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RESEARCH CATALOG



OCTOBER 2013

PREFACE

FY 2013 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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www.mississippi.edu/research

Recommended APA Citation:

Atchison, E. S. (2013). Fiscal Year 2013 Research Catalog. Jackson, Mississippi: Mississippi Institutions of Higher Learning Office of Academic & Student Affairs.

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MISSISSIPPI INSTITUTIONS OF HIGHER LEARNING

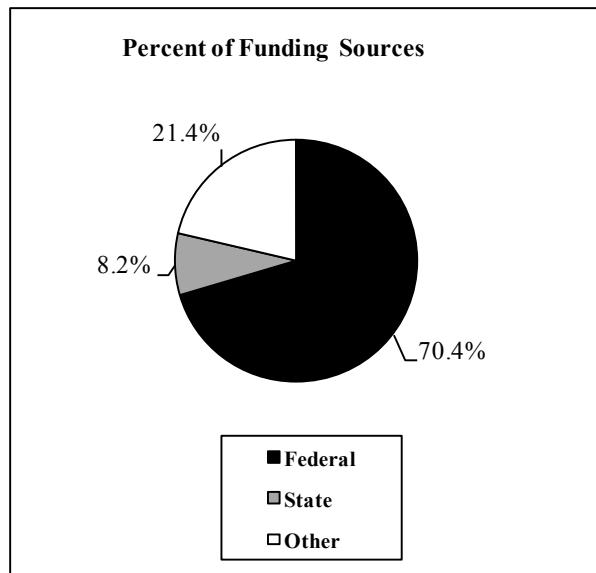
FY 2013 Research Catalog - IHL System Summary

Dr. Hank M. Bounds, Commissioner

Period Covered: July 1, 2012 - June 30, 2013

University	Federal	State	Private/ Corporate/Other	Total Funding Awarded
ASU	\$15,927,373	\$409,099	\$967,959	\$17,304,430
DSU	\$1,010,459	\$1,024,571	\$2,149,712	\$4,184,742
JSU	\$28,660,927	\$3,045,618	\$4,536,432	\$36,242,977
MSU	\$82,010,510	\$10,939,631	\$21,869,759	\$114,819,900
MUW*	\$127,190	\$5,000	\$5,171,823	\$5,304,013
MVSU	\$5,880,545	\$583,161	\$293,949	\$6,757,655
UM/UMMC	\$71,884,020	\$8,185,615	\$26,003,262	\$106,072,897
USM	\$35,945,283	\$4,037,201	\$12,213,132	\$52,195,616
SYSTEM	\$241,446,307	\$28,229,895	\$73,206,028	\$342,882,231

University	Total Research Projects Supported
ASU	86
DSU	42
JSU	134
MSU	942
MUW*	9
MVSU	25
UM/UMMC	566
USM	255
SYSTEM	2,059



* 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 2009	FY 2010	FY 2011	FY 2012	FY 2013
ASU	\$26,499,386	\$28,504,626	\$30,821,885	\$29,947,232	\$17,304,430
DSU	\$13,263,122	\$13,877,250	\$6,137,743	\$7,086,255	\$4,184,742
JSU	\$66,079,898	\$68,178,800	\$57,023,314	\$48,664,799	\$36,242,977
MSU	\$145,982,717	\$201,621,088	\$166,660,258	\$134,904,345	\$114,819,900
MUW*	\$7,137,115	\$6,531,459	\$6,664,021	\$6,469,649	\$5,304,013
MVSU	\$12,374,960	\$7,527,441	\$12,273,455	\$7,866,330	\$6,757,655
UM	\$82,988,530	\$101,932,683	\$78,854,347	\$49,644,887	\$61,555,860
UMMC	\$60,867,198	\$75,368,727	\$84,995,810	\$60,214,620	\$44,517,037
USM	\$73,744,642	\$82,801,673	\$77,724,860	\$63,342,586	\$52,195,616
SYSTEM	\$488,937,568	\$586,343,747	\$521,155,694	\$408,140,703	\$342,882,231

Percent Change in Total External Funding

University	FY 2009 to FY 2010	FY 2010 to FY 2011	FY 2011 to FY 2012	FY 2012 to FY 2013
ASU	7.6%	8.1%	-2.8%	-42.2%
DSU	4.6%	-55.8%	15.5%	-40.9%
JSU	3.2%	-16.4%	-14.7%	-25.5%
MSU	38.1%	-17.3%	-19.1%	-14.9%
MUW*	-8.5%	2.0%	-2.9%	-18.0%
MVSU	-39.2%	63.0%	-35.9%	-14.1%
UM	22.8%	-22.6%	-37.0%	24.0%
UMMC	23.8%	12.8%	-29.2%	-26.1%
USM	12.3%	-6.1%	-18.5%	-17.6%
SYSTEM	19.9%	-11.1%	-21.7%	-16.0%

