This report summarizes the overall trends in grant and contract activity across all three campuses of the University of Michigan through the first seven months of Fiscal Year 2019, which ended January 31, 2019.

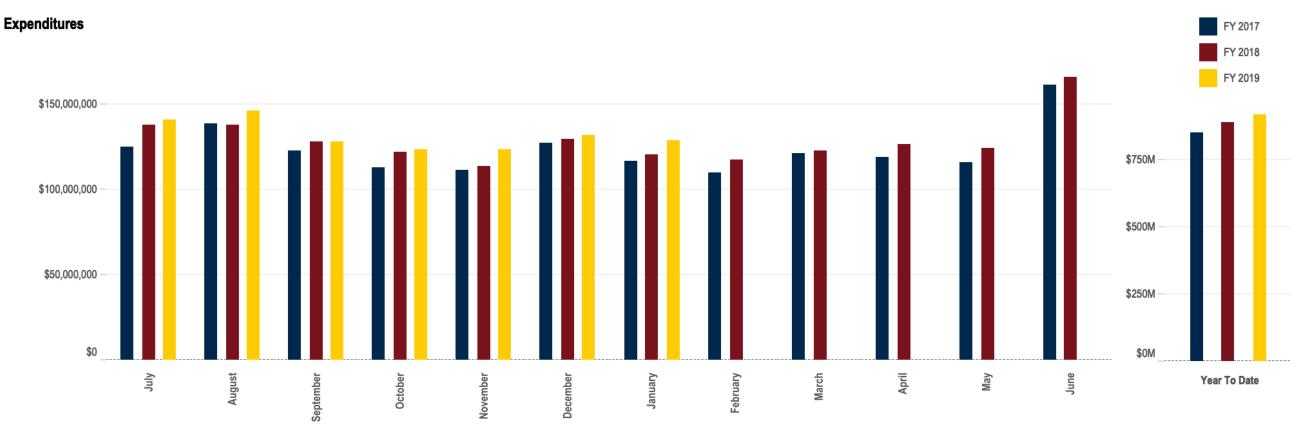
Figure 1 shows that total research expenditures through the first seven months of FY 2019 are ahead of the previous year by 3.6 percent. It is important to note that total research expenditures for FY 2018, which closed on June 30, 2018, reached a record high of \$1.55 billion.

The number of research submissions through January was down 8 percent when compared to last year, as shown in Figure 2. Figure 3, however, shows the value of those submissions is up 3.9 percent when compared to FY 2018.

Figures 4 and 5 show the number of new research awards from external sponsors are down 2.9 percent, but their value increased by 0.4 percent when compared to the previous fiscal year—led by an award to support the Michigan-Israel Partnership for Research and Education.

