

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions	-	61,286,610	65,274,393	65,729,007	66,977,566	67,161,428	68,519,962	71,736,671	75,148,301	79,024,262	83,488,120	86,302,262	89,694,837	97,680,528
Johns Hopkins U. ^a	1	2,004,482	2,145,308	2,106,185	2,168,568	2,242,478	2,305,679	2,431,180	2,562,307	2,661,033	2,917,436	3,110,494	3,181,385	3,420,312
U. California, San Francisco	2	935,509	995,226	1,032,673	1,042,841	1,084,031	1,126,620	1,294,261	1,409,398	1,595,732	1,595,098	1,651,073	1,710,036	1,805,950
U. Pennsylvania	3	836,322	886,036	847,077	828,422	828,350	864,068	1,296,429	1,374,293	1,441,931	1,506,285	1,579,364	1,631,950	1,791,311
U. Michigan, Ann Arbor	4	1,184,445	1,279,123	1,322,711	1,375,117	1,349,262	1,369,278	1,436,448	1,530,139	1,600,869	1,675,805	1,673,862	1,639,645	1,770,708
U. Washington, Seattle	5	1,022,740	1,148,533	1,109,008	1,192,513	1,176,340	1,180,563	1,277,679	1,348,220	1,413,902	1,425,601	1,456,902	1,488,645	1,559,708
U. California, Los Angeles	6	936,995	982,357	1,003,375	966,659	948,197	1,021,227	1,037,528	1,076,917	1,318,110	1,306,376	1,392,941	1,454,880	1,536,197
U. California, San Diego	7	943,219	1,009,378	1,073,864	1,075,554	1,067,388	1,101,466	1,087,117	1,133,454	1,265,196	1,353,763	1,403,735	1,425,499	1,533,357
U. Wisconsin-Madison	8	1,029,295	1,111,642	1,169,779	1,123,501	1,108,564	1,069,077	1,157,680	1,193,413	1,205,518	1,297,331	1,363,931	1,380,075	1,523,513
Duke U.	9	983,289	1,022,207	1,009,911	992,821	1,036,813	1,036,698	1,055,778	1,126,924	1,167,611	1,226,517	1,196,638	1,237,686	1,390,538
Stanford U.	10	839,839	907,971	903,238	945,450	959,247	1,022,551	1,066,269	1,109,708	1,157,597	1,204,116	1,203,950	1,274,483	1,384,555
Ohio State U.	11	755,194	832,126	766,513	793,373	815,075	817,881	818,464	864,327	875,014	929,250	968,260	1,236,111	1,363,388
U. North Carolina, Chapel Hill	12	755,284	869,174	884,791	973,007	989,766	966,781	1,045,338	1,102,063	1,136,158	1,153,773	1,159,725	1,205,883	1,361,028
Harvard U.	13	583,361	649,774	799,432	1,012,766	933,975	1,013,753	1,077,253	1,123,160	1,173,371	1,239,736	1,239,983	1,254,008	1,308,458
Cornell U.	14	749,721	781,651	802,387	845,184	883,292	954,412	974,199	984,478	1,071,621	1,144,534	1,190,063	1,183,524	1,300,357
New York U.	15	365,944	430,752	458,645	471,909	523,623	602,041	809,739	917,744	887,558	934,720	947,293	1,063,704	1,276,038
U. Pittsburgh, Pittsburgh	16	822,491	899,386	866,638	872,736	856,806	861,205	889,793	939,706	1,006,513	1,080,951	1,105,532	1,135,416	1,251,998
Georgia Institute of Technology	17	615,833	655,375	688,905	730,488	725,550	765,370	790,706	804,301	891,728	960,167	1,048,988	1,114,481	1,231,485
Columbia U. in the City of New York	18	807,235	878,900	889,487	889,188	890,642	868,159	837,312	893,062	947,504	1,003,615	1,032,909	1,098,570	1,230,924
U. Maryland ^b	19	na	na	na	na	na	na	na	na	na	1,096,600	1,103,062	1,142,264	1,228,550
U. Minnesota, Twin Cities	20	786,074	847,419	826,173	858,378	876,870	880,618	910,181	921,681	954,683	1,013,112	1,042,382	1,072,961	1,202,084
Yale U.	21	623,510	656,967	656,555	788,784	772,840	803,004	881,765	951,084	990,399	1,072,309	1,094,135	1,165,148	1,191,201
U. Texas M. D. Anderson Cancer Center	22	599,529	663,279	685,814	718,096	794,980	833,406	852,095	888,029	929,710	969,496	1,051,297	1,124,971	1,182,536
Texas A&M U., College Station and Health Science Center	23	689,624	705,720	693,421	820,015	854,214	866,678	892,718	905,474	922,178	952,156	1,130,803	1,147,720	1,152,666

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Vanderbilt U. and Vanderbilt U. Medical Center	24	504,959	566,031	560,466	571,603	683,890	647,816	640,842	712,036	738,620	776,937	824,803	1,019,273	1,086,223
U. Florida	25	681,548	739,931	696,985	695,063	708,526	739,522	791,294	801,418	865,093	928,639	942,223	959,965	1,085,834
Washington U., Saint Louis	26	695,974	725,039	706,410	684,847	664,752	694,069	741,115	754,462	816,139	887,088	920,215	989,214	1,047,098
U. Southern California	27	592,791	603,294	623,544	645,636	687,222	691,031	702,866	764,322	891,625	909,683	941,198	955,565	1,039,905
Pennsylvania State U., University Park and Hershey Medical Center	28	770,449	794,846	797,679	837,880	800,773	791,031	825,561	854,815	908,708	949,679	991,923	970,544	1,019,940
Northwestern U.	29	575,078	618,980	631,078	639,781	645,333	656,167	713,491	751,809	805,672	857,069	874,671	913,178	1,000,695
Massachusetts Institute of Technology	30	677,138	723,610	824,130	900,524	908,017	930,719	946,159	952,017	964,336	1,009,466	987,968	949,076	989,166
U. California, Berkeley	31	694,049	707,945	730,348	727,002	744,343	788,505	774,255	770,822	796,505	802,931	840,000	846,872	981,035
Emory U.	32	529,453	547,316	565,766	575,943	558,600	585,210	614,527	664,888	712,417	794,928	808,792	852,922	958,281
Icahn School of Medicine at Mount Sinai	33	370,666	405,527	400,680	428,654	463,429	508,353	540,296	575,448	640,141	722,241	747,014	820,260	893,968
U. California, Davis	34	679,915	707,896	713,292	725,734	711,721	721,077	741,892	738,347	788,832	804,282	816,693	817,409	883,807
U. Texas, Austin	35	589,502	632,171	621,538	634,132	585,251	604,376	621,692	652,187	679,781	696,111	797,199	779,348	845,896
Baylor C. of Medicine	36	447,874	466,061	474,700	508,799	496,314	520,220	572,527	604,952	623,396	651,920	685,641	716,976	827,005
U. Arizona	37	586,647	610,565	625,365	629,466	588,088	606,219	604,464	622,200	687,066	734,270	760,975	770,031	824,340
Arizona State U.	38	329,345	355,215	385,959	405,154	426,651	458,412	518,239	545,016	617,717	639,637	673,357	677,303	797,224
U. Illinois, Urbana-Champaign	39	515,133	545,669	583,754	743,487	621,733	639,817	625,180	642,084	652,709	677,523	689,176	731,268	765,909
Michigan State U.	40	431,373	454,248	507,061	515,707	526,906	558,248	613,369	694,917	715,290	725,708	713,197	710,178	759,229
Purdue U., West Lafayette	41	548,980	578,231	602,501	595,739	564,923	558,611	606,302	622,813	631,574	663,927	687,144	679,482	754,627
Indiana U., Bloomington	42	177,520	184,096	184,486	197,897	206,039	485,076	508,766	540,421	566,907	668,157	710,850	695,258	751,309
Boston U.	43	352,817	355,916	334,496	368,281	367,328	388,336	395,921	421,360	484,205	534,205	583,267	652,096	725,402
U. Texas Southwestern Medical Center	44	419,220	431,883	435,085	440,620	434,627	438,824	442,666	461,797	474,260	496,697	595,939	632,134	719,002
U. Alabama, Birmingham	45	489,845	503,698	453,779	440,796	428,563	516,229	537,825	561,851	588,207	607,863	618,226	644,330	713,480

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Rutgers, State U. New Jersey, New Brunswick	46	428,432	432,306	434,901	493,320	644,116	628,613	630,212	681,719	706,282	657,249	688,077	643,955	712,231
U. Utah	47	379,200	414,316	430,056	494,058	486,140	518,928	350,212	380,295	552,306	601,133	607,061	624,737	670,119
U. Virginia, Charlottesville	48	276,308	398,096	383,359	385,828	358,576	373,218	397,458	469,682	551,761	613,938	652,002	611,313	662,658
U. Cincinnati	49	411,269	448,936	433,668	438,642	422,873	436,028	430,579	455,250	480,095	529,796	530,138	551,826	615,070
U. Colorado Boulder	50	349,449	390,677	392,004	385,849	379,475	420,775	453,123	499,389	514,573	513,822	525,674	547,724	611,380
U. Colorado Anschutz Medical Campus ^c	51	na	na	na	na	na	na	na	na	na	na	na	562,855	611,358
U. Iowa	52	444,034	443,893	446,429	435,377	449,147	443,218	473,362	494,280	511,973	508,353	538,583	553,876	594,215
Virginia Polytechnic Institute and State U.	53	398,169	450,058	454,417	496,169	513,149	504,282	521,773	522,425	531,636	541,969	556,341	542,045	591,861
U. Chicago	54	437,721	453,562	419,631	402,621	390,082	412,536	420,997	433,328	423,993	459,171	458,891	497,651	591,805
North Carolina State U.	55	360,795	378,154	404,225	417,468	446,112	468,293	489,918	500,445	509,841	541,100	546,290	547,118	583,203
U. Georgia	56	295,339	335,901	351,395	350,225	355,471	374,264	410,345	455,432	453,249	477,536	482,786	493,944	545,631
U. California, Irvine	57	327,594	344,678	350,030	347,773	340,056	329,798	345,319	361,414	426,610	448,967	490,597	523,752	534,947
Scripps Research Institute	58	387,298	400,768	398,673	399,899	386,231	384,161	364,670	354,582	396,839	427,734	444,964	485,435	492,639
Oregon Health and Science U.	59	314,990	334,324	305,530	308,767	314,802	326,915	331,524	348,449	372,180	415,629	446,890	452,812	479,226
California Institute of Technology	60	362,172	377,514	379,713	347,105	367,182	374,424	371,060	400,312	391,003	399,931	449,651	438,624	478,142
U. Kentucky	61	359,944	372,932	360,776	339,764	328,239	331,705	349,661	378,374	393,034	410,581	417,674	429,241	476,517
Case Western Reserve U.	62	418,164	429,206	431,090	425,788	419,011	401,527	405,655	408,609	434,441	438,994	439,778	421,868	467,389
Princeton U.	63	242,570	263,335	275,666	269,908	293,274	279,851	307,653	334,125	365,007	385,739	396,502	404,448	461,185
Colorado State U., Fort Collins	64	302,896	330,784	375,919	313,238	307,978	317,219	331,862	338,404	374,955	398,477	407,302	447,197	456,911
U. Rochester	65	414,655	429,034	389,612	389,355	353,419	346,932	346,165	353,003	370,645	393,960	397,211	409,255	450,805
Carnegie Mellon U.	66	222,790	242,882	255,933	271,277	251,222	242,004	319,168	328,100	331,383	359,720	386,996	402,376	449,707
U. Illinois, Chicago	67	362,939	380,828	388,625	367,848	347,888	354,560	337,296	372,619	361,690	382,949	412,147	429,585	440,573
SUNY, U. Buffalo	68	349,670	353,172	360,226	387,863	386,562	382,935	389,569	401,591	410,220	413,817	422,038	425,349	439,709
U. Miami	69	280,671	323,486	365,301	344,757	345,805	331,036	358,441	367,877	357,104	360,716	381,410	375,841	439,300
U. Missouri, Columbia	70	238,500	230,957	239,810	236,423	237,266	246,684	280,051	293,006	294,686	310,421	332,180	388,779	432,310
SUNY, Polytechnic Institute	71	na	na	na	na	412,851	295,313	316,680	308,861	257,358	352,889	355,651	465,273	413,763

