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RESEARCH CATALOG



OCTOBER 2018

PREFACE

FY 2018 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:

Eric S. Atchison
Office of Strategic Research
3825 Ridgewood Road
Jackson, MS 39211
Phone: (601) 432-6288
www.mississippi.edu/research

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MISSISSIPPI INSTITUTIONS OF HIGHER LEARNING

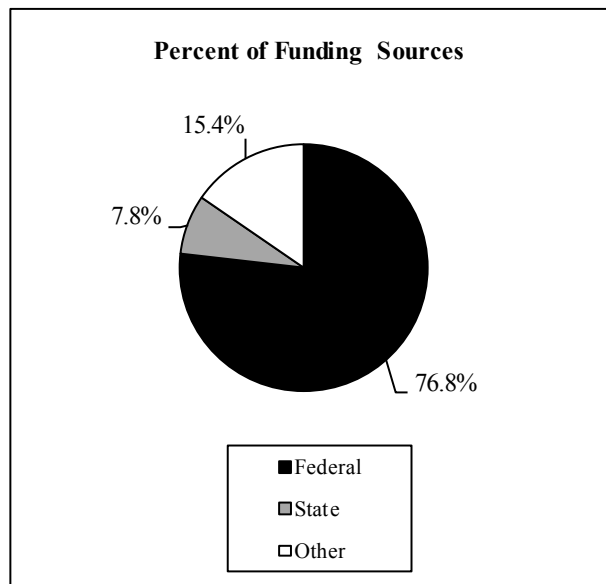
FY 2018 Research Catalog - IHL System Summary

Dr. Alfred Rankins, Jr., Commissioner

Period Covered: July 1, 2017 - June 30, 2018

University	Federal	State	Private/ Corporate/Other	Total Funding Awarded
ASU	\$12,258,923	\$442,266	\$322,989	\$13,024,178
DSU	\$2,655,285	\$1,194,415	\$1,143,452	\$4,993,152
JSU	\$20,625,103	\$1,889,722	\$3,728,113	\$26,242,939
MSU	\$155,996,980	\$11,631,827	\$29,849,677	\$197,478,484
MUW*	\$444,600	\$4,495,000	\$169,448	\$5,109,048
MVSU	\$6,612,989	\$645,796	\$142,174	\$7,400,959
UM/UMMC	\$101,549,084	\$5,900,111	\$27,286,137	\$134,735,332
USM	\$55,414,893	\$6,067,141	\$8,803,364	\$70,285,398
Exec. Office	\$1,134,468	\$3,956,880	\$-	\$5,091,348
SYSTEM	\$356,692,326	\$36,223,158	\$71,445,354	\$464,360,838

University	Total Research Projects Supported
ASU	43
DSU	44
JSU	117
MSU	1,422
MUW*	8
MVSU	23
UM/UMMC	581
USM	228
Exec. Office	4
SYSTEM	2,470



* 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 2014	FY 2015	FY 2016	FY 2017	FY 2018
ASU	\$14,056,414	\$13,422,941	\$16,264,478	\$14,700,229	\$13,024,178
DSU	\$4,284,252	\$6,820,389	\$4,999,784	\$5,255,958	\$4,993,152
JSU	\$28,363,681	\$29,466,629	\$33,575,356	\$41,399,589	\$26,242,939
MSU	\$142,914,368	\$167,543,258	\$178,968,746	\$144,187,317	\$197,478,484
MUW*	\$5,564,315	\$5,716,500	\$4,859,180	\$5,417,405	\$5,109,048
MVSU	\$6,523,565	\$6,550,449	\$9,170,959	\$7,581,186	\$7,400,959
UM/UMMC	\$139,266,227	\$114,139,830	\$114,577,193	\$123,290,112	\$134,735,332
USM	\$58,790,269	\$72,976,047	\$59,597,668	\$73,979,487	\$70,285,398
Exec. Office	\$5,352,547	\$3,129,696	\$1,757,329	\$4,931,728	\$5,091,348
SYSTEM	\$399,763,091	\$419,765,739	\$423,770,693	\$420,743,011	\$464,360,838

