

F
Y

2
0
1
2



RESEARCH CATALOG



OCTOBER 2012

PREFACE

FY 2012 RESEARCH CATALOG

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

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

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

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

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

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

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

H. Ed Blakeslee, President
Gulfport

Bob Owens, Vice President
Terry

Karen L. Cummins
Oakland

Dr. Bradford J. Dye, III
Oxford

Shane Hooper
Tupelo

Hal Parker
Bolton

Aubrey B. Patterson
Tupelo

Alan W. Perry
Jackson

Christine Lindsay Pickering
Biloxi

Robin J. Robinson
Laurel

Dr. Douglas W. Rouse
Hattiesburg

C. D. Smith, Jr.
Meridian

Dr. Hank M. Bounds
Commissioner of Higher Education

INSTITUTIONAL EXECUTIVE OFFICERS

Dr. M. Christopher Brown, II, President
Alcorn State University

Dr. John M. Hilpert, President
Delta State University

Dr. Carolyn Meyers, President
Jackson State University

Dr. Mark E. Keenum, President
Mississippi State University

Dr. Jim B. Borsig, President
Mississippi University for Women

Dr. Donna H. Oliver, President
Mississippi Valley State University

Dr. Daniel W. Jones, Chancellor
University of Mississippi

Dr. Aubrey K. Lucas, Interim President
University of Southern Mississippi

Dr. James E. Keeton, Vice Chancellor for Health Affairs
University of Mississippi Medical Center

Dr. Gregory A. Bohach, Vice President
Agriculture, Forestry and Veterinary Medicine
Mississippi State University

TABLE OF CONTENTS

Preface.....	i
Board of Trustees.....	ii
Institutional Executive Officers.....	iii
Table of Contents.....	iv
System Summary.....	1
System History.....	2
System Trend of Federal Funding.....	3
Federal Funding in Descending Order.....	4
Alcorn State University.....	5
Delta State University.....	6
Jackson State University.....	7
Mississippi State University.....	8
Mississippi University for Women.....	10
Mississippi Valley State University.....	11
University of Mississippi with the University of Mississippi Medical Center.....	12
University of Southern Mississippi.....	14
<hr/>	
UNIVERSITY RESEARCH GROUPS.....	15
Mississippi University Research Authority (MURA).....	16
Mississippi Research Consortium (MRC).....	17
Mississippi Education and Research Group (MERG).....	18

MISSISSIPPI INSTITUTIONS OF HIGHER LEARNING

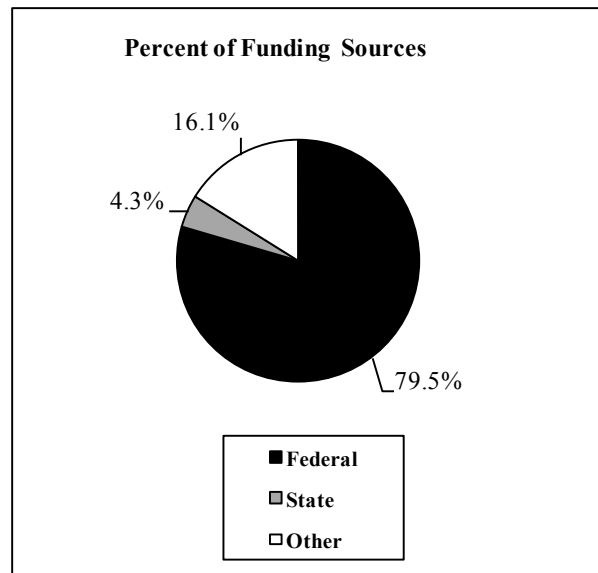
FY 20121 Research Catalog - IHL System Summary

Dr. Hank M. Bounds, Commissioner

Period Covered: July 1, 2011 - June 30, 2012

University	Federal	State	Private/ Corporate/Other	Total Funding Awarded
ASU	\$27,355,032	\$562,216	\$2,029,984	\$29,947,232
DSU	\$3,078,533	\$6,913	\$4,000,809	\$7,086,255
JSU	\$44,288,635	\$2,518,253	\$1,857,911	\$48,664,799
MSU	\$114,582,684	\$3,592,091	\$16,729,570	\$134,904,345
MUW*	\$732,236	\$36,213	\$5,701,200	\$6,469,649
MVSU	\$6,188,892	\$854,398	\$823,040	\$7,866,330
UM/UMMC	\$85,132,242	\$6,949,844	\$17,777,421	\$109,859,507
USM	\$43,286,340	\$3,232,392	\$16,823,854	\$63,342,586
SYSTEM	\$324,644,594	\$17,752,320	\$65,743,789	\$408,140,703