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Oklahoma, Norman and Health Science Center	72	218,089	249,297	240,974	255,674	253,344	242,367	259,998	272,239	283,638	302,679	362,209	380,048	408,656
Virginia Commonwealth U.	73	197,709	207,756	201,366	196,015	201,858	218,925	225,999	235,464	246,190	255,648	283,874	364,096	405,898
U. Kansas	74	267,961	274,727	286,262	298,498	301,534	311,383	297,933	300,319	339,046	352,643	368,811	385,637	405,267
U. South Florida ^d	75	385,029	394,963	443,206	459,409	488,641	485,354	505,965	557,889	385,686	391,325	333,344	385,965	405,166
Iowa State U.	76	250,120	267,641	260,995	266,596	313,263	306,125	328,385	323,584	361,206	358,474	363,107	360,275	393,184
Washington State U.	77	304,352	320,510	335,930	305,510	288,752	303,214	301,640	331,051	331,424	344,997	335,201	357,648	368,396
U. Delaware	78	153,311	169,746	170,174	179,967	175,563	175,724	176,295	183,428	186,192	206,270	220,445	231,532	368,107
U. Connecticut	79	237,908	253,792	256,854	242,251	258,056	259,397	265,522	267,647	269,685	285,764	280,131	302,329	367,557
Rockefeller U.	80	265,750	272,491	292,896	298,474	316,368	323,932	335,136	348,845	353,142	351,089	356,217	357,543	360,877
U. Massachusetts, Medical School	81	232,039	262,714	256,090	245,923	241,869	250,338	253,099	279,884	274,211	281,507	279,096	347,337	358,204
Florida State U.	82	227,329	230,411	225,378	250,877	252,548	256,449	268,288	282,901	297,661	329,205	350,430	328,604	355,986
Utah State U.	83	149,169	174,167	157,355	158,352	169,605	175,353	180,590	187,314	219,397	283,917	304,256	325,223	344,851
Louisiana State U., Baton Rouge	84	289,872	287,841	285,395	283,400	290,076	281,154	291,972	265,168	286,726	296,497	286,733	296,673	344,556
Dartmouth C. and Dartmouth Hitchcock Medical Center	85	194,141	210,631	195,930	201,591	212,606	209,646	233,636	308,445	323,927	323,020	326,349	330,226	344,126
U. Texas Health Science Center, Houston	86	240,772	261,172	236,250	233,256	233,737	234,299	237,016	246,060	258,411	271,525	273,862	308,823	342,633
U. Nebraska, Lincoln	87	224,135	235,296	253,321	266,507	278,299	284,438	294,856	302,204	308,053	316,820	320,463	320,758	340,260
U. New Mexico	88	211,771	220,565	220,360	227,703	228,849	232,271	239,550	246,597	251,322	239,696	243,375	332,566	331,164
U. Tennessee, Knoxville ^e	89	150,671	167,456	179,252	193,054	179,041	173,533	183,268	203,800	259,607	247,693	320,407	316,273	324,435
Thomas Jefferson U.	90	103,064	104,923	100,506	89,273	118,378	119,631	122,396	142,569	148,573	170,458	171,377	200,393	321,644
Medical C. Wisconsin	91	191,816	215,358	209,040	201,237	199,713	199,283	199,925	209,618	229,436	251,300	264,325	276,850	321,506
Albert Einstein C. of Medicine	92	na	na	na	na	na	na	289,660	289,685	297,328	298,824	288,654	301,715	318,314
Georgetown U.	93	159,355	169,916	180,308	178,995	172,726	176,131	183,788	212,319	221,449	240,960	258,659	279,932	313,220
SUNY, Stony Brook U.	94	204,728	211,356	219,744	225,712	211,631	220,580	230,621	238,612	245,016	260,813	263,470	274,516	312,698
Brown U.	95	335,838	344,090	365,120	361,010	341,531	342,040	347,016	212,290	244,838	256,954	266,127	276,331	310,780
Auburn U., Auburn	96	145,115	163,335	133,013	147,229	142,487	135,899	152,381	190,340	212,925	231,619	255,281	266,374	304,439
Mississippi State U.	97	231,675	226,070	233,197	206,424	209,729	226,359	239,446	240,972	244,102	264,526	280,485	275,143	303,418
Temple U.	98	124,528	134,533	138,318	224,087	224,101	227,468	246,392	268,385	276,011	284,301	299,707	299,778	301,395

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Oregon State U.	99	216,595	228,814	240,507	232,677	230,963	245,317	254,275	267,068	272,433	263,830	268,385	276,955	297,934
Medical U. South Carolina	100	224,632	213,346	236,586	245,451	242,594	243,534	260,098	262,267	282,253	295,600	272,590	277,761	284,553
Florida International U.	101	110,271	110,006	118,058	128,070	132,531	163,033	170,846	177,292	196,180	225,864	236,842	246,075	281,665
U. Notre Dame	102	110,369	134,410	157,691	175,220	182,228	190,954	202,216	212,823	219,993	240,078	227,535	240,324	280,604
U. California, Santa Barbara	103	225,730	230,435	233,883	236,497	231,322	222,870	230,139	238,246	235,164	243,778	254,434	248,961	278,897
U. Hawaii, Manoa	104	303,085	318,316	312,311	326,750	324,342	316,497	304,476	292,021	276,388	280,416	275,929	271,768	277,323
Uniformed Services U. of the Health Sciences	105	134,126	175,365	143,250	164,232	262,489	361,173	256,203	298,370	308,326	417,300	324,510	384,490	277,240
George Washington U.	106	196,917	197,621	196,448	202,428	227,995	241,117	231,829	245,519	260,656	269,799	270,369	266,108	275,483
Wake Forest U.	107	192,034	209,134	204,328	182,721	176,380	171,926	170,006	182,227	191,371	238,933	244,643	264,216	269,109
Clemson U.	108	174,693	166,350	142,096	152,444	161,070	171,215	183,965	193,268	213,458	218,760	228,597	237,485	263,158
Wichita State U.	109	51,524	63,538	61,279	61,388	58,859	59,940	65,930	78,514	81,137	128,795	153,816	192,042	261,519
Woods Hole Oceanographic Institution	110	181,746	198,775	204,352	198,232	220,016	216,592	212,374	194,088	204,400	229,143	227,573	262,048	255,017
U. Massachusetts, Amherst	111	169,141	181,297	194,775	190,739	200,199	213,902	214,576	210,416	211,140	223,177	219,389	213,824	245,158
Wayne State U.	112	254,492	259,895	227,070	224,331	218,435	213,878	221,537	227,728	238,859	244,217	243,259	235,519	242,247
U. Houston	113	119,811	113,709	116,288	130,844	140,597	150,628	162,049	169,431	177,484	195,398	200,428	202,536	240,126
U. Texas Health Science Center, San Antonio	114	207,115	198,655	184,298	175,983	172,716	170,277	194,885	169,200	179,219	188,483	202,572	219,734	238,510
Northeastern U.	115	79,949	86,783	107,862	116,088	116,245	122,915	129,040	142,349	166,711	183,998	200,068	211,342	231,607
Tufts U.	116	156,106	156,395	160,922	156,525	160,825	168,314	189,085	223,409	213,457	213,285	216,241	224,956	231,224
George Mason U.	117	84,120	88,089	90,198	95,913	98,680	106,410	108,899	112,404	149,138	186,267	218,445	214,207	230,068
U. Louisville	118	189,090	197,438	196,842	186,772	183,376	163,262	172,907	177,588	176,655	177,862	198,818	200,362	229,582
U. South Carolina, Columbia	119	229,145	201,592	214,901	203,365	206,173	208,736	209,271	208,670	206,355	205,940	219,734	215,374	229,162
Texas Tech U.	120	133,360	149,399	138,026	142,676	159,308	163,897	172,521	191,482	185,742	193,923	199,643	197,739	226,729
Tulane U.	121	165,513	171,703	164,373	160,414	157,825	152,658	165,438	180,993	193,294	196,933	204,430	205,206	222,605
U. Central Florida	122	117,985	109,190	116,891	126,681	185,555	215,519	198,211	200,387	215,332	225,085	213,757	218,596	221,488
U. Vermont	123	129,856	132,356	115,697	115,486	109,701	114,547	115,611	117,667	128,293	135,859	191,147	195,320	216,307
Rice U.	124	97,903	110,235	117,223	131,003	138,536	144,679	154,543	167,277	161,831	182,564	198,681	207,404	216,202
Georgia State U.	125	81,015	92,725	91,148	111,999	123,915	139,596	161,314	200,171	201,235	195,572	202,451	206,472	215,908

