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RESEARCH CATALOG



OCTOBER 2017

PREFACE

FY 2017 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:

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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

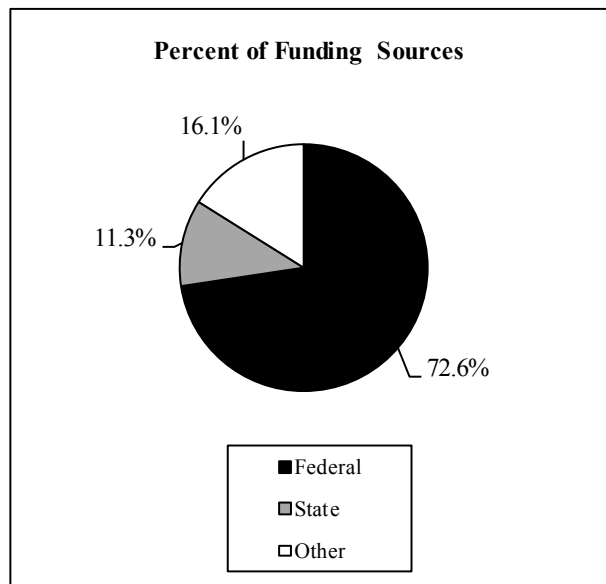
FY 2017 Research Catalog - IHL System Summary

Dr. Glenn F. Boyce, Commissioner

Period Covered: July 1, 2016 - June 30, 2017

University	Federal	State	Private/ Corporate/Other	Total Funding Awarded
ASU	\$13,875,786	\$172,871	\$651,572	\$14,700,229
DSU	\$2,755,138	\$1,596,142	\$904,679	\$5,255,958
JSU	\$31,827,381	\$3,621,913	\$5,950,295	\$41,399,589
MSU	\$113,844,479	\$7,697,600	\$22,645,238	\$144,187,317
MUW*	\$586,800	\$4,495,000	\$335,605	\$5,417,405
MVSU	\$5,879,556	\$790,230	\$911,400	\$7,581,186
UM/UMMC	\$77,733,156	\$20,027,927	\$25,529,029	\$123,290,112
USM	\$57,525,750	\$5,795,148	\$10,658,589	\$73,979,487
Exec. Office	\$1,444,061	\$3,487,667	\$0	\$4,931,728
SYSTEM	\$305,472,106	\$47,684,497	\$67,586,407	\$420,743,011

University	Total Research Projects Supported
ASU	45
DSU	39
JSU	135
MSU	1,295
MUW*	12
MVSU	28
UM/UMMC	597
USM	249
Exec. Office	7
SYSTEM	2,407



* 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 2013	FY 2014	FY 2015	FY 2016	FY 2017
ASU	\$17,304,430	\$14,056,414	\$13,422,941	\$16,264,478	\$14,700,229
DSU	\$4,184,742	\$4,284,252	\$6,820,389	\$4,999,784	\$5,255,958
JSU	\$36,242,977	\$28,363,681	\$29,466,629	\$33,575,356	\$41,399,589
MSU	\$114,819,900	\$142,914,368	\$167,543,258	\$178,968,746	\$144,187,317
MUW*	\$5,304,013	\$5,564,315	\$5,716,500	\$4,859,180	\$5,417,405
MVSU	\$6,757,655	\$6,523,565	\$6,550,449	\$9,170,959	\$7,581,186
UM/UMMC	\$106,072,897	\$139,266,227	\$114,139,830	\$114,577,193	\$123,290,112
USM	\$52,195,616	\$58,790,269	\$72,976,047	\$59,597,668	\$73,979,487
Exec. Office	\$10,709,619	\$5,352,547	\$3,129,696	\$1,757,329	\$4,931,728
SYSTEM	\$353,591,850	\$399,763,091	\$419,765,739	\$423,770,693	\$420,743,011

Percent Change in Total External Funding

University	FY 2013 to FY 2014	FY 2014 to FY 2015	FY 2015 to FY 2016	FY 2016 to FY 2017
ASU	-18.8%	-4.5%	21.2%	-9.6%
DSU	2.4%	59.2%	-26.7%	5.1%
JSU	-21.7%	3.9%	13.9%	23.3%
MSU	24.5%	17.2%	6.8%	-19.4%
MUW*	4.9%	2.7%	-15.0%	11.5%
MVSU	-3.5%	0.4%	40.0%	-17.3%
UM	31.3%	-18.0%	0.4%	7.6%
USM	12.6%	24.1%	-18.3%	24.1%
Exec. Office	-50.0%	-41.5%	-43.8%	180.6%
SYSTEM	13.1%	5.0%	1.0%	-0.7%