Percent Change in Total External Funding

University	FY 2014 to FY 2015	FY 2015 to FY 2016	FY 2016 to FY 2017	FY 2017 to FY 2018
ASU	-4.5%	21.2%	-9.6%	-11.4%
DSU	59.2%	-26.7%	5.1%	-5.0%
JSU	3.9%	13.9%	23.3%	-36.6%
MSU	17.2%	6.8%	-19.4%	37.0%
MUW*	2.7%	-15.0%	11.5%	-5.7%
MVSU	0.4%	40.0%	-17.3%	-2.4%
UM	-18.0%	0.4%	7.6%	9.3%
USM	24.1%	-18.3%	24.1%	-5.0%
Exec. Office	-41.5%	-43.8%	180.6%	3.2%
SYSTEM	5.0%	1.0%	-0.7%	10.4%

Percent Change in Total Projects Supported

Fiscal Year	# of Projects	% Change
FY 2014	2,579	24.8%
FY 2015	2,461	-4.6%
FY 2016	2,449	-0.5%
FY 2017	2,407	-1.7%
FY 2018	2,470	2.6%

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

**FY 2018 Research and Sponsored Programs
System Trend of Federal External Funding**

Funding Source	2016 Total	2017 Total	2018 Total	2016-18 % Change	2017-18 % Change
Appalachian Regional Commission	\$10,000	\$419,016	\$0	-100.0%	-100.0%
Corporation for National & Community Service	\$2,629,522	\$2,409,216	\$2,134,795	-18.8%	-11.4%
Corporation for Public Broadcasting	\$128,110	\$0	\$0	-100.0%	N/A
Delta Regional Authority	\$347,864	\$0	\$0	-100.0%	N/A
Engineering Research & Development Center	\$497,798	\$0	\$0	-100.0%	N/A
Health Resource and Services Administration	\$5,953,917	\$4,169,251	\$9,478,558	59.2%	127.3%
Institute of Museum and Library Sciences	\$82,251	\$0	\$534,307	549.6%	N/A
Library of Congress	\$0	\$398,596	\$0	N/A	-100.0%
Mississippi Band of Choctaw Indians	\$0	\$0	\$8,759	N/A	N/A
National Aeronautics and Space Administration	\$4,372,318	\$2,554,129	\$5,848,190	33.8%	129.0%
National Endowment for the Arts	\$51,700	\$30,734	\$56,400	9.1%	83.5%
National Endowment for the Humanities	\$401,228	\$723,505	\$215,789	-46.2%	-70.2%
National Highway Traffic Safety Administration	\$717,905	\$199,264	\$0	-100.0%	-100.0%
National Institutes of Health	\$39,822,266	\$53,390,048	\$48,438,939	21.6%	-9.3%
National Library of Medicine	\$29,545	\$0	\$0	-100.0%	N/A
National Oceanic and Atmospheric Administration	\$190,281	\$0	\$0	-100.0%	N/A
National Park Service	\$0	\$0	\$300,000	N/A	N/A
National Science Foundation	\$23,735,994	\$29,430,669	\$20,900,278	-11.9%	-29.0%
National Security Agency	\$527,955	\$397,661	\$460,814	-12.7%	15.9%
NAVAIR SYSCOM	\$102,767	\$0	\$0	-100.0%	N/A
Naval Research Laboratory	\$0	\$231,281	\$99,346	N/A	-57.0%
Nuclear Regulatory Commission	\$21,000	\$570,163	\$0	-100.0%	-100.0%
Office of Naval Research	\$0	\$0	\$1,370,000	N/A	N/A
Smithsonian Institution	\$4,000	\$0	\$0	-100.0%	N/A
Tennessee Valley Authority	\$0	\$0	\$31,532	N/A	N/A
United Sorghum Checkoff Program	\$0	\$0	\$21,000	N/A	N/A
U.S. Agency for International Development	\$417,697	\$360,519	\$293,905	-29.6%	-18.5%
U.S. Army	\$8,526,817	\$0	\$0	-100.0%	N/A
U.S. Department of Agriculture	\$75,846,394	\$51,046,282	\$70,915,158	-6.5%	38.9%
U.S. Department of Commerce	\$15,356,854	\$28,590,336	\$35,277,235	129.7%	23.4%
U.S. Department of Defense	\$23,780,225	\$41,609,149	\$54,257,649	128.2%	30.4%
U.S. Department of Education	\$34,328,840	\$28,723,924	\$35,852,807	4.4%	24.8%
U.S. Department of Energy	\$9,387,066	\$7,767,275	\$6,667,916	-29.0%	-14.2%
U.S. Department of Health and Human Services	\$50,008,451	\$29,685,629	\$27,999,400	-44.0%	-5.7%
U.S. Department of Homeland Security	\$13,269,734	\$3,756,057	\$3,100,852	-76.6%	-17.4%
U.S. Department of Housing and Urban Development	\$1,035,031	\$641,584	\$1,142,859	10.4%	78.1%
U.S. Department of Interior	\$2,631,347	\$4,449,595	\$3,482,589	32.4%	-21.7%
U.S. Department of Justice	\$1,920,757	\$609,958	\$891,205	-53.6%	46.1%
U.S. Department of Labor	\$880,000	\$5,975,166	\$12,791,811	1353.6%	114.1%
U.S. Department of State	\$169,750	\$194,900	\$25,000	-85.3%	-87.2%
U.S. Department of the Treasury	\$22,150	\$773,202	\$9,545,053	42992.8%	1134.5%
U.S. Department of Transportation	\$4,227,104	\$3,132,213	\$979,945	-76.8%	-68.7%
U.S. Department of Veterans Affairs	\$66,813	\$120,310	\$1,500	-97.8%	-98.8%
U.S. Economic Development Administration	\$0	\$128,592	\$0	N/A	-100.0%
U.S. Environmental Protection Agency	\$765,958	\$591,233	\$1,019,153	33.1%	72.4%
U.S. Geological Survey	\$394,197	\$282,677	\$54,079	-86.3%	-80.9%
U.S. Small Business Administration	\$2,146,213	\$2,109,973	\$2,495,500	16.3%	18.3%
United Negro College Fund	\$92,000	\$0	\$0	-100.0%	N/A
Total	\$324,899,821	\$305,472,106	\$356,692,326	9.8%	16.8%