University	Total Research Projects Supported
ASU	119
DSU	62
JSU	180
MSU	1,212
MUW*	31
MVSU	33
UM/UMMC	499
USM	256
SYSTEM	2,392



* 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 2008	FY 2009	FY 2010	FY 2011	FY 2012
ASU	\$24,563,364	\$26,499,386	\$28,504,626	\$30,821,885	\$29,947,232
DSU	10,176,004	13,263,122	13,877,250	6,137,743	7,086,255
JSU	58,686,784	66,079,898	68,178,800	57,023,314	48,664,799
MSU	151,426,449	145,982,717	201,621,088	166,660,258	134,904,345
MUW*	7,125,046	7,137,115	6,531,459	6,664,021	6,469,649
MVSU	9,640,678	12,374,960	7,527,441	12,273,455	7,866,330
UM	60,494,424	82,988,530	101,932,683	78,854,347	49,644,887
UMMC	39,703,476	60,867,198	75,368,727	84,995,810	60,214,620
USM	90,578,506	73,744,642	82,801,673	77,724,860	63,342,586
SYSTEM	\$452,394,730	\$488,937,568	\$586,343,747	\$521,155,694	\$408,140,703

Percent Change in Total External Funding

University	FY 2008 to FY 2009	FY 2009 to FY 2010	FY 2010 to FY 2011	FY 2011 to FY 2012
ASU	7.9%	7.6%	8.1%	-2.8%
DSU	30.3%	4.6%	-55.8%	15.5%
JSU	12.6%	3.2%	-16.4%	-14.7%
MSU	-3.6%	38.1%	-17.3%	-19.1%
MUW*	0.2%	-8.5%	2.0%	-2.9%
MVSU	28.4%	-39.2%	63.0%	-35.9%
UM	37.2%	22.8%	-22.6%	-37.0%
UMMC	53.3%	23.8%	12.8%	-29.2%
USM	-18.6%	12.3%	-6.1%	-18.5%
SYSTEM	8.1%	19.9%	-11.1%	-21.7%

Percent Change in Total Projects Supported

Fiscal Year	# of Projects	% Change
FY 2008	2,627	
FY 2009	2,511	-4.4%
FY 2010	2,524	0.5%
FY 2011	2,530	0.2%
FY 2012	2,392	-5.5%

