



EXTERNALLY FUNDED RESEARCH & PROJECTS REPORT
PREPARED BY THE OFFICE OF RESEARCH ADMINISTRATION
FISCAL YEAR (FY) 2020

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 2019-2020, Missouri State University was awarded a record \$45,264,259 to support projects in research, education and service. Of that amount, a total of \$15,547,815 came from CARES Act funding. A total of 348 proposals were submitted.

2020

SUMMARY OF SPONSORED RESEARCH & PROGRAMS ACTIVITY		
Key Indicators	FY2020 Activity	% Change from FY2019
Proposals Submitted	348	4%
Funds Requested	\$73,236,683	53%
Named Investigators	103	-3%
Grants & Contracts Awarded	289	-1%
Funds Awarded	\$45,264,259	38%

FY 2020 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 2020:

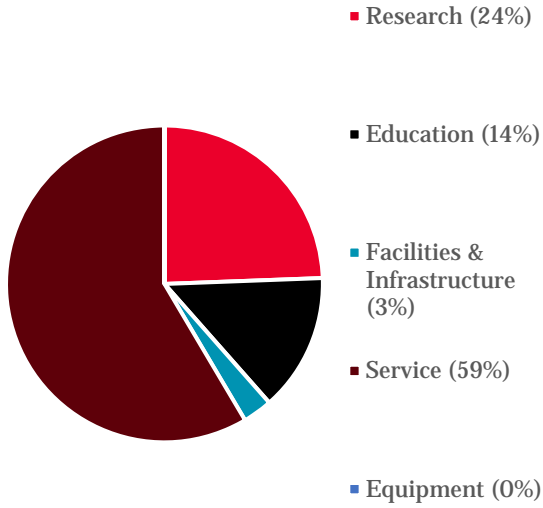
- **Andrea Hellman**, Associate Professor of English, received **\$505,036** from the **U.S. Department of Education**. The overarching goal of the iELT-Ozarks project is to provide access to affordable, customizable, state-of-the-art English language teacher training to better the educational outcomes of the language minority student population within the Ozarks region. The project builds partnerships with three local educational agencies to make available coursework and clinical field experiences required for the Missouri K-12 English Language Learner (ELL) endorsement to in-service teachers within the partner districts and other high-need districts within the region that serve ELLs and have a shortage of highly qualified ELL specialists.
- **Russell Brock**, Director of the Agency for Teaching, Leading and Learning, received **\$1,520,000** from the **U.S. Department of Education** through the **Missouri Department of Elementary and Secondary Education**. Activities supported by this contract provide additional training to field staff who might be involved in supporting districts and schools in their region. Activities require the use of state developed materials that are evidence-based and support students in regular and specialized classroom settings. Additional activities are focused on helping districts understand and meet federal program compliance requirements.