S. Jack Hu, Vice President for Research

Craig Reynolds, Executive Director, Office of Research and Sponsored Projects



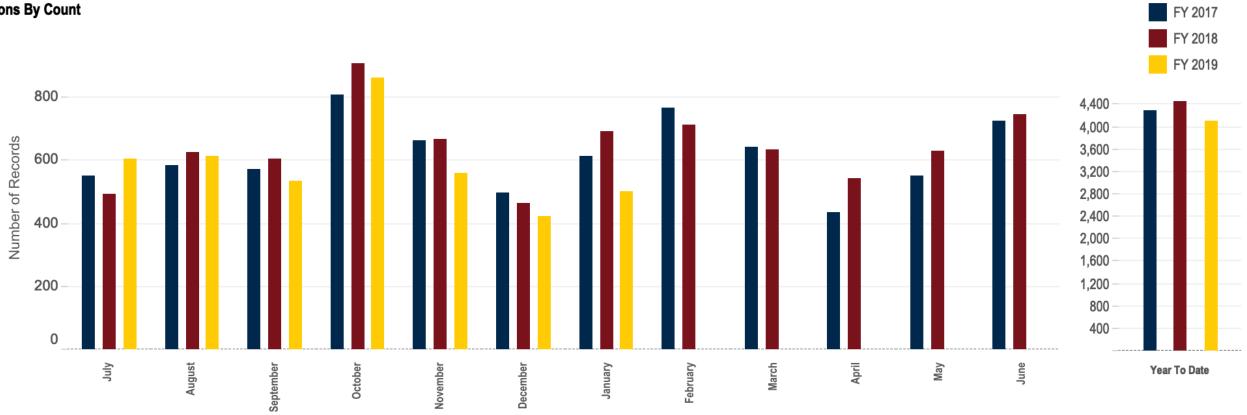
## Figure 1

### Received by the Regents **March 2019** March 28, 2019 U-M Research Award and Expenditures Report

FY 2017: \$855,438,178 FY 2018: \$890,837,367 FY 2019: \$922,664,129

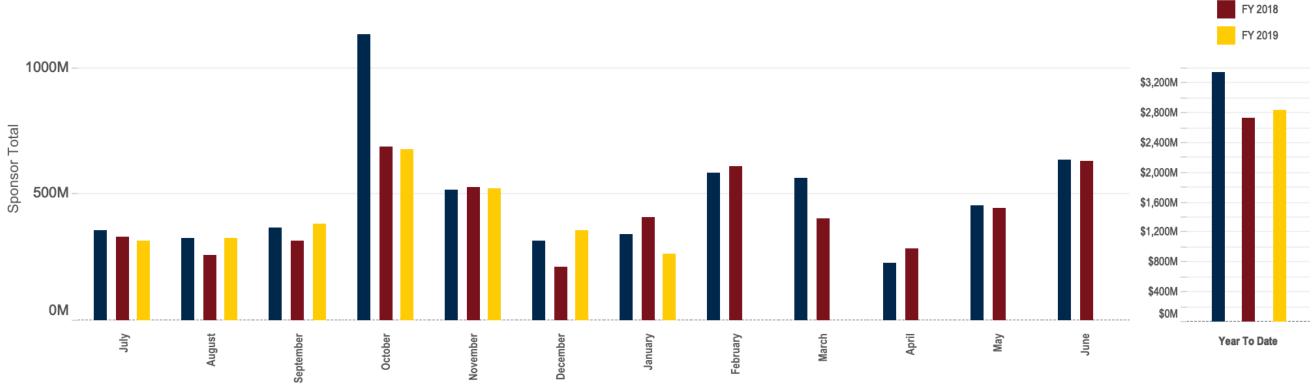
## Figure 2

### **Submissions By Count**



# Figure 3

### **Submissions By Amount**



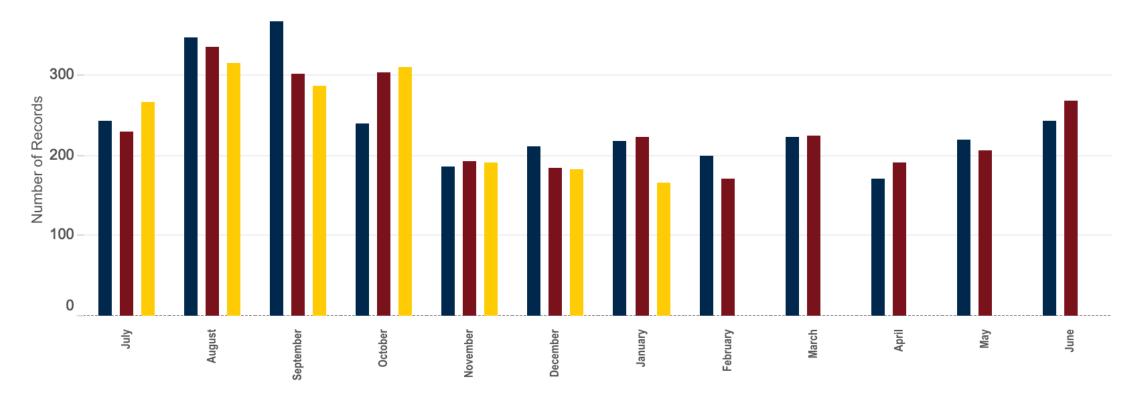
FY 2017: 4,298 FY 2018: 4,465 FY 2019: 4,106