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

**FY 2012 Research and Sponsored Programs
System Trend of Federal External Funding**

Funding Source	2010 Total	2011 Total	2012 Total	2011-12 % Change	2010-12 % Change
Appalachian Regional Commission	\$61,315	\$652,781	\$346,418	-46.9%	465.0%
Corporation for National & Community Service	\$1,497,387	\$1,448,484	\$1,589,262	9.7%	6.1%
Corporation for Public Broadcasting	\$169,352	\$305,487	-	-100.0%	-100.0%
Engineering Research & Development Center (ERDC)	-	\$581,346	\$821,626	41.3%	n/a
Federal Emergency Management Agency (FEMA)	-	\$327,750	-	-100.0%	n/a
Fund for the Improvement of Postsecondary Education	-	\$30,491	\$34,250	12.3%	n/a
Federal Trade Commission	\$4,000	-	-	n/a	-100.0%
Health Resource and Services Association	\$16,929,953	\$19,658,604	\$5,873,936	-70.1%	-65.3%
Incorporated Research Institutions for Seismology	-	\$738	-	-100.0%	n/a
Institute of Museum and Library Sciences	\$750,000	\$357,081	\$526,139	47.3%	-29.8%
Los Alamos National Lab	\$13,500	-	-	n/a	-100.0%
National Aeronautics and Space Administration	\$9,430,179	\$10,806,774	\$5,045,754	-53.3%	-46.5%
National Endowment for the Arts	\$84,258	\$43,500	\$34,266	-21.2%	-59.3%
National Endowment for the Humanities	\$541,325	\$355,107	\$324,714	-8.6%	-40.0%
National Highway Traffic Safety Administration (NHTSA)	-	\$1,205,096	\$975,649	-19.0%	n/a
National Institutes of Health	\$51,011,067	\$43,253,427	\$49,930,769	15.4%	-2.1%
National Oceanic and Atmospheric Administration	-	-	\$108,991	n/a	n/a
National Science Foundation	\$36,920,430	\$34,287,007	\$23,858,495	-30.4%	-35.4%
National Security Agency	\$398,720	\$45,323	\$75,505	66.6%	-81.1%
NAVAIR SYSCOM	-	\$23,637	\$519,417	2097.5%	n/a
Nuclear Regulatory Commission	-	\$200,000	-	-100.0%	n/a
Oak Ridge Associated Universities	-	\$5,000	-	-100.0%	n/a
SAMSHA	\$10,000	-	-	n/a	-100.0%
Southern SARE Program	-	\$92,363	-	-100.0%	n/a
Substance Abuse & Mental Health Services Administration	-	\$91,427	-	-100.0%	n/a
Tennessee Valley Authority	-	\$1,899	\$5,309	179.6%	n/a
The Aerospace Corporation	-	\$25,312	-	-100.0%	n/a
U.S. Agency of International Development	\$826,022	-	-	n/a	-100.0%
U.S. Army Corps of Engineers	-	\$1,144,012	\$30,619	-97.3%	n/a
U.S. Army Tank Automotive & Armaments Command	-	-	\$139,927	n/a	n/a
U.S. Department of Agriculture	\$61,434,073	\$47,721,385	\$49,887,743	4.5%	-18.8%
U.S. Department of Commerce	\$48,639,704	\$66,651,976	\$15,781,991	-76.3%	-67.6%
U.S. Department of Defense	\$52,210,455	\$47,153,821	\$30,488,918	-35.3%	-41.6%
U.S. Department of Education	\$40,753,299	\$50,776,620	\$43,735,837	-13.9%	7.3%
U.S. Department of Energy	\$31,039,497	\$18,482,645	\$18,606,376	0.7%	-40.1%
U.S. Department of Health and Human Services	\$50,184,640	\$45,094,522	\$35,747,684	-20.7%	-28.8%
U.S. Department of Homeland Security	\$8,925,623	\$8,671,501	\$5,384,438	-37.9%	-39.7%
U.S. Department of Housing and Urban Development	\$6,791,125	\$4,399,999	\$2,087,898	-52.5%	-69.3%
U.S. Department of Interior	\$4,613,930	\$6,061,692	\$7,139,323	17.8%	54.7%
U.S. Department of Justice	\$13,588,989	\$10,022,331	\$2,392,891	-76.1%	-82.4%
U.S. Department of Labor	\$726,000	\$6,853,460	\$9,500,616	38.6%	1208.6%
U.S. Department of State	\$4,389,611	\$3,264,875	\$3,085,647	-5.5%	-29.7%
U.S. Department of the Treasury	-	\$36,500	-	-100.0%	n/a
U.S. Department of Transportation	\$4,660,862	\$4,607,504	\$6,274,648	36.2%	34.6%
U.S. Department of Veterans Affairs	\$324,567	\$137,757	\$76,976	-44.1%	-76.3%
U.S. Election Assistance Commission	\$48,471	-	-	n/a	-100.0%
U.S. Economic Development Administration (USEDA)	-	\$142,880	\$142,880	0.0%	n/a
U.S. Environmental Protection Agency	\$1,322,789	\$3,891,138	\$1,108,421	-71.5%	-16.2%
U.S. Geological Survey	\$1,281,046	\$50,000	\$190,000	280.0%	-85.2%
U.S. National Archives and Records Administration	-	-	\$113,198	n/a	n/a
U.S. Small Business Administration	\$4,424,168	\$4,169,502	\$2,658,063	-36.2%	-39.9%
United Negro College Fund	-	\$20,000	-	-100.0%	n/a
Workforce Investment Act	\$2,706	-	-	n/a	-100.0%
Other Federal	\$1,004,414	-	-	n/a	-100.0%
Total	\$455,013,477	\$443,152,752	\$324,644,594	-26.7%	-28.7%