Percent Change in Total Projects Supported

Fiscal Year	# of Projects	% Change
FY 2009	2,511	
FY 2010	2,524	0.5%
FY 2011	2,530	0.2%
FY 2012	2,392	-5.5%
FY 2013	2,059	-13.9%

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

**FY 2013 Research and Sponsored Programs
System Trend of Federal External Funding**

Funding Source	2011 Total	2012 Total	2013 Total	2012-13 % Change	2011-13 % Change
Appalachian Regional Commission	\$652,781	\$346,418	\$729,589	110.6%	11.8%
Corporation for National & Community Service	\$1,448,484	\$1,589,262	\$1,085,917	-31.7%	-25.0%
Corporation for Public Broadcasting	\$305,487	\$-	\$-	n/a	-100.0%
Defense Threat Reduction Agency	\$-	\$-	\$7,323	n/a	n/a
Delta Area Economic Development	\$-	\$-	\$450,000	n/a	n/a
Engineering Research & Development Center	\$581,346	\$821,626	\$1,053,829	28.3%	81.3%
Federal Emergency Management Agency	\$327,750	\$-	\$-	n/a	-100.0%
Federal Highway Administration	\$-	\$-	\$55,000	n/a	n/a
Fund for the Improvement of Postsecondary Education	\$30,491	\$34,250	\$-	-100.0%	-100.0%
Health Resource and Services Association	\$19,658,604	\$5,873,936	\$5,611,661	-4.5%	-71.5%
Incorporated Research Institutions for Seismology	\$738	\$-	\$-	n/a	-100.0%
Institute of Museum and Library Sciences	\$357,081	\$526,139	\$7,190	-98.6%	-98.0%
Missile Defense Agency	\$-	\$-	\$5,550	n/a	n/a
National Aeronautics and Space Administration	\$10,806,774	\$5,045,754	\$5,731,558	13.6%	-47.0%
National Endowment for the Arts	\$43,500	\$34,266	\$53,210	55.3%	22.3%
National Endowment for the Humanities	\$355,107	\$324,714	\$306,930	-5.5%	-13.6%
National Highway Traffic Safety Administration (NHTSA)	\$1,205,096	\$975,649	\$850,833	-12.8%	-29.4%
National Institute of Justice	\$-	\$-	\$264,603	n/a	n/a
National Institutes of Health	\$43,253,427	\$49,930,769	\$35,634,122	-28.6%	-17.6%
National Oceanic and Atmospheric Administration	\$-	\$108,991	\$-	-100.0%	n/a
National Science Foundation	\$34,287,007	\$23,858,495	\$24,627,523	3.2%	-28.2%
National Security Agency	\$45,323	\$75,505	\$69,966	-7.3%	54.4%
NAVAIR SYSCOM	\$23,637	\$519,417	\$726,001	39.8%	2971.5%
Nuclear Regulatory Commission	\$200,000	\$-	\$-	n/a	-100.0%
Oak Ridge Associated Universities	\$5,000	\$-	\$-	n/a	-100.0%
Open World Leadership Center	\$-	\$-	\$17,653	n/a	n/a
Southern SARE Program	\$92,363	\$-	\$-	n/a	-100.0%
Substance Abuse & Mental Health Services Administration	\$91,427	\$-	\$-	n/a	-100.0%
Tennessee Valley Authority	\$1,899	\$5,309	\$-	-100.0%	-100.0%
The Aerospace Corporation	\$25,312	\$-	\$-	n/a	-100.0%
U.S. Army Corps of Engineers	\$1,144,012	\$30,619	\$-	-100.0%	-100.0%
U.S. Army Tank Automotive & Armaments Command	\$-	\$139,927	\$-	-100.0%	n/a
U.S. Department of Agriculture	\$47,721,385	\$49,887,743	\$45,691,440	-8.4%	-4.3%
U.S. Department of Commerce	\$66,651,976	\$15,781,991	\$11,565,840	-26.7%	-82.6%
U.S. Department of Defense	\$47,153,821	\$30,488,918	\$19,766,261	-35.2%	-58.1%
U.S. Department of Education	\$50,776,620	\$43,735,837	\$31,855,896	-27.2%	-37.3%
U.S. Department of Energy	\$18,482,645	\$18,606,376	\$4,547,393	-75.6%	-75.4%
U.S. Department of Health and Human Services	\$45,094,522	\$35,747,684	\$28,350,883	-20.7%	-37.1%
U.S. Department of Homeland Security	\$8,671,501	\$5,384,438	\$2,915,811	-45.8%	-66.4%
U.S. Department of Housing and Urban Development	\$4,399,999	\$2,087,898	\$858,566	-58.9%	-80.5%
U.S. Department of Interior	\$6,061,692	\$7,139,323	\$2,984,118	-58.2%	-50.8%
U.S. Department of Justice	\$10,022,331	\$2,392,891	\$773,185	-67.7%	-92.3%
U.S. Department of Labor	\$6,853,460	\$9,500,616	\$4,577,117	-51.8%	-33.2%
U.S. Department of State	\$3,264,875	\$3,085,647	\$121,877	-96.1%	-96.3%
U.S. Department of the Treasury	\$36,500	\$-	\$-	n/a	-100.0%
U.S. Department of Transportation	\$4,607,504	\$6,274,648	\$5,937,780	-5.4%	28.9%
U.S. Department of Veterans Affairs	\$137,757	\$76,976	\$29,250	-62.0%	-78.8%
U.S. Economic Development Administration	\$142,880	\$142,880	\$628,592	339.9%	339.9%
U.S. Environmental Protection Agency	\$3,891,138	\$1,108,421	\$1,153,733	4.1%	-70.3%
U.S. Fish and Wildlife Service	\$-	\$-	\$546,845	n/a	n/a
U.S. Food and Drug Administration	\$-	\$-	\$438,958	n/a	n/a
U.S. Geological Survey	\$50,000	\$190,000	\$-	-100.0%	-100.0%
U.S. National Archives and Records Administration	\$-	\$113,198	\$-	-100.0%	n/a
U.S. Small Business Administration	\$4,169,502	\$2,658,063	\$1,414,307	-46.8%	-66.1%
United Negro College Fund	\$20,000	\$-	\$-	n/a	-100.0%
Total	\$443,152,752	\$324,644,594	\$241,446,307	-25.6%	-45.5%