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
West Virginia U.	126	154,926	166,420	169,303	167,144	164,454	170,145	172,477	185,606	185,110	187,512	188,452	199,907	214,081
Kansas State U.	127	160,679	169,167	176,141	183,096	184,945	188,721	193,254	196,478	218,299	218,622	213,900	203,846	212,974
U. Dayton	128	93,309	90,557	81,030	84,252	86,881	98,182	116,589	135,214	147,001	165,343	163,718	191,228	211,494
U. New Hampshire	129	115,562	143,002	165,156	147,446	147,544	144,735	145,015	145,375	146,430	148,980	156,901	167,373	206,392
U. Arkansas for Medical Sciences	130	119,518	122,066	129,056	133,677	131,438	132,451	125,378	128,508	139,187	153,135	174,549	194,709	205,493
U. Nebraska, Medical Center	131	138,219	133,036	141,619	137,485	139,126	145,009	150,694	171,491	177,245	194,455	202,406	200,974	205,253
U. Louisiana, Lafayette	132	69,412	69,978	65,275	61,887	67,580	77,300	80,099	100,956	124,713	144,187	164,070	181,400	205,201
U. Texas Medical Branch	133	188,399	193,555	180,888	180,198	178,014	173,506	179,541	185,106	181,831	175,372	180,595	185,759	204,518
U. Alaska, Fairbanks	134	161,986	165,530	160,407	162,658	155,769	142,742	144,259	152,694	140,917	144,457	152,299	172,957	202,516
Montana State U., Bozeman	135	135,084	125,966	124,228	113,136	113,348	108,414	112,073	129,622	125,129	154,811	166,285	193,577	200,820
U. California, Riverside	136	130,288	132,238	135,494	132,617	133,558	144,511	152,233	163,632	167,847	177,655	184,894	189,600	199,135
Oklahoma State U., Stillwater	137	147,094	162,786	166,523	134,500	126,543	129,968	181,617	189,024	188,756	184,276	187,060	198,799	195,041
U. Arkansas, Fayetteville	138	113,909	120,007	123,199	125,501	125,824	133,660	145,020	157,791	175,498	180,225	165,887	164,443	184,080
U. Nevada, Reno	139	95,423	89,740	85,726	89,797	87,324	90,138	95,475	105,869	144,426	152,128	159,790	175,386	181,782
U. California, Santa Cruz	140	143,919	155,617	155,516	150,777	151,734	151,713	151,192	124,344	127,538	142,958	150,400	160,615	176,760
North Dakota State U.	141	126,419	134,064	135,493	150,173	154,437	153,542	156,297	153,119	145,669	152,381	155,645	164,050	174,904
U. Maine	142	111,282	111,600	92,135	77,583	101,247	79,500	79,222	99,502	106,694	129,913	134,183	146,801	171,931
U. Alabama, Huntsville	143	75,683	75,724	87,388	101,016	89,325	88,439	96,865	94,376	99,405	109,744	131,648	149,792	169,532
New Jersey Institute of Technology	144	92,318	100,491	102,851	107,310	106,081	110,512	130,812	142,164	162,349	161,232	163,447	166,587	167,135
U. Alabama, Tuscaloosa	145	40,762	53,633	55,885	55,443	53,140	58,234	62,549	63,282	71,992	83,317	95,200	129,509	163,204
U. Oregon	146	94,107	103,019	105,030	94,522	91,203	79,698	100,754	95,974	111,896	110,664	114,259	139,193	160,500
Syracuse U.	147	107,024	83,686	85,649	70,967	66,321	69,896	84,651	145,705	147,751	154,366	149,652	151,717	157,407
U. Mississippi	148	110,020	122,765	121,731	108,168	109,922	94,040	121,665	134,542	137,521	158,809	122,960	116,175	152,903
Drexel U.	149	118,349	115,020	116,768	123,813	131,170	128,027	127,909	138,577	155,908	149,481	143,123	152,752	151,903
U. North Dakota	150	76,560	74,882	80,149	68,942	67,595	64,384	70,275	102,823	109,865	110,836	111,663	143,506	147,717
U. Texas, San Antonio	151	56,279	58,667	57,233	53,626	47,061	54,949	59,831	70,163	72,682	84,326	138,586	145,362	147,629
U. Wyoming	152	55,319	57,549	65,611	65,490	51,422	56,996	112,056	125,032	113,063	80,353	93,061	93,202	139,764

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Texas, Arlington	153	71,414	72,483	78,556	86,735	89,175	77,798	87,386	97,197	105,688	123,858	133,793	126,477	133,770
U. Texas, Dallas	154	82,044	93,230	90,700	98,842	99,727	98,551	106,205	113,205	113,315	126,661	132,192	122,825	130,914
SUNY, Binghamton U.	155	72,057	72,539	81,000	76,005	71,382	79,895	85,192	98,089	113,851	104,297	117,870	124,565	130,882
U. Texas, El Paso	156	68,870	74,069	79,649	83,249	79,537	89,418	91,330	94,565	91,032	106,809	108,628	109,410	130,501
SUNY, U. Albany	157	359,364	148,625	137,758	137,759	130,955	111,705	120,232	156,386	173,031	181,531	138,088	114,501	129,796
U. Rhode Island	158	90,016	102,630	114,323	101,898	91,706	93,828	97,900	101,871	104,490	115,160	109,967	129,296	129,102
Augusta U.	159	na	na	na	64,033	64,118	67,737	71,338	99,661	99,081	96,502	103,961	116,480	127,313
U. Montana, Missoula	160	63,540	60,159	59,313	60,189	55,032	60,485	70,059	85,044	90,563	104,665	110,218	121,571	125,603
San Diego State U.	161	99,137	106,591	92,867	86,733	95,674	93,572	90,722	89,187	88,177	92,964	97,710	107,681	123,856
Rensselaer Polytechnic Institute	162	83,952	84,834	92,720	92,495	105,608	102,841	101,127	104,797	100,856	103,739	122,753	119,056	121,809
New Mexico State U.	163	157,872	139,062	141,151	142,365	134,262	132,377	106,282	102,218	96,270	101,457	107,275	110,580	121,472
Cold Spring Harbor Laboratory	164	ne	89,913	84,072	78,236	76,733	84,653	88,943	97,288	115,870	126,773	115,198	114,903	118,034
U. Idaho	165	87,207	96,229	97,227	95,891	95,594	97,493	102,457	109,537	111,590	113,107	112,810	105,895	115,603
U. Tennessee, Health Science Center	166	81,904	81,220	77,754	71,902	67,841	65,771	71,547	73,393	79,460	96,979	99,716	109,562	115,161
Rush U.	167	73,398	79,212	80,300	81,770	80,551	79,048	73,351	74,062	89,101	96,267	94,438	107,398	114,874
U. Massachusetts, Lowell	168	59,345	60,013	60,624	63,136	64,591	70,384	68,494	69,677	72,266	83,996	92,216	94,708	111,144
U. Maryland, Baltimore County	169	87,156	91,657	74,993	71,819	67,833	68,688	70,166	70,406	71,481	80,632	83,867	84,418	110,319
Texas State U.	170	30,560	33,487	36,664	37,053	39,265	47,694	54,298	60,741	64,322	64,554	70,714	72,510	110,102
Brandeis U.	171	71,006	74,889	74,660	76,060	74,992	74,700	73,435	68,437	61,639	60,825	91,355	95,001	102,378
Colorado School of Mines	172	44,879	48,704	58,836	59,091	59,695	58,349	60,931	59,477	60,372	70,397	78,517	81,443	98,404
U. Nevada, Las Vegas	173	44,457	39,526	34,543	35,935	39,448	42,000	62,825	66,285	83,800	99,445	105,872	101,009	94,967
U. North Texas, Denton	174	31,496	42,475	46,943	49,518	44,180	43,628	37,106	43,789	44,025	78,691	84,239	81,252	93,538
Michigan Technological U.	175	63,471	70,089	71,989	70,689	68,526	69,607	72,536	71,629	78,678	80,443	77,927	81,715	91,084
New Mexico Institute of Mining and Technology	176	51,696	43,857	37,875	32,499	48,338	26,265	19,598	20,491	21,383	24,616	24,591	28,745	89,900
Saint Louis U.	177	46,839	53,179	49,086	48,231	44,481	44,457	42,151	56,402	60,380	66,103	69,528	79,005	82,740
Cleveland State U.	178	34,235	55,502	61,111	67,378	61,783	57,662	77,720	83,762	83,641	80,077	78,189	71,451	81,225
Van Andel Research Institute	179	ne	ne	ne	ne	ne	40,502	40,040	44,578	55,171	61,738	58,982	65,789	78,626

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
William & Mary	180	57,461	58,919	55,805	57,940	59,015	61,554	63,027	64,127	65,269	64,835	66,763	68,801	75,953
U. Southern Mississippi	181	42,059	46,591	60,079	51,962	51,938	51,840	59,363	61,659	61,336	76,464	72,322	67,417	72,477
San Jose State U.	182	38,241	40,149	34,727	38,326	43,509	45,037	41,662	39,192	41,366	44,309	47,301	60,100	71,695
U. Memphis	183	49,517	48,321	51,194	48,141	55,566	46,675	48,321	49,695	64,297	58,700	69,463	67,092	71,271
Boston C.	184	50,537	52,253	51,442	50,702	49,724	47,761	54,469	58,088	57,030	61,956	63,063	65,156	68,958
American U.	185	39,747	46,611	43,526	61,087	63,628	58,325	57,064	56,034	61,741	71,053	71,839	65,912	67,616
Howard U.	186	40,080	42,341	45,486	42,789	40,771	47,322	41,038	45,768	45,965	44,163	44,933	52,412	67,594
Northern Arizona U.	187	28,803	30,785	28,100	30,516	31,590	35,206	39,580	46,253	52,899	58,914	64,456	69,129	66,729
Baylor U.	188	10,925	12,343	10,161	13,616	20,729	24,642	26,767	29,400	31,936	33,304	39,765	48,809	66,014
CUNY, City C.	189	46,699	60,648	57,982	55,138	52,654	53,223	62,484	54,627	53,979	52,738	45,632	57,361	65,569
U. Massachusetts, Boston	190	56,416	57,040	60,086	60,380	61,186	62,374	64,223	70,019	61,473	62,018	64,219	63,723	65,215
Old Dominion U.	191	97,176	102,192	104,579	99,138	67,037	65,092	70,054	67,990	60,321	67,425	65,704	62,332	64,877
U. Toledo	192	70,399	74,149	68,228	69,072	61,900	52,354	50,019	50,030	50,320	55,006	54,100	53,169	64,654
U. Texas Rio Grande Valley	193	na	na	na	na	na	na	31,007	29,500	27,125	52,016	56,702	58,187	64,401
Indiana U.-Purdue U., Indianapolis	194	296,194	322,617	316,914	332,760	324,261	55,973	57,853	58,056	60,501	67,635	70,778	65,330	64,162
Naval Postgraduate School	195	103,510	101,363	132,450	94,880	99,032	89,170	65,529	60,386	59,213	67,323	62,903	65,101	64,055
Rochester Institute of Technology	196	38,663	34,889	36,935	36,613	35,945	40,442	45,518	51,263	49,413	58,175	57,777	56,043	62,383
Florida Atlantic U.	197	56,472	62,024	65,377	23,967	22,997	21,214	26,750	46,025	48,024	51,085	53,845	58,471	61,748
South Dakota State U.	198	67,552	69,680	68,743	63,843	58,334	58,373	60,677	63,412	63,465	66,794	60,939	51,542	59,590
Southern Methodist U.	199	18,742	24,453	24,397	22,544	32,401	29,282	31,819	29,879	31,140	42,562	43,081	41,960	57,544
Worcester Polytechnic Institute	200	18,613	22,137	20,232	25,298	29,929	36,130	37,822	33,368	33,067	39,878	43,092	48,702	56,904
U. Wisconsin-Milwaukee	201	71,181	65,648	61,771	56,587	60,752	63,414	59,813	54,181	55,771	53,773	61,069	55,664	56,822
East Carolina U.	202	23,995	28,114	31,990	38,271	29,925	26,549	25,273	26,117	39,074	55,611	57,820	51,662	55,693
U. California, Office of the President	203	72,542	63,420	65,627	67,447	50,103	48,341	39,051	46,399	55,676	67,702	60,686	50,848	54,640
Louisiana State U., Health Sciences Center, New Orleans	204	59,776	57,007	53,712	49,443	45,486	46,840	43,067	40,785	38,989	40,914	43,419	44,370	53,995

