	\$0	\$0	\$108,849	--	--
U.S. Department of the Treasury	\$7,595,064	\$8,947,562	\$7,715,857	1.6%	-13.8%
U.S. Department of Transportation	\$6,117,379	\$10,753,397	\$10,142,654	65.8%	-5.7%
U.S. Department of Veterans Affairs	\$91,260	\$127,610	\$20,466	-77.6%	-84.0%
U.S. Environmental Protection Agency	\$5,940,068	\$2,206,945	\$2,919,315	-50.9%	32.3%
U.S. Fish and Wildlife Service	\$0	\$126,605	\$0	--	-100.0%
U.S. Geological Survey	\$687,914	\$350,042	\$174,061	-74.7%	-50.3%
U.S. National Archives and Records Administration	\$340,424	\$100,000	\$108,925	-68.0%	8.9%
U.S. Navy	\$75,000	\$0	\$0	-100.0%	--
U.S. Securities and Exchange Commission	\$0	\$272,122	\$210,098	--	-22.8%
U.S. Small Business Administration	\$4,541,223	\$2,783,903	\$3,287,157	-27.6%	18.1%
Total	\$533,320,250	\$796,616,157	\$578,596,632	8.5%	-27.4%

*Includes federal HEERF/CARES funds disbursed from multiple agencies.

Summary of Federal External Funding by Funding Source
in Descending Order of Totals by Source, FY 2022*

	ASU	DSU	JSU	MSU	MUW	MVSU	UM	USM	EO	Grand Total
U.S. Department of Education	7,495,275	2,715,374	25,840,075	16,898,985		6,099,080	14,983,113	3,475,950	5,522,484	83,030,336
U.S. Department of Agriculture	11,939,512			58,709,690			8,714,422	1,260,885		80,624,509
National Institutes of Health*		170,899	5,007,167	8,205,684	115,000		59,473,174			72,971,924
U.S. Department of Health and Human Services*			9,999,938	28,926,997			9,582,716	9,636,757	1,642,727	59,789,135
U.S. Department of Defense			1,508,136	25,334,882			10,784,670	17,109,497		54,737,185
HEERF/CARES			36,919,804			14,456,935	0	1,621,098		52,997,837
National Science Foundation		36,353	6,316,124	18,153,719		76,609	5,252,043	3,661,652		33,496,480
U.S. Department of Commerce				13,735,997			624,924	17,929,212		32,290,133
Health Resource and Services Association				1,432,951			21,620,060			23,053,011
U.S. Department of Energy	47,800			13,313,252			515,344	331,999		14,208,395
U.S. Department of Homeland Security				4,103,872			277,890	6,797,660		11,179,422
U.S. Department of Transportation				9,764,265			378,389			10,142,654
U.S. Department of Labor				9,344,675			149,500	200,000		9,544,675
U.S. Department of Interior	500,000			5,743,140			89,340	7,545,439		8,485,573
U.S. Department of the Treasury				1,950,761	30,000		1,387,069	1,961,619		7,634,779
National Aeronautics and Space Administration		15,000	175,109	418,219			2,850,640	71,157		5,519,558
U.S. Department of Justice				1,237,568			1,789,589	110,000		3,340,016
U.S. Small Business Administration			150,000	1,823,214			999,957	96,144		3,287,157
U.S. Environmental Protection Agency				1,971,728						2,919,315
Appalachian Regional Commission				1,374,006						1,971,728
U.S. Agency of International Development				120,194			200,384	362,243	572,996	1,374,006
Corporation for National & Community Service		84,180								1,339,997
U.S. Department of Housing and Urban Development								706,898		706,898
Tennessee Valley Authority				583,000						583,000
National Security Agency				500,319			0			500,319
U.S. National Park Service			400,000							400,000
Corporation for Public Broadcasting	338,434									338,434
U.S. Air Force				320,964						320,964
National Geospatial Agency (NGA)		270,020								270,020
Central Intelligence Agency				215,000						215,000
U.S. Securities and Exchange Commission							210,098			210,098
U.S. Geological Survey				174,061						174,061
National Museum of African American History and Culture										128,250
Federal Aviation Association via MS State University		121,763								121,763
U.S. National Archives and Records Admin								108,925		108,925
U.S. Department of State				108,849						108,849
National Library of Congress				104,286						104,286
Library of Congress								83,995		83,995
U.S. Department of Treasury				81,078						81,078
National Endowment for the Humanities	35,000			23,672			11,728			70,400
Institute of Museum and Library Sciences				50,000			0			50,000
IREX-Global UG Exchange Program										29,001
National Endowment for the Arts		29,001								29,001
U.S. Department of Veterans Affairs				25,000						25,000
Mississippi Band of Choctaw Indians				20,466						20,466
Agency for Healthcare Research and Quality - Covid Funding				5,000						5,000
Grand Total	20,356,021	4,163,554	86,257,738	224,241,395	145,000	20,632,624	139,982,045	75,080,048	7,738,207	578,596,632