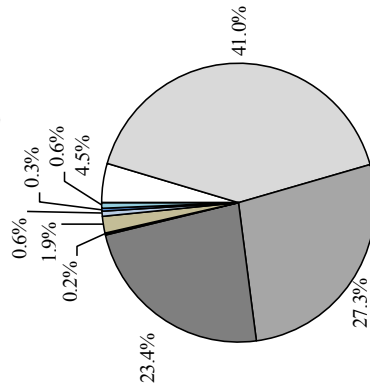
**Summary of Federal External Funding by Funding Source
in Descending Order of Totals by Source, FY 2018**

Funding Source	ASU	DSU	JSU	MSU	MUW	MVSU	UM/UMMC	USM	Exec. Office	2018 Total
U.S. Department of Agriculture	\$6,925,143	\$433,941	\$2,000	\$50,292,296		\$64,500	\$11,909,422	\$1,287,856		\$70,915,158
U.S. Department of Defense			\$2,369,416	\$28,692,997		\$125,000	\$13,046,837	\$10,023,399		\$54,257,649
National Institutes of Health			\$2,798,723	\$2,788,938	\$50,000		\$42,801,278			\$48,438,939
U.S. Department of Education	\$5,192,340	\$1,020,361	\$11,736,572	\$6,710,170	\$359,600	\$5,890,649	\$2,256,071	\$2,687,043		\$35,852,807
U.S. Department of Commerce				\$2,371,286			\$1,558,247	\$12,347,702		\$35,277,235
U.S. Department of Health and Human Services				\$8,536,039	\$20,000		\$5,794,631	\$13,648,731		\$27,999,400
National Science Foundation			\$2,877,029	\$7,940,724		\$532,840	\$6,942,978	\$2,606,707		\$20,900,278
U.S. Department of Labor				\$12,791,811						\$12,791,811
U.S. Department of the Treasury				\$4,886,542			\$625,000	\$4,033,511		\$9,545,053
Health Resource and Services Administration	\$20,000	\$280,434	\$355,394				\$8,822,730			\$9,478,558
U.S. Department of Energy			\$485,969	\$4,395,115			\$689,255	\$1,097,577		\$6,667,916
National Aeronautics and Space Administration				\$1,600,071	\$15,000		\$2,765,399	\$1,467,720		\$5,848,190
U.S. Department of Interior				\$2,688,643			\$220,503	\$573,443		\$3,482,589
U.S. Department of Homeland Security				\$130,000			\$1,181,861	\$1,788,991		\$3,100,852
U.S. Small Business Administration				\$400,193			\$1,670,307	\$425,000		\$2,495,500
Corporation for National & Community Service		\$293,616		\$10,000			\$40,570	\$656,141	\$1,134,468	\$2,134,795
Office of Naval Research								\$1,370,000		\$1,370,000
U.S. Department of Housing and Urban Development								\$1,142,859		\$1,142,859
U.S. Environmental Protection Agency				\$996,585			\$22,568			\$1,019,153
U.S. Department of Transportation	\$65,000			\$624,953			\$289,992			\$979,945
U.S. Department of Justice				\$10,320			\$715,082	\$165,803		\$891,205
Institute of Museum and Library Services				\$534,307						\$534,307
National Security Agency	\$46,440			\$324,378			\$89,996			\$460,814
National Park Service		\$300,000								\$300,000
U.S. Agency for International Development				\$175,620			\$41,325	\$76,960		\$293,905
National Endowment for the Humanities		\$189,387					\$10,952	\$15,450		\$215,789
Naval Research Laboratory		\$99,346								\$99,346
National Endowment for the Arts	\$10,000	\$38,200		\$8,200						\$56,400
U.S. Geological Survey								\$54,079		\$54,079
Tennessee Valley Authority				\$31,532						\$31,532
U.S. Department of State				\$25,000						\$25,000
United Sorghum Checkoff Program				\$21,000						\$21,000
Mississippi Band of Choctaw Indians				\$8,759						\$8,759
U.S. Department of Veterans Affairs				\$1,500						\$1,500
Total	\$12,258,923	\$2,655,285	\$20,625,103	\$155,996,980	\$444,600	\$6,612,989	\$101,549,084	\$55,414,893	\$1,134,468	\$356,692,326