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Maryland Center for Environmental Science	205	42,670	50,007	48,224	53,683	50,814	52,235	54,974	55,078	54,136	56,033	54,560	51,201	53,718
Stevens Institute of Technology	206	35,544	41,622	31,929	28,908	30,826	34,082	35,765	35,144	33,060	36,695	44,747	43,386	53,563
Missouri U. of Science and Technology	207	42,263	41,581	38,588	40,397	39,065	35,842	35,756	38,243	42,986	47,807	47,001	54,437	53,357
U. Missouri, Kansas City	208	30,163	32,769	29,227	28,829	29,164	26,595	26,292	25,123	25,136	31,956	36,356	33,855	52,657
Ohio U.	209	50,440	57,643	57,203	59,734	60,800	61,078	59,117	61,092	53,303	53,735	51,914	49,764	52,465
Kent State U.	210	26,331	27,455	26,507	23,149	25,666	38,069	34,661	42,003	42,792	47,188	50,307	50,408	52,175
Lehigh U.	211	37,332	32,086	31,992	35,220	37,066	36,788	32,941	36,969	38,674	38,185	38,064	41,279	51,769
Florida A&M U.	212	53,474	53,326	52,263	51,149	46,367	46,522	45,390	37,578	39,682	42,470	41,319	47,124	50,636
SUNY, Upstate Medical U.	213	43,824	39,988	35,897	34,286	33,460	32,453	31,892	35,551	36,674	38,091	41,557	44,870	50,586
Mercer U.	214	27,298	29,039	31,376	28,892	30,209	32,838	31,735	29,447	34,197	44,128	49,116	51,989	50,222
U. California, Merced	215	21,591	21,328	22,656	22,909	23,916	29,688	29,370	35,093	38,226	44,890	45,966	45,964	48,147
North Carolina A&T State U.	216	35,297	34,930	35,103	33,994	35,047	35,172	33,759	37,379	38,140	37,339	36,151	40,751	47,908
Boise State U.	217	18,731	24,204	27,920	25,690	26,568	31,341	32,085	34,992	41,382	39,824	43,307	46,065	47,617
U. Puerto Rico, Medical Sciences Campus	218	39,134	64,017	45,649	43,374	40,444	43,316	46,232	42,423	41,216	45,014	37,217	44,111	47,578
Southern Illinois U., Carbondale	219	69,924	71,130	71,097	70,854	65,256	57,509	53,172	48,416	49,636	41,729	41,617	47,210	46,967
Texas Tech U., Health Sciences Center	220	51,282	58,774	61,219	61,412	38,015	40,438	40,235	39,767	37,819	44,072	44,135	41,583	46,574
Loyola U., Chicago	221	43,903	42,708	45,903	51,676	50,774	48,664	42,672	39,738	39,332	39,223	39,365	44,036	46,169
Brigham Young U., Provo	222	32,997	37,142	33,843	36,562	38,051	39,126	42,304	43,406	40,755	39,582	38,569	43,916	45,610
U. Denver	223	15,748	17,004	15,237	19,262	18,183	16,116	21,326	22,289	27,270	36,551	41,349	38,751	45,561
Air Force Institute of Technology	224	31,259	31,879	32,746	27,592	23,902	26,866	29,998	35,733	33,360	34,016	35,584	45,703	44,391
U. South Alabama	225	35,500	42,233	40,172	40,590	41,681	43,722	46,670	41,431	41,056	52,540	51,102	47,610	43,491
U. North Carolina, Charlotte	226	31,814	27,533	25,141	24,764	23,342	24,870	27,815	26,097	39,888	47,187	50,050	51,877	43,126
Morehouse School of Medicine	227	30,669	33,946	37,586	36,638	41,858	33,367	38,774	36,925	33,215	31,289	29,813	32,637	42,489

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Portland State U.	228	56,533	58,975	58,489	55,435	54,787	53,872	56,572	48,964	46,911	50,045	43,667	41,311	41,483
U. North Carolina, Greensboro	229	22,436	26,121	19,080	16,590	20,723	23,026	23,965	23,231	22,743	26,325	28,966	37,033	41,303
Marquette U.	230	14,310	19,876	18,606	20,856	23,633	24,816	28,422	30,034	32,471	37,777	37,136	37,087	40,638
U. West Florida	231	17,757	21,710	16,221	19,332	19,579	31,232	40,815	35,054	41,035	38,555	37,397	36,837	38,870
Catholic U. of America	232	21,454	25,397	24,971	23,235	22,331	24,265	25,139	24,282	25,497	24,484	25,221	35,548	38,191
Oakland U.	233	12,856	15,868	18,194	16,767	15,196	17,108	16,001	14,561	13,817	18,002	12,949	20,261	38,061
San Francisco State U.	234	25,615	26,198	30,291	33,885	29,457	26,345	28,273	29,940	30,903	31,888	33,828	35,768	36,617
U.S. Air Force Academy	235	62,097	73,607	56,044	57,164	44,663	38,326	55,358	48,287	35,925	43,941	42,197	32,086	36,506
Georgia Southern U.	236	3,704	3,912	5,719	18,069	20,245	17,152	17,395	16,084	12,978	11,166	12,166	37,201	36,362
Texas A&M U.-Corpus Christi	237	17,266	17,509	15,776	17,418	21,321	24,507	24,786	27,993	30,253	32,944	32,284	30,500	36,014
CUNY, Hunter C.	238	38,900	39,772	41,022	40,059	38,879	36,368	37,094	31,273	33,702	37,478	38,345	33,816	35,348
Chapman U.	239	3,830	3,547	3,314	4,463	4,794	5,353	6,554	10,626	14,141	19,592	26,660	25,820	34,212
U. Texas Health Science Center, Tyler	240	ne	ne	ne	ne	ne	12,191	11,799	16,292	17,949	19,606	21,265	27,928	33,872
California Polytechnic State U., San Luis Obispo	241	19,732	16,532	17,412	16,067	15,096	16,312	18,081	17,979	16,352	25,249	26,605	25,953	33,155
U. Massachusetts, Dartmouth	242	25,725	25,644	22,732	27,326	28,219	26,776	26,824	26,102	26,626	28,036	26,836	28,729	33,136
SUNY, C. of Environmental Science and Forestry	243	26,916	25,024	23,132	21,239	19,027	22,051	24,504	27,923	26,610	29,137	29,296	28,440	32,904
Montclair State U.	244	2,255	3,621	5,123	4,568	4,266	4,274	5,207	5,796	7,980	15,588	17,636	17,390	32,202
Nova Southeastern U.	245	10,116	12,322	12,908	12,712	13,716	14,775	19,559	22,508	23,296	24,567	26,035	24,513	31,189
Teachers C., Columbia U.	246	17,167	18,406	20,805	19,649	20,538	23,269	24,124	24,194	24,477	24,865	22,630	24,335	30,978
SUNY, Downstate Health Sciences U.	247	32,512	41,993	43,257	39,354	33,331	28,652	33,735	31,873	34,661	36,015	33,204	34,459	30,918
U. South Dakota	248	30,616	28,959	31,982	33,187	30,700	25,661	25,864	28,358	30,943	32,028	29,279	27,537	30,322
Rowan U.	249	2,987	3,247	3,783	3,407	8,202	8,044	10,212	12,856	16,247	22,892	26,018	26,458	29,949
Illinois Institute of Technology	250	36,554	44,463	32,576	36,722	31,356	34,336	29,826	32,659	33,280	34,334	29,122	29,698	29,791

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Louisiana State U., Health Sciences Center, Shreveport	251	30,817	31,021	29,365	28,266	25,004	24,069	23,353	22,560	24,463	26,262	25,321	24,600	29,502
Morgan State U.	252	12,804	12,803	17,751	15,475	15,720	13,577	15,727	14,978	12,993	13,253	17,193	20,628	29,482
Delaware State U.	253	15,200	19,019	15,668	17,295	17,679	15,980	21,320	20,793	21,377	23,017	23,105	23,193	29,016
Miami U.	254	26,521	26,093	26,311	23,924	21,216	16,108	16,057	17,239	19,658	22,380	24,489	25,138	28,799
Embry-Riddle Aeronautical U.	255	12,189	16,289	19,376	16,484	15,393	11,942	16,761	13,335	16,767	12,478	17,786	19,830	28,650
Desert Research Institute	256	34,367	35,331	33,056	27,695	23,778	22,103	29,422	29,440	27,875	26,991	26,428	26,365	28,478
Rutgers, State U. New Jersey, Newark	257	27,745	35,774	34,797	37,134	28,083	24,387	21,492	25,898	27,206	26,661	28,006	23,854	28,345
U. Puerto Rico, Rio Piedras	258	30,515	32,582	33,099	29,234	28,793	28,579	23,491	21,204	17,085	24,088	22,895	28,896	28,083
Western Michigan U. and Homer Stryker M.D. School of Medicine	259	26,391	25,051	21,073	18,979	18,942	19,679	18,927	22,372	21,184	25,071	24,541	25,314	27,768
Creighton U.	260	27,700	31,443	32,594	29,983	25,560	23,825	23,510	24,315	20,587	24,039	20,339	23,251	27,609
Wright State U.	261	48,575	48,501	46,213	50,489	54,985	54,289	55,484	59,379	68,035	64,208	49,825	26,259	27,440
Northern Illinois U.	262	27,036	21,748	21,823	23,027	16,427	17,722	21,225	19,150	23,280	26,570	25,420	25,261	27,068
Louisiana Tech U.	263	26,020	27,583	26,546	24,949	22,942	23,827	23,104	22,741	24,655	26,143	26,585	27,417	26,591
Villanova U.	264	10,066	10,044	8,547	7,049	13,700	14,512	14,903	19,037	20,730	22,837	25,505	24,723	25,955
Marshall U.	265	24,501	26,723	18,998	19,617	20,382	19,936	20,687	18,348	20,050	19,622	22,250	23,620	25,692
Illinois State U.	266	18,417	17,833	17,760	17,589	19,159	18,742	20,408	20,080	21,055	27,082	31,539	24,152	25,510
U. Nebraska, central administration	267	ne	ne	ne	ne	ne	ne	ne	ne	13,352	18,860	23,672	21,295	25,402
Central Michigan U.	268	7,483	8,671	10,907	12,879	15,015	12,880	14,166	14,652	15,616	17,102	17,448	21,726	25,105
U. Nebraska, Omaha	269	8,951	9,509	8,376	9,181	9,222	9,422	10,459	12,061	12,943	14,302	16,134	19,006	24,259
California State U., Sacramento	270	15,207	16,344	14,053	15,564	13,136	17,930	20,676	21,106	21,429	23,544	24,939	23,699	23,795
Texas A&M U.-Kingsville	271	17,378	17,114	17,419	18,653	21,819	20,894	21,309	22,633	21,150	22,268	22,745	23,578	23,451
East Tennessee State U.	272	9,869	10,249	11,213	8,919	7,836	6,930	7,982	9,493	14,043	14,197	13,925	18,449	23,420
U. Minnesota, Duluth	273	21,150	23,400	21,530	21,383	21,904	27,550	27,528	24,956	25,189	27,530	26,137	23,767	23,362
Middle Tennessee State U.	274	4,793	4,969	7,108	5,718	4,334	4,350	6,164	4,714	7,132	7,673	8,697	22,531	22,631
Albany Medical C.	275	22,953	20,876	17,735	15,093	16,093	18,043	20,166	20,443	21,187	23,028	23,510	22,443	22,297