* Includes federal HEERF/CARES funds disbursed from multiple agencies.

FY 2022 Research and Sponsored Programs
System Trend of State, Private, Corporate, & Other External Funding

Funding Source	2020 Total	2021 Total	2022 Total	2020-22	2021-22
				% Change	% Change
State Funding [other than general appropriation]	\$4,852,470	\$6,563,494	\$4,883,733	0.6%	-25.6%
State of Mississippi Agencies	\$18,419,466	\$50,616,792	\$32,546,979	76.7%	-35.7%
Private/Corporate Business and Industry	\$19,903,528	\$30,810,110	\$21,247,336	6.8%	-31.0%
Foundations and Non-Profit Groups*	\$24,776,967	\$25,796,963	\$33,272,824	34.3%	29.0%
Other In-State Universities	\$1,626,229	\$2,010,792	\$2,335,558	43.6%	16.2%
Other Out-of-State Universities	\$1,826,083	\$2,998,589	\$4,211,673	130.6%	40.5%
Local Governments	\$921,149	\$837,417	\$1,443,523	56.7%	72.4%
Other State Governments	\$395,971	\$156,977	\$2,902,340	633.0%	1748.9%
Foreign Governments & Organizations	\$408,587	\$255,497	\$927,562	127.0%	263.0%
Other [all other sources not listed above]	\$132,000	\$10,000	\$240,036	81.8%	2300.4%
Total	\$73,262,450	\$120,056,631	\$104,011,564	42.0%	-13.4%

Percent of Total	2020 Total	2021 Total	2022 Total	2020-22	2021-22
				Change	Change
State Funding [other than general appropriation]	6.6%	5.5%	4.7%	-1.9%	-0.8%
State of Mississippi Agencies	25.1%	42.2%	31.3%	6.1%	-10.9%
Private/Corporate Business and Industry	27.2%	25.7%	20.4%	-6.7%	-5.2%
Foundations and Non-Profit Groups*	33.8%	21.5%	32.0%	-1.8%	10.5%
Other In-State Universities	2.2%	1.7%	2.2%	0.0%	0.6%
Other Out-of-State Universities	2.5%	2.5%	4.0%	1.6%	1.6%
Local Governments	1.3%	0.7%	1.4%	0.1%	0.7%
Other State Governments	0.5%	0.1%	2.8%	2.2%	2.7%
Foreign Governments & Organizations	0.6%	0.2%	0.9%	0.3%	0.7%
Other [all other sources not listed above]	0.2%	0.0%	0.2%	0.1%	0.2%
Total	100.0%	100.0%	100.0%	0.0%	0.0%

*Includes federal HEERF/CARES funds disbursed from multiple agencies.