Percent Change in Total Projects Supported

Fiscal Year	# of Projects	% Change
FY 2013	2,067	-13.9%
FY 2014	2,579	24.8%
FY 2015	2,461	-4.6%
FY 2016	2,449	-0.5%
FY 2017	2,407	-1.7%

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

**FY 2017 Research and Sponsored Programs
System Trend of Federal External Funding**

Funding Source	2015 Total	2016 Total	2017 Total	2015-17 % Change	2016-17 % Change
Appalachian Regional Commission	\$0	\$10,000	\$419,016	n/a	4090.2%
Corporation for National & Community Service	\$2,219,301	\$2,629,522	\$2,409,216	8.6%	-8.4%
Corporation for Public Broadcasting	\$0	\$128,110	\$0	n/a	-100.0%
Defense Advanced Research Projects Agency	\$7,500	\$0	\$0	-100.0%	n/a
Delta Regional Authority	\$0	\$347,864	\$0	n/a	-100.0%
Embassy of the United States of America, Baghdad, Iraq	\$161,922	\$0	\$0	-100.0%	n/a
Engineering Research & Development Center	\$0	\$497,798	\$0	n/a	-100.0%
Health Resource and Services Administration	\$4,834,208	\$5,953,917	\$4,169,251	-13.8%	-30.0%
Institute of Museum and Library Sciences	\$0	\$82,251	\$0	n/a	-100.0%
Library of Congress	\$0	\$0	\$398,596	n/a	n/a
Missile Defense Agency	\$4,129	\$0	\$0	-100.0%	n/a
National Aeronautics and Space Administration	\$5,071,231	\$4,372,318	\$2,554,129	-49.6%	-41.6%
National Endowment for the Arts	\$46,893	\$51,700	\$30,734	-34.5%	-40.6%
National Endowment for the Humanities	\$189,955	\$401,228	\$723,505	280.9%	80.3%
National Highway Traffic Safety Administration	\$966,327	\$717,905	\$199,264	-79.4%	-72.2%
National Institutes of Health	\$53,066,783	\$39,822,266	\$53,390,048	0.6%	34.1%
National Institute of Justice	\$843,376	\$0	\$0	-100.0%	n/a
National Institute for Occupational Safety & Health	\$67,455	\$0	\$0	-100.0%	n/a
National Library of Medicine	\$0	\$29,545	\$0	n/a	-100.0%
National Oceanic and Atmospheric Administration	\$0	\$190,281	\$0	n/a	-100.0%
National Science Foundation	\$21,295,910	\$23,735,994	\$29,430,669	38.2%	24.0%
National Security Agency	\$5,769,480	\$527,955	\$397,661	-93.1%	-24.7%
NAVAIR SYSCOM	\$581,093	\$102,767	\$0	-100.0%	-100.0%
Naval Research Laboratory	\$0	\$0	\$231,281	n/a	n/a
Nuclear Regulatory Commission	\$314,726	\$21,000	\$570,163	81.2%	2615.1%
Office of Juvenile Justice and Delinquency Prevention	\$96,547	\$0	\$0	-100.0%	n/a