- **Laszlo Kovacs**, Professor of Biology, received **\$125,675** from the **National Science Foundation** via **Saint Louis University**. This study focuses on the genetic and molecular basis of communication between the rootstock and the scion in grapevine and how that communication enables the grafted plant to adapt to the environment.
- **Dorothy Wittorff-Sandgren**, Community Development Coordinator and **Jason Ray**, Director of the Center for Resource Planning and Management, received **\$380,133** from the **U.S. Department of Homeland Security** through the **Missouri Department of Public Safety, Office of Homeland Security**. Activities supported by this contract support state and local efforts to prevent terrorism and other catastrophic events and to prepare the Nation for the threats and hazards that pose the greatest risk to the security of the United States. It will provide funding to implement investments that build, sustain, and deliver the 32 core capabilities essential to achieving the National Preparedness Goal of a secure and resilient Nation.
- **Allen Kunkel**, Associate VP for Economic Development & Director of JVIC, received **\$1,250,000** from the **U.S. Department of Commerce**. This project is an expansion of the existing eFactory facility, which includes expanding within the existing Robert W. Plaster Free Enterprise Center through additional infill construction. Specifically, this project will create 6,984 square feet of additional leasable tenant space, plus an additional 9,778 square feet of dedicated eFactory conference, collaboration and flex space. With this expansion, we will be able to serve over 60 companies in the facility.
- **Quinton Phelps**, Assistant Professor of Biology, received **\$152,000.61** from the **Virginia Department of Game and Inland Fisheries**. The objectives of this study are to evaluate the natal origin of Northern Snakehead and tributary contributions by Virginia tributaries to the Potomac River basin population and to determine factors affecting recruitment variability of Northern Snakehead in the Potomac River basin and associated tributaries. The knowledge gained should help provide managers opportunities to develop effective control measures and better understand the biology and ecology of this potentially invasive predator.
- **Dennis Lancaster**, Dean of Academic Affairs on the West Plains Campus, received **\$253,540** from the **U.S. Department of Labor** through the **Missouri Department of Higher Education and Workforce Development** to meet the demand for registered nurses in south central Missouri. The GOCCARE program will increase the number of registered nurses graduating through an online MSU-WP LPN-to-RN bridge program by 20 annually and build capacity to double the number of registered nurses graduating from the nursing program. In addition, it will significantly increase the number of RNs choosing to work in south central Missouri and across the state.
- **Kris Grbac**, Director of the Newborn Hearing Screening Project, 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 services. Activities are designed to assist hospitals with maintaining quality newborn hearing screening programs and to provide the oversight office with audiological consult.
- **Robert Pavlowsky**, Director of the Ozarks Environmental and Water Resources Institute, received **\$256,589**, from the **U.S. Environmental Protection Agency**, through the **Missouri Department of Natural Resources**. The project will develop a watershed management plan for Lake Taneycomo and involve a partnership with the Ozarks Water Watch. It will include water quality monitoring and modeling, assessment of bank erosion and lake sedimentation, stakeholder/community meetings, water quality concerns survey of the public, and training for three graduate students.

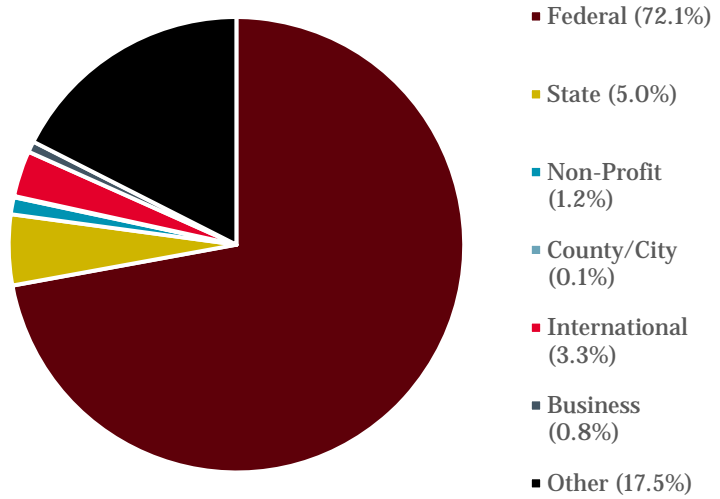
FY 2020 EXTERNAL FUNDING SUMMARY & TRENDS

In FY2020, federal agencies remained the leading source of grants and contracts. State and non-profit sponsors provided the next largest sources of funding. Our project types have been diverse with the majority being service projects, followed by research and then education.