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Eastern Virginia Medical School	276	44,420	36,569	37,745	44,183	43,917	42,296	32,550	28,671	30,010	27,064	20,870	19,415	22,165
Tuskegee U.	277	15,581	15,685	15,991	21,150	24,945	20,740	16,535	16,535	16,535	20,562	20,973	21,355	21,941
U. New Orleans	278	35,021	35,359	28,450	24,607	20,614	18,960	15,719	15,939	14,437	15,328	16,594	16,979	21,911
Kennesaw State U.	279	1,854	1,961	3,511	5,062	2,192	4,762	8,279	9,510	11,214	12,850	17,954	18,880	21,705
Clarkson U.	280	18,584	17,951	14,809	12,061	13,750	13,406	12,983	15,148	16,927	17,147	15,104	16,765	21,703
CUNY, Queens C.	281	16,845	23,219	22,399	19,762	23,434	19,092	19,168	15,936	16,676	18,391	16,470	16,063	21,434
U. Alaska, Anchorage	282	16,709	18,620	20,194	20,255	17,150	17,436	19,883	20,861	21,096	21,724	22,713	21,332	21,024
U.S. Military Academy	283	22,171	13,799	12,227	11,630	14,819	15,312	13,500	13,617	13,582	10,765	12,473	19,696	20,841
U. Guam	284	5,555	5,626	6,131	6,043	7,075	6,062	7,402	8,842	11,225	12,249	13,043	17,666	20,481
Fordham U.	285	19,289	18,350	19,311	18,822	17,961	20,939	25,374	20,807	20,644	20,287	20,456	16,731	20,432
Prairie View A&M U.	286	12,565	15,243	14,552	13,198	12,292	13,123	12,616	13,982	17,278	18,018	18,723	17,582	20,429
U. of the Virgin Islands	287	32,350	21,994	25,719	20,041	20,371	20,630	21,215	12,298	11,957	12,236	13,631	15,231	20,259
South Dakota School of Mines and Technology	288	28,572	32,070	19,140	12,156	10,524	14,970	15,396	15,541	15,092	12,973	14,490	15,746	20,061
Tarleton State U.	289	10,763	10,426	9,393	9,722	10,996	9,825	9,404	10,893	12,503	13,171	14,890	17,729	20,056
U. North Carolina, Wilmington	290	23,143	22,593	19,722	18,145	14,648	15,564	15,715	16,015	16,955	17,515	16,544	16,656	20,053
U. Akron	291	52,884	60,352	66,413	69,640	69,528	58,512	58,817	41,326	32,582	30,020	23,496	17,340	19,943
California State U., Northridge	292	29,469	25,654	29,491	9,640	12,991	13,333	16,330	17,979	19,618	21,095	21,228	16,573	19,638
Bowling Green State U.	293	8,124	8,999	8,566	13,157	8,861	7,995	14,460	14,333	17,991	17,026	18,729	18,619	19,342
New School	294	5,178	6,420	7,568	9,219	7,160	8,978	17,425	12,740	13,606	13,421	13,186	14,281	19,218
Southern Illinois U., Edwardsville	295	31,781	33,736	26,992	25,807	18,915	19,051	18,780	17,393	18,420	18,088	18,273	18,044	19,152
California State U., East Bay	296	1,312	1,644	1,039	934	ne	ne	837	ne	ne	ne	9,072	10,852	19,035
U. North Florida	297	8,041	9,379	7,031	4,480	3,674	3,689	5,141	6,476	9,994	12,341	13,573	15,782	18,394
Texas Christian U.	298	5,306	5,595	7,775	8,574	7,872	8,007	6,589	7,255	5,808	6,552	15,326	15,336	18,353
U. Puerto Rico, Mayaguez	299	26,475	34,424	32,115	29,225	27,152	28,100	25,491	26,130	24,769	26,877	26,553	18,368	18,274
U. Colorado Denver ^c	300	na	na	na	na	na	na	na	na	na	na	na	18,039	18,080
Tennessee State U.	301	12,432	13,468	15,439	16,177	20,068	19,955	19,520	18,108	17,681	15,236	25,942	21,977	18,012
Meharry Medical C.	302	27,001	29,055	25,559	22,532	18,997	13,998	14,768	16,782	16,980	18,286	13,870	15,840	17,960

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
California State U., Long Beach	303	15,494	14,595	13,696	12,796	10,097	8,830	16,390	18,805	22,880	18,664	16,684	15,134	17,807
Florida Institute of Technology	304	12,054	14,523	17,100	13,298	14,255	14,282	18,860	18,180	17,378	17,876	18,271	23,195	17,706
Jackson State U.	305	44,862	49,998	46,943	36,264	26,609	23,908	23,832	22,790	19,465	18,160	15,081	16,157	17,481
U. Tulsa	306	23,387	19,489	20,270	21,757	27,077	25,066	22,347	20,879	20,072	18,648	18,787	17,187	17,416
Long Island U.	307	832	877	890	915	ne	ne	1,420	2,290	2,405	5,113	13,997	15,059	17,183
James Madison U.	308	7,038	7,303	8,891	5,835	4,628	3,712	3,303	3,248	4,191	8,726	10,247	14,687	17,021
Alcorn State U.	309	10,280	11,397	11,515	11,315	10,060	9,396	8,204	16,129	13,834	14,435	13,710	14,188	16,726
California State U., Fullerton	310	21,776	28,186	22,222	18,478	7,919	5,611	5,755	5,510	6,348	7,173	5,929	9,006	16,642
Idaho State U.	311	20,495	21,450	21,179	22,147	20,610	17,866	20,447	18,564	18,081	14,972	14,478	13,953	16,615
North Carolina Central U.	312	6,870	9,496	11,076	8,979	11,537	12,448	12,463	14,119	14,942	16,227	15,833	14,105	16,600
CUNY, Advanced Science Research Center	313	na	na	na	na	na	569	ne	3,541	5,666	8,310	11,373	15,403	16,507
New York Medical C.	314	28,400	27,316	23,277	20,243	17,908	17,653	17,311	15,637	16,226	19,398	20,137	18,872	16,461
CUNY, Graduate School of Public Health and Health Policy	315	na	na	na	na	na	na	na	na	9,751	9,521	12,177	15,035	16,423
Tennessee Technological U.	316	16,754	13,247	10,233	9,715	10,097	11,082	11,528	12,079	12,765	13,801	14,085	15,387	16,398
CUNY, John Jay C. of Criminal Justice	317	5,916	6,205	9,319	7,355	8,633	8,689	9,688	11,934	14,310	12,295	13,939	11,791	16,233
California State Polytechnic U., Humboldt	318	9,845	9,570	9,510	8,025	8,306	11,218	16,143	15,969	15,044	15,076	14,236	14,103	15,612
Loma Linda U.	319	35,990	39,409	31,772	31,715	23,375	25,519	22,977	21,846	19,892	17,938	15,984	14,029	15,517
Western Washington U.	320	10,571	9,498	7,597	8,157	8,567	9,921	10,743	13,014	13,075	11,983	12,823	13,450	15,081
Charles R. Drew U. of Medicine and Science	321	22,152	22,150	20,580	18,547	20,686	14,128	13,360	15,652	11,490	13,739	13,682	13,228	14,581
Texas Tech U., Health Sciences Center, El Paso	322	ne	ne	ne	ne	23,282	18,889	17,391	16,479	12,556	11,883	10,421	11,360	14,206
Montana Technological U.	323	7,424	6,705	11,765	11,059	11,348	11,595	11,851	13,059	12,666	12,731	12,987	14,933	14,188
Xavier U. Louisiana	324	8,029	9,849	10,606	8,789	9,346	9,588	12,084	12,424	11,784	10,152	11,387	12,799	14,156

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Duquesne U.	325	15,804	16,814	15,547	15,661	15,025	16,159	17,089	17,197	17,420	16,947	17,485	10,521	13,944
Northeast Ohio Medical U.	326	10,819	13,581	13,358	12,722	15,916	17,103	18,823	19,216	18,231	18,016	15,758	13,853	13,465
U. Missouri, Saint Louis	327	14,628	18,461	19,356	20,869	18,618	12,061	13,460	12,042	12,266	14,432	15,352	14,632	13,247
Rosalind Franklin U. of Medicine and Science	328	12,426	14,261	15,587	17,401	17,794	16,604	16,760	17,006	16,765	16,126	14,601	13,805	12,988
U. Tennessee, Chattanooga	329	10,749	9,251	10,896	7,844	6,239	6,817	5,600	6,352	7,585	9,280	10,834	11,192	12,808
Loyola Marymount U.	330	4,557	6,455	5,746	6,766	7,635	6,389	7,504	7,071	7,911	7,272	7,193	12,819	12,773
U. Hawaii, system office	331	ne	ne	ne	ne	ne	ne	ne	ne	12,340	12,159	13,568	12,918	12,646
California State U., Fresno	332	8,698	8,597	8,359	7,682	8,109	8,624	8,586	8,102	8,988	8,599	8,856	9,213	12,603
Virginia State U.	333	7,466	8,562	10,296	9,535	8,374	7,808	8,147	10,725	10,673	11,457	10,014	10,123	12,326
Texas Southern U.	334	7,003	6,318	6,380	6,548	6,038	5,005	4,495	4,722	3,740	4,893	10,138	9,128	12,120
Sam Houston State U.	335	7,555	5,816	4,349	4,608	3,996	3,086	3,266	3,658	7,152	9,445	12,437	13,315	12,009
California State U., San Bernardino	336	4,188	11,591	9,303	11,942	13,582	15,317	10,771	12,924	16,702	16,062	10,819	11,607	11,929
Lincoln U., Jefferson City	337	8,475	8,518	7,899	6,585	6,742	6,296	5,826	5,164	4,215	4,581	5,777	7,621	11,500
Hampton U.	338	14,455	12,414	15,356	12,641	11,169	14,895	14,225	16,482	14,424	13,605	11,402	11,669	11,462
Missouri State U.	339	7,770	5,584	4,340	3,882	3,782	3,540	3,069	3,215	4,409	5,910	13,131	10,014	11,162
Rhode Island C.	340	ne	8,027	10,389	10,385	8,938	10,080	9,943	9,030	9,287	9,480	10,094	10,990	11,127
Midwestern U.	341	3,626	4,022	5,200	6,292	7,310	8,560	7,732	9,207	10,173	10,343	10,479	10,961	11,069
U. of the District of Columbia	342	5,012	4,422	4,030	3,073	2,361	2,043	3,469	3,733	2,960	4,800	4,590	8,104	10,779
U.S. Naval Academy	343	11,093	10,543	9,610	10,816	10,861	9,609	11,374	13,541	14,057	13,621	13,123	10,818	10,664
Salisbury U.	344	3,503	1,852	6,891	6,959	7,923	7,960	8,473	7,731	9,119	9,368	9,496	10,552	10,614
U. North Texas, Health Science Center	345	38,862	45,943	46,865	44,904	47,002	46,335	50,567	48,476	49,503	50,124	42,766	50,698	10,439
Winston-Salem State U.	346	ne	1,179	1,977	841	ne	ne	1,356	1,575	1,629	2,011	5,781	8,123	10,436
Central State U.	347	3,233	3,821	3,591	2,771	2,025	1,508	1,643	2,008	3,615	3,766	6,107	8,751	10,274
U. San Diego	348	2,934	3,483	4,275	4,554	5,146	4,476	4,734	5,089	5,642	6,036	8,607	7,580	10,143
Wesleyan U.	349	8,397	10,367	8,945	8,120	7,262	7,223	7,740	8,945	10,662	9,958	8,300	8,009	10,101
Fort Valley State U.	350	5,310	3,850	3,665	3,688	4,547	4,320	5,138	5,374	3,916	4,563	4,921	4,842	9,969
Ball State U.	351	20,477	18,765	11,740	10,357	9,209	10,548	11,763	8,797	11,163	12,145	9,429	8,826	9,932