Office of Naval Research	\$1,033,998	\$0	\$0	-100.0%	n/a
Smithsonian Institution	\$0	\$4,000	\$0	n/a	-100.0%
Substance Abuse & Mental Health Services Administration	\$202,683	\$0	\$0	-100.0%	n/a
United Sorghum Checkoff Program	\$37,000	\$0	\$0	-100.0%	n/a
U.S. Agency for International Development	\$1,094,857	\$417,697	\$360,519	-67.1%	-13.7%
U.S. Army	\$565,468	\$8,526,817	\$0	-100.0%	-100.0%
U.S. Army Corps of Engineers	\$8,295,247	\$0	\$0	-100.0%	n/a
U.S. Department of Agriculture	\$66,761,680	\$75,846,394	\$51,046,282	-23.5%	-32.7%
U.S. Department of Commerce	\$17,169,938	\$15,356,854	\$28,590,336	66.5%	86.2%
U.S. Department of Defense	\$16,094,973	\$23,780,225	\$41,609,149	158.5%	75.0%
U.S. Department of Education	\$35,770,688	\$34,328,840	\$28,723,924	-19.7%	-16.3%
U.S. Department of Energy	\$12,075,071	\$9,387,066	\$7,767,275	-35.7%	-17.3%
U.S. Department of Health and Human Services	\$33,133,843	\$50,008,451	\$29,685,629	-10.4%	-40.6%
U.S. Department of Homeland Security	\$1,603,059	\$13,269,734	\$3,756,057	134.3%	-71.7%
U.S. Department of Housing and Urban Development	\$1,485,198	\$1,035,031	\$641,584	-56.8%	-38.0%
U.S. Department of Interior	\$3,079,220	\$2,631,347	\$4,449,595	44.5%	69.1%
U.S. Department of Justice	\$215,405	\$1,920,757	\$609,958	183.2%	-68.2%
U.S. Department of Labor	\$4,696,867	\$880,000	\$5,975,166	27.2%	579.0%
U.S. Department of State	\$247,000	\$169,750	\$194,900	-21.1%	14.8%
U.S. Department of State Bureau of Educ. & Cult. Affairs	\$67,084	\$0	\$0	-100.0%	n/a
U.S. Department of Transportation	\$1,388,997	\$4,227,104	\$3,132,213	125.5%	-25.9%
U.S. Department of the Treasury	\$0	\$22,150	\$773,202	n/a	3390.8%
U.S. Department of Veterans Affairs	\$85,500	\$66,813	\$120,310	40.7%	80.1%
U.S. Economic Development Administration	\$128,592	\$0	\$128,592	0.0%	n/a
U.S. Environmental Protection Agency	\$1,059,387	\$765,958	\$591,233	-44.2%	-22.8%
U.S. Food and Drug Administration	\$381,481	\$0	\$0	-100.0%	n/a
U.S. Geological Survey	\$0	\$394,197	\$282,677	n/a	-28.3%
U.S. Small Business Administration	\$2,115,842	\$2,146,213	\$2,109,973	-0.3%	-1.7%
United Negro College Fund	\$0	\$92,000	\$0	n/a	-100.0%
UT-Battelle	\$102,434	\$0	\$0	-100.0%	n/a
Vietnam Education Foundation	\$56,500	\$0	\$0	-100.0%	n/a
Total	\$304,484,849	\$324,899,821	\$305,472,106	0.3%	-6.0%