AWARDS BY PROJECT TYPE

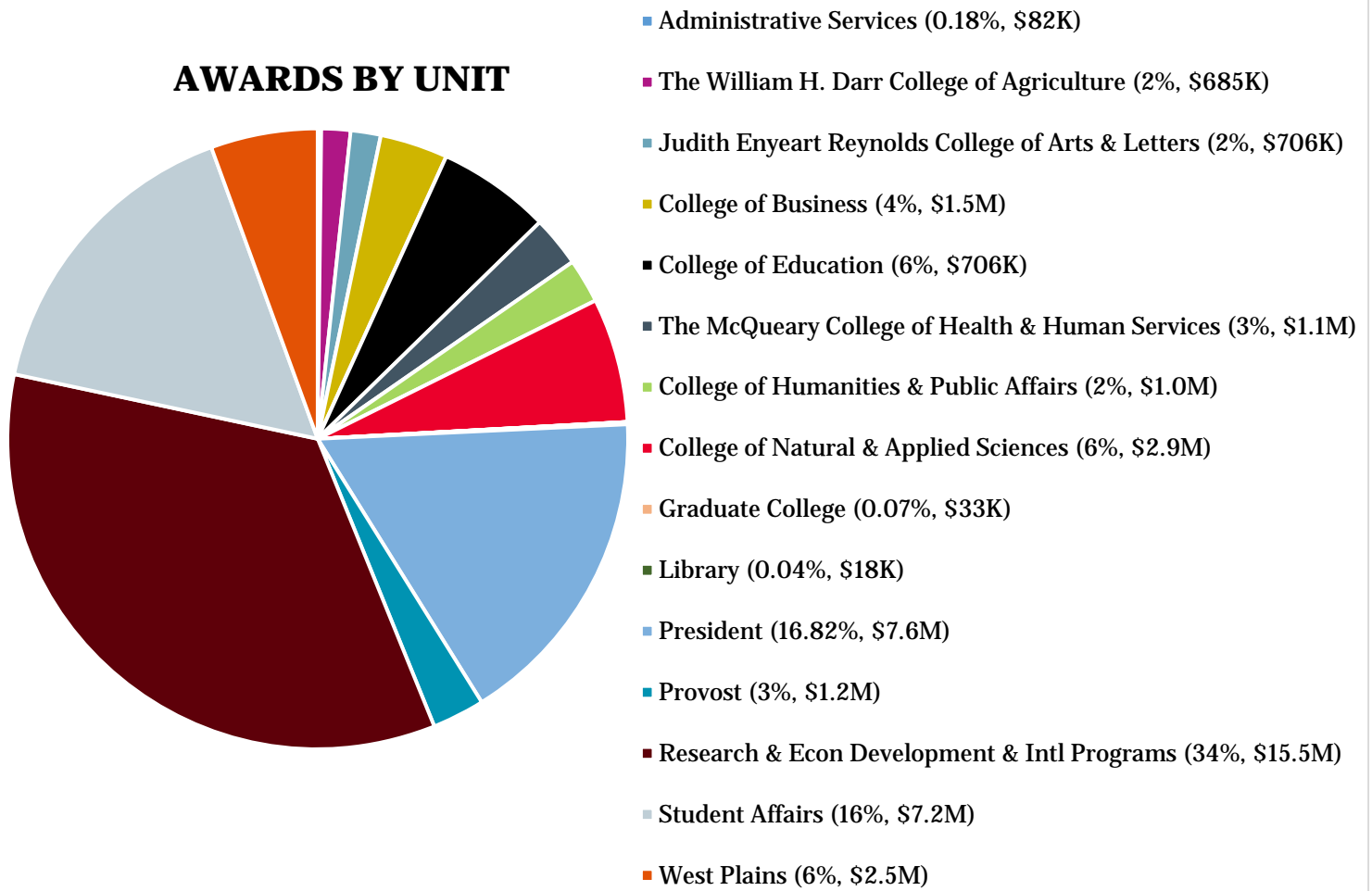


AWARDS BY SPONSOR TYPE



Nine of Missouri State's major units exceeded \$1 million in annual award funding, and University centers continued to be instrumental in acquiring external funding, with approximately \$16.4 million of the total funds awarded in FY 2020.

