

EXTERNALLY FUNDED RESEARCH & PROJECTS REPORT PREPARED BY THE OFFICE OF RESEARCH ADMINISTRATION FISCAL YEAR (FY) 2018

Externally sponsored grants and contracts enhance the capacity for the University to achieve its mission through education, research, and service projects. External funding enables faculty and staff to address the needs of communities, schools, and businesses throughout southwest Missouri and beyond.

In 2017-2018, Missouri State University was awarded a record \$26,051,086 to support projects in research, education and service. A total of 305 proposals were submitted. Approximately 15% of faculty were named investigators on awards.

∞	SUMMARY OF SPONSORED RESEARCH & PROGRAMS ACTIVITY										
	Key Indicators	FY2018 Activity	% Change from FY2017								
	Proposal Submitted	305	-20%								
	Funds Requested	\$56,948,022	5%								
\triangle I	Named Investigators	110	-15%								
	Grants & Contracts Awarded	258	-9%								
	Funds Awarded	\$26,051,086	27%								

FY 2018 PROJECT HIGHLIGHTS

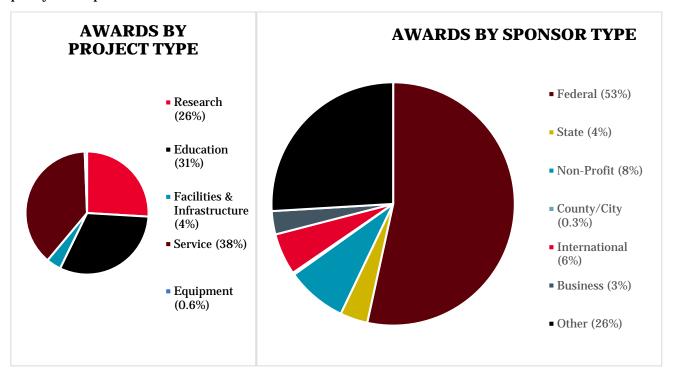
Faculty and staff from across many areas of the University complete incredible and unique projects due in part to the external funding they receive. The following is a sampling of grants and contracts awarded in fiscal year 2018:

- Joan Wright, Coordinator of College Readiness Programs, received \$422,265 from the US Department of Education, through the Missouri Department of Elementary and Secondary Education for the Adult Education and Literacy Program. This program serves 12 sites within six counties, providing educational services for people preparing to take their high school equivalency test as well as students preparing for college readiness.
- Kris Grbac, Director of the Newborn Hearing Screening Project, and Letitia White, Department Head of Communication Sciences & Disorders, received \$45,927 from the Missouri Department of Health and Senior Services. The purpose of the project is to provide the Missouri Department of Health and Senior Services Newborn Hearing Screening Program with audiological consultation. Activities conducted are designed to assist hospitals with maintaining quality newborn hearing screening programs and to program the oversight office with audiological consult. In addition, MSU assist in development and provision for training materials for hospitals, service providers, DHSS staff and other public health entities.