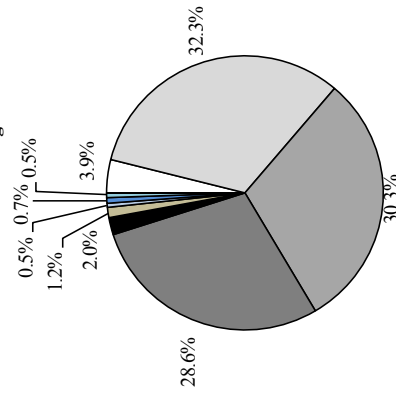
**Summary of Federal External Funding by Funding Source
in Descending Order of Totals by Source, FY 2017**

Funding Source	ASU	DSU	JSU	MSU	MUW	MVSU	UM/UMMC	USM	Exec. Office	2017 Total
National Institutes of Health	\$230,832		\$4,680,851	\$7,610,994	\$50,000		\$40,817,371			\$53,390,048
U.S. Department of Agriculture	\$7,669,250		\$2,500	\$27,874,150			\$13,108,091	\$2,392,291		\$51,046,282
U.S. Department of Defense	\$554,958		\$4,692,377	\$21,648,670		\$260,587	\$5,573,380	\$8,879,177		\$41,609,149
U.S. Department of Health and Human Services				\$13,361,538	\$20,000		\$4,427,258	\$11,876,833		\$29,685,629
National Science Foundation	\$417,633		\$11,828,092	\$5,457,971		\$718,680	\$3,129,833	\$7,878,460		\$29,430,669
U.S. Department of Education	\$4,722,210	\$825,714	\$9,659,948	\$5,059,293	\$497,300	\$4,865,289	\$364,694	\$2,557,129	\$172,347	\$28,723,924
U.S. Department of Commerce				\$9,693,332			\$517,197	\$18,379,807		\$28,590,336
U.S. Department of Energy				\$5,394,888			\$2,304,484	\$67,903		\$7,767,275
U.S. Department of Labor				\$5,710,166					\$265,000	\$5,975,166
U.S. Department of Interior	\$10,740	\$300,000		\$3,203,910			\$38,500	\$896,445		\$4,449,595
Health Resource and Services Administration	\$20,000	\$805,832					\$3,343,419			\$4,169,251
U.S. Department of Homeland Security				\$745,581			\$2,182,673	\$792,803		\$3,756,057
U.S. Department of Transportation	\$65,000			\$2,778,740			\$288,473			\$3,132,213
National Aeronautics and Space Administration			\$7,428	\$1,212,673	\$15,000		\$360,000	\$959,028		\$2,554,129
Corporation for National & Community Service		\$543,606		\$159,912			\$25,000	\$673,984	\$1,006,714	\$2,409,216
U.S. Small Business Administration				\$1,127,957			\$598,045	\$383,971		\$2,109,973
U.S. Department of the Treasury								\$773,202		\$773,202
National Endowment for the Humanities		\$178,698	\$256,185	\$16,100			\$256,400	\$16,122		\$723,505
U.S. Department of Housing and Urban Development								\$641,584		\$641,584
U.S. Department of Justice			\$300,000	\$106,489			\$142,773	\$60,696		\$609,958
U.S. Environmental Protection Agency				\$294,918				\$296,315		\$591,233
Nuclear Regulatory Commission	\$170,163		\$400,000							\$570,163
Appalachian Regional Commission				\$414,516	\$4,500					\$419,016
Library of Congress				\$398,596						\$398,596
National Security Agency				\$397,661						\$397,661
U.S. Agency for International Development				\$360,519						\$360,519
U.S. Geological Survey				\$277,414			\$5,263			\$282,677
Naval Research Laboratory							\$129,993			\$231,281
National Highway Traffic Safety Administration		\$101,288		\$199,264						\$199,264
U.S. Department of State				\$194,900						\$194,900
U.S. Economic Development Administration				\$128,592						\$128,592
U.S. Department of Veterans Affairs							\$120,310			\$120,310
National Endowment for the Arts	\$15,000			\$15,734						\$30,734
Total	\$13,875,786	\$2,755,138	\$31,827,381	\$113,844,479	\$586,800	\$5,879,556	\$77,733,156	\$57,525,750	\$1,444,061	\$305,474,106

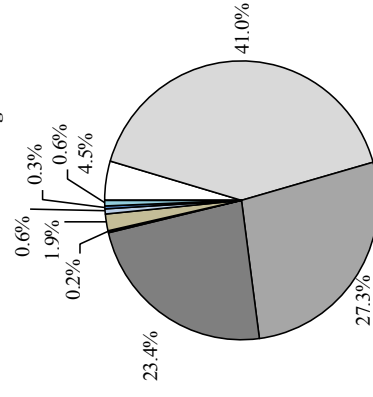
**FY 2017 Research and Sponsored Programs
System Trend of State, Private, Corporate, & Other External Funding**

Funding Source	2015 Total	2016 Total	2017 Total	2015-17 % Change	2016-17 % Change
State Funding [other than general appropriation]	\$4,516,706	\$4,495,000	\$4,495,000	-0.5%	0.0%
State of Mississippi Agencies	\$37,227,230	\$40,581,677	\$39,320,692	5.6%	-3.1%
Private/Corporate Business and Industry	\$34,916,538	\$27,008,411	\$28,902,757	-17.2%	7.0%
Foundations and Non-Profit Groups	\$32,934,869	\$23,090,390	\$30,981,484	-5.9%	34.2%
Other In-State Universities	\$2,344,034	\$228,017	\$3,136,754	33.8%	1275.7%
Other Out-of-State Universities	\$1,396,081	\$1,917,678	\$5,278,144	278.1%	175.2%
Local Governments	\$547,449	\$585,701	\$732,051	33.7%	25.0%
Other State Governments	\$760,991	\$329,712	\$714,377	-6.1%	116.7%
Foreign Governments & Organizations	\$610,206	\$634,287	\$1,666,903	173.2%	162.8%
Other [all other sources not listed above]	\$26,786	\$0	\$42,743	59.6%	n/a
Total	\$115,280,890	\$98,870,873	\$115,270,904	0.0%	16.6%