**Summary of Federal External Funding by Funding Source
in Descending Order of Totals by Source, FY 2013**

Funding Source	ASU	DSU	JSU	MSU	MUW	MVSU	UM/UMMC	USM	2013 Total
U.S. Department of Agriculture	\$7,871,261	\$-	\$291,746	\$20,568,748	\$-	\$21,701	\$15,810,855	\$1,127,129	\$45,691,440
National Institutes of Health	\$167,790	\$-	\$10,696,181	\$1,632,845	\$-	\$-	\$23,137,306	\$-	\$35,634,122
U.S. Department of Education	\$5,205,186	\$89,852	\$7,694,282	\$6,956,508	\$90,000	\$5,305,545	\$585,032	\$5,929,491	\$31,855,896
U.S. Department of Health and Human Services	\$433,594	\$174,201	\$-	\$9,702,308	\$30,000	\$-	\$13,697,602	\$4,313,178	\$28,350,883
National Science Foundation	\$270,754	\$6,600	\$5,857,185	\$11,192,009	\$-	\$497,544	\$2,818,063	\$3,985,368	\$24,627,523
U.S. Department of Defense	\$827,898	\$-	\$2,384,406	\$5,336,936	\$-	\$-	\$5,028,595	\$6,188,426	\$19,766,261
U.S. Department of Commerce	\$-	\$-	\$190,245	\$4,826,357	\$-	\$-	\$337,500	\$6,211,738	\$11,565,840
U.S. Department of Transportation	\$65,000	\$-	\$30,500	\$4,802,900	\$-	\$-	\$98,850	\$940,530	\$5,937,780
National Aeronautics and Space Administration	\$-	\$10,000	\$90,000	\$893,331	\$-	\$-	\$1,567,301	\$3,170,926	\$5,731,558
Health Resource and Services Association	\$-	\$50,000	\$-	\$-	\$-	\$-	\$5,561,661	\$-	\$5,611,661
U.S. Department of Labor	\$-	\$-	\$-	\$4,577,117	\$-	\$-	\$-	\$-	\$4,577,117
U.S. Department of Energy	\$308,701	\$-	\$339,302	\$2,615,344	\$-	\$-	\$1,128,386	\$155,660	\$4,547,393
U.S. Department of Interior	\$59,700	\$-	\$-	\$2,420,397	\$-	\$-	\$54,134	\$449,888	\$2,984,118
U.S. Department of Homeland Security	\$135,395	\$-	\$944,400	\$747,600	\$-	\$-	\$277,080	\$811,336	\$2,915,811
U.S. Small Business Administration	\$259,494	\$36,360	\$142,680	\$38,458	\$-	\$-	\$917,315	\$20,000	\$1,414,307
U.S. Environmental Protection Agency	\$-	\$-	\$-	\$613,161	\$-	\$-	\$-	\$540,572	\$1,153,733
Corporation for National & Community Service	\$-	\$361,462	\$-	\$245,939	\$-	\$-	\$-	\$478,516	\$1,085,917
Engineering Research & Development Center	\$-	\$-	\$-	\$1,053,829	\$-	\$-	\$-	\$-	\$1,053,829
U.S. Department of Housing and Urban Development	\$98,499	\$-	\$-	\$1,360	\$-	\$-	\$-	\$758,707	\$858,566
National Highway Traffic Safety Administration	\$-	\$-	\$-	\$850,833	\$-	\$-	\$-	\$-	\$850,833
U.S. Department of Justice	\$141,451	\$100,000	\$-	\$57,081	\$-	\$-	\$353,250	\$121,403	\$773,185
Appalachian Regional Commission	\$-	\$-	\$-	\$698,749	\$-	\$-	\$30,840	\$-	\$729,589
NAVAIR SYSCOM	\$-	\$-	\$-	\$726,001	\$-	\$-	\$-	\$-	\$726,001
U.S. Economic Development Administration	\$-	\$-	\$-	\$628,592	\$-	\$-	\$-	\$-	\$628,592
U.S. Fish and Wildlife Service	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$546,845	\$546,845
Delta Area Economic Development	\$-	\$-	\$-	\$-	\$-	\$-	\$450,000	\$-	\$450,000
U.S. Food and Drug Administration	\$-	\$-	\$-	\$438,958	\$-	\$-	\$-	\$-	\$438,958