**Summary of Federal External Funding by Funding Source
in Descending Order of Totals by Source, 2012**

Funding Source	ASU	DSU	JSU	MSU	MUW	MVSU	UM/UMMC	USM	2012 Total
National Institutes of Health	\$1,450,721	-	\$9,354,669	\$1,728,207	-	-	\$37,397,172	-	\$49,930,769
U.S. Department of Agriculture	\$13,057,261	\$265,555	\$73,500	\$28,370,916	-	\$60,000	\$6,961,459	\$1,099,052	\$49,887,743
U.S. Department of Education	\$4,323,394	\$1,015,702	\$19,222,724	\$9,005,203	\$320,693	\$5,330,117	\$543,588	\$3,974,416	\$43,735,837
U.S. Department of Health and Human Services	\$194,870	\$144,520	\$992,834	\$9,894,712	\$119,874	-	\$13,162,240	\$11,238,634	\$35,747,684
U.S. Department of Defense	\$3,102,271	\$-	\$1,147,529	\$11,656,642	-	-	\$9,754,544	\$4,827,932	\$30,488,918
National Science Foundation	\$161,801	\$46,326	\$6,462,227	\$9,634,808	-	\$694,260	\$3,799,160	\$3,059,913	\$23,858,495
U.S. Department of Energy	\$744,243	-	\$1,466,464	\$14,975,419	-	-	\$1,063,250	\$357,000	\$18,606,376
U.S. Department of Commerce	-	-	\$799,613	\$5,057,535	-	-	\$1,875,000	\$8,049,843	\$15,781,991
U.S. Department of Labor	-	-	-	\$9,454,616	-	\$46,000	-	-	\$9,500,616
U.S. Department of Interior	\$400,000	\$231,000	-	\$3,437,961	-	-	\$295,500	\$2,774,862	\$7,139,323
U.S. Department of Transportation	\$65,000	-	\$39,200	\$4,961,006	-	-	-	\$1,209,442	\$6,274,648
Health Resource and Services Association	-	\$90,000	-	-	-	-	\$5,783,936	-	\$5,873,936
U.S. Department of Homeland Security	\$917,476	\$70,686	\$1,624,984	\$421,511	-	\$38,515	\$499,998	\$1,811,268	\$5,384,438
National Aeronautics and Space Administration	-	-	\$111,101	\$942,264	-	\$20,000	\$1,990,000	\$1,982,389	\$5,045,754
U.S. Department of State	-	-	\$2,968,790	-	-	-	-	\$116,857	\$3,085,647
U.S. Small Business Administration	\$820,000	\$60,300	-	\$102,046	-	-	\$1,572,820	\$102,897	\$2,658,063
U.S. Department of Justice	\$1,520,392	\$100,000	-	\$273,956	-	-	\$300,000	\$198,543	\$2,392,891
U.S. Department of Housing and Urban Development	\$495,000	-	-	\$432,000	\$30,747	-	-	\$1,130,151	\$2,087,898
Corporation for National & Community Service	-	\$626,572	-	-	-	-	\$44,099	\$918,591	\$1,589,262
U.S. Environmental Protection Agency	\$5,000	\$59,000	\$25,000	\$788,240	-	-	-	\$231,181	\$1,108,421
National Highway Traffic Safety Administration (NHTSA)	-	-	-	\$975,649	-	-	-	-	\$975,649
Engineering Research & Development Center (ERDC)	-	-	-	\$821,626	-	-	-	-	\$821,626
Institute of Museum and Library Sciences	-	-	-	\$526,139	-	-	-	-	\$526,139
NAVAIR SYSCOM	-	-	-	\$519,417	-	-	-	-	\$519,417
Appalachian Regional Commission (ARC)	-	-	-	\$194,487	\$151,931	-	-	-	\$346,418
National Endowment for the Humanities	\$97,603	\$178,872	-	-	-	-	\$2,500	\$45,739	\$324,714
U.S. Geological Survey	-	\$190,000	-	-	-	-	-	-	\$190,000
U.S. Economic Development Administration (USEDA)	-	-	-	\$142,880	-	-	-	-	\$142,880
U.S. Army Tank Automotive & Armaments Command	-	-	-	\$139,927	-	-	-	-	\$139,927
U.S. National Archives and Records Administration	-	-	-	-	-	-	-	\$113,198	\$113,198
National Oceanic and Atmospheric Administration	-	-	-	-	\$108,991	-	-	-	\$108,991
U.S. Department of Veterans Affairs	-	-	-	-	-	-	\$76,976	-	\$76,976
National Security Agency	-	-	-	\$75,505	-	-	-	-	\$75,505
National Endowment for the Arts	-	-	-	\$10,453	-	-	\$10,000	\$13,813	\$34,266
Fund for the Improvement of Postsecondary Education	-	-	-	\$34,250	-	-	-	-	\$34,250
U.S. Army Corps of Engineers	-	-	-	-	-	-	-	\$30,619	\$30,619
Tennessee Valley Authority (TVA)	-	-	-	\$5,309	-	-	-	-	\$5,309
Total	\$27,355,032	\$3,078,533	\$44,288,635	\$114,582,684	\$732,236	\$6,188,892	\$85,132,242	\$43,286,340	\$324,644,594

Alcorn State University
Annual Report on Research and Sponsored Programs
July 1, 2011 - June 30, 2012