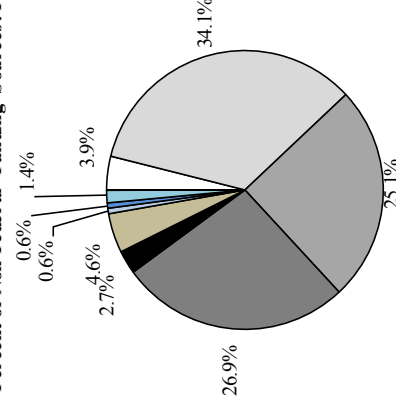
Percent of Non-Federal Funding Sources: FY 2015



Percent of Non-Federal Funding Sources: FY 2016



Percent of Non-Federal Funding Sources: FY 2017



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

Alcorn State University
Annual Report on Research and Sponsored Programs
July 1, 2016 - June 30, 2017

Dr. Alfred Rankins, Jr., President
Phone number: 601-877-6111

Mr. Ramesh Maddali, Chief Research Officer
Phone number: 601-877-6123

I. Funding Distribution - College/Division	Number of Projects	Amount
Office of Community Development	9	\$1,498,721
School of Agriculture, Research, Extension, and Applied Sciences	19	\$7,051,352
School of Arts and Sciences	9	\$765,639
School of Education and Psychology	2	\$333,383
School of General College of Excellence	2	\$647,477
School of Nursing	2	\$328,924
Title III Strengthening Institutional Programs	2	\$4,074,733
TOTAL	45	\$14,700,229
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
Health Resource and Services Administration	1	\$20,000
National Endowment for the Arts	1	\$15,000
National Institutes of Health	4	\$230,832
National Science Foundation	2	\$417,633
Nuclear Regulatory Commission	2	\$170,163
U.S. Department of Agriculture	19	\$7,669,250
U.S. Department of Defense	1	\$554,958
U.S. Department of Education	4	\$4,722,210
U.S. Department of Interior	1	\$10,740
U.S. Department of Transportation	1	\$65,000
TOTAL Federal Sources	36	\$13,875,786
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	2	\$172,871
Private/Corporate Business and Industry	2	\$533,383
Foundations and Non-Profit Groups	1	\$66,128
Other In-State Universities	0	\$0
Other Out-of-State Universities	4	\$52,061
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	9	\$824,443
GRAND TOTAL of ALL EXTERNAL FUNDING	45	\$14,700,229

Delta State University
Annual Report on Research and Sponsored Programs
July 1, 2016 - June 30, 2017

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	2	\$26,185
Bologna Performing Arts Center	4	\$26,958
Center for Community and Economic Development	7	\$894,106
College of Arts and Sciences	8	\$315,814
College of Business	1	\$31,350
College of Education and Human Sciences	6	\$926,682
Delta Center for Culture and Learning	4	\$803,498
Office of the President	1	\$5,000
Graduate and Continuing Studies	1	\$281,320
Robert E. Smith School of Nursing	3	\$429,702
Student Success Center	2	\$1,515,343
TOTAL	39	\$5,255,958
II. Funding Sources:		
FEDERAL External Funding by Agency/Department		
Corporation for National & Community Service	2	\$543,606
Health Resource and Services Administration	3	\$805,832
National Endowment for the Humanities	1	\$178,698
Naval Research Laboratory	1	\$101,288
U.S. Department of Education	3	\$825,714
U.S. Department of Interior	1	\$300,000
TOTAL Federal Sources	11	\$2,755,138
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	10	\$1,542,281
Private/Corporate Business and Industry	0	\$0
Foundations and Non-Profit Groups	10	\$811,936
Other In-State Universities	3	\$53,861
Other Out-of-State Universities	1	\$50,000
Local Governments	0	\$0
Other State Governments	0	\$0
Foreign Governments & Organizations	0	\$0
Other [all other sources not listed above]	4	\$42,743
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	28	\$2,500,821
GRAND TOTAL of ALL EXTERNAL FUNDING	39	\$5,255,958

Jackson State University
Annual Report on Research and Sponsored Programs
July 1, 2016- June 30, 2017

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	3	\$273,896
College of Education & Human Development	12	\$1,369,463
College of Liberal Arts	14	\$819,075
College of Public Service	3	\$289,831
College of Science, Engineering & Technology	75	\$23,534,876
Division of Academic Affairs	4	\$352,800
Division of Athletics	1	\$952,500
Division of Business and Finance	1	\$10,000
Division of Information Technology	2	\$1,500,000
Division of Institutional Advancement	1	\$3,500
Division of Research and Federal Relations	2	\$592,609
Office of the President	6	\$9,306,165
School of Journalism and Media Studies	1	\$128,588
School of Public Health	10	\$2,266,286
TOTAL	135	\$41,399,589