National Endowment for the Humanities	\$12,685	\$181,984	\$-	\$6,983	\$-	\$55,755	\$1,000	\$48,523	\$306,930
National Institute of Justice	\$-	\$-	\$-	\$264,603	\$-	\$-	\$-	\$-	\$264,603
U.S. Department of State	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$121,877	\$121,877
National Security Agency	\$69,966	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$69,966
Federal Highway Administration	\$-	\$-	\$-	\$55,000	\$-	\$-	\$-	\$-	\$55,000
National Endowment for the Arts	\$-	\$-	\$-	\$35,363	\$-	\$-	\$-	\$17,847	\$53,210
U.S. Department of Veterans Affairs	\$-	\$-	\$-	\$-	\$-	\$-	\$29,250	\$-	\$29,250
Open World Leadership Center	\$-	\$-	\$-	\$17,653	\$-	\$-	\$-	\$-	\$17,653
Defense Threat Reduction Agency	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$7,323	\$7,323
Institute of Museum and Library Sciences	\$-	\$-	\$-	\$-	\$7,190	\$-	\$-	\$-	\$7,190
Missile Defense Agency	\$-	\$-	\$-	\$5,550	\$-	\$-	\$-	\$-	\$5,550
Total	\$15,927,373	\$1,010,459	\$28,660,927	\$82,010,510	\$127,190	\$5,880,545	\$71,884,020	\$35,945,283	\$241,446,307

Alcorn State University
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013

Dr. M. Christopher Brown II, 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	\$312,701
School of Agriculture, Research, Extension, and Applied Sciences	52	\$9,721,472
School of Arts and Sciences	18	\$1,549,080
School of Business	2	\$32,393
School of Education and Psychology	2	\$440,947
School of General College of Excellence	4	\$650,241
School of Graduate Studies	1	\$500,000
School of Nursing	1	\$30,000
Title III Strengthening Institutional Programs	1	\$4,067,596
TOTAL	86	\$17,304,430
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Endowment for the Humanities	1	\$12,685
National Institutes of Health	2	\$167,790
National Science Foundation	1	\$270,754
National Security Agency	1	\$69,966
U.S. Department of Agriculture	32	\$7,871,261
U.S. Department of Defense	4	\$827,898
U.S. Department of Education	4	\$5,205,186
U.S. Department of Energy	2	\$308,701
U.S. Department of Health and Human Services	3	\$433,594
U.S. Department of Homeland Security	2	\$135,395
U.S. Department of Housing and Urban Development	1	\$98,499
U.S. Department of Interior	1	\$59,700
U.S. Department of Justice	1	\$141,451
U.S. Department of Transportation	1	\$65,000
U.S. Small Business Administration	2	\$259,494
TOTAL Federal Sources	58	\$15,927,373
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$-
State of Mississippi Agencies	7	\$409,099
Private/Corporate Business and Industry	6	\$342,148
Foundations and Non-Profit Groups	4	\$168,147
Other State Governments	0	\$-
Other In-State Universities	8	\$430,800
Other Out-of-State Universities	3	\$26,863
Local Governments	0	\$-
Foreign Governments & Organizations	0	\$-
Other [all other sources not listed above]	0	\$-
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	28	\$1,377,057
GRAND TOTAL of ALL EXTERNAL FUNDING	86	\$17,304,430

