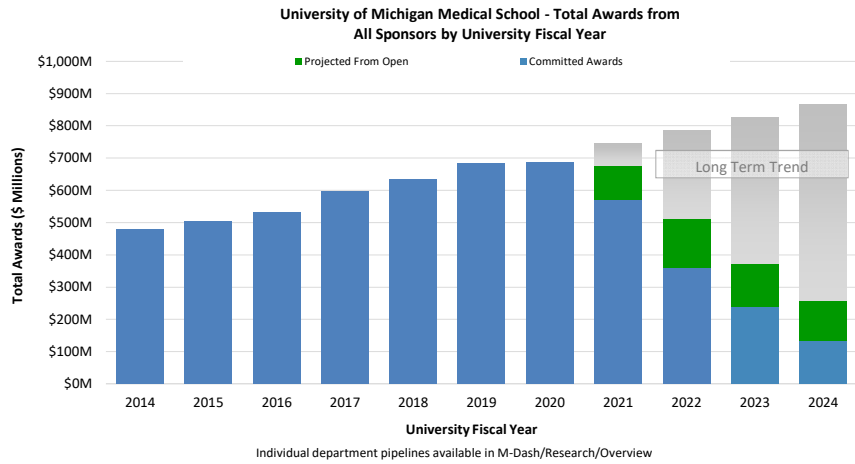
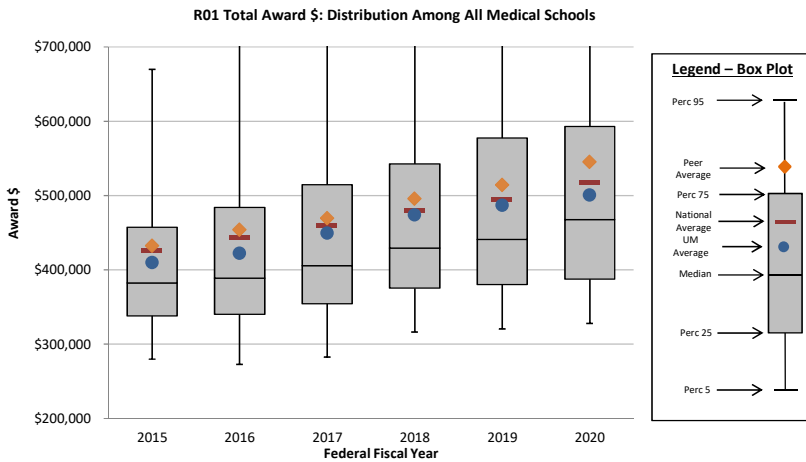


State of Research

UMMS Externally Funded Awards & Pipeline (1/18/2020)



External Benchmarking (1/8/2021)



*Peers institutions are determined by FFY 2019 rank bands based on total award \$ (excluding contracts).

Success Rates and Submissions (1/18/2021)

	2016	2017	2018	2019	2020	2021 YTD
Submissions to Start in Univ. FY	2,680	2,790	2,877	2,939	2,834	2,708
Success Rate (All Sponsors)	42%	42%	42%	43%	41%	22%
NIH Submissions (All Activity)	853	900	923	941	888	1,003
NIH Success Rate (All Activity)	26%	25%	25%	28%	26%	16%
R01 Submissions	406	444	445	457	461	472
R01 Success Rate	24%	22%	22%	22%	21%	11%

*Submissions are sorted into University Fiscal Year by actual budget award date or proposed anticipated start date.

Output, Influence, and Recognition

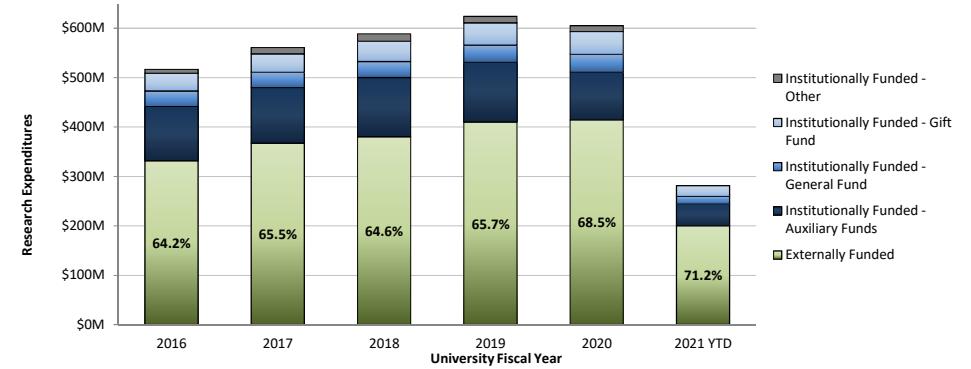
Publications (Michigan Research Experts; 1/20/2021)

Calendar Year	2015	2016	2017	2018	2019	2020 CYTD
Publications	6,869	6,159	5,876	6,577	6,923	8,469