AWARDS BY UNIT



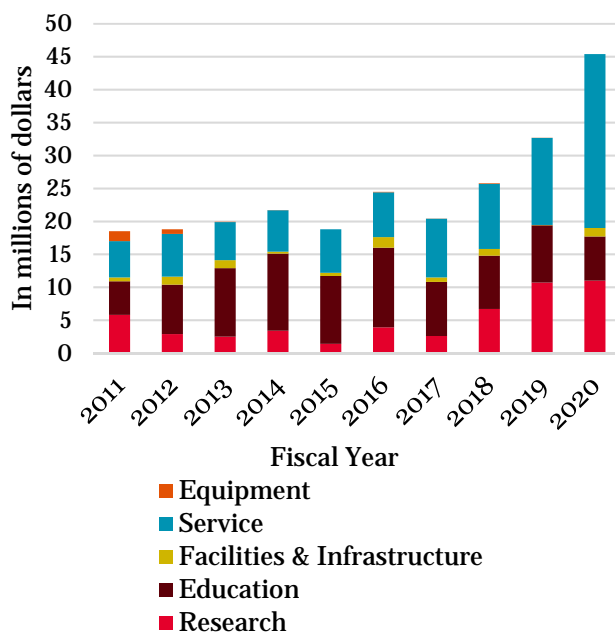
Missouri State University met its 2019-2020 Action Plan's Research Administration goals:

- Maintain external funding through private support, grants and sponsored contracts of \$40 million or more annually (\$45.3 million from Research Administration and \$22.7 million through the Foundation)
- Maintain the number of grant and contract proposals submitted for external funding through the Office of Research Administration

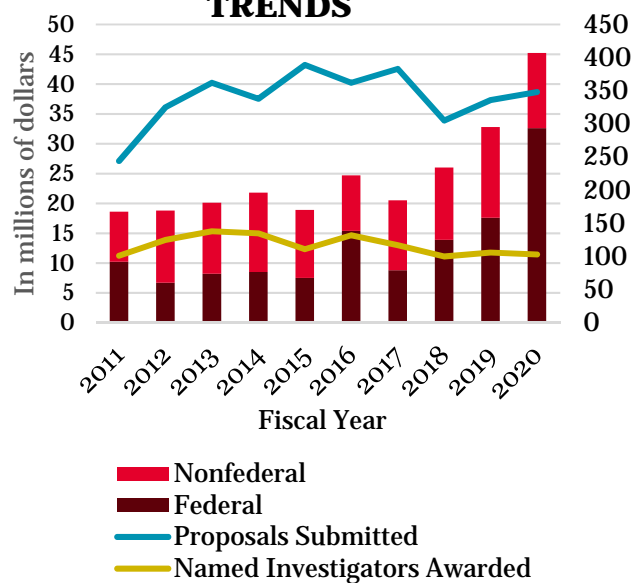
Over the last 8 years, faculty and staff have consistently submitted more than 300 proposals annually.

HISTORY OF SPONSORED RESEARCH & PROGRAMS ACTIVITY					
Fiscal Year	Proposals Submitted	Named Investigators Awarded	Total Awards	Total Requested (millions)	Total Awarded (millions)
2011	244	101	153	\$65.70	\$18.70
2012	325	125	245	\$38.00	\$18.90
2013	362	138	289	\$32.40	\$20.10
2014	338	135	289	\$33.50	\$21.90
2015	389	111	297	\$52.70	\$19.00
2016	362	132	288	\$54.50	\$24.70
2017	383	117	285	\$54.20	\$20.50
2018	305	100	258	\$56.95	\$26.05
2019	336	106	292	\$48.01	\$32.80
2020	348	103	289	\$73.20	\$45.30

PROJECT TYPE HISTORY



EXTERNAL FUNDING TRENDS



Missouri State University FY2020 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 and the largest number (48) of awards, based on credit sharing values. The Center for Applied Science and Engineering obtained the highest value of funding (\$8M) of any center, department, or unit.