Delta State University
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013

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

Mr. Steven McClellan, Vice President for Finance and Administration
Phone number: 662-846-4004

Ms. Robin Boyles, Chief Research Officer
Phone number: 662-846-4804

I. Funding Distribution - College/Division	Number of Projects	Amount
Archives and Museums	3	\$24,975
Bologna Performing Arts Center	4	\$16,000
Coahoma Couty Higher Education Center	1	\$1,500
College of Arts and Sciences	17	\$1,663,781
College of Business	1	\$36,360
College of Education and Human Sciences	5	\$1,333,016
Delta Center for Culture and Learning	2	\$181,984
Office of Academic Affairs	1	\$1,000
Office of Student Affairs	1	\$87,762
Office of the President	4	\$663,364
School of Nursing	3	\$175,000
TOTAL	42	\$4,184,742

II. Funding Sources:

FEDERAL External Funding by Agency/Department

Federal Funding Source

Corporation for National & Community Service	2	\$361,462
Health Resource and Services Association	2	\$50,000
National Aeronautics and Space Administration	1	\$10,000
National Endowment for the Humanities	2	\$181,984
National Science Foundation	1	\$6,600
U.S. Department of Education	1	\$89,852
U.S. Department of Health and Human Services	2	\$174,201
U.S. Department of Justice	1	\$100,000
<u>U.S. Small Business Administration</u>	<u>1</u>	<u>\$36,360</u>
TOTAL Federal Sources	13	\$1,010,459

STATE, PRIVATE, CORPORATE, OTHER External Funding by

State Funding [other than general appropriation]	0	\$-
State of Mississippi Agencies	6	\$1,024,571
Private/Corporate Business and Industry	6	\$807,000
Foundations and Non-Profit Groups	16	\$1,336,712
Other State Governments	0	\$-
Other In-State Universities	0	\$-
Other Out-of-State Universities	1	\$6,000
Local Governments	0	\$-
Foreign Governments & Organizations	0	\$-
<u>Other [all other sources not listed above]</u>	<u>0</u>	<u>\$-</u>
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	29	\$3,174,283

GRAND TOTAL of ALL EXTERNAL FUNDING	42	\$4,184,742
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Jackson State University
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013

Dr. Carolyn W. Meyers, President
Phone number: 601-979-2323

Dr. Loretta A. Moore, Interim Vice President for Research
Phone number: 601-979-5840

I. Funding Distribution - College/Division	Number of Projects	Amount
College of Business	2	\$434,426
College of Education & Human Development	12	\$3,267,337
College of Liberal Arts	4	\$66,404
College of Public Service	17	\$1,506,137
College of Science, Engineering & Technology	64	\$16,893,938
Division of Academic Affairs	3	\$319,488
Division of International Programs	1	\$11,680
Division of Research, Development, & Federal Relations	24	\$12,934,979
Division of Student Life	3	\$38,400
Office of Institutional Advancement	2	\$443,088
<u>Office of the President</u>	<u>2</u>	<u>\$327,100</u>
TOTAL	134	\$36,242,977
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Aeronautics and Space Administration	2	\$90,000
National Institutes of Health	22	\$10,696,181
National Science Foundation	20	\$5,857,185
U.S. Department of Agriculture	1	\$291,746
U.S. Department of Commerce	2	\$190,245
U.S. Department of Defense	13	\$2,384,406
U.S. Department of Education	5	\$7,694,282
U.S. Department of Energy	4	\$339,302
U.S. Department of Homeland Security	1	\$944,400
U.S. Department of Transportation	5	\$30,500
<u>U.S. Small Business Administration</u>	<u>1</u>	<u>\$142,680</u>
TOTAL Federal Sources	76	\$28,660,927
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$-
State of Mississippi Agencies	29	\$3,045,618
Private/Corporate Business and Industry	21	\$4,157,568
Foundations and Non-Profit Groups	8	\$378,864
Other State Governments	0	\$-
Other In-State Universities	0	\$-
Other Out-of-State Universities	0	\$-
Local Governments	0	\$-
Foreign Governments & Organizations	0	\$-
<u>Other [all other sources not listed above]</u>	<u>0</u>	<u>\$-</u>
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	58	\$7,582,050
GRAND TOTAL of ALL EXTERNAL FUNDING	134	\$36,242,977