Alcorn State University
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022

Dr. Felecia M. Nave
Phone number: 601-877-6111

Dr. Keith McGee, Chief Research Officer
Phone number: 601-877-6198

I. Funding Distribution - College/Division	Number of Projects	Amount
Office of Community Development	9	\$6,187,738
School of Agriculture, Research, Extension, and Applied Sciences	21	\$10,072,665
School of Arts and Sciences	8	\$443,286
School of Business	0	\$0
School of Education and Psychology	3	\$794,077
School of General College of Excellence	2	\$758,990
School of Graduate Studies	0	\$0
School of Nursing	2	\$207,200
Title III Strengthening Institutional Programs	1	\$6,181,535
TOTAL	46	\$24,645,491
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Endowment for the Humanities	1	\$35,000
U.S. Department of Agriculture	16	\$11,939,512
U.S. Department of Education	5	\$7,495,275
U.S. Department of Energy	1	\$47,800
U.S. Department of Interior	1	\$500,000
Corporation for Public Broadcasting	3	\$338,434
HEERF	0	\$0
TOTAL Federal Sources	27	\$20,356,021
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	3	\$1,594,765
Private/Corporate Business and Industry	0	\$0
Foundations and Non-Profit Groups	5	\$994,765
Other In-State Universities	2	\$215,000
Other Out-of-State Universities	9	\$1,484,940
Local Governments	0	\$0
Other State Governments	0	\$0
Foreign Governments & Organizations	0	\$0
Other [all other sources not listed above]	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	19	\$4,289,470
GRAND TOTAL of ALL EXTERNAL FUNDING	46	\$24,645,491

Delta State University
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022

Mr. Butch Caston, Interim President
Phone number: 662-846-4000

Ms. Heather K. Miller, Chief Research Officer
Phone Number: 662-846-4804

I. Funding Distribution - College/Division	Number of Projects	Amount
Bologna Performing Arts Center	6	\$29,150
Center for Community and Economic Development	5	\$3,117,308
College of Arts and Sciences	9	\$505,672
College of Business and Aviation	2	\$442,727
College of Education and Human Sciences	3	\$590,809
Delta Center for Culture and Learning	2	\$500,000
Delta Music Institute	2	\$33,750
Graduate and Continuing Studies	1	\$140,000
Office of Diversity, Equity, and Inclusion	3	\$7,500
Office of Student Affairs	2	\$32,500
Robert E. Smith School of Nursing	3	\$208,400
Student Success Center	4	\$526,120
TOTAL	42	\$6,133,936
II. Funding Sources:		
FEDERAL External Funding by Agency/Department		
Corporation for National & Community Service	1	\$84,180
IREX-Gobal UG Exchange Program	1	\$29,001
National Aeronautics and Space Administration	1	\$15,000
National Institutes of Health	2	\$170,899
National Science Foundation	1	\$36,353
U.S. Department of Education	3	\$2,715,374
National Park Service	1	\$400,000
National Geospatial Agency	2	\$270,020
U.S. Air Force	1	\$320,964
Federal Aviation Association via MS State University	1	\$121,763
TOTAL Federal Sources	14	\$4,163,554
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State of Mississippi Agencies	8	\$524,459
Foundations and Non-Profit Groups	20	\$1,445,923
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	28	\$1,970,382
 GRAND TOTAL of ALL EXTERNAL FUNDING	 42	 \$6,133,936

Jackson State University
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022

Mr. Thomas K. Hudson, President
Phone number: 601-979-2323

Dr. Joseph A. Whittaker, Vice President for Research and Economic Development
Phone number: 601-979-2008

	Number of Projects	Amount
I. Funding Distribution - College/Division		
Office of the President	36	\$61,190,358
College of Business	3	\$135,297
College of Education and Human Development	10	\$2,506,494
College of Health Sciences	14	\$12,749,286
College of Liberal Arts	16	\$2,426,102
College of Engineering, Science and Technology	75	\$15,270,468
Department of Public Safety	0	\$0
Division of Academic Affairs	16	\$5,767,044
Division of Institutional Advancement	4	\$516,235
Office of Research and Economic Development	8	\$1,122,811
Student Affairs	0	\$0
TOTAL	182	\$101,684,095
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
Health Resource and Services Association	0	\$0
HEERF/CARES	1	\$36,919,804
National Library of Congress	1	\$104,286
National Aeronautics and Space Administration	2	\$175,109
National Museum of African American History and Culture	1	\$128,250
National Institutes of Health	14	\$5,007,167
National Science Foundation	18	\$6,316,124
U.S. Department of Defense	6	\$1,508,136
U.S. Department of Education	42	\$25,840,075
U.S. Department of Health and Human Services	1	\$9,999,938
U.S. Department of State	1	\$108,849
U.S. Small Business Administration	1	\$150,000
TOTAL Federal Sources	88	\$86,257,738
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	17	\$4,025,075
Private/Corporate Business and Industry	4	\$131,620
Foundations and Non-Profit Groups	31	\$3,678,308
Other State Governments	1	\$2,753,701
Other In-State Universities	18	\$1,920,021
Other Out-of-State Universities	22	\$2,200,632
Local Governments	1	\$717,000
Foreign Governments & Organizations	0	\$0
Other [all other sources not listed above]	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	94	\$15,426,357
GRAND TOTAL of ALL EXTERNAL FUNDING	182	\$101,684,095