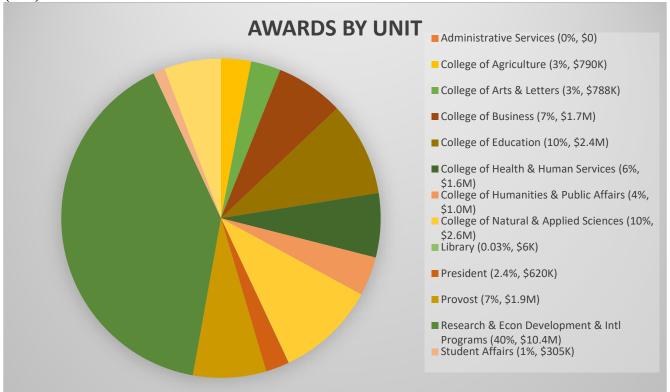
- Cyren Rico, Assistant Professor, and Richard Biagioni, Professor, of the Chemistry Department, Robert Pavlowsky, Distinguished Professor, and Gary Michelfelder, Assistant Professor, of the Geography, Geology and Planning Department, and Melissa Remley, Assistant Professor, of the Environmental Plant Science and Natural Resources Department, received \$156,918 from the National Science Foundation, for the Acquisition of Inductively Coupled Plasma Mass Spectrometry (ICP-MS) System at Missouri State University. Selection of the proposed instrument was made on the basis of the research demands of a diverse range of disciplines, the need to have an instrument that is also suitable for teaching, and consideration of purchase price and maintenance costs. The ICP-MS will be used in teaching and research training of over 400 undergraduate and graduate students each year and support multi-disciplinary research of several faculty members from MSU.
- Ridwan Sakidja, Associate Professor, Physics Astronomy & Materials Science, received \$728,621 from the U. S. Department of Energy, National energy Technology Laboratory (NETL) program. The purpose is to develop innovative technology to enhance fossil power system efficiency.
- Stephen Stapleton, Director of the School of Nursing received \$148,233 from the Missouri State
 Board of Nursing, through the Missouri Department of Higher Education, for the Nursing Education
 Incentive Program. Which will provide the resources to increase the integration of simulation
 experiences in the generic 4-year BSN Program and the BSN-DNP program. By increasing simulation
 experiences in the nursing program, inter-professional collaboration with other healthcare profession
 programs offered at MSU will also be increased
- Chrystal Irons, Director of the Small Business and Technology Center received \$91,485 from the U.S.
 Small Business Administration, through The Curators for the University of Missouri, for the Portable Assistance Program. The purpose of this program is to help upskill incumbent workers and entrepreneurs to be more competitive in the advanced manufacturing sector and be a model for manufacturing growth to startup businesses and offering sustainability support to small businesses in South Central Missouri that are economically challenged.
- Russell Brock, Director of the Agency for Teaching, Leading & Learning, received \$1,310,500 from the
 US Department of Education, through the Missouri Department of Elementary and Secondary
 Education, to fund several important projects, including: the Regional Professional Development
 Center, Migrant English Language Learners, Special Education Improvement, IDEA Compliance, the
 Blindness Skills Specialist, Career Pathway Regional Consultant, and a Dyslexia Specialist, as well as
 other projects that are essential to education in Missouri.
- Jill Patterson, Coordinator for Title IX for the President, received \$549,892 from the US Department of
 Justice for Project HEAL (Help, Educate, Advocate, and Listen) to coordinate campus prevention and
 response to sexual assault, dating and domestic violence, and stalking. The focus of this new
 consortium project is to ensure a coordinated community approach to these issues on the Missouri
 State University (MSU) and Ozarks Technical Community College (OTC) campuses in Springfield,
 Missouri.

FY 2018 EXTERNAL FUNDING SUMMARY & TRENDS

In FY2018, federal agencies remain the leading source of grants and contracts. Non-Profit and Other types of sponsors provide the next largest sources of funding. Our project types are diverse with a pretty even split between Research, Service and Education.



Eight of Missouri State's major units exceeded \$1 million in annual award funding, and University centers continue to be instrumental in acquiring external funding, with approximately \$13.3 million (51%) of the total funds awarded in FY 2018.



Missouri State University met its 2017-2018 Action Plan externally sponsored research and program goals:

- Maintain external funding through the office of sponsored research and programs at \$20 million or more annually (\$26 million received for FY2018)
- Maintain the number of grant and contract proposals submitted for external funding through the office of sponsored research and programs at 300 or more proposals (305 proposals submitted for FY2018)

Over the last 5 years faculty and staff have consistently submitted more than 300 proposals annually.

	HISTORY OF SPONSORED RESEARCH & PROGRAMS ACTIVITY									
Fiscal Year	Proposals Submitted	Named Investigators Awarded	Total Awards	Total Requested (millions)	Total Awarded (millions)					
2008	251	109	141	\$32.1	\$22.4					
2009	296	119	196	\$48.3	\$20.9					
2010	251	119	184	\$71.8	\$20.1					
2011	244	101	153	\$65.7	\$18.7					
2012	325	125	245	\$38.0	\$18.9					
2013	362	138	289	\$32.4	\$20.1					
2014	338	135	289	\$33.5	\$21.9					
2015	389	111	297	\$52.7	\$19.0					
2016	362	132	288	\$54.4	\$24.7					
2017	383	117	285	\$54.2	\$20.5					
2018	305	100	258	\$56.9	\$26.1					

EXTERNAL FUNDING PROJECT TYPE HISTORY TRENDS In millions of dollars In millions of dollars 2013 2014 2015 2016 2017 2018 2011 Fiscal Year Fiscal Year Nonfederal ■ Federal **■** Equipment Service **Proposals Submitted** ■ Facilities & Infrastructure **■** Education Named Investigators

Awarded

Missouri State University FY2017 Grant/Contract Activity by Unit

The numbers of faculty and staff applying and awarded grants and contracts by each unit is presented below. The College of Natural and Applied Sciences had the largest number (44) of faculty apply for external funding. The College of Health and Human Services had the largest number (42) of awards, based on credit sharing values. The Research, Economic Development, and International Programs unit obtained the highest value of funding (\$2.6M) of any center, department, or unit.