Mississippi State University
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013

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

Dr. David Shaw, Chief Research Officer
Phone number: 662-325-3570

I. Funding Distribution - College/Division	Number of Projects	Amount
Bagley College of Engineering	108	\$17,753,187
College of Architecture, Art, and Design	12	\$257,169
College of Arts and Sciences	80	\$7,128,405
College of Business	4	\$182,050
College of Education	83	\$17,482,847
College of Forest Resources/Forest Wildlife Research Center	113	\$4,201,872
College of Veterinary Medicine	19	\$775,746
Division of Student Affairs	6	\$503,284
Mitchell Memorial Library	2	\$6,000
MS Agricultural and Forestry Experiment Station (MAFES)/CAL5	248	\$21,275,197
MS State University Extension Service (MSU ES)	188	\$15,966,416
Office of Graduate Studies	2	\$53,500
University Branch Campus (Meridian)	6	\$298,320
University Centers and Institutes	63	\$22,755,630
Vice President for Campus Services	1	\$809,041
Vice President for Research and Economic Development	7	\$5,371,238
TOTAL	942	\$114,819,901

II. Funding Sources	Number of Projects	Amount
FEDERAL External Funding by Agency/Department		
Appalachian Regional Commission	6	\$698,749
Corporation for National & Community Service	1	\$245,939
Engineering Research & Development Center	10	\$1,053,829
Federal Highway Administration	1	\$55,000
Missile Defense Agency	1	\$5,550
National Aeronautics and Space Administration	13	\$893,331
National Endowment for the Arts	7	\$35,363
National Endowment for the Humanities	3	\$6,983
National Highway Traffic Safety Administration	3	\$850,833
National Institutes of Health	16	\$1,632,845
National Institute of Justice	3	\$264,603
National Science Foundation	33	\$11,192,009
NAVAIR SYSCOM	2	\$726,001
Open World Leadership Center	1	\$17,653
U.S. Department of Agriculture	148	\$20,568,748
U.S. Department of Commerce	10	\$4,826,357
U.S. Department of Defense	38	\$5,336,936
U.S. Department of Education	51	\$6,956,508
U.S. Department of Energy	27	\$2,615,344
U.S. Food and Drug Administration	3	\$438,958
U.S. Department of Health and Human Services	24	\$9,702,308
U.S. Department of Homeland Security	6	\$747,600
U.S. Department of Housing and Urban Development	1	\$1,360
U.S. Department of Interior	20	\$2,420,397
U.S. Department of Justice	3	\$57,081
U.S. Department of Labor	3	\$4,577,117
U.S. Department of Transportation	11	\$4,802,900
U.S. Economic Development Administration	2	\$628,592

**Mississippi State University
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013**

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

**Dr. David Shaw, Chief Research Officer
Phone number: 662-325-3570**

II. Funding Sources	Number of Projects	Amount
FEDERAL External Funding by Agency/Department Continued		
U.S. Environmental Protection Agency	6	\$613,161
<u>U.S. Small Business Administration</u>	<u>1</u>	<u>\$38,458</u>
TOTAL	454	\$82,010,510
	Number of	
STATE, PRIVATE, CORPORATE, OTHER External Funding by	Projects	Amount
State Funding [other than general appropriation]	0	\$-
State of Mississippi Agencies	50	\$10,939,631
Private/Corporate Business and Industry	245	\$7,484,781
Foundations and Non-Profit Groups	161	\$13,538,083
Other State Governments	6	\$288,544
Other In-State Universities	2	\$145,770
Other Out-of-State Universities	2	\$60,503
Local Governments	13	\$199,986
<u>Foreign Governments & Organizations</u>	<u>9</u>	<u>\$152,093</u>
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	488	\$32,809,391
GRAND TOTAL of ALL EXTERNAL FUNDING	942	\$114,819,901