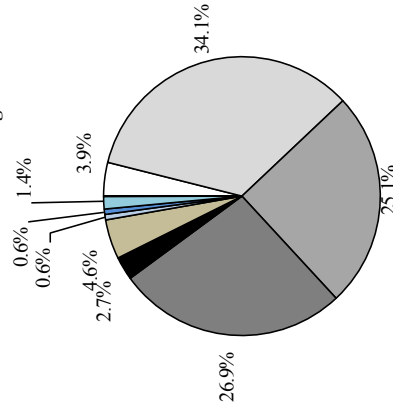
**FY 2018 Research and Sponsored Programs
System Trend of State, Private, Corporate, & Other External Funding**

Funding Source	2016 Total	2017 Total	2018 Total	2016-18 % Change	2017-18 % Change
State Funding [other than general appropriation]	\$4,495,000	\$4,495,000	\$4,668,833	3.9%	3.9%
State of Mississippi Agencies	\$40,581,677	\$39,320,692	\$28,543,611	-29.7%	-27.4%
Private/Corporate Business and Industry	\$27,008,411	\$28,902,757	\$22,325,584	-17.3%	-22.8%
Foundations and Non-Profit Groups	\$23,090,390	\$30,981,484	\$44,448,677	92.5%	43.5%
Other In-State Universities	\$228,017	\$3,136,754	\$1,992,488	773.8%	-36.5%
Other Out-of-State Universities	\$1,917,678	\$5,278,144	\$3,122,019	62.8%	-40.9%
Local Governments	\$585,701	\$732,051	\$1,018,225	73.8%	39.1%
Other State Governments	\$329,712	\$714,377	\$916,312	177.9%	28.3%
Foreign Governments & Organizations	\$634,287	\$1,666,903	\$632,762	-0.2%	-62.0%
Other [all other sources not listed above]	\$0	\$42,743	\$0	n/a	n/a
Total	\$98,870,873	\$115,270,904	\$107,668,512	8.9%	-6.6%

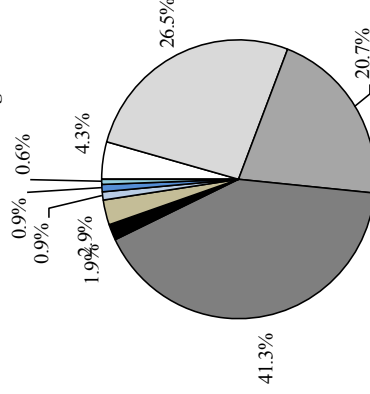
Percent of Non-Federal Funding Sources: FY 2016



Percent of Non-Federal Funding Sources: FY 2017



Percent of Non-Federal Funding Sources: FY 2018



- State Funding
- Foundations and Non-Profit Groups
- Local Governments
- Other
- State of Mississippi Agencies
- Other In-State Universities
- Other State Governments
- Private/Corporate Business and Industry
- Other Out-of-State Universities
- Foreign Governments & Organizations

Alcorn State University
Annual Report on Research and Sponsored Programs
July 1, 2017 - June 30, 2018