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Florida Gulf Coast U.	352	13,906	17,051	14,393	14,204	9,626	8,992	7,335	6,025	5,115	5,907	6,671	8,197	9,896
California State U., Los Angeles	353	7,714	8,823	7,192	7,659	5,172	5,010	5,371	8,274	9,594	12,476	10,590	9,382	9,839
Alabama A&M U.	354	30,497	30,238	29,979	29,720	29,461	29,202	25,112	21,022	16,932	12,840	8,749	9,180	9,611
West Texas A&M U.	355	7,346	5,847	6,937	5,510	5,407	4,513	4,048	4,943	4,797	5,437	6,220	9,920	9,438
Kentucky State U.	356	4,912	4,562	6,859	5,605	5,694	6,017	7,178	8,151	9,125	8,433	7,963	8,756	9,284
U. Maryland, Eastern Shore	357	8,692	8,664	7,309	8,826	8,982	9,700	8,250	7,403	4,941	7,133	8,092	8,636	9,274
California State U., San Marcos	358	5,788	6,795	7,802	8,809	8,302	6,432	6,634	6,549	8,348	10,595	13,250	10,213	9,238
Bryn Mawr C.	359	7,476	8,388	9,837	9,452	9,143	11,692	10,867	11,146	10,282	9,846	11,575	8,987	9,123
Saint Joseph's U.	360	2,918	3,073	2,955	2,921	1,988	2,093	2,171	2,409	2,151	2,851	3,150	2,922	9,041
Western U. of Health Sciences	361	1,786	1,768	3,005	3,721	5,474	4,904	6,895	6,187	5,140	4,951	5,899	6,688	9,029
California State U., Monterey Bay	362	5,305	6,959	6,567	6,129	4,787	5,492	5,680	5,397	5,799	6,444	5,874	6,882	8,975
Clark U.	363	7,111	6,861	7,260	5,693	6,168	7,050	6,970	8,453	8,318	10,193	10,277	7,931	8,813
Clark Atlanta U.	364	8,515	8,245	10,406	9,159	9,192	9,945	8,513	8,007	7,833	9,048	8,452	8,892	8,791
Towson U.	365	3,052	3,574	2,599	2,800	2,997	3,153	2,303	2,834	3,194	3,423	3,612	3,794	8,788
Claremont Graduate U.	366	7,116	6,589	10,350	9,705	9,540	9,375	9,210	9,045	8,880	8,715	9,403	7,235	8,382
Oklahoma State U., Center for Health Sciences	367	4,398	2,815	2,122	2,137	1,805	1,625	2,182	2,454	2,608	5,408	8,378	7,758	8,368
DePaul U.	368	4,889	5,798	5,706	5,524	6,415	9,479	9,558	8,561	7,079	6,144	6,557	6,675	8,362
Arkansas State U., Jonesboro	369	11,115	13,435	14,250	10,463	8,099	8,453	8,169	7,952	8,245	8,945	8,640	8,422	8,214
U. Washington, Bothell	370	630	2,857	4,285	4,704	7,550	7,657	8,406	10,219	8,097	7,950	7,107	8,311	8,197
U. Michigan, Dearborn	371	6,779	7,554	6,015	6,846	8,176	7,802	7,904	8,315	8,094	8,813	8,777	7,472	8,180
Eastern Michigan U.	372	14,133	11,643	12,437	3,128	1,428	1,761	3,815	6,281	6,600	7,175	9,088	7,233	8,025
U. Hawaii, Hilo	373	14,857	9,934	22,003	16,009	9,323	14,495	11,287	7,008	7,133	6,864	6,992	7,411	8,001
U. Oklahoma, Tulsa	374	ne	ne	ne	ne	ne	4,104	4,962	4,487	6,233	6,373	7,483	7,185	7,945
California State Polytechnic U., Pomona	375	6,493	7,198	6,597	6,988	5,455	4,611	5,254	5,863	8,043	6,099	7,396	7,011	7,909
U. Colorado Colorado Springs	376	9,088	7,425	4,727	4,721	5,363	6,988	6,812	6,680	5,976	4,720	5,557	5,338	7,761
Western Kentucky U.	377	9,943	8,344	10,639	9,322	8,280	7,854	8,926	10,814	9,617	9,281	8,241	6,944	7,720

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
William Paterson U.	378	1,051	1,452	ne	ne	ne	ne	1,919	3,012	9,456	10,122	9,603	7,867	7,574
U. Arkansas, Little Rock	379	11,007	12,039	10,500	13,107	8,068	7,003	7,604	6,833	8,167	9,975	9,711	7,397	7,530
U. Arkansas, Pine Bluff	380	8,343	9,415	9,082	8,911	8,198	8,425	8,873	8,136	8,349	9,024	8,540	8,713	7,506
Yeshiva U.	381	314,240	281,334	289,027	271,166	306,826	306,174	46,130	3,258	3,302	2,420	2,763	5,452	7,274
Appalachian State U.	382	2,898	3,835	4,438	3,051	4,289	3,878	3,146	4,475	3,631	3,268	4,894	4,509	7,189
Amherst C.	383	3,628	4,623	5,448	6,275	4,308	4,412	4,260	4,070	4,849	6,325	4,906	4,636	7,177
Edward Via C. of Osteopathic Medicine	384	ne	2,453	2,576	4,992	2,633	2,237	5,692	8,119	7,601	7,225	7,475	6,629	7,121
U. Central Oklahoma	385	1,786	1,548	1,028	1,067	1,362	7,691	6,275	5,832	5,104	5,682	5,788	5,997	7,070
Southern U. and A&M C., Agricultural Research and Extension Center	386	ne	6,143	8,122	5,530	5,606	4,761	4,704	5,000	5,296	5,448	4,475	6,164	7,048
Hofstra U.	387	2,552	2,472	3,237	2,394	3,102	2,585	2,440	1,702	1,662	1,744	1,445	5,545	6,939
West Virginia State U.	388	3,770	4,176	5,087	4,491	7,221	7,365	5,224	6,305	6,535	5,829	5,775	6,565	6,703
Grand Valley State U.	389	5,044	6,429	7,814	9,202	8,198	7,453	6,764	6,917	6,968	6,592	6,792	6,809	6,695
Philadelphia C. of Osteopathic Medicine	390	1,278	2,401	1,898	2,614	2,209	2,561	2,458	2,969	3,059	3,162	3,360	6,186	6,667
U. New England	391	3,560	4,016	5,224	6,637	7,650	7,498	7,566	8,064	6,700	7,346	6,886	6,234	6,664
U. Baltimore	392	4,229	5,944	5,556	5,448	4,990	5,022	5,798	6,851	10,556	12,451	15,054	14,672	6,646
Langston U.	393	4,492	5,206	5,326	4,932	8,512	8,126	11,178	11,025	10,872	10,719	14,409	6,345	6,481
Rutgers, State U. New Jersey, Camden	394	3,574	5,079	3,810	5,722	4,919	5,123	4,250	5,103	3,264	3,211	3,950	5,142	6,480
C. Charleston	395	14,218	8,320	9,579	10,224	10,034	10,607	10,189	8,927	7,375	7,610	5,728	6,361	6,421
Purdue U., Northwest	396	na	na	na	na	na	na	na	8,924	8,062	5,272	5,839	5,647	6,387
Pennsylvania State U., Behrend	397	3,265	3,183	3,374	3,203	4,282	3,737	5,382	3,804	2,760	3,414	1,743	5,509	6,384
Gallaudet U.	398	7,652	7,161	6,765	6,769	5,655	4,477	6,947	7,603	7,617	5,382	4,599	6,126	6,360
Hope C.	399	3,596	4,185	3,376	3,559	3,016	2,932	2,811	3,225	3,179	2,745	3,822	5,211	6,355
Wellesley C.	400	8,422	7,242	8,439	9,113	10,127	9,595	11,664	10,326	11,530	8,810	8,088	6,252	6,326
Indiana U. Pennsylvania	401	1,376	1,736	1,809	1,280	938	ne	1,241	2,291	6,450	8,119	6,531	6,180	6,313
Abilene Christian U.	402	662	487	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,597	6,310
Roseman U. of Health Sciences	403	ne	840	ne	ne	3,021	3,287	3,433	4,167	3,973	4,176	4,380	5,985	6,296
Southern Connecticut State U.	404	3,840	4,083	3,526	2,012	5,465	5,482	3,243	2,493	2,763	4,627	5,413	5,750	6,286