**Mississippi University for Women
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013**

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

**Ms. Nora Miller, Senior Vice President for Finance and Administration
Phone number: 662-329-7145**

I. Funding Distribution - College/Division	Number of Projects	Amount
Academic Support *	1	\$4,370,000
Center for Creative Learning	2	\$651,823
College of Education and Human Sciences	2	\$95,000
College of Nursing	1	\$30,000
Other Units	3	\$157,190
*Includes total for Mississippi School for Math and Science		\$4,370,000
TOTAL	9	\$5,304,013

II. Funding Sources		
FEDERAL External Funding by Agency/Department		
Institute of Museum and Library Sciences	1	\$7,190
U.S. Department of Education	1	\$90,000
<u>U.S. Department of Health and Human Services</u>	<u>1</u>	<u>\$30,000</u>
TOTAL	3	\$127,190
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$-
State of Mississippi Agencies	1	\$5,000
Private/Corporate Business and Industry	0	\$-
Foundations and Non-Profit Groups	3	\$402,300
Other State Governments	2	\$4,769,523
Other In-State Universities	0	\$-
Other Out-of-State Universities	0	\$-
Local Governments	0	\$-
Foreign Governments & Organizations	0	\$-
<u>Other [all other sources not listed above]</u>	<u>0</u>	<u>\$-</u>
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	6	\$5,176,823
GRAND TOTAL of ALL EXTERNAL FUNDING	9	\$5,304,013

**Mississippi Valley State University
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013**

**Dr. Alfred Rankins, Jr., 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
Division of Academic Affairs	15	\$1,358,848
Division of Business and Finance	4	\$573,262
Division of Student Affairs	4	\$1,298,978
Title III Strengthening Institutions Program	2	\$3,526,567
TOTAL	25	\$6,757,655
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Endowment for the Humanities	1	\$55,755
National Science Foundation	1	\$497,544
<u>U.S. Department of Agriculture</u>	<u>1</u>	<u>\$21,701</u>
<u>U.S. Department of Education</u>	<u>6</u>	<u>\$5,305,545</u>
TOTAL	9	\$5,880,545
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	\$-
State of Mississippi Agencies	5	\$583,161
Private/Corporate Business and Industry	0	\$-
Foundations and Non-Profit Groups	4	\$176,592
Other State Governments	0	\$-
Other In-State Universities	4	\$79,396
Other Out-of-State Universities	1	\$20,000
Local Governments	0	\$-
Foreign Governments & Organizations	0	\$-
<u>Other [all other sources not listed above]</u>	<u>2</u>	<u>\$17,961</u>
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	16	\$877,110
GRAND TOTAL of ALL EXTERNAL FUNDING	25	\$6,757,655

University of Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013

Dr. Daniel W. Jones, Chancellor
Phone number: 662-915-1100

Dr. Alice M. Clark, Vice Chancellor for Research and Sponsored Programs
Phone number: 662-915-7583

Dr. James Keeton, Vice Chancellor for Health Affairs
Phone number: 601-984-1058

Dr. John Hall, 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	77	\$5,607,869
Division of Outreach and Continuing Education	8	\$266,192
Ford Center for Performing Arts	2	\$3,200
Graduate School	1	\$43,500
International Programs	1	\$1,000
Jamie Whitten National Center for Physical Acoustics	31	\$4,688,722
National Center for Computational Hydroscience and Engineering	12	\$1,416,766
National Center for Natural Products Research	15	\$7,835,702
National Food Service Management Institute	5	\$11,266,000
National Institute for Undersea Science & Technology	3	\$6,806,543
Office of Research	2	\$11,800
Office of the Chancellor	1	\$252,000
Office of the Provost	2	\$56,000
School of Applied Sciences (not including NSFMI)	17	\$2,608,505
School of Business Administration	4	\$922,315
School of Education	20	\$9,174,383
School of Engineering (not including NCCHE)	32	\$3,069,925
School of Journalism and New Media	2	\$53,200
School of Law	12	\$940,368
School of Pharmacy (not including NCNPR)	43	\$5,239,420
University Counseling Center	1	\$253,250
University Museums	3	\$2,744
University of Mississippi Field Station	2	\$36,456
<u>William Winter Institute for Racial Reconciliation</u>	<u>1</u>	<u>\$1,000,000</u>
Total Oxford	297	\$61,555,860
B. Medical Center		
Academic Affairs	1	\$5,500
Academic Information	1	\$5,200
School of Dentistry	9	\$593,644
School of Health Related Professions	1	\$150,000
School of Medicine	238	\$39,961,908
School of Nursing	6	\$1,218,593
Sponsored Programs	1	\$145,856
Strategic Research Alliances	9	\$2,072,184
<u>Teaching Hospital</u>	<u>3</u>	<u>\$364,152</u>
Total Medical Center	269	\$44,517,037
TOTAL (UM + UMMC)	566	\$106,072,897