Dr. Donzell Lee, Interim President
Phone number: 601-877-6111

Mr. Alfred L. Galtney, Chief Research Officer
Phone number: 601-877-3965

I. Funding Distribution - College/Division	Number of Projects	Amount
Office of Community Development	5	\$780,871
School of Agriculture, Research, Extension, and Applied Sciences	24	\$6,369,428
School of Arts and Sciences	5	\$254,039
School of Education and Psychology	2	\$207,500
School of General College of Excellence	2	\$665,204
School of Graduate Studies	1	\$416,666
School of Nursing	2	\$220,000
Title III Strengthening Institutional Programs	2	\$4,110,470
TOTAL	43	\$13,024,178
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
Health Resource and Services Administration	1	\$20,000
National Endowment for the Arts	1	\$10,000
National Security Agency	1	\$46,440
U.S. Department of Agriculture	22	\$6,925,143
U.S. Department of Education	5	\$5,192,340
U.S. Department of Transportation	1	\$65,000
TOTAL Federal Sources	31	\$12,258,923
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	6	\$358,266
Private/Corporate Business and Industry	0	\$0
Foundations and Non-Profit Groups	2	\$220,450
Other In-State Universities	2	\$84,000
Other Out-of-State Universities	2	\$102,539
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	12	\$765,255
GRAND TOTAL of ALL EXTERNAL FUNDING	43	\$13,024,178

Delta State University
Annual Report on Research and Sponsored Programs
July 1, 2017 - June 30, 2018

Dr. William N. LaForge, President
Phone number: 662-846-4000

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

I. Funding Distribution - College/Division	Number of Projects	Amount
Archives and Museums	1	\$4,000
Bologna Performing Arts Center	5	\$17,330
Center for Community and Economic Development	5	\$799,680
College of Arts and Sciences	14	\$1,106,069
College of Business	1	\$31,350
College of Education and Human Sciences	6	\$998,784
Delta Center for Culture and Learning	4	\$627,587
Graduate and Continuing Studies	3	\$511,994
Office of the President	2	\$11,750
Roberts-LaForge Library	1	\$3,000
Student Success Center	2	\$881,607
TOTAL	44	\$4,993,152
II. Funding Sources:		
FEDERAL External Funding by Agency/Department		
Corporation for National & Community Service	1	\$293,616
Health Resource and Services Administration	1	\$280,434
National Endowment for the Arts	1	\$38,200
National Endowment for the Humanities	1	\$189,387
National Park Service	1	\$300,000
Naval Research Laboratory	1	\$99,346
U.S. Department of Agriculture	3	\$433,941
<u>U.S. Department of Education</u>	<u>4</u>	<u>\$1,020,361</u>
TOTAL Federal Sources	13	\$2,655,285
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	2	\$173,833
State of Mississippi Agencies	7	\$872,181
Private/Corporate Business and Industry	1	\$303,872
Foundations and Non-Profit Groups	10	\$836,579
Other In-State Universities	5	\$148,401
Other Out-of-State Universities	1	\$3,000
Local Governments	0	\$0
Other State Governments	0	\$0
Foreign Governments & Organizations	0	\$0
<u>Other [all other sources not listed above]</u>	<u>0</u>	<u>\$0</u>
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	26	\$2,337,867
GRAND TOTAL of ALL EXTERNAL FUNDING	39	\$4,993,152

Jackson State University
Annual Report on Research and Sponsored Programs
July 1, 2017- June 30, 2018

Dr. William B. Bynum, Jr., President
Phone number: 601-979-1591

Dr. Joseph A. Whittaker, Associate Provost
Phone number: 601-979-2008

I. Funding Distribution - College/Division	Number of Projects	Amount
College of Business	2	\$265,384
College of Education & Human Development	10	\$1,438,758
College of Engineering, Science, & Technology	75	\$10,764,042
College of Liberal Arts	10	\$231,350
College of Public Service	3	\$151,675
Division of Academic Affairs	1	\$232,265
Division of Information Technology	1	\$1,500,000
Division of Institutional Advancement	3	\$323,545
Division of Research and Federal Relations	1	\$100,000
Office of the President	3	\$10,554,383
School of Public Health	8	\$681,537
TOTAL	117	\$26,242,939

II. Funding Sources

FEDERAL External Funding by Agency/Department

Health Resource and Services Association	1	\$355,394
National Institutes of Health	13	\$2,798,723
National Science Foundation	18	\$2,877,029
U.S. Department of Agriculture	1	\$2,000
U.S. Department of Defense	7	\$2,369,416
U.S. Department of Education	8	\$11,736,572
U.S. Department of Energy	1	\$485,969
TOTAL Federal Sources	49	\$20,625,103