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	7	\$1,035,988
School of Agriculture, Research, Extension, and Applied Sciences	76	\$20,709,723
School of Arts and Sciences	21	\$2,663,396
School of Business	2	\$358,243
School of Education and Psychology	3	\$683,394
School of General College of Excellence	6	\$737,465
School of Graduate Studies	2	\$738,000
School of Nursing	1	\$30,000
Title III Strengthenig Institutional Programs	1	\$2,991,023
TOTAL	119	\$29,947,232
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Endowment for the Humanities	1	\$97,603
National Institutes of Health	5	\$1,450,721
National Science Foundation	2	\$161,801
U.S. Department of Agriculture	42	\$13,057,261
U.S. Department of Defense	4	\$3,102,271
U.S. Department of Education	8	\$4,323,394
U.S. Department of Energy	2	\$744,243
U.S. Department of Health and Human Services	2	\$194,870
U.S. Department of Homeland Security	3	\$917,476
U.S. Department of Housing and Urban Development	1	\$495,000
U.S. Department of Interior	1	\$400,000
U.S. Department of Justice	1	\$1,520,392
U.S. Department of Transportation	1	\$65,000
U.S. Environmental Protection Agency	1	\$5,000
<u>U.S. Small Business Administration</u>	<u>2</u>	<u>\$820,000</u>
TOTAL Federal Sources	76	\$27,355,032
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	5	\$562,216
Private/Corporate Business and Industry	9	\$502,809
Foundations and Non-Profit Groups	11	\$474,572
Other State Governments	0	-
Other In-State Universities	8	\$603,106
Other Out-of-State Universities	8	\$435,716
Local Governments	2	\$13,781
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	43	\$2,592,200
GRAND TOTAL of ALL EXTERNAL FUNDING	119	\$29,947,232

Delta State University
Annual Report on Research and Sponsored Programs
July 1, 2011 - June 30, 2012

Dr. John Hilpert, President
Phone number: 662-846-4000

Mr. Greg Redlin, 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	1	\$4,000
Bologna Performing Arts Center	7	\$109,944
College of Arts and Sciences	25	\$3,281,019
College of Business	8	\$421,707
College of Education	8	\$533,438
Delta Center for Culture and Learning	5	\$435,872
Office of the President/Admissions	3	\$2,002,220
School of Nursing	5	\$298,055
TOTAL	62	\$7,086,255
II. Funding Sources:		
FEDERAL External Funding by Agency/Department		
Federal Funding Source		
Corporation for National & Community Service	2	\$626,572
Health Resource and Services Association	2	\$90,000
National Endowment for the Humanities	1	\$178,872
National Science Foundation	1	\$46,326
U.S. Department of Agriculture	2	\$265,555
U.S. Department of Education	5	\$1,015,702
U.S. Department of Health and Human Services	3	\$144,520
U.S. Department of Homeland Security	1	\$70,686
U.S. Department of Interior	2	\$231,000
U.S. Department of Justice	1	\$100,000
U.S. Environmental Protection Agency	1	\$59,000
U.S. Geological Survey	2	\$190,000
U.S. Small Business Administration	1	\$60,300
TOTAL Federal Sources	24	\$3,078,533
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	3	\$6,913
Private/Corporate Business and Industry	7	\$855,828
Foundations and Non-Profit Groups	26	\$3,061,926
Other State Governments	0	-
Other In-State Universities	2	\$83,055
Other Out-of-State Universities	0	-
Local Governments	0	-
Foreign Governments & Organizations	0	-
Other [all other sources not listed above]	0	-
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	38	\$4,007,722
GRAND TOTAL of ALL EXTERNAL FUNDING	62	\$7,086,255

Jackson State University
Annual Report on Research and Sponsored Programs
July 1, 2011 - June 30, 2012