**Mississippi State University
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022**

**Dr. Mark E. Keenum, President
Phone number: 662-325-3221**

**Dr. Julie Jordan, Vice President for Research and Economic Development
Phone number: 662-325-3570**

I. Funding Distribution - College/Division	Number of Projects	Amount
Bagley College of Engineering	120	\$47,036,052
College of Architecture, Art, and Design	14	\$555,125
College of Arts and Sciences	100	\$12,489,680
College of Business	6	\$1,375,568
College of Education	34	\$4,789,263
College of Forest Resources/Forest Wildlife Research Center	109	\$15,666,412
College of Veterinary Medicine	32	\$4,871,252
Division of Student Affairs	10	\$1,486,973
Mitchell Memorial Library	2	\$6,487
MS Agricultural and Forestry Experiment Station (MAFES)/CALs	250	\$32,972,406
MS State University Extension Service (MSU ES)	142	\$47,232,323
University Branch Campus (Meridian)	3	\$1,087,568
University Centers and Institutes	136	\$72,731,684
Vice President for Campus Services	1	\$2,742,395
Vice President for Research and Economic Development	6	\$5,863,642
TOTAL	965	\$250,906,830

II. Funding Sources	Number of Projects	Amount
FEDERAL External Funding by Agency/Department		
Appalachian Regional Commission	3	\$1,971,728
Central Intelligence Agency	1	\$215,000
Corporation for National & Community Service	2	\$120,194
Health Resource and Services Association	2	\$1,432,951
HEERF/CARES	0	\$0
Institute of Museum and Library Sciences	1	\$50,000
Mississippi Band of Choctaw Indians	1	\$5,000
National Aeronautics and Space Administration	24	\$1,950,761
National Endowment for the Arts	2	\$25,000
National Endowment for the Humanities	6	\$23,672
National Institutes of Health	35	\$8,205,684
National Science Foundation	51	\$18,153,719
National Security Agency	1	\$500,319
Tennessee Valley Authority	2	\$583,000
U.S. Agency of International Development	5	\$1,374,006
U.S. Department of Agriculture	199	\$58,709,690
U.S. Department of Commerce	39	\$13,735,997
U.S. Department of Defense	40	\$25,334,882
U.S. Department of Education	27	\$16,898,985
U.S. Department of Energy	31	\$13,313,252
U.S. Department of Health and Human Services	32	\$28,926,997
U.S. Department of Homeland Security	2	\$4,103,872

Mississippi State University
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022

II. Funding Sources (Continued)	Number of Projects	Amount
FEDERAL External Funding by Agency/Department		
U.S. Department of Interior	41	\$5,743,140
U.S. Department of Justice	7	\$418,219
U.S. Department of Labor	7	\$9,344,675
U.S. Department of Transportation	12	\$9,764,265
U.S. Department of Treasury	1	\$81,078
U.S. Department of Veterans Affairs	1	\$20,466
U.S. Environmental Protection Agency	13	\$1,823,214
U.S. Geological Survey	2	\$174,061
U.S. Small Business Administration	4	\$1,237,568
TOTAL Federal Sources	594	\$224,241,395
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	41	\$7,314,428
Private/Corporate Business and Industry	99	\$5,044,655
Foundations and Non-Profit Groups	200	\$13,456,846
Other In-State Universities	0	\$0
Other Out-of-State Universities	5	\$42,189
Local Governments	13	\$179,527
Other State Governments	5	\$109,439
Foreign Governments & Organizations	8	\$518,351
Other [all other sources not listed above]	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER	371	\$26,665,435
GRAND TOTAL of <u>ALL</u> EXTERNAL FUNDING	965	\$250,906,830

**Mississippi University for Women
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022**

**Ms. Nora Miller, President
Phone number 662-329-7100**

**Dr. C. Scott Tollison, Provost & Vice President for Academic Affairs
Phone number: 662-329-7142**

I. Funding Distribution - College/Division	Number of Projects	Amount
Academic Support*	2	\$4,886,733
Center for Outreach and Innovation	1	\$411,498
College of Arts, Sciences, & Education	8	\$202,500
TOTAL	11	\$5,500,731