II. Funding Sources

FEDERAL External Funding by Agency/Department		
National Aeronautics and Space Administration	1	\$7,428
National Endowment for the Humanities	2	\$256,185
National Institutes of Health	11	\$4,680,851
National Science Foundation	20	\$11,828,092
Nuclear Regulatory Commission	1	\$400,000
U.S. Department of Agriculture	1	\$2,500
U.S. Department of Defense	12	\$4,692,377
U.S. Department of Education	6	\$9,659,948
U.S. Department of Justice	1	\$300,000
TOTAL Federal Sources	55	\$31,827,381

STATE, PRIVATE, CORPORATE, OTHER External Funding by

State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	12	\$1,962,514
Private/Corporate Business and Industry	12	\$1,131,629
Foundations and Non-Profit Groups	19	\$838,193
Other In-State Universities	14	\$1,553,195
Other Out-of-State Universities	20	\$3,980,473
Local Governments	3	\$106,204
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	80	\$9,572,208

GRAND TOTAL of ALL EXTERNAL FUNDING	135	\$41,399,589
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Mississippi State University
Annual Report on Research and Sponsored Programs
July 1, 2016 - June 30, 2017

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
Bagley College of Engineering	126	\$15,619,269
College of Architecture, Art, and Design	15	\$345,904
College of Arts and Sciences	73	\$6,244,263
College of Business	8	\$1,493,671
College of Education	76	\$8,729,759
College of Forest Resources/Forest Wildlife Research Center	146	\$9,468,086
College of Veterinary Medicine	36	\$4,461,555
Division of Student Affairs	5	\$780,164
Honors College	3	\$5,100
Mitchell Memorial Library	4	\$36,900
MS Agricultural and Forestry Experiment Station / CALS	345	\$19,468,390
MS State University Extension Service	202	\$15,683,169
Office of Graduate Studies	1	\$100,500
Provost and Executive Vice President	2	\$901,369
University Branch Campus (Meridian)	5	\$113,023
University Centers and Institutes	243	\$58,834,018
Vice President for Research and Economic Development	2	\$62,942
Vice President for Campus Services	3	\$1,839,235
TOTAL	1,295	\$144,187,317

II. Funding Sources		
FEDERAL External Funding by Agency/Department		
Appalachian Regional Commission (ARC)	2	\$414,516
Corporation for National & Community Service	4	\$159,912
Library of Congress	2	\$398,596
National Aeronautics and Space Administration	27	\$1,212,673
National Endowment for the Arts	5	\$15,734
National Endowment for the Humanities	5	\$16,100
National Highway Traffic Safety Administration	1	\$199,264
National Institutes of Health	34	\$7,610,994
National Science Foundation	39	\$5,457,971
National Security Agency	4	\$397,661
U.S. Agency for International Development	4	\$360,519
U.S. Department of Agriculture	207	\$27,874,150
U.S. Department of Commerce	46	\$9,693,332
U.S. Department of Defense	96	\$21,648,670
U.S. Department of Education	40	\$5,059,293
U.S. Department of Energy	26	\$5,394,888
U.S. Department of Health and Human Services	35	\$13,361,538
U.S. Department of Homeland Security	4	\$745,581
U.S. Department of Interior	32	\$3,203,910
U.S. Department of Justice	3	\$106,489
U.S. Department of Labor	6	\$5,710,166
U.S. Department of State	3	\$194,900
U.S. Department of Transportation	14	\$2,778,740
U.S. Economic Development Administration	1	\$128,592
U.S. Environmental Protection Agency	8	\$294,918
U.S. Geological Survey	10	\$277,414

**Mississippi State University
Annual Report on Research and Sponsored Programs
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**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**

II. Funding Sources	Number of Projects	Amount
<u>U.S. Small Business Administration</u>	4	\$1,127,957
TOTAL Federal Sources	662	\$113,844,479
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	46	\$7,572,750
Private/Corporate Business and Industry	365	\$10,131,249
Foundations and Non-Profit Groups	192	\$11,208,583
Other In-State Universities	1	\$4,885
Other Out-of-State Universities	5	\$245,248
Local Governments	10	\$119,965
Other State Governments	3	\$388,602
Foreign Governments & Organizations	11	\$671,557
<u>Other [all other sources not listed above]</u>	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	633	\$30,342,838
GRAND TOTAL of ALL EXTERNAL FUNDING	1,295	\$144,187,317