Missouri State University FY 20 Grant/Contract Activity by Unit

Unit	# Applying		# Awarded		Credit Share*			Actual**		
	Staff	Faculty	Staff	Faculty	Grants / Contracts		Award	Grants / Contracts		Award
					Submit	Awards	\$	Submit	Awards	\$
Administrative Services	3	0	3	0	4	3	\$ 82,014	4	3	\$ 82,014
The William H. Darr College of Agriculture	1	9	2	5	22	20	\$ 495,948	18	16	\$ 495,948
Center for Grapevine Biotechnology	0	1	0	1	1	2	\$ 183,928	1	2	\$ 183,928
Mid-America Viticulture & Enology Center	1	1	1	1	6	4	\$ 5,807	6	4	\$ 5,807
Judith Enyeart Reynolds College of Arts & Letters	0	4	0	5	8	9	\$ 654,200	8	9	\$ 654,200
Center for Dispute Resolution	0	1	0	1	4	4	\$ 34,527	4	4	\$ 34,527
Center for Writing in College, Career, & Community	0	1	0	1	4	3	\$ 17,687	3	3	\$ 17,687
College of Business	0	2	0	3	4	5	\$ 1,592,111	4	5	\$ 1,592,111
Center for Project Innovation & Management	0	0	0	0	0	0	\$ -	0	0	\$ -
College of Education	3	11	3	2	29	15	\$ 775,981	23	15	\$ 775,981
Agency for Teaching, Leading and Learning	1	1	3	1	10	12	\$ 1,883,555	9	9	\$ 1,883,555
Institute for Play Therapy	0	0	0	0	0	0	\$ -	0	0	\$ -
Institute for School Improvement	0	0	0	0	0	0	\$ -	0	0	\$ -
The McQueary College of Health & Human Services	3	19	2	12	42	30	\$ 1,191,084	34	29	\$ 1,191,084
Center for Research & Service	0	0	0	0	0	0	\$ -	0	0	\$ -
College of Humanities & Public Affairs	0	3	0	1	3	1	\$ 8,950	1	1	\$ 8,950
Center for Archaeological Research	1	1	1	1	29	25	\$ 1,031,510	19	16	\$ 1,031,510
Center for Community Engagement	0	0	0	0	0	0	\$ -	0	0	\$ -
Center for Economic Research	0	0	0	0	0	0	\$ -	0	0	\$ -
Center for Social Science & Public Policy Research	0	0	0	0	0	0	\$ -	0	0	\$ -
College of Natural & Applied Sciences	3	44	4	23	88	48	\$ 2,347,869	69	36	\$ 2,168,810
Bull Shoals Field Station	0	1	0	1	2	2	\$ 16,283	2	2	\$ 16,283
Center for Resource Planning & Management	4	0	4	0	21	21	\$ 225,397	15	15	\$ 247,269
Ozark Environmental Water Research Institute	1	1	1	1	18	16	\$ 508,906	10	10	\$ 494,631
Diversity & Inclusion	0	0	0	0	0	0	\$ -	0	0	\$ -
Graduate College	0	1	0	1	2	2	\$ 33,803	2	2	\$ 33,803
Information Services	0	0	0	0	0	0	\$ -	0	0	\$ -
Library	0	1	0	1	2	1	\$ 18,000	2	1	\$ 18,000
President	2	0	1	0	3	2	\$ 7,611,403	3	2	\$ 7,611,403
Provost	1	3	1	2	14	14	\$ 907,973	14	14	\$ 1,079,435
Ozarks Public Health Institute	0	1	0	1	2	1	\$ 20,556	2	1	\$ 20,556
Southwest Missouri Area Health Education Center	1	0	1	0	10	11	\$ 306,342	10	11	\$ 306,342
Research & Economic Development	4	0	5	0	27	27	\$ 3,384,511	27	27	\$ 3,384,511
Center for Applied Science & Engineering	2	0	2	0	7	5	\$ 8,024,367	6	5	\$ 8,024,367
Center for Biomedical & Life Sciences	0	1	0	1	8	7	\$ 214,495	8	7	\$ 214,495
International Leadership & Training Center	1	0	1	0	4	4	\$ 2,794,011	4	4	\$ 2,794,011
Jordan Valley Innovation Center	1	0	1	0	14	13	\$ 829,568	14	13	\$ 829,568
Small Business Development & Technology Center	1	0	1	0	7	7	\$ 297,594	7	7	\$ 297,594
Student Affairs	3	0	3	0	3	3	\$ 7,255,344	3	3	\$ 7,255,344
West Plains	4	5	4	3	18	13	\$ 2,510,536	16	13	\$ 2,510,536
TOTAL	41	112	44	68	416	330	\$ 45,264,259	348	289	\$ 45,264,259