STATE, PRIVATE, CORPORATE, OTHER External Funding by

State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	12	\$426,158
Private/Corporate Business and Industry	11	\$578,688
Foundations and Non-Profit Groups	9	\$289,596
Other In-State Universities	14	\$1,363,889
Other Out-of-State Universities	21	\$2,859,829
Local Governments	1	\$99,675
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	68	\$5,617,836

GRAND TOTAL of ALL EXTERNAL FUNDING	117	\$26,242,939
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**Mississippi State University
Annual Report on Research and Sponsored Programs
July 1, 2017 - June 30, 2018**

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

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

I. Funding Distribution - College/Division	Number of Projects	Amount
Athletics	1	\$385,271
Bagley College of Engineering	107	\$20,903,842
College of Architecture, Art, and Design	19	\$340,644
College of Arts and Sciences	69	\$6,567,357
College of Business	4	\$657,901
College of Education	76	\$6,439,325
College of Forest Resources/Forest Wildlife Research Center	185	\$11,905,831
College of Veterinary Medicine	36	\$4,366,915
Division of Student Affairs	11	\$2,746,456
Mitchell Memorial Library	3	\$4,100
MS Agricultural and Forestry Experiment Station / CALS	376	\$26,576,106
MS State University Extension Service	240	\$29,976,405
Office of Graduate Studies	1	\$98,000
Office of the President	1	\$4,100
University Centers and Institutes	282	\$84,483,884
Vice President for Campus Services	2	\$1,730,251
Vice President for Research and Economic Development	9	\$292,095
TOTAL	1,422	\$197,478,484

II. Funding Sources

FEDERAL External Funding by Agency/Department		
Corporation for National & Community Service	1	\$10,000
Institute of Museum and Library Services	1	\$534,307
Mississippi Band of Choctaw Indians	1	\$8,759
National Aeronautics and Space Administration	21	\$1,600,071
National Endowment for the Arts	2	\$8,200
National Institutes of Health	17	\$2,788,938
National Science Foundation	40	\$7,940,724
National Security Agency	4	\$324,378
Tennessee Valley Authority	1	\$31,532
U.S. Agency for International Development	2	\$175,620
U.S. Department of Agriculture	213	\$50,292,296
U.S. Department of Commerce	45	\$21,371,286
U.S. Department of Defense	163	\$28,692,997
U.S. Department of Education	53	\$6,710,170
U.S. Department of Energy	19	\$4,395,115
U.S. Department of Health and Human Services	25	\$8,536,039
U.S. Department of Homeland Security	2	\$130,000
U.S. Department of Interior	53	\$2,688,643
U.S. Department of Justice	1	\$10,320
U.S. Department of Labor	13	\$12,791,811
U.S. Department of State	2	\$25,000
U.S. Department of the Treasury	14	\$4,886,542
U.S. Department of Transportation	3	\$624,953
U.S. Department of Veterans Affairs	1	\$1,500
U.S. Environmental Protection Agency	21	\$996,585
U.S. Small Business Administration	1	\$400,193

**Mississippi State University
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**Dr. David Shaw, Vice President for Research and Economic Development
Phone number: 662-325-3570**

II. Funding Sources	Number of Projects	Amount
<u>United Sorghum Checkoff Program</u>	1	\$21,000
TOTAL Federal Sources	720	\$155,996,980
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	49	\$11,168,683
Private/Corporate Business and Industry	404	\$5,734,540
Foundations and Non-Profit Groups	222	\$22,784,429
Other In-State Universities	2	\$177,022
Other Out-of-State Universities	3	\$28,229
Local Governments	13	\$286,121
Other State Governments	3	\$914,312
Foreign Governments & Organizations	6	\$388,168
<u>Other [all other sources not listed above]</u>	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	702	\$41,481,504
GRAND TOTAL of ALL EXTERNAL FUNDING	1,422	\$197,478,484

**Mississippi University for Women
Annual Report on Research and Sponsored Programs
July 1, 2017 - June 30, 2018**

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

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

I. Funding Distribution - College/Division	Number of Projects	Amount
Academic Support*	2	\$4,497,000
Center for Outreach and Innovation	2	\$522,948
College of Arts, Sciences, & Education	3	\$69,100
College of Nursing & Health Sciences	1	\$20,000
*Includes total for Mississippi School for Math and Science		\$4,495,000
TOTAL	8	\$5,109,048