**Mississippi University for Women
Annual Report on Research and Sponsored Programs
July 1, 2016 - June 30, 2017**

**Dr. Jim Borsig, President
Phone number 662-329-7100**

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

I. Funding Distribution - College/Division	Number of Projects	Amount
Academic Support*	1	\$4,495,000
Center for Outreach and Innovation	3	\$669,255
College of Arts and Sciences	4	\$163,650
College of Education and Human Sciences	3	\$69,500
College of Nursing	1	\$20,000
*Includes total for Mississippi School for Math and Science		\$4,495,000
TOTAL	12	\$5,417,405

II. Funding Sources		
FEDERAL External Funding by Agency/Department		
Appalachian Regional Commission	1	\$4,500
National Aeronautics and Space Administration	1	\$15,000
National Institutes of Health	1	\$50,000
U.S. Department of Education	2	\$497,300
U.S. Department of Health and Human Services	1	\$20,000
TOTAL Federal Sources	6	\$586,800
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	5	\$335,605
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	6	\$4,830,605
GRAND TOTAL of ALL EXTERNAL FUNDING	12	\$5,417,405

**Mississippi Valley State University
Annual Report on Research and Sponsored Programs
July 1, 2016 - June 30, 2017**

**Dr. Jerryl Briggs, Acting 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
Athletics Administration	2	\$318,150
Department of Distance Education	1	\$475,000
Department of English and Foreign Languages	1	\$15,000
Department of Mathematics and Computer Information Sciences	3	\$733,680
Department of Natural Sciences and Environmental Health	4	\$423,787
Department of Teacher Education	2	\$107,587
Division of Academic Affairs	1	\$900
Division of Student Affairs	3	\$957,290
Division of University Advancement	6	\$496,400
Office of the Chief Operating Officer	3	\$605,950
Title III Strengthening Institutions Program	2	\$3,447,442
TOTAL	28	\$7,581,186
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Science Foundation	2	\$718,680
U.S. Department of Defense	1	\$260,587
U.S. Department of Education	5	\$4,865,289
U.S. Department of Homeland Security	1	\$35,000
TOTAL Federal Sources	9	\$5,879,556
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	5	\$713,593
Private/Corporate Business and Industry	0	\$0
Foundations and Non-Profit Groups	9	\$896,400
Other In-State Universities	4	\$76,637
Other Out-of-State Universities	1	\$15,000
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	19	\$1,701,630
GRAND TOTAL of ALL EXTERNAL FUNDING	28	\$7,581,186

University of Mississippi
Annual Report on Research and Sponsored Programs
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Dr. Jeffrey S. Vitter, Chancellor
Phone number: 662-915-1100

Dr. Joseph R. Gladden, Interim 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	88	\$7,709,289
Division of Outreach and Continuing Education	7	\$121,427
Office of the Chancellor	1	\$259,560
Office of the Provost	9	\$828,759
Office of the Vice Chancellor for Research	34	\$7,280,073
Office of the Vice Chancellor for Student Affairs	2	\$593,500
School of Applied Sciences	16	\$12,520,481
School of Business Administration	3	\$612,045
School of Education	31	\$6,885,245
School of Engineering	24	\$3,325,885
School of Journalism and New Media	2	\$144,114
School of Law	12	\$586,225
<u>School of Pharmacy</u>	<u>52</u>	<u>\$16,969,248</u>
Total Oxford	281	\$57,835,850
B. Medical Center		
Holmes County Hospital	1	\$7,100
Office of Academic Affairs	6	\$456,812
Office of the Vice Chancellor for Health Affairs	1	\$999,077
School of Dentistry	4	\$1,095,467
School of Medicine	281	\$55,785,858
School of Nursing	6	\$1,273,272
School of Population Health	13	\$1,494,362
<u>UMMC Hospital Administration</u>	<u>4</u>	<u>\$4,342,314</u>
Total Medical Center	316	\$65,454,262
TOTAL (UM + UMMC)	597	\$123,290,112

University of Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2016 - June 30, 2017