*Includes total for Mississippi School for Math and Science

II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Aeronautics and Space Administration	2	\$30,000
National Institutes of Health	2	\$115,000
TOTAL Federal Sources	4	\$145,000

STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	1	\$4,883,733
State of Mississippi Agencies	1	\$411,498
Private/Corporate Business and Industry	0	\$0
Foundations and Non-Profit Groups	5	\$60,500
Other In-State Universities	0	\$0
Other Out-of-State Universities	0	\$0
Local Governments	0	\$0
Other State Governments	0	\$0
Foreign Governments & Organizations	0	\$0
Other [all other sources not listed above]	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	7	\$5,355,731

GRAND TOTAL of <u>ALL</u> EXTERNAL FUNDING	11	\$5,500,731
---	-----------	--------------------

**Mississippi Valley State University
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022**

**Dr. Jerryl Briggs, President
Phone Number: 662-254-3425**

**Mr. Samuel Melton, Jr., Chief Research Officer
Phone Number: 662-254-3882**

	Number of Projects	Amount
I. Funding Distribution - College/Division		
Athletics Administration	1	\$17,500
Department of English and Foreign Languages	1	\$14,400
Department of Mathematics, Computer and Information Sciences	3	\$154,462
Department of Natural Sciences and Environmental Health	3	\$612,367
Department of Social Sciences	1	\$240,036
Department of Social Work	1	\$47,690
Division of Academic Affairs	4	\$1,282,385
Division of Enrollment Management and Student Affairs	2	\$380,567
Office of Business and Finance	1	\$541,411
Office of the President	3	\$14,489,435
Title III Strengthening Institutions Programs	2	\$3,795,363
University College	3	\$1,387,277
TOTAL	25	\$22,962,893
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
HEERF/CARES	1	\$14,456,935
National Science Foundation	1	\$76,609
U.S. Department of Education	7	\$6,099,080
TOTAL Federal Sources	9	\$20,632,624
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	2	\$546,411
Private/Corporate Business and Industry	0	\$0
Foundations and Non-Profit Groups	8	\$1,346,785
Other In-State Universities	5	\$197,037
Other Out-of-State Universities	0	\$0
Local Governments	0	\$0
Other State Governments	0	\$0
Foreign Governments & Organizations	0	\$0
Other [all other sources not listed above]	1	\$240,036
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	16	\$2,330,269
GRAND TOTAL of ALL EXTERNAL FUNDING	25	\$22,962,893

University of Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022

Dr. Glenn Boyce, Chancellor
Phone number: 662-915-7428

Dr. Joseph R. Gladden, Vice Chancellor for Research
Phone number: 662-915-7583

Dr. LouAnn H. Woodward, Vice Chancellor for Health Affairs
Phone number: 601-984-1058

Dr. Richard Summers, Associate Vice Chancellor for Research
Phone number: 601-858-5000

I. Funding Distribution - College/Division	Number of Projects	Amount
A. Oxford Campus		
College of Liberal Arts	72	\$7,263,124
Division of Outreach and Continuing Education	1	\$27,267
Graduate School	2	\$374,981
Office of the Provost	1	\$100,000
Office of the Vice Chancellor for Administration and Finance	1	\$12,375
Office of the Vice Chancellor for Research and Sponsored Programs	42	\$7,123,838
Office of Vice Chancellor for Student Affairs	2	\$12,700
School of Accountancy	1	\$210,098
School of Applied Sciences	8	\$6,991,837
School of Business Administration	9	\$1,902,709
School of Education	23	\$14,112,519
School of Engineering	28	\$8,414,135
School of Journalism and New Media	1	\$170,000
School of Law	9	\$889,327
School of Pharmacy	54	\$16,914,783
Total Oxford	254	\$64,519,693
B. Medical Center		
Academic Affairs	1	\$1,500
Dentistry	14	\$1,438,663
Health Related Professions	2	\$6,000
Hospital	1	\$213,891
Medicine	340	\$85,861,392
Medicine - Covid Funding	8	\$2,145,033
Nursing	10	\$1,088,616
Population Health	20	\$2,820,348
Population Health - Covid Funding	3	\$2,061,712
Research and Sponosred Programs - Covid Funding	1	\$87,000
UP-Telehealth Services	4	\$10,918,608
Office of Diversity and Inclusion	1	\$200
Total Medical Center	405	\$106,642,964
TOTAL (UM + UMMC)	659	\$171,162,657