II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Aeronautics and Space Administration	1	\$15,000
National Institutes of Health	1	\$50,000
U.S. Department of Education	1	\$359,600
U.S. Department of Health and Human Services	1	\$20,000
TOTAL Federal Sources	4	\$444,600
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	1	\$4,495,000
State of Mississippi Agencies	0	\$0
Private/Corporate Business and Industry	0	\$0
Foundations and Non-Profit Groups	3	\$169,448
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	4	\$4,664,448
GRAND TOTAL of ALL EXTERNAL FUNDING	8	\$5,109,048

**Mississippi Valley State University
Annual Report on Research and Sponsored Programs
July 1, 2017 - June 30, 2018**

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

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

I. Funding Distribution - College/Division	Number of Projects	Amount
Department of Criminal Justice	1	\$10,000
Department of Distance Education	1	\$475,000
Department of Fine Arts	1	\$15,174
Department of Mathematics, Computer and Information Sciences	5	\$843,634
Department of Natural Sciences and Environmental Health	2	\$511,666
Department of Social Sciences	1	\$2,000
Department of Teacher Education	1	\$7,200
Division of Student Affairs	4	\$1,266,602
Office of the President	5	\$751,056
Title III Strengthening Institutions Program	2	\$3,518,627
TOTAL	23	\$7,400,959
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Science Foundation	1	\$532,840
U.S. Department of Agriculture	1	\$64,500
U.S. Department of Defense	1	\$125,000
U.S. Department of Education	8	\$5,890,649
TOTAL Federal Sources	11	\$6,612,989
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	4	\$597,802
Private/Corporate Business and Industry	0	\$0
Foundations and Non-Profit Groups	4	\$122,174
Other In-State Universities	3	\$47,994
Other Out-of-State Universities	1	\$20,000
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	12	\$787,970
GRAND TOTAL of ALL EXTERNAL FUNDING	23	\$7,400,959

**University of Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2017 - June 30, 2018**

**Dr. Jeffrey S. Vitter, Chancellor
Phone number: 662-915-1100**

**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: 601-815-5000**

I. Funding Distribution - College/Division	Number of Projects	Amount
A. Oxford Campus		
College of Liberal Arts	58	\$7,420,676
Division of Outreach and Continuing Education	3	\$156,880
Graduate School	1	\$51,000
Office of the Provost	9	\$5,115,312
Office of the Vice Chancellor for Research	48	\$12,228,938
Office of the Vice Chancellor for Diversity & Community Engagement	6	\$596,936
Office of the Vice Chancellor for Student Affairs	1	\$18,755
School of Accountancy	1	\$1,464,000
School of Applied Sciences	13	\$8,467,430
School of Business Administration	6	\$1,684,307
School of Education	21	\$10,219,036
School of Engineering	22	\$5,648,438
School of Journalism and New Media	2	\$204,987
School of Law	14	\$1,019,769
<u>School of Pharmacy</u>	<u>62</u>	<u>\$16,785,204</u>
Total Oxford	267	\$71,081,667
B. Medical Center		
Health Innovation and Transfer Center	1	\$774,000
Office of Academic Affairs	3	\$765,633
Office of Research and Sponosred Programs	3	\$1,635,909
Physicians Workforce	1	\$5,000
School of Dentistry	10	\$1,276,008
School of Medicine	267	\$54,979,475
School of Nursing	5	\$1,198,811
School of Population Health	14	\$1,506,493
UMMC Hospital Administration	6	\$554,768
<u>University Physicians - Telehealth Services</u>	<u>4</u>	<u>\$957,567</u>
Total Medical Center	314	\$63,653,664
TOTAL (UM + UMMC)	581	\$134,735,331

University of Mississippi
Annual Report on Research and Sponsored Programs
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Dr. LouAnn H. Woodward, Vice Chancellor for Health Affairs
Phone number: 601-984-1058

Dr. Richard Summers, Associate Vice Chancellor for Research
Phone number: 601-815-5000