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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	1	\$25,000
Health Resource and Services Administration	18	\$3,343,419
National Aeronautics and Space Administration	1	\$360,000
National Endowment for the Humanities	3	\$256,400
National Institutes of Health	146	\$40,817,371
National Science Foundation	18	\$3,129,833
National Security Agency	4	\$129,993
U.S. Department of Agriculture	20	\$13,108,091
U.S. Department of Commerce	3	\$517,197
U.S. Department of Defense	20	\$5,573,380
U.S. Department of Education	3	\$364,694
U.S. Department of Energy	4	\$2,304,484
U.S. Department of Health and Human Services	31	\$4,427,258
U.S. Department of Homeland Security	3	\$2,182,673
U.S. Department of Interior	1	\$38,500
U.S. Department of Justice	1	\$142,773
U.S. Department of Transportation	3	\$288,473
U.S. Department of Veterans Affairs	2	\$120,310
U.S. Geological Survey	1	\$5,263
<u>U.S. Small Business Administration</u>	<u>2</u>	<u>\$598,045</u>
TOTAL Federal Sources	285	\$77,733,156
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	53	\$18,440,028
Private/Corporate Business and Industry	90	\$11,808,948
Foundations and Non-Profit Groups	116	\$11,788,387
Other In-State Universities	15	\$1,444,684
Other Out-of-State Universities	23	\$905,568
Local Governments	6	\$143,215
Other State Governments	3	\$325,775
Foreign Governments & Organizations	6	\$700,351
<u>Other [all other sources not listed above]</u>	<u>0</u>	<u>\$0</u>
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	312	\$45,556,956
GRAND TOTAL of ALL EXTERNAL FUNDING	597	\$123,290,112

University of Southern Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2016 - June 30, 2017

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

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

	Number of Projects	Amount
I. Funding Distribution - College/Division		
College of Arts and Letters	21	\$848,632
College of Education and Psychology	36	\$3,071,493
College of Health	30	\$7,351,938
College of Nursing	1	\$1,604,788
College of Science and Technology	111	\$34,988,270
Office of Student Affairs	4	\$927,529
Office of the President	1	\$1,500,000
Office of the Provost	3	\$498,400
Office of the Vice President for Research	42	\$23,188,437
Total	249	\$73,979,487
II. Funding Sources		
Federal Funding Source		
Corporation for National & Community Service	3	\$673,984
National Aeronautics and Space Administration	4	\$959,028
National Endowment for the Humanities	8	\$16,122
National Science Foundation	17	\$7,878,460
U.S. Department of Agriculture	8	\$2,392,291
U.S. Department of Commerce	23	\$18,379,807
U.S. Department of Defense	18	\$8,879,177
U.S. Department of Education	18	\$2,557,129
U.S. Department of Energy	1	\$67,903
U.S. Department of Health and Human Services	24	\$11,876,833
U.S. Department of Homeland Security	2	\$792,803
U.S. Department of Housing and Urban Development	4	\$641,584
U.S. Department of Interior	7	\$896,445
U.S. Department of Justice	1	\$60,696
U.S. Department of the Treasury	1	\$773,202
U.S. Environmental Protection Agency	1	\$296,315
U.S. Small Business Administration	2	\$383,971
TOTAL Federal Sources	142	\$57,525,750
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	38	\$5,791,656
Private/Corporate Business and Industry	13	\$5,297,548
Foundations and Non-Profit Groups	48	\$5,036,252
Other In-State Universities	1	\$3,492
Other Out-of-State Universities	1	\$29,794
Local Governments	0	\$0
Other State Governments	0	\$0
Foreign Governments & Organizations	6	\$294,995
Other [all other sources not listed above]	0	\$0
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	107	\$16,453,737
GRAND TOTAL of ALL EXTERNAL FUNDING	249	\$73,979,487

**IHL Executive Office
Annual Report on Research and Sponsored Programs
July 1, 2016 - June 30, 2017**

**Dr. Glenn F. Boyce, 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	4	\$1,541,728
Government Relations and Strategic Initiatives	3	\$3,390,000
TOTAL	7	\$4,931,728
II. Funding Sources		
Federal Funding Source		
Corporation for National & Community Service	1	\$1,006,714
U.S. Department of Education	1	\$172,347
U.S. Department of Labor	1	\$265,000
TOTAL Federal Sources	3	\$1,444,061
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$0
State of Mississippi Agencies	3	\$3,125,000
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	\$362,667
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	\$3,487,667
GRAND TOTAL of ALL EXTERNAL FUNDING	7	\$4,931,728

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.