University of Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013

Dr. Daniel W. Jones, Chancellor
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Dr. John Hall, Associate Vice Chancellor for Research
Phone number: 601-815-5000

II. Funding Sources

FEDERAL External Funding by Agency/Department

Appalachian Regional Commission	1	\$30,840
Delta Area Economic Development	1	\$450,000
Health Resource and Services Association	34	\$5,561,661
National Aeronautics and Space Administration	6	\$1,567,301
National Endowment for the Humanities	1	\$1,000
National Institutes of Health	119	\$23,137,306
National Science Foundation	13	\$2,818,063
U.S. Department of Agriculture	23	\$15,810,855
U.S. Department of Commerce	2	\$337,500
U.S. Department of Defense	25	\$5,028,595
U.S. Department of Education	4	\$585,032
U.S. Department of Energy	7	\$1,128,386
U.S. Department of Health and Human Services	24	\$13,697,602
U.S. Department of Homeland Security	3	\$277,080
U.S. Department of Interior	2	\$54,134
U.S. Department of Justice	2	\$353,250
U.S. Department of Transportation	1	\$98,850
U.S. Department of Veterans Affairs	1	\$29,250
U.S. Small Business Administration	3	\$917,315
TOTAL	272	\$71,884,020

STATE, PRIVATE, CORPORATE, OTHER External Funding by

State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	74	\$8,185,615
Private/Corporate Business and Industry	66	\$4,708,333
Foundations and Non-Profit Groups	126	\$20,001,134
Other State Governments	2	\$20,800
Other In-State Universities	0	\$-
Other Out-of-State Universities	19	\$1,195,544
Local Governments	5	\$18,750
Foreign Governments & Organizations	2	\$58,701
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	294	\$34,188,877

GRAND TOTAL of ALL EXTERNAL FUNDING	566	\$106,072,897
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University of Southern Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2012 - June 30, 2013

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

Dr. Gordon Cannon, Vice President for Research
Phone number: 601-266-5116

I. Funding Distribution - College/Division	Number of Projects	Amount
College of Arts and Letters	22	\$465,929
College of Education and Psychology	29	\$4,941,414
College of Health	34	\$6,817,800
College of Nursing	3	\$273,600
College of Science and Technology	124	\$29,957,808
Gulf Coast Vice President	1	\$32,000
Office of Student Affairs	4	\$511,203
Office of the Provost	2	\$258,087
Office of the Vice President for Research	36	\$8,937,775
Total	255	\$52,195,616

II. Funding Sources	Number of Projects	Amount
Federal Funding Source	3	\$478,516
Corporation for National & Community Service	1	\$7,323
Defense Threat Reduction Agency	9	\$3,170,926
National Aeronautics and Space Administration	5	\$17,847
National Endowment for the Arts	12	\$48,523
National Endowment for the Humanities	19	\$3,985,368
National Science Foundation	3	\$1,127,129
U.S. Department of Agriculture	23	\$6,211,738
U.S. Department of Commerce	11	\$6,188,426
U.S. Department of Defense	20	\$5,929,491
U.S. Department of Education	2	\$155,660
U.S. Department of Energy	32	\$4,313,178
U.S. Department of Health and Human Services	5	\$811,336
U.S. Department of Homeland Security	3	\$758,707
U.S. Department of Housing and Urban Development	8	\$449,888
U.S. Department of Interior	3	\$121,403
U.S. Department of Justice	0	\$121,877
U.S. Department of State	9	\$940,530
U.S. Department of Transportation	6	\$540,572
U.S. Environmental Protection Agency	1	\$546,845
U.S. Fish and Wildlife Service	1	\$20,000
<u>U.S. Small Business Administration</u>	<u>1</u>	<u>\$20,000</u>
TOTAL	176	\$35,945,283

STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	17	\$4,037,201
Private/Corporate Business and Industry	31	\$9,815,471
Foundations and Non-Profit Groups	30	\$2,395,861
Other State Governments	0	\$-
Other In-State Universities	0	\$-
Other Out-of-State Universities	1	\$1,800
Local Governments	0	\$-
Foreign Governments & Organizations	0	\$-
Other [all other sources not listed above]	0	\$-
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	79	\$16,250,333
GRAND TOTAL of ALL EXTERNAL FUNDING	255	\$52,195,616

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.