Missouri State University FY 18 Grant/Contract Activity by Unit

						Credit Share*				Actual **			
	#Applying #Awarded		Grants / Contracts Award		Award	Grants / Contracts		А	ward				
Unit		Faculty	Staff	Faculty	Submit	Awards		\$	Submit	Awards		\$	
Administrative Services		0	0	0	1	0	s	-	1	0	\$	-	
College of Agriculture	1	7	1	7	21	21	\$	286,564	18	16	\$	255,181	
Center for Grape vine Biotechnology		1	0	1	3	2	\$	84,964	2	2	\$	84,964	
Mid-America Viticulture & Enology Center	2	1	2	1	7	8	\$	450,116	6	7	\$	450,116	
College of Arts & Letters	0	4	0	3	4	3	\$	582,241	2	3	\$	582,241	
Center for Dispute Resolution		1	0	1	5	5	\$	57,728	5	5	\$	57,728	
Center for Writing in College, Career, & Community	3	1	2	1	14	11	\$	148,765	9	7	\$	148,765	
College of Business	0	1	0	1	4	4	\$	1,763,325	4	4	\$ 1	,763,325	
Centerfor Project Innovation & Management	0	0	0	1	0	1	\$	30,000	0	1	\$	30,000	
College of Education	2	8	2	5	18	15	\$	979,850	17	15	\$	979,850	
Agency for Teaching, Leading and Learning	2	1	0	1	10	7	\$	1,502,288	8	7	\$ 1	,502,288	
Institute for Play The rapy	0	0	0	0	0	0	\$	-	0	0	\$	-	
Institute for School Improvement	0	0	0	0	0	0	\$	-	0	0	\$	-	
College of Health & Human Services	2	21	3	17	47	44	5	1,748,943	37	34	\$ 1	,692,207	
Center for Research & Service	0	0	0	0	0	0	\$	-	0	0	\$	-	
College of Humanities & Public Affairs	0	5	0	1	6	2	\$	421,875	5	2	\$	421,875	
Center for Archaeological Research	2	1	2	1	18	15	s	608,179	12	10	\$	608,179	
Center for Community Engagement	0	0	0	0	0	0	\$	-	0	0	s	-	
Center for Economic Research	0	0	0	0	0	0	s	-	0	0	s	-	
Center for Social Science & Public Policy Research	0	0	0	0	0	0	\$	-	0	0	\$	-	
College of Natural & Applied Sciences	2	37	0	17	71	26	\$	1,589,088	53	22	\$ 1	,608,421	
Bull Shoals Field Station	0	1	0	1	4	4	\$	18,685	4	4	\$	18,685	
Center for Resource Planning & Management	3	0	3	0	15	16	\$	624,580	11	11	\$	624,580	
Ozark Environmental Water Research Institute	1	1	1	1	12	10	\$	365,365	9	8	\$	377,365	
Diversity & Inclusion	1	0	0	0	1	0	\$	-	2	0	\$	-	
Graduate College	0	0	0	0	0	0	\$	-	0	0	\$	-	
Information Services		0	0	0	0	0	\$	-	0	0	\$	-	
Library	1	4	0	2	6	2	\$	6,555	4	2	\$	6,555	
President	1	0	1	0	2	3	\$	620,368	2	3	\$	620,368	
Provost	2	2	1	2	9	7	\$	736,699	9	7	\$	736,699	
Ozarks Public Health Institute	0	1	0	1	11	10	\$	887,107	11	10	\$	943,843	
Southwest Missouri Area Health Education Center	1	0	1	0	7	7	\$	249,618	7	7	\$	249,618	
Research & Economic Development	4	0	4	0	24	24	\$	2,261,725	20	20	\$ 2	,261,725	
Centerfor Applied Science & Engineering	4	0	4	0	12	13	\$	4,455,740	8	9	\$ 4	,455,740	
Centerfor Biomedical & Life Sciences	0	1	0	1	7	8	\$	162,359	7	8	\$	162,359	
International Leadership & Training Center	1	0	1	0	4	4	s	2,241,433	4	4	\$ 2	,241,433	
Jordan Valley Innovation Center	1	0	1	0	9	9	s	1,004,935	9	9	\$ 1	,004,935	
Small Business Development & Technology Center	1	0	1	0	6	8	\$	356,010	6	8	\$	356,010	
Student Affairs	1	0	2	0	1	3	\$	305,373	1	3	\$	305,373	
West Plains	4	4	5	2	13	11	\$	1,500,658	12	10	\$ 1	,500,658	
TOTAL	43	103	37	68	372	303	\$	26,051,086	305	258	\$ 26	,051,086	