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

Dr. Felix A. Okojie, Chief Research Officer
Phone number: 601-979-2931

I. Funding Distribution - College/Division	Number of Projects	Amount
College of Business	5	\$481,440
College of Education & Human Development	12	\$970,435
College of Liberal Arts	6	\$274,874
College of Public Service	17	\$3,008,674
College of Science, Engineering & Technology	81	\$17,381,083
Division of Academic Affairs	10	\$3,200,204
Division of Research, Development, & Federal Relations	40	\$22,351,397
Division of Student Life	6	\$537,497
Office of Institutional Advancement	1	\$118,765
Office of the President	2	\$340,430
TOTAL	180	\$48,664,799
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Aeronautics and Space Administration	3	\$111,101
National Institutes of Health	26	\$9,354,669
National Science Foundation	18	\$6,462,227
U.S. Department of Agriculture	1	\$73,500
U.S. Department of Commerce	5	\$799,613
U.S. Department of Defense	13	\$1,147,529
U.S. Department of Education	15	\$19,222,724
U.S. Department of Energy	6	\$1,466,464
U.S. Department of Health and Human Services	4	\$992,834
U.S. Department of Homeland Security	3	\$1,624,984
U.S. Department of State	2	\$2,968,790
U.S. Department of Transportation	3	\$39,200
U.S. Environmental Protection Agency	1	\$25,000
TOTAL Federal Sources	100	\$44,288,635
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	42	\$2,518,253
Private/Corporate Business and Industry	20	\$973,306
Foundations and Non-Profit Groups	18	\$884,605
Other State Governments	0	-
Other In-State Universities	0	-
Other Out-of-State Universities	0	-
Local Governments	0	-
Foreign Governments & Organizations	0	-
Other [all other sources not listed above]	0	-
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	80	\$4,376,164
GRAND TOTAL of ALL EXTERNAL FUNDING	180	\$48,664,799

Mississippi State University
Annual Report on Research and Sponsored Programs
July 1, 2011 - June 30, 2012

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	131	\$24,521,457
College of Architecture, Art, and Design	15	\$681,156
College of Arts and Sciences	86	\$5,024,363
College of Business	6	\$602,078
College of Education	114	\$8,787,594
College of Forest Resources/Forest Wildlife Research Center	118	\$8,306,994
College of Veterinary Medicine	22	\$1,626,416
Division of Academic Outreach & Continuing Education	1	\$3,200
Division of Student Affairs	9	\$1,139,969
Mitchell Memorial Library	1	\$3,100
MS Agricultural and Forestry Experiment Station (MAFES)/CALS	451	\$29,086,914
MS State University Extension Service (MSU ES)	176	\$17,134,772
Office of Graduate Studies	1	\$40,500
University Branch Campus (Meridian)	6	\$227,895
University Centers and Institutes	61	\$35,886,754
Vice President for Research and Economic Development	14	\$1,831,184
TOTAL	1,212	\$134,904,346

II. Funding Sources		
FEDERAL External Funding by Agency/Department		
Appalachian Regional Commission (ARC)	5	\$194,487
Engineering Research & Development Center (ERDC)	8	\$821,626
Fund for the Improvement of Postsecondary Education	1	\$34,250
Institute of Museum and Library Sciences	3	\$526,139
National Aeronautics and Space Administration	17	\$942,264
National Endowment for the Arts	3	\$10,453
National Highway Traffic Safety Administration	5	\$975,649
National Institutes of Health	16	\$1,728,207
National Science Foundation	38	\$9,634,808
National Security Agency	2	\$75,505
NAVAIR SYSCOM	6	\$519,417
Tennessee Valley Authority (TVA)	4	\$5,309
US Army Tank Automotive and Armaments Command	1	\$139,927
U.S. Department of Agriculture	143	\$28,370,916
U.S. Department of Commerce	15	\$5,057,535
U.S. Department of Defense	51	\$11,656,642
U.S. Department of Education	82	\$9,005,203
U.S. Department of Energy	32	\$14,975,419
U.S. Department of Health and Human Services	26	\$9,894,712
U.S. Department of Homeland Security	12	\$421,511
U.S. Department of Housing and Urban Development	2	\$432,000
U.S. Department of Interior	23	\$3,437,961
U.S. Department of Justice	3	\$273,956
U.S. Department of Labor	5	\$9,454,616
U.S. Department of Transportation	10	\$4,961,006
U.S. Economic Development Administration (USEDA)	1	\$142,880
U.S. Environmental Protection Agency	6	\$788,240
U.S. Small Business Administration	2	\$102,046
TOTAL	522	\$114,582,683

**Mississippi State University
Annual Report on Research and Sponsored Programs
July 1, 2011 - June 30, 2012**

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

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

STATE, PRIVATE, CORPORATE, OTHER External Funding by	Number of Projects	Amount
State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	56	\$3,592,091
Private/Corporate Business and Industry	426	\$5,544,547
Foundations and Non-Profit Groups	163	\$9,780,045
Other State Governments	8	\$491,379
Other In-State Universities	1	\$140,649
Other Out-of-State Universities	7	\$167,470
Local Governments	21	\$274,815
Foreign Governments & Organizations	8	\$330,665
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	690	\$20,321,661
GRAND TOTAL of ALL EXTERNAL FUNDING	1,212	\$134,904,344