II. Funding Sources	Number of Projects	Amount
FEDERAL External Funding by Agency/Department		
Corporation for National & Community Service	2	\$40,570
Health Resource and Services Administration	32	\$8,822,730
National Aeronautics and Space Administration	10	\$2,765,399
National Endowment for the Humanities	4	\$10,952
National Institutes of Health	175	\$42,801,278
National Science Foundation	31	\$6,942,978
National Security Agency	1	\$89,996
U.S. Agency of International Development	1	\$41,325
U.S. Department of Agriculture	19	\$11,909,422
U.S. Department of Commerce	12	\$1,558,247
U.S. Department of Defense	35	\$13,046,837
U.S. Department of Education	8	\$2,256,071
U.S. Department of Energy	5	\$689,255
U.S. Department of Health and Human Services	26	\$5,794,631
U.S. Department of Homeland Security	6	\$1,181,861
U.S. Department of Interior	5	\$220,503
U.S. Department of Justice	2	\$715,082
U.S. Department of Transportation	3	\$289,992
U.S. Department of Treasury	1	\$625,000
U.S. Environmental Protection Agency	1	\$22,568
U.S. Geological Survey	3	\$54,079
U.S. Small Business Administration	5	\$1,670,307
TOTAL Federal Sources	387	\$101,549,084
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	17	\$5,702,870
Private/Corporate Business and Industry	65	\$8,441,041
Foundations and Non-Profit Groups	103	\$18,743,941
Other In-State Universities	3	\$171,181
Other Out-of-State Universities	2	\$60,922
Local Governments	1	\$26,060
Other State Governments	0	\$0
Foreign Governments & Organizations	3	\$40,233
Other [all other sources not listed above]	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	194	\$33,186,248
GRAND TOTAL of ALL EXTERNAL FUNDING	581	\$134,735,332

University of Southern Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2017 - June 30, 2018

Dr. Rodney D. Bennett, President
Phone number: 601-266-5001

Dr. Gordon Cannon, Chief Research Officer
Phone number: 601-266-5116

I. Funding Distribution - College/Division	Number of Projects	Amount
College of Arts and Letters	11	\$770,333
College of Business	1	\$45,578
College of Education and Psychology	30	\$3,224,889
College of Health	36	\$10,300,096
College of Nursing	5	\$616,215
College of Science and Technology	102	\$40,906,358
Office of Student Affairs	2	\$399,076
Office of the Provost	5	\$597,243
Office of the Vice President for Research	36	\$13,425,610
Total	228	\$70,285,398
II. Funding Sources		
Federal Funding Source		
Corporation for National & Community Service	3	\$656,141
National Aeronautics and Space Administration	4	\$1,467,720
National Endowment for the Humanities	4	\$15,450
National Science Foundation	15	\$2,606,707
Office of Naval Research	1	\$1,370,000
U.S. Agency of International Development	1	\$76,960
U.S. Department of Agriculture	4	\$1,287,856
U.S. Department of Commerce	20	\$12,347,702
U.S. Department of Defense	18	\$10,023,399
U.S. Department of Education	8	\$2,687,043
U.S. Department of Energy	4	\$1,097,577
U.S. Department of Health and Human Services	30	\$13,648,731
U.S. Department of Homeland Security	3	\$1,788,991
U.S. Department of Housing and Urban Development	4	\$1,142,859
U.S. Department of Interior	5	\$573,443
U.S. Department of Justice	2	\$165,803
U.S. Department of the Treasury	2	\$4,033,511
<u>U.S. Small Business Administration</u>	<u>1</u>	<u>\$425,000</u>
TOTAL Federal Sources	129	\$55,414,893
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	40	\$5,898,152
Private/Corporate Business and Industry	20	\$7,267,443
Foundations and Non-Profit Groups	28	\$1,282,060
Other In-State Universities	0	\$0
Other Out-of-State Universities	2	\$47,500
Local Governments	7	\$168,989
Other State Governments	0	\$2,000
Foreign Governments & Organizations	2	\$204,361
<u>Other [all other sources not listed above]</u>	<u>0</u>	<u>\$0</u>
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	99	\$14,870,505
GRAND TOTAL of ALL EXTERNAL FUNDING	228	\$70,285,398

**IHL Executive Office
Annual Report on Research and Sponsored Programs
July 1, 2017 - June 30, 2018**

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

**Mr. Paul Sumrall, Associate Commissioner for External Relations
Phone number: 601-432-7057**

	Number of Projects	Amount
I. Funding Distribution - College/Division		
Academic and Student Affairs	2	\$1,571,848
Government Relations and Strategic Initiatives	2	\$3,519,500
TOTAL	4	\$5,091,348
II. Funding Sources		
Federal Funding Source		
Corporation for National & Community Service	1	\$1,134,468
TOTAL Federal Sources	1	\$1,134,468
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	2	\$3,519,500
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	\$437,380
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	3	\$3,956,880
GRAND TOTAL of ALL EXTERNAL FUNDING	4	\$5,091,348

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.