Effective 1/18/21

Additional metrics for the Office of Research units available at: <http://www.med.umich.edu/medschool/research/state-of-research>
 Looking for aggregate department metrics? Log on to M-Dash: <https://www.umms.med.umich.edu/mdash/login-display.do>
 Looking for detailed metrics by department & individual? Log on to M-Stat: <https://www.umms.med.umich.edu/mstat/start.htm>

UMMS Direct Research Expenditures (excluding Transfers & Distributions Expenditures; 12/31/2020)

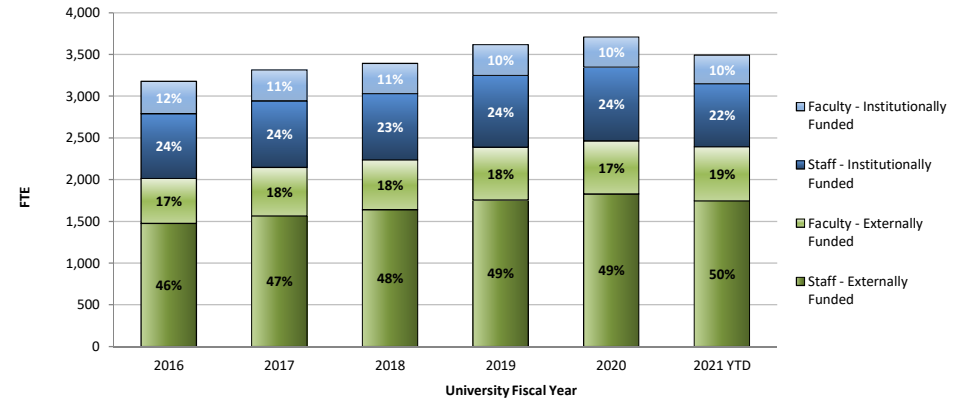


*Externally Sponsored Research Expenditures defined by all expenditures made in fund codes 20000 & 25000

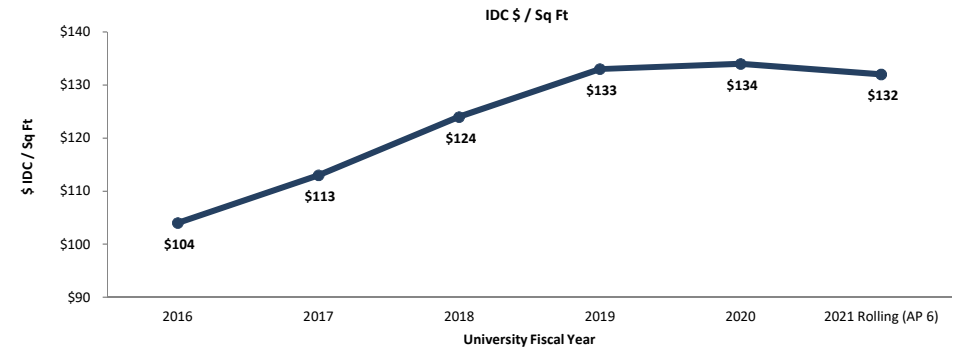
**Institutionally Funded Research Expenditures defined by expenditures made in class codes: 21000, 22000, 22100, 22200, & 31200 and all fund codes not equal to 20000 & 25000.

***Institutionally Funded - Other Expenditures include expenditures made in : Designated, Consolidated, Department Equipment, and Agency Funds.

UMMS Research Mission FTEs (12/31/2020)



UMMS Space Productivity (12/31/2020)



	2016	2017	2018	2019	2020	2021 Rolling (AP 6)
IDC Expenditure \$ in Research Space	\$98,010,090	\$105,959,500	\$114,525,308	\$123,138,581	\$124,140,683	\$122,134,288
12-Month Avg Sq Ft (Research Space)	938,072	934,451	927,019	928,679	925,625	926,385

ssica MSA/gsa (msgrants@umich.edu)

State of Research - View by Department

Output, Influence, and Recognition

Leading Indicators of Financial Performance

Lagging Indicators of Financial Performance

Basic Science Departments

	Publications (Scopus Count)				Awards (\$ Millions)				Awards Pipeline (\$ M), Progress toward:		Space Productivity (IDC \$/Sq Ft)			
	2018	2019	2020 CTVD	2015-2019	2019	2020	2021 YTD	2016-2020	FY 22 All Sponsors Pipeline	All Future Years (FY 22-36)	2019	2020	2021 R	2016-2021 R
Biological Chemistry	174	137	139		6.6	7.3	9.9		4.9	11.6	77	85	86	
Biomedical Engineering	337	315	397		2.3	4.3	4.8		3.5	8.2	93	90	86	
Cell and Developmental Biology	165	130	168		8.2	12.7	11.5		10.2	19.7	104	122	119	
DCMB	320	311	385		10.9	10.1	11.2		5.8	13.4	161	217	211	
Department of Learning Health	152	174	241		5.0	4.8	1.0		0.2	0.2	289	334	327	
Human Genetics	123	150	199		10.7	8.6	8.1		6.0	11.2	108	103	94	
Microbiology and Immunology	222	192	264		19.4	19.2	15.8		12.1	22.2	129	140	127	
Molec & Integrative Physiology	333	351	354		26.0	23.7	17.5		9.5	19.1	147	133	121	
Pharmacology	248	173	340		9.9	11.6	12.3		9.2	23.9	71	93	94	