**Mississippi University for Women
Annual Report on Research and Sponsored Programs
July 1, 2011 - June 30, 2012**

**Dr. Jim B. Borsig, President
Phone number 662-329-7145**

**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*	2	\$4,612,446
College of Arts and Sciences	12	\$270,516
College of Education and Human Sciences	5	\$334,895
College of Nursing	6	\$977,438
Other Units	6	\$274,354
*Includes total for Mississippi School for Math and Science		\$4,607,864
TOTAL	31	\$6,469,649

II. Funding Sources		
FEDERAL External Funding by Agency/Department		
Applacian Regional Commission	1	\$151,931
National Oceanic and Atmospheric Administration	1	\$108,991
U.S. Department of Education	3	\$320,693
U.S. Department of Health and Human Services	2	\$119,874
U.S. Department of Housing and Urban Development	1	\$30,747
TOTAL	8	\$732,236
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	3	\$36,213
Private/Corporate Business and Industry	4	\$268,056
Foundations and Non-Profit Groups	1	\$55,463
Other State Governments	6	\$5,131,988
Other In-State Universities	8	\$240,601
Other Out-of-State Universities	1	\$5,091
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	23	\$5,737,412
GRAND TOTAL of ALL EXTERNAL FUNDING	31	\$6,469,648

Mississippi Valley State University
Annual Report on Research and Sponsored Programs
July 1, 2011 - June 30, 2012

Dr. Donna H. Oliver, President
Phone Number: 662-254-3524

Mr. Samuel Melton, Chief Research Officer
Phone Number: 662-254-9574

I. Funding Distribution - College/Division	Number of Projects	Amount
Division of Academic Affairs	23	\$5,101,918
Division of Student Affairs	6	\$1,336,663
Division of Fiscal Affairs	4	\$1,427,749
TOTAL	33	\$7,866,330
II. Funding Sources		
FEDERAL External Funding by Agency/Department		
National Aeronautics and Space Administration	1	\$20,000
National Science Foundation	3	\$694,260
U.S. Department of Agriculture	2	\$60,000
U.S. Department of Education	9	\$5,330,117
U.S. Department of Homeland Security	1	\$38,515
U.S. Department of Labor	1	\$46,000
TOTAL	17	\$6,188,892
STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	6	\$854,398
Private/Corporate Business and Industry	10	\$823,040
Foundations and Non-Profit Groups	0	-
Other State Governments	0	-
Other In-State Universities	0	-
Other Out-of-State Universities	0	-
Local Governments	0	-
Foreign Governments & Organizations	0	-
Other [all other sources not listed above]	0	-
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	16	\$1,677,438
GRAND TOTAL of ALL EXTERNAL FUNDING	33	\$7,866,330

University of Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2011 - June 30, 2012

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		
Center for Water and Wetland Resources	2	\$109,210
College of Liberal Arts	84	\$7,677,720
Division of Outreach and Continuing Education	6	\$218,391
Ford Center for Performing Arts	2	\$8,858
Graduate School	2	\$40,500
International Programs	2	\$5,800
Jamie Whitten National Center for Physical Acoustics	43	\$10,275,104
Landscape Services	1	\$5,000
Lott Leadership Institute	1	\$2,500
National Center for Computational Hydroscience and Engineering	6	\$1,375,859
National Center for Natural Products Research	12	\$8,520,773
National Food Service Management Institute	4	\$1,002,697
National Institute for Undersea Science & Technology	1	\$6,656,542
Office of Campus Sustainability	2	\$37,400
Office of Research and Sponsored Programs	1	\$499,915
Office of the Chancellor	1	\$244,188
Office of the Provost	1	\$46,000
School of Applied Sciences (not including NSFMI)	16	\$1,509,595
School of Business Administration	4	\$1,579,820
School of Education	15	\$2,208,640
School of Engineering (not including NCCHE)	22	\$2,972,923
School of Journalism and New Media	2	\$14,700
School of Law	16	\$1,340,476
School of Pharmacy (not including NCNPR)	28	\$2,589,776
University Libraries	1	\$2,500
<u>William Winter Institute for Racial Reconciliation</u>	<u>1</u>	<u>\$700,000</u>
Total Oxford	276	\$49,644,887
B. Medical Center		
Office of Strategic Research Alliances	6	\$2,976,886
School of Dentistry	8	\$415,929
School of Health Related Professions	3	\$44,351
School of Medicine	197	\$50,668,104
School of Nursing	8	\$5,864,807
<u>Teaching Hospital</u>	<u>1</u>	<u>\$244,543</u>
Total Medical Center	223	\$60,214,620
TOTAL (UM + UMMC)	499	\$109,859,507

University of Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2010 - June 30, 2011