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CUNY, Brooklyn C.	405	6,846	9,306	9,216	8,064	9,407	9,091	9,602	7,393	6,600	6,837	7,074	6,318	6,220
High Tech High Graduate School of Ed.	406	ne	ne	ne	ne	ne	ne	ne	ne	861	ne	3,304	5,032	6,203
Pacific U.	407	1,849	1,129	2,110	2,535	2,122	2,016	2,508	7,770	6,264	8,753	5,842	4,690	6,128
Texas Woman's U.	408	2,271	2,919	4,129	2,704	2,650	2,310	3,014	4,073	4,822	4,477	4,135	4,943	6,029
U. North Carolina, Asheville	409	2,671	3,157	3,068	2,647	2,150	2,384	3,348	2,863	3,414	4,602	4,789	4,844	5,973
Reed C.	410	1,904	1,839	1,837	2,395	3,124	3,050	3,213	1,415	2,607	3,240	5,155	5,132	5,922
West Chester U. Pennsylvania	411	5,584	8,103	4,591	1,635	2,793	5,009	5,895	7,293	6,340	6,777	6,414	4,433	5,903
Claremont McKenna C.	412	5,725	5,316	5,365	5,414	5,463	ne	6,094	5,818	5,693	6,214	5,846	4,515	5,893
Grinnell C.	413	2,069	1,340	2,735	4,023	3,974	3,723	4,183	4,953	5,573	5,500	5,826	4,122	5,867
Smith C.	414	4,613	4,529	4,246	4,234	4,283	5,268	4,466	6,055	5,954	6,041	4,685	4,085	5,831
MGH Institute of Health Professions	415	ne	607	ne	ne	ne	3,931	2,548	2,282	3,328	4,130	3,549	3,037	5,805
Seton Hall U.	416	4,003	7,701	6,398	6,489	6,675	7,058	7,244	7,272	6,536	7,056	5,718	5,320	5,741
Morehouse C.	417	7,857	8,485	9,113	9,581	7,349	6,180	4,315	3,667	4,531	4,564	4,825	4,533	5,664
Williams C.	418	4,691	4,513	4,518	3,857	4,440	5,679	5,747	5,227	5,506	5,188	4,924	4,902	5,657
Northwest Indian C.	419	2,426	2,744	2,847	3,247	2,609	1,631	ne	ne	2,154	2,659	3,650	4,641	5,632
New York Institute of Technology	420	1,785	2,059	3,013	4,007	5,761	4,169	4,114	3,236	3,832	5,820	3,580	4,465	5,555
Naval War C.	421	ne	ne	2,938	2,700	2,736	2,653	3,210	4,240	5,270	5,060	5,944	5,542	5,529
CUNY, Graduate Center	422	11,562	11,974	9,173	11,982	7,797	6,175	7,093	8,011	4,781	5,399	4,787	4,265	5,509
Kean U.	423	ne	1,497	2,029	761	ne	1,064	908	ne	ne	ne	2,201	3,538	5,499
U. Southern Maine	424	16,358	16,938	13,915	11,725	9,408	7,091	4,773	7,147	7,414	6,654	5,635	5,480	5,498
U.S. Army War C.	425	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,418	ne	4,662	5,496
U. Washington, Tacoma	426	872	1,359	1,845	2,203	2,938	3,618	3,957	3,246	3,006	3,471	3,504	4,291	5,484
Des Moines U.	427	855	924	ne	ne	929	ne	1,401	1,416	1,423	1,954	5,021	5,164	5,307
Lamar U.	428	5,829	4,762	3,589	2,605	2,447	2,824	2,783	3,883	3,595	4,848	4,327	4,734	5,304
Bucknell U.	429	5,456	5,043	4,009	4,297	4,464	4,140	4,516	4,892	5,269	5,625	5,051	4,476	5,259
U. Detroit Mercy	430	1,148	1,462	970	ne	1,320	1,882	3,654	2,748	4,605	5,210	4,786	4,578	5,186
Oregon Institute of Technology	431	ne	258	ne	ne	ne	2,056	4,027	3,595	3,163	4,793	4,267	4,314	5,086
U. Central del Caribe	432	7,122	7,515	7,313	7,095	7,181	6,964	7,090	5,634	4,111	3,953	3,931	3,831	5,053

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Barnard C.	433	3,353	4,046	3,684	2,931	2,738	2,916	3,534	3,730	3,458	4,010	3,748	4,632	4,988
Texas A&M U.- Commerce	434	2,679	2,242	2,279	2,541	2,833	3,755	2,943	4,227	3,431	3,403	4,166	3,827	4,955
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	435	ne	2,342	2,562	2,979	3,356	3,089	3,177	3,285	3,502	3,769	3,737	3,776	4,954
California State U., Bakersfield	436	2,083	3,162	1,241	2,602	2,432	3,192	3,161	4,652	5,577	7,591	7,053	6,253	4,815
Dakota State U.	437	ne	1,015	5,709	1,574	1,446	1,152	2,171	2,284	3,619	3,710	4,412	3,416	4,684
CUNY, Lehman C.	438	3,593	i 3,762	3,228	2,904	3,265	3,130	5,347	4,979	5,556	4,690	4,154	4,181	4,656
U. Wisconsin-Superior	439	5,890	6,187	i 6,041	i ne	3,030	i ne	ne	ne	3,068	2,250	2,301	2,602	4,615
U. New Haven	440	ne	2,009	2,723	1,400	1,616	i 1,832	3,822	5,005	5,585	5,062	3,843	4,069	4,548
SUNY, C. of Optometry	441	3,529	3,738	3,466	3,637	3,481	3,906	4,169	3,304	3,120	2,968	3,477	3,460	4,497
Haverford C.	442	3,620	2,765	2,588	2,769	2,546	2,633	2,173	2,442	3,041	3,752	4,473	3,835	4,487
Texas A&M International U.	443	2,428	3,121	3,344	3,674	3,441	2,917	3,742	4,745	5,735	6,068	3,067	3,740	4,486
Toyota Technological Institute, Chicago	444	ne	746	ne	ne	ne	2,543	2,710	2,880	3,251	3,681	5,887	4,967	4,470
Franklin and Marshall C.	445	3,770	3,439	2,997	3,475	3,105	3,888	3,772	4,385	4,769	5,041	3,623	3,722	4,440
Citadel Military C. South Carolina	446	ne	415	ne	ne	ne	ne	ne	ne	ne	ne	1,012	2,054	4,374
Carleton C.	447	4,575	5,382	4,957	5,848	5,657	6,746	6,385	6,888	5,515	4,388	3,732	3,800	4,358
Southern U. and A&M C., Baton Rouge	448	6,865	6,819	i 6,773	4,920	4,812	4,766	4,322	4,043	4,171	4,492	3,849	4,943	4,344
Colgate U.	449	2,851	2,291	3,268	2,704	2,444	2,721	3,219	3,414	3,823	3,756	2,913	3,306	4,343
Western Illinois U.	450	1,221	1,528	4,514	1,983	1,349	860	ne	2,006	2,466	2,373	2,461	3,532	4,311
U. of Health Sciences and Pharmacy in St. Louis	451	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,835	5,313	4,280
South Carolina State U.	452	7,167	10,037	i 12,909	12,809	i 12,709	i 12,607	13,076	i 14,300	15,130	i 3,659	3,796	i 3,933	i 4,270
California State U., Dominguez Hills	453	2,743	2,780	2,894	4,671	3,614	i 2,557	2,790	1,858	2,043	1,957	2,065	2,690	4,230
Santa Clara U.	454	3,816	2,407	3,329	2,376	2,883	1,659	2,056	2,145	2,299	2,319	2,682	3,142	4,225

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Swarthmore C.	454	2,984	2,994	3,281	3,415	3,528	2,943	3,211	3,569	3,921	4,203	3,544	3,296	4,225
California State U., Chico	456	2,881	2,684	2,492	2,868	2,384	1,837	2,363	1,600	2,452	3,232	4,305	4,209	4,177
Youngstown State U.	457	4,523	4,732	3,598	3,785	3,464	3,348	2,342	4,439	4,463	4,447	4,120	2,775	4,157
Occidental C.	458	2,289	1,809	1,592	1,634	2,177	1,544	2,008	1,764	1,445	2,458	2,657	3,587	4,139 i
U. Nebraska, Kearney	459	1,655	2,199	1,715	1,761	1,504	1,496	1,864	3,510	2,639	2,919	2,640	3,201	4,009
Fisk U.	460	7,700	4,849	4,058	6,565 i	9,073	9,854 i	10,635	5,017	2,790	4,748	3,904	4,320	4,000
National Defense U.	461	ne	ne	ne	5,865	7,682	5,542	6,447	6,293	4,276	4,231	4,583	3,786	3,920
Northern Kentucky U.	462	2,316	2,397	2,201	1,810	2,052	2,026	1,846	1,649	1,653	2,363	2,693	3,403	3,888
Pepperdine U.	463	2,672	1,924	2,571	2,400	2,401	2,714	3,178	2,396	1,954	2,170	2,006	2,655	3,775
Sonoma State U.	464	858	825	ne	1,938	1,714	1,163	693	ne	ne	ne	1,545	2,957	3,774
U. Wisconsin-Stevens Point	465	6,766	6,171 i	5,576	4,392	3,919 i	3,446 i	2,973	3,420 i	3,867 i	4,314 i	4,764	4,401	3,740
Coastal Carolina U.	466	2,404	2,162	2,412	2,516	2,166	1,862	1,779	1,893	1,631	2,042	1,903	2,245	3,724
Chicago State U.	467	1,598	2,014	565	ne	ne	ne	910	ne	1,154	898	ne	ne	3,701
U. Central Arkansas	468	2,670	2,821	3,277	2,913	4,064	3,502	3,453	3,313	3,620	3,477	3,455	3,990	3,684
Trinity U.	469	1,446	1,355	1,611	3,094	2,992	2,633	2,383	3,274	3,244	3,736	3,472	2,905	3,657
Colorado C.	470	671	1,198	1,248	1,229	1,823	2,247	1,775	2,215	2,560	2,233	2,291	5,467	3,646
Norfolk State U.	471	5,944	7,140	8,336	6,431	6,936	5,348	7,593	7,296	6,914	8,050	7,153	4,316	3,593
St. John's U., New York	472	1,643	1,786	2,161	2,401	2,507	2,558	2,307	2,542	2,903	2,352	3,282	2,940	3,592
U. Texas of the Permian Basin	473	1,417	1,232	1,707	1,146	1,532	1,725	1,561	1,152	668	ne	2,105	3,504	3,577
CUNY, C. Staten Island	474	3,290	4,188	4,955	3,691	3,731	3,060	3,511	4,250	4,118 i	3,986	3,682	2,860	3,545
Milwaukee School of Engineering	474	3,944	4,472	4,635	4,376	4,410	4,524	3,930	3,374	3,232	4,026	3,190	3,193	3,545
Pace U.	476	3,085	3,732	4,214	3,611	4,373	4,647	5,359	5,028	4,282	3,855	4,272	3,649	3,524
U. North Carolina, general administration	477	ne	ne	ne	ne	ne	4,197	4,137	3,721	4,843	4,154	3,942	4,024	3,522
U. Northern Iowa	478	3,064	4,248	3,615	3,678	3,711	4,032	3,632	3,303	2,983	3,628	2,970	3,259	3,486
Alfred U.	479	4,524	6,084	5,451	6,731	4,655	5,193	3,975	3,231	3,641	5,153	2,780	2,660	3,477
C. New Jersey	480	850	486	ne	ne	ne	ne	ne	1,078	949	ne	1,464	1,912	3,464
Winthrop U.	481	ne	5,089	7,993	12,495	13,981	10,156	1,993	1,826	2,007	2,189	2,217	2,586	3,424
St. Edward's U.	482	ne	7,160	5,906	8,040	3,975	9,515	9,325	10,149	10,431	9,650	9,619	9,527	3,393
Azusa Pacific U.	483	ne	3,620	2,056 i	ne	ne	7,521	8,898	8,430	8,380	5,598	7,068	5,318	3,389