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

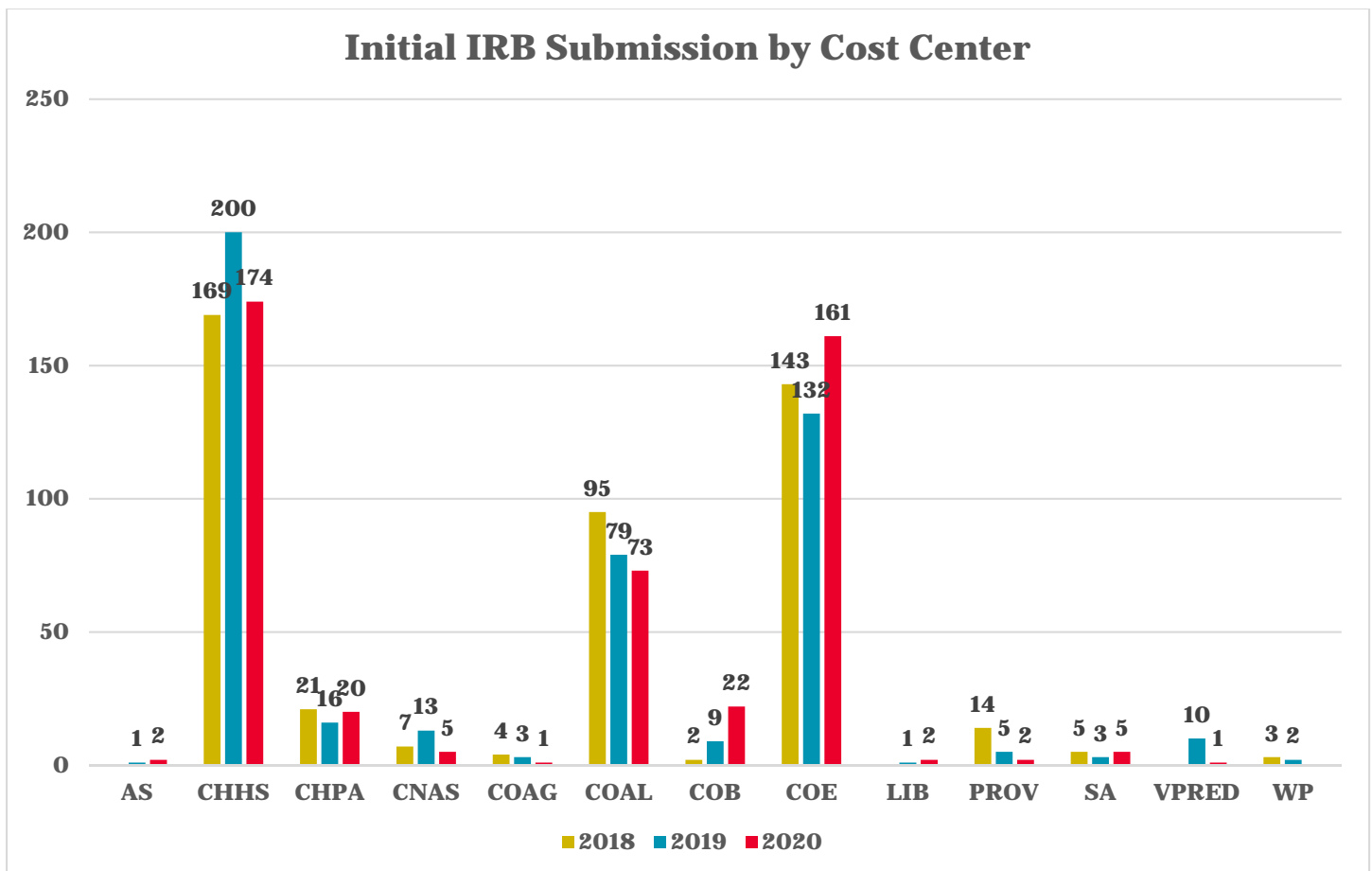
** Actual - proposals/awards will only be shown in the originating unit.