University of Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022

II. Funding Sources

FEDERAL External Funding by Agency/Department		
Corporation for National & Community Service	2	\$200,384
Health Resource and Services Association	38	\$21,620,060
Library of Congress	1	\$83,995
National Aeronautics and Space Administration	5	\$1,387,069
National Endowment for the Humanities	3	\$11,728
National Institutes of Health	230	\$57,075,940
National Institutes of Health - Covid Funding	7	\$2,397,234
National Science Foundation	32	\$5,252,043
National Security Agency	0	\$0
U.S. Agency of International Development	0	\$0
U.S. Department of Agriculture	16	\$8,714,422
U.S. Department of Commerce	4	\$624,924
U.S. Department of Defense	38	\$10,784,670
U.S. Department of Education	12	\$14,983,113
U.S. Department of Energy	4	\$515,344
U.S. Department of Health and Human Services	24	\$7,735,012
U.S. Department of Health and Human Services - Covid Funding	5	\$1,847,704
U.S. Department of Homeland Security	1	\$277,890
U.S. Department of Interior	4	\$149,500
U.S. Department of Justice	1	\$2,850,640
U.S. Department of Transportation	1	\$378,389
U.S. Department of the Treasury	1	\$89,340
U.S. Environmental Protection Agency	1	\$999,957
U.S. Geological Survey	0	\$0
U.S. Securities and Exchange Commission	1	\$210,098
U.S. Small Business Administration	5	\$1,789,589
Agency for Healthcare Research and Quality - Covid Funding	1	\$3,000
TOTAL Federal Sources	437	\$139,982,045

STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	19	\$3,510,934
Private/Corporate Business and Industry	80	\$15,666,854
Foundations and Non-Profit Groups	101	\$11,055,731
Foundations and Non-Profit Groups - Covid Funding	1	\$87,000
Other In-State Universities	1	\$3,500
Other Out-of-State Universities	5	\$460,426
Local Governments	8	\$92,084
Other State Governments	2	\$39,200
Foreign Governments & Organizations	5	\$264,882
Other [all other sources not listed above]	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Source	222	\$31,180,611

GRAND TOTAL of ALL EXTERNAL FUNDING	659	\$171,162,656
--	------------	----------------------

University of Southern Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022

Dr. Joseph S. Paul, President
Phone number: 601-266-5001

Dr. Kelly Lucas, Vice President for Research
Phone number: 601-266-5116

I. Funding Distribution - College/Division	Number of Projects	Amount
College of Arts and Sciences	134	\$31,844,265
College of Business and Economic Development	1	\$15,937
College of Education and Human Sciences	37	\$8,250,039
College of Nursing and Health Professions	19	\$4,248,601
Office of Student Affairs	3	\$358,403
Office of the Provost and Vice President for Academic Affairs	5	\$639,023
Office of the Vice President for Finance and Administration	1	\$1,621,098
Office of the Vice President for Research	106	\$44,482,124
Total	306	\$91,459,490

II. Funding Sources	Number of Projects	Amount
Federal Funding Source		
Corporation for National & Community Service	2	\$362,243
HEERF/CARES	1	\$1,621,098
National Aeronautics and Space Administration	37	\$1,961,619
National Science Foundation	27	\$3,661,632
U.S. Department of Agriculture	5	\$1,260,885
U.S. Department of Commerce	49	\$17,929,212
U.S. Department of Defense	29	\$17,109,497
U.S. Department of Education	12	\$3,475,950
U.S. Department of Energy	2	\$331,999
U.S. Department of Health and Human Services	34	\$9,636,757
U.S. Department of Homeland Security	1	\$6,797,660
U.S. Department of Housing and Urban Development	2	\$706,898
U.S. Department of Interior	20	\$2,092,933
U.S. Department of Justice	1	\$71,157
U.S. Department of Labor	1	\$200,000
U.S. Environmental Protection Agency	3	\$96,144
U.S. National Archives and Records Admin	1	\$108,925
U.S. Small Business Administration	1	\$110,000
U.S. Department of the Treasury	5	\$7,545,439
TOTAL Federal Sources	233	\$75,080,048