Clinical Departments

Anesthesiology	178	217	278		25.5	21.4	23.5		10.9	20.3	346	322	336	
Cardiac Surgery	170	144	222		4.2	5.9	5.0		4.9	13.3	53	87	122	
Dermatology	88	111	160		6.4	6.6	6.2		3.0	6.5	145	144	147	
Emergency Medicine	223	202	308		26.6	24.4	22.3		17.7	38.9	333	323	327	
Family Medicine	154	159	175		5.2	6.1	2.0		0.8	1.0	248	507	537	
Internal Medicine	2275	2375	2977		198.7	216.7	192.6		126.8	301.2	174	169	170	
Neurology	330	383	444		41.6	28.0	34.5		21.0	34.3	199	195	188	
Neurosurgery	208	191	258		5.0	5.3	4.1		3.6	9.9	147	136	134	
Obstetrics/Gynecology	327	365	429		5.5	6.5	6.0		4.1	10.0	136	187	210	
Ophthalmology	191	176	213		13.0	15.4	14.2		8.8	21.6	87	96	103	
Orthopaedics	193	251	316		5.7	5.5	4.8		1.9	3.8	148	111	101	
Otolaryngology	201	170	254		7.6	8.6	6.2		3.9	9.1	88	70	66	
Pathology	485	553	569		32.9	36.2	28.5		15.9	34.9	134	136	135	
Pediatrics	585	676	846		34.3	32.2	27.5		17.6	40.8	188	191	190	
Physical Medicine and Rehab	118	128	126		5.3	5.3	4.2		3.3	7.7	506	593	795	
Psychiatry	466	475	532		37.5	40.5	34.3		14.9	38.7	433	783	959	
Radiation Oncology	272	306	321		7.9	10.1	6.1		4.2	15.7	141	125	117	
Radiology	565	495	709		16.8	20.6	14.8		9.7	17.7	105	108	109	
Surgery	675	727	923		36.4	41.8	29.8		17.7	40.6	176	176	152	
Urology	345	361	402		6.3	6.1	9.7		6.3	15.8	172	186	186	

Other Med School Departments

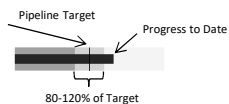
Cancer Center*	0	1894	2381		17.5	10.8	9.2		8.9	13.0	258	265	273	
Division of Anatomical Science	1	2	1		0.0	0.0	0.0		0.0	0.0	15	8	4	
IHPI	0	3104	3646		0.3	0.3	0.3		0.3	0.3	16	27	25	
MNI*	63	57	57		12.5	12.0	10.2		2.5	4.0	73	70	69	

Research Oversight Units

BRCF Roll-Up	0	0	0		3.9	3.5	2.9		1.6	1.6	29	33	26	
Ctr for Organogenesis	0	0	0		0.0	0.0	0.0		0.0	0.0	0	0	0	
Food Allergy Center	32	34	33		2.5	2.2	1.7		1.3	1.8	133	153	164	
MI Nanotechnology Institute	0	0	0		0.8	0.2	0.0		0.0	0.0	34	17	17	
MICHR Roll-up	0	0	0		14.7	13.3	14.0		0.9	0.9	421	386	402	
ULAM	0	42	42		0.6	0.6	0.2		0.1	0.2	20	15	12	

Med. Sch. Total (Incl. MSA, Other)	6577	6923	8469		684.3	696.5	617.1		383.5	853.0	133	134	132	
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Department award pipelines available in M-Dash/Research/Overview



Department space productivity available in M-Dash/Space/Productivity

Notes:

*Count of unique publications are attributed only to a faculty member's current administrative appointment as defined in M-Paths HR Records; Department publication totals do not reflect publications by faculty with secondary appointments; Department totals do not add up to the School total due to co-authorships counting in multiple departments; Source: Michigan Research Experts (2018 and later); Effective 1/20/21.

The Awards Pipeline is a forward-looking measure of all awards committed to the Department in future FY. The pipeline metrics reflect the Department's ability to maintain promised funding levels for one or all fiscal years. Targets are defined:

- **FY columns:** the Department's committed budget awards that are assigned to be available to support research in the next FY
- **All Future Years column:** the Department's committed budget awards that are assigned for all future FYs to support research
- **Pipeline Target:** the Department's set goal based on the previous FY's pipeline commitments + a 5% increase