FY2020 OFFICE OF RESEARCH ADMINISTRATION (ORA) HIGHLIGHTS

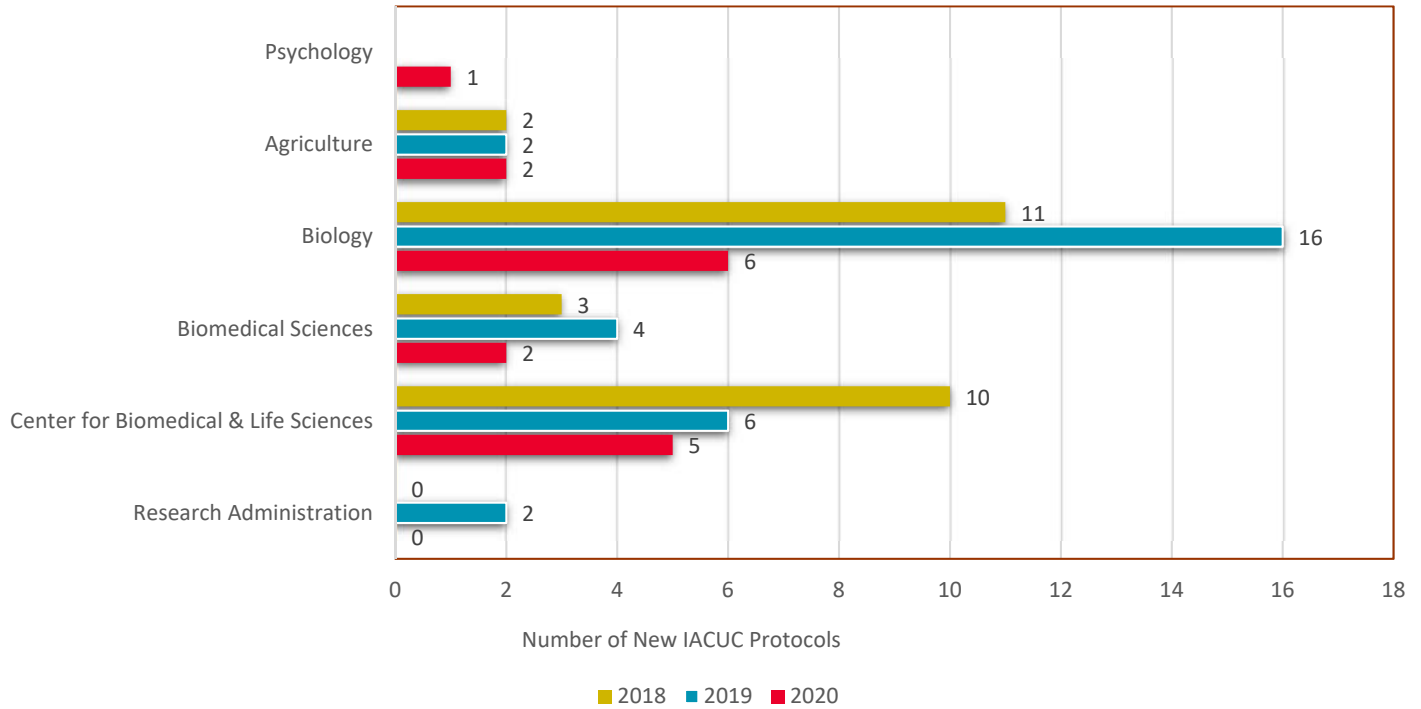
The ORA continued to support faculty and staff in their pursuit of external funding by providing monetary support for travel to send faculty and staff to conferences focused on grant writing, legislative visits, and meetings with federal and private agencies and program officers. The ORA also provided competitive funding for summer graduate assistants to help gather information or data needed for proposal submissions. It is the intent of the ORA that these funds were a small investment to stimulate proposal submission, and hopefully increased funding 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 FY2020, the IRB reviewed 468 applications and the IACUC reviewed 16 new applications. The following charts provide information on new submissions that occurred in FY2020, in addition to the totals from FY2018 and FY2019, for comparison.



IACUC PROTOCOL SUBMISSIONS



MORE INFORMATION

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