University of Southern Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022

STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	27	\$14,469,409
Private/Corporate Business and Industry	10	\$404,207
Foundations and Non-Profit Groups	25	\$1,146,966
Other In-State Universities	0	\$0
Other Out-of-State Universities	2	\$23,486
Local Governments	8	\$191,045
Other State Governments	0	\$0
Foreign Governments & Organizations	1	\$144,329
Other [all other sources not listed above]	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Source:	73	\$16,379,442
GRAND TOTAL of <u>ALL</u> EXTERNAL FUNDING	306	\$91,459,490

IHL Executive Office
Annual Report on Research and Sponsored Programs
July 1, 2021 - June 30, 2022

Dr. Alfred Rankins, Jr., Commissioner
Phone number: 601-432-6623

Ms. Kim Gallaspy, Assistant Commissioner for Government Relations
Phone number: 601-432-6493

	Number of Projects	Amount
I. Funding Distribution - College/Division		
Academic and Student Affairs	4	\$2,629,590
Government Relations and Strategic Initiatives	2	\$5,522,484
TOTAL	6	\$8,152,074
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
Corporation for National & Community Service	1	\$572,996
U.S. Department of Education	2	\$5,522,484
U.S. Department of Health and Human Services	1	\$1,642,727
TOTAL Federal Sources	4	\$7,738,207
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	1	\$150,000
Private/Corporate Business and Industry	0	\$0
Foundations and Non-Profit Groups	0	\$0
Other In-State Universities	0	\$0
Other Out-of-State Universities	0	\$0
Local Governments	1	\$263,867
Other State Governments	0	\$0
Foreign Governments & Organizations	0	\$0
Other [all other sources not listed above]	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	2	\$413,867
GRAND TOTAL of ALL EXTERNAL FUNDING	6	\$8,152,074

University Research Groups

Mississippi University Research Authority (MURA)

The primary role of the Mississippi University Research Authority (MURA), which was authorized in 1992 through the Mississippi University Research Authority Act, is to promote the public welfare and prosperity of the people of Mississippi and to foster economic development within the state by forging links among the state's educational institutions, businesses and industrial communities, and state government through the development of cooperative ventures of innovative technological significance which will advance education, research, or economic development within the state. These ventures facilitate the commercialization of technologies developed or discovered in campus environments and enhance the economic development of the state through such commercialization. Before the MURA Act was passed, the ethics laws of Mississippi effectively prohibited university faculty from commercializing their research. These laws were established to prohibit public servants from engaging in activities which would be in conflict with their public positions. Although the ethics laws were directed toward public officials, the language in the laws is such that attempts to commercialize technology by faculty members of a university could be construed as a violation of the laws.

MURA membership is composed of the University Research Vice-Presidents from the three comprehensive public universities and from the urban public university, a representative from the Mississippi Development Authority, the president of the Mississippi Resource Development Corporation, the president of the Mississippi Education Research Group (MERG), and the Vice President of the Board of Trustees of State Institutions of Higher Learning. The Commissioner of Higher Education serves as an ex officio member. The Executive Director is selected by the MURA membership.

MURA was established in such a way that there is an extensive review process for any proposal for technology transfer or commercialization. The process is initiated with the Chief Research Officer of the affected university. The proposal is then recommended to the Institutional Executive Officer, who must certify that there is no conflict with the university and that the participation of the faculty member in the commercialization of the technology will not bring harm to the university or to the economic development of the state. The Institutional Executive Officer then recommends that the proposal be reviewed by the MURA Board, which objectively assesses the nature of the proposed commercialization. This process of full disclosure and evaluation first by the university and then by the MURA Board serves to assure that each proposal is of economic interest to the state and is not in conflict with the interests or commitments of the state, the university, or the faculty member(s).