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

II. Funding Sources

FEDERAL External Funding by Agency/Department

Corporation for National & Community Service	3	\$44,099
Health Resource and Services Association	33	\$5,783,936
National Aeronautics and Space Administration	4	\$1,990,000
National Endowment for the Arts	1	\$10,000
National Endowment for the Humanities	1	\$2,500
National Institutes of Health	98	\$37,397,172
National Science Foundation	22	\$3,799,160
U.S. Department of Agriculture	16	\$6,961,459
U.S. Department of Commerce	2	\$1,875,000
U.S. Department of Defense	34	\$9,754,544
U.S. Department of Education	4	\$543,588
U.S. Department of Energy	6	\$1,063,250
U.S. Department of Health and Human Services	26	\$13,162,240
U.S. Department of Homeland Security	1	\$499,998
U.S. Department of Interior	4	\$295,500
U.S. Department of Justice	1	\$300,000
U.S. Department of Veterans Affairs	2	\$76,976
U.S. Small Business Administration	3	\$1,572,820
TOTAL	261	\$85,132,242

STATE, PRIVATE, CORPORATE, OTHER External Funding by

State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	68	\$6,949,844
Private/Corporate Business and Industry	47	\$4,624,316
Foundations and Non-Profit Groups	98	\$11,978,762
Other State Governments	2	\$37,955
Other In-State Universities	0	-
Other Out-of-State Universities	16	\$1,055,455
Local Governments	7	\$80,933
Foreign Governments & Organizations	0	-
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	238	\$24,727,265

GRAND TOTAL of ALL EXTERNAL FUNDING	499	\$109,859,507
--	------------	----------------------

University of Southern Mississippi
Annual Report on Research and Sponsored Programs
July 1, 2011 - June 30, 2012

Aubrey Lucas, Interim President
Phone number: 601-266-5001

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

I. Funding Distribution - College/Division	Number of Projects	Amount
College of Arts and Letters	16	\$564,522
College of Business	1	\$33,087
College of Education and Psychology	37	\$2,632,904
College of Health	37	\$17,013,579
College of Science and Technology	109	\$28,639,228
Gulf Coast Vice President	1	\$79,986
Office of the President	2	\$78,220
Office of the Provost	6	\$1,855,773
Office of the Vice President for Research	47	\$12,445,287
Total	256	\$63,342,586

II. Funding Sources	Number of Projects	Amount
Federal Funding Source	5	\$918,591
Corporation for National & Community Service	9	\$1,982,389
National Aeronautics and Space Administration	3	\$13,813
National Endowment for the Arts	6	\$45,739
National Science Foundation	15	\$3,059,913
U.S. Army Corps of Engineers*	0	\$30,619
U.S. Department of Agriculture	3	\$1,099,052
U.S. Department of Commerce	21	\$8,049,843
U.S. Department of Defense	12	\$4,827,932
U.S. Department of Education	19	\$3,974,416
U.S. Department of Energy*	0	\$357,000
U.S. Department of Health and Human Services ⁺	34	\$11,238,634
U.S. Department of Homeland Security	5	\$1,811,268
U.S. Department of Housing and Urban Development	5	\$1,130,151
U.S. Department of Interior	9	\$2,774,862
U.S. Department of Justice	3	\$198,543
U.S. Department of State*	0	\$116,857
U.S. Department of Transportation	5	\$1,209,442
U.S. Environmental Protection Agency	4	\$231,181
U.S. National Archives and Records Administration	1	\$113,198
<u>U.S. Small Business Administration</u>	<u>2</u>	<u>\$102,897</u>
TOTAL	161	\$43,286,340

STATE, PRIVATE, CORPORATE, OTHER External Funding by		
State Funding [other than general appropriation]	0	-
State of Mississippi Agencies	28	\$3,232,392
Private/Corporate Business and Industry	26	\$14,175,306
Foundations and Non-Profit Groups	14	\$1,357,167
Other State Governments	0	-
Other In-State Universities	0	-
Other Out-of-State Universities	0	-
Local Governments	0	-
Foreign Governments & Organizations	0	-
Other [all other sources not listed above]	27	\$1,291,381
TOTAL STATE, PRIVATE, CORPORATE, and OTHER Sources	95	\$20,056,246
GRAND TOTAL of ALL EXTERNAL FUNDING	256	\$63,342,586

⁺ All projects funded by National Institutes of Health or Health Resources Services Administration are included in the US Dept of Health and Human Services figure.

* Dollars represent additional funding from sponsors for active/ongoing awards which began in a previous FY.

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.