^{*} Credit Share - divides the proposals/awards between the PI's, therefore proposals/awards may be reflected in the totals more than once.

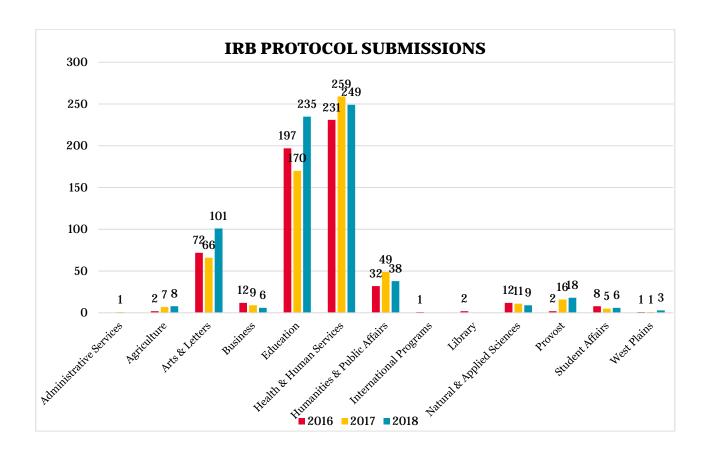
^{**} Actual - proposals/awards will only be shown in the originating unit.

FY2018 OFFICE OF RESEARCH ADMINISTRATION (ORA) HIGHLIGHTS

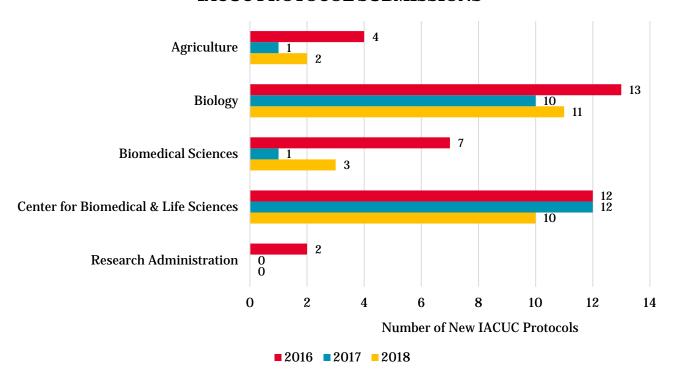
The ORA continues to support faculty and staff in their pursuit of external funding, in addition to considering ways to improve their support of faculty and staff. The ORA offers monetary support for travel in 2018 to send more faculty and staff to conferences focused on grant writing, legislative visits, and meetings with federal and private agencies and program officers. It is the intent of the ORA that these funds are a small investment for more proposals being submitted and hopefully funded in the future.

The ORA is also responsible for research compliance in the areas of human subjects research, animal subjects research, radiation safety, biosafety, export control, responsible conduct of research, conflict of interest, and research misconduct.

The research compliance committees, Institutional Review Board (IRB) and Institutional Animal Care and Use Committee (IACUC), are responsible for reviewing and approving human subjects and animal subjects research, respectively. In FY2018, the IRB reviewed 673 applications and the IACUC reviewed 26 new applications. The following charts provide information on submissions that occurred in FY2018, in addition to the totals from FY2016 and FY2017, for comparison.



IACUC PROTOCOL SUBMISSIONS



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