MURA enables faculty members who conceive of new technologies to copyright and/or patent their discoveries, to participate in the development of the technologies, and to realize some commercial benefit. It allows individuals who have developed or discovered new technologies through campus-based research to be a part of new, spin-off businesses in Mississippi, rather than being forced to channel their discoveries through agencies and businesses outside Mississippi, thus allowing the state to realize the economic benefits of the commercialization. The impact from research at the universities, particularly when commercialization occurs, can be far reaching and long-term. The MURA process for facilitating technology transfer and commercialization holds tremendous future possibilities for the state of Mississippi.

Mississippi Research Consortium (MRC)

The Mississippi Research Consortium aims to develop and sustain nationally competitive research programs in the state of Mississippi. Alongside supporting basic and applied research, the consortium has several additional goals: first, to increase public awareness of science, engineering, and mathematics at all educational levels in order to develop a scientifically literate citizenry who can fuel the science and engineering industry in Mississippi with the state's own human resources; second, to establish and maintain a solid scientific infrastructure in our university system by developing equipment and facility resources, collaboration resources, private sector links, and federal laboratory partnerships; and third, to expand the state's economic opportunities through technology and knowledge transfer activities, including greater commercialization, increased technical assistance, and the education of a workforce that can support technology-based industries.

Formed in 1986, the Mississippi Research Consortium (MRC) includes Mississippi's four research universities: Jackson State University, Mississippi State University, the University of Mississippi, and the University of Southern Mississippi. The MRC's Board of Directors is made up of the Chief Research Officers from these institutions. The board serves as the Science and Technology Research Advisors to both the Governor and the Legislature and holds the responsibility of integrating science and technology initiatives with economic development plans in Mississippi. The creation of the Mississippi Universities Research Authority (MURA) Act of 1992 was the product of the Mississippi Research Consortium Technology Transfer Task Force's collaboration with the Board of Trustees of State Institutions of Higher Learning.

Mississippi Education and Research Group (MERG)

The Mississippi Education and Research Group (MERG) was established in 1990 with representation from each of the eight public universities in the state. The primary goals of MERG are to promote collaboration, resource sharing, and communication concerning education and research matters that have an impact on all of the public universities. The result of these efforts is that opportunities which would have been outside the budgetary capabilities of an individual university are made available to the universities through MERG.

The conception of and the need for the establishment of MERG originated in the Mississippi Research Consortium (MRC), comprised of the Chief Research Officers of the four research universities (Jackson State University, Mississippi State University, the University of Mississippi, and the University of Southern Mississippi). The MRC had successfully promoted collaborative research and collaborative funding among themselves. However, MRC realized that Mississippi would best be served if a separate organization was created for the coordination of statewide projects. Additionally, this new organization provided a vehicle for sharing the research and education expertise of the research universities with the four other universities (Alcorn State University, Delta State University, Mississippi University for Women, and Mississippi Valley State University).

MERG was initially involved with two projects, the Mississippi Alliance for Minority Participation (MAMP) and the Rural Science Initiative (RSI). However, many new and important outcomes have evolved from the activities of MERG. The accomplishments and initiatives of MERG may best be reviewed in three broad categories: (1) Educational Efforts, (2) Research Efforts, and (3) Administrative and Legal Consulting.

Educational Efforts: MERG served as the coordinating agent for the development of the Mississippi Alliance for Minority Participation, a major grant from the National Science Foundation which provides financial and academic support to under-represented minorities wishing to pursue careers in science, engineering, and mathematics. MERG members worked from a nuclear concept, developing plans for each of the universities and continuing as the primary coordinating group in the oversight of changes and new directions throughout the program's implementation. MERG has also served in the coordinating role for the successful Rural Science Initiative Grant, which supports public school education in Mississippi, Louisiana, and Arkansas, and has developed a proposal for science-humanities initiatives in undergraduate teaching.

Research Efforts: The MRC developed and received major research funding under the Experiential Program to Stimulate Competitive Research (EPSCoR) programs, designed to advance the research capabilities of universities in selected states. Numerous collaborative research projects have resulted among the research universities. MERG has served as a means of disseminating related research opportunities to the regional universities and of sharing both human resources and research facilities among all eight public universities. MERG has also made contacts with the National Science Foundation about developing proposals to support the use of the Internet as a research resource and for research discussion groups.

Administrative and Legal Consulting: Through MERG, the research universities, which have major grants and development offices, have been able to provide assistance to the regional universities concerning grant proposals, rapidly changing federal regulations, and sources of funding.