FY 2017: \$3,351,926,109 FY 2018: \$2,737,040,319 FY 2019: \$2,843,916,915

FY 2017

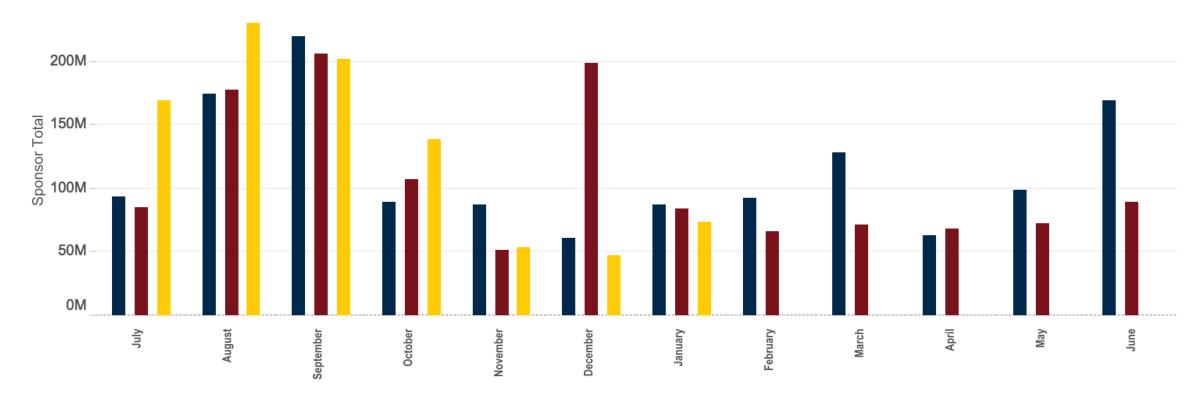


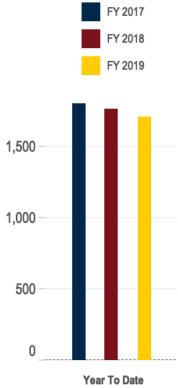
## Awards By Count



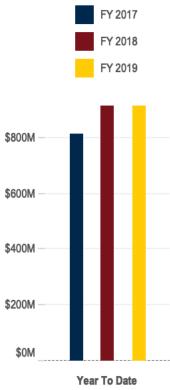


Awards By Amount





FY	2017:	1,808
FY	2018:	1,765
FY	2019:	1,714



FY 2017: \$814,075,125 FY 2018: \$912,081,259 FY 2019: \$915,303,600

# 20 Largest Project Awards: January 2019

Principal Investigator	Department	Award Title	Sponsor	Award Sponsor Total	Estimated Award Duration (years)
Reynolds, Craig	UMOR Office of VP for Research	Michigan-Israel Partnership for Research: D. Dan and Betty Kahn Foundation	Kahn, Dan D. and Betty, Foundation	\$15,000,000	10.0 *
Moore, Bethany	Int Med-Pulm./Critical Care	Immunobiology of Lung Injury and Fibrosis	Health and Human Services, Department of-National Institutes of Health	\$5,991,960	6.9
Xu, Guan	Department of Radiology	Real time fine needle assessment of architectural heterogeneity in prostate cancer	Health and Human Services, Department of-National Institutes of Health	\$3,032,113	5.0
Rao, Arvind	Comp Med and Bioinformatics	Synthesizing Image-derived Heterogeneity with Genomic measurements for Assessing Disease Aggressiveness in Lower Grade Gliomas	Health and Human Services, Department of-National Institutes of Health	\$2,697,833	4.7
Cho, Kathleen	Pathology Department	Modeling Factors Associated with Risk of High-Grade Serous Carcinoma in Mice	Health and Human Services, Department of-National Institutes of Health	\$2,591,028	5.0
Duan, Bo	LSA Molec./Cell./Develop. Bio	Dissecting neural circuits for mechanical itch	Health and Human Services, Department of-National Institutes of Health	\$2,199,525	5.0
Banerjee, Ruma	Biological Chemistry Dept	Sulfide Oxidation and Signaling	Health and Human Services, Department of-National Institutes of Health	\$1,950,000	5.0
Beard, Daniel	Molec & Integrative Physiology	Computational systems analysis of cardiac mechanical-energetic coupling in heart disease	Health and Human Services, Department of-National Institutes of Health	\$1,791,613	4.0
Smith, Ellen	School of Nursing	Duloxetine to Prevent Oxaliplatin-Induced Chemotherapy-Induced Peripheral Neuropathy: A Randomized, Double-Bind, Placebo-Controlled Phase II to	Health and Human Services, Department of-National Institutes of Health	\$1,788,411	5.0
Banerjee, Ruma	Biological Chemistry Dept	B12 Trafficking and Inherited Defects	Health and Human Services, Department of-National Institutes of Health	\$1,784,640	4.0
Scott, Emily	PHARMACY Medicinal Chemistry	Structure and dynamics of clinically-relevant cytochrome P450 enzymes	Health and Human Services, Department of-National Institutes of Health	\$1,754,489	3.9
Schipani, Ernestina	Orthopaedic Surgery	HIF-2alpha, a Novel Regulator of Osteoblastogenesis	Health and Human Services, Department of-National Institutes of Health	\$1,716,000	5.0
Levi, Benjamin	Plastic Surgery Section	Continuous, Portable, Non-Perfusion Based "Short Wave Assessment Tool" (SWAT) Improves Burn Care	Defense, Department of-Army, Department of the	\$1,686,744	3.0
Mihalcea, Rada	EECS - CSE - AI/IS	Tracking and Understanding the Effects of Transformative Events in People's Lives	Templeton, John, Foundation	\$1,684,328	4.0
Lei, Lei	Cell and Developmental Biology	Mouse oocyte fate determination via polarized cytoplasmic transport within germline cysts	Health and Human Services, Department of-National Institutes of Health	\$1,606,788	5.0
Leiser, Scott	Molec & Integrative Physiology	Mechanisms of cell non-autonomous signaling through the hypoxic response	Health and Human Services, Department of-National Institutes of Health	\$1,576,445	4.9
Kamada, Nobuhiko	Int Med-Gastroenterology	The link between oral bacteria and gut disease	Health and Human Services, Department of-National Institutes of Health	\$1,564,432	4.0
Eby, David	UMTRI-Behavioral Sciences	LongROAD Senior Driver Cohort Study Phase II: University of Michigan	AAA Foundation for Traffic Safety	\$1,296,383	3.0
Raghunathan, Trivellore	Survey Research Organization	HUD Housing and Children's Healthy Development Supplemental Funding	Housing and Urban Development, Department of	\$1,100,039	1.6
Brummett, Chad	Anesthesiology Department	Optimizing Pain Management and Opioid Prescribing During Procedural Care	Michigan, State of, Health and Human Services, Department of	\$1,081,216	0.8

\* The Dan D. and Betty Kahn Foundation also provided a contemporaneous \$5M gift to U-M that was recorded through the U-M Office of University Development