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
California State U., Channel Islands	484	ne	524	ne	1,236	3,862	1,949	1,383	1,096	1,248	1,572	1,497	2,341	3,377
Murray State U.	485	3,396	3,718	3,345	2,192	2,080	2,371	2,124	2,459	2,872	3,710	3,019	3,844	3,371
Bowie State U.	486	ne	1,910	1,739	1,422	1,761	1,497	1,927	1,813	1,839	1,911	1,967	1,398	3,351
Harvey Mudd C.	487	3,214	3,861	3,512	3,595	3,127	3,272	4,332	3,748	3,790	3,353	2,916	2,359	3,350
U. Northern Colorado	488	2,607	2,078	2,896	3,034	4,176	3,652	4,028	4,538	5,089	4,571	3,738	3,159	3,308
Hawaii Pacific U.	489	ne	1,436	1,390	1,043	1,524	1,241	2,371	2,175	2,114	1,980	1,796	1,849	3,302
Biola U.	490	ne	ne	ne	ne	ne	ne	2,418	2,499	2,622	2,792	2,868	3,003	3,260
U. Texas, Tyler	491	5,679	2,766	8,520	5,317	6,894	4,610	2,844	1,837	1,828	2,063	2,007	2,279	3,246
Hobart and William Smith Colleges	492	1,434	1,566	1,516	2,238	1,221	946	ne	952	ne	1,919	2,114	1,941	3,228
Fayetteville State U.	493	11,865	14,618	15,719	16,698	14,732	13,746	15,725	5,105	4,980	4,695	2,797	3,933	3,206
Stephen F. Austin State U.	494	9,127	6,046	5,495	4,612	4,298	5,170	4,749	3,677	3,336	3,679	3,672	3,204	3,184
Alabama State U.	495	13,340	12,340	13,607	1,927	2,236	2,303	2,372	2,253	2,434	2,577	2,582	2,631	3,178
Central Washington U.	496	5,159	2,858	2,753	2,122	2,124	2,581	2,751	3,798	3,066	3,223	2,674	2,410	3,176
Calvin U.	497	5,010	3,113	3,252	3,466	3,051	2,430	1,809	1,456	1,937	1,577	2,107	2,637	3,169
CUNY, Baruch C.	498	2,616	2,645	3,605	2,264	2,183	2,451	2,998	2,543	2,817	2,387	2,396	2,521	3,156
Austin Peay State U.	499	ne	2,180	2,124	2,067	2,002	2,113	1,823	2,134	2,644	2,285	2,833	2,740	3,149
U. Louisiana, Monroe	500	2,884	2,812	2,469	2,781	2,267	1,672	2,441	2,297	2,123	2,364	2,362	2,198	3,128
Colorado State U., Pueblo	501	413	364	ne	ne	ne	ne	ne	ne	ne	3,107	3,104	2,990	3,117
Lawrence Technological U.	502	3,952	3,348	1,483	2,022	1,876	2,528	1,907	1,942	1,668	1,352	1,521	1,764	3,050
U. Wisconsin-La Crosse	503	4,141	3,862	3,583	3,796	3,424	3,615	3,211	3,187	3,569	2,692	2,795	3,001	2,942
Pennsylvania State U., Harrisburg	504	2,734	3,460	2,903	2,230	2,557	3,379	2,558	1,654	2,119	2,805	1,866	2,938	2,927
CUNY, system office	505	ne	ne	1,817	1,210	1,088	1,782	1,655	1,114	3,253	2,619	1,704	1,664	2,900
Pittsburg State U.	506	1,759	1,687	1,479	1,536	2,475	2,210	2,162	2,255	2,253	2,513	2,173	2,730	2,884
U. Illinois, Springfield	507	2,096	2,002	2,370	2,276	1,916	2,070	1,683	2,900	2,164	1,876	3,406	2,612	2,881
Morehead State U.	508	2,145	2,018	2,174	2,631	1,892	1,838	2,399	2,860	2,434	2,028	1,883	1,754	2,880
Saginaw Valley State U.	509	873	1,249	1,094	939	ne	1,220	1,190	1,406	1,640	2,818	2,343	2,428	2,862
Framingham State U.	510	ne	ne	ne	ne	ne	ne	ne	1,901	164	ne	2,317	2,401	2,830
Davidson C.	511	1,493	1,977	1,400	2,337	1,804	2,377	1,521	1,736	1,638	1,777	2,263	2,466	2,788
Western Carolina U.	512	2,376	1,451	1,811	1,028	1,048	1,145	1,305	1,474	1,507	2,633	2,696	2,847	2,783
Fort Lewis C.	513	392	606	ne	ne	ne	ne	ne	ne	ne	1,460	1,370	1,926	2,765

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Christopher Newport U.	514	1,110	1,669	1,327	1,187	1,508	1,208	1,172	1,264	1,732	1,961	2,608	2,656	2,762
U. Wisconsin-Green Bay	515	1,219	1,239	1,259	1,279	1,299	1,320	1,599	1,510	1,454	2,083	1,982	1,879	2,713
Spelman C.	516	3,181	2,273	2,148	1,602	1,595	1,524	1,929	2,079	2,350	2,751	2,750	2,282	2,686
Johnson C. Smith U.	517	ne	ne	ne	ne	ne	ne	2,094	2,255	2,468	2,148	2,472	2,578	2,685
U. Richmond	518	4,052	4,064	4,282	3,351	3,598	3,069	3,047	3,106	2,784	2,783	2,469	2,294	2,670
U. San Francisco	519	2,124	2,668	4,301	2,663	2,764	2,599	2,365	2,602	2,741	2,712	2,161	1,375	2,657
Furman U.	520	2,311	2,184	2,049	2,199	1,600	1,928	1,869	2,051	2,064	1,628	2,101	2,431	2,650
Bowdoin C.	521	2,627	2,877	4,732	4,292	3,126	2,991	3,204	2,340	2,724	2,991	2,719	2,417	2,648
U. Virginia's C. Wise	522	481	336	ne	ne	ne	ne	ne	ne	ne	ne	ne	3,310	2,628
Middlebury C.	523	2,292	2,408	3,031	2,179	1,450	1,599	1,822	2,043	1,895	1,657	1,720	2,927	2,603
U. South Carolina, Aiken	524	337	750	ne	1,309	1,133	1,154	1,445	2,961	2,602	2,481	2,590	2,042	2,595
Pomona C.	525	2,924	3,640	3,259	3,679	3,818	3,538	3,691	3,205	2,983	2,985	2,855	2,146	2,589
Vassar C.	526	1,280	1,838	1,258	1,694	1,220	2,854	1,495	1,600	4,185	1,009	1,568	1,606	2,580
Lewis and Clark C.	527	2,753	2,778	2,246	3,628	4,713	3,873	3,267	3,438	2,811	2,750	3,350	2,281	2,566
Touro U., California	528	1,221	1,779	2,237	2,155	3,067	3,106	3,466	3,122	3,233	3,543	3,551	3,489	2,561
Franklin W. Olin C. of Engineering	529	ne	1,016	1,777	1,157	1,561	2,136	1,762	1,553	1,254	1,655	1,404	1,627	2,554
Colby C.	530	1,782	1,772	1,996	1,822	1,673	1,748	1,903	2,071	2,240	1,852	1,536	1,672	2,530
Sul Ross State U.	531	3,039	3,183	2,375	2,159	2,528	2,204	2,015	2,500	2,934	2,352	2,068	2,143	2,526
Troy U.	532	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,692	1,548	2,517
U. of St. Thomas (MN)	533	1,330	1,316	1,030	1,424	916	ne	1,266	1,241	1,645	1,870	2,679	5,146	2,476
Bates C.	534	1,590	1,897	2,070	2,514	1,584	2,791	1,781	1,853	1,635	2,135	2,303	2,620	2,468
Eastern Washington U.	535	3,266	3,910	2,700	2,115	1,867	2,973	3,368	2,000	2,590	2,024	2,282	1,921	2,437
Southeastern Louisiana U.	536	2,561	1,952	2,121	2,067	1,503	2,670	2,128	2,206	2,039	1,971	2,258	1,723	2,407
Tougaloo C.	537	2,978	2,753	2,613	2,639	2,285	2,689	2,473	3,030	3,173	3,380	2,102	2,092	2,336
Pratt Institute	538	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	2,547	2,325
Grambling State U.	539	993	2,135	2,179	1,695	1,469	1,863	1,570	5,911	2,981	2,836	2,427	2,124	2,306
Albany C. of Pharmacy and Health Sciences	540	3,074	3,496	2,639	2,637	3,200	2,533	1,789	2,567	2,732	3,383	3,765	3,687	2,276
Dillard U.	541	8,425	7,936	7,448	7,741	6,939	9,387	9,566	7,095	6,573	2,772	2,523	2,528	2,270
La Sierra U.	542	ne	732	ne	ne	1,057	1,165	1,255	2,202	2,227	1,581	1,647	1,517	2,246

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
St. Cloud State U.	543	4,184	3,404	2,932	2,912	3,380	4,192	3,497	3,588	3,725	3,275	3,056	2,379	2,226
Northeastern Illinois U.	544	711	533	ne	ne	703	ne	ne	1,403	2,442	2,478	2,018	1,913	2,224
Minnesota State U., Mankato	545	3,837	2,654	2,082	2,640	3,310	2,294	4,034	2,471	2,943	3,392	2,754	2,170	2,206
Willamette U.	546	2,059	1,940	2,652	1,960	1,698	2,007	2,459	3,147	2,723	1,953	1,546	1,817	2,183
SUNY, Buffalo State	547	1,935	2,539	2,970	2,106	1,996	2,366	2,221	1,887	1,928	2,124	2,253	1,962	2,172
Roger Williams U.	548	1,967	2,627	2,596	2,186	2,558	2,348	2,441	2,952	1,937	1,852	1,531	1,854	2,156
Purdue U., Fort Wayne	549	8,523	8,864	8,570	8,128	7,882	7,052	5,952	5,254	4,945	2,416	2,264	2,495	2,134
Mount Holyoke C.	550	2,788	3,317	3,323	3,118	3,871	3,826	3,403	3,635	3,027	2,979	2,016	2,026	2,112
Dine C.	551	ne	959	ne	ne	ne	ne	ne	ne	1,238	1,126	347	ne	2,091
SUNY, Geneseo	551	1,373	2,677	2,132	1,201	1,084	1,314	1,750	1,758	1,939	2,139	1,642	2,070	2,091
Erikson Institute	553	ne	1,212	2,511	2,001	1,321	2,397	3,117	3,965	3,583	2,279	1,992	1,723	2,068
U. of the Incarnate Word	554	ne	667	ne	ne	ne	848	ne	ne	1,338	1,800	1,469	1,982	2,064
Lafayette C.	555	2,089	2,426	1,864	1,947	1,915	1,693	1,553	1,831	1,815	1,554	1,390	1,015	2,059
Lake Superior State U.	556	ne	752	ne	ne	ne	1,170	1,039	1,067	633	ne	ne	ne	2,056
Western New England U.	557	ne	1,111	483	ne	ne	ne	1,291	610	ne	ne	ne	ne	2,052
Palmer C. of Chiropractic, Davenport	558	4,693	4,861	4,507	3,774	2,736	1,698	1,510	1,836	1,600	1,650	1,900	2,233	2,050
U. Wisconsin-Oshkosh	559	1,556	2,384	2,331	2,167	1,935	1,703	ne	1,507	1,544	1,581	1,618	1,656	1,990
Black Hills State U.	560	2,883	1,643	2,466	3,061	2,380	2,430	2,833	2,109	1,571	2,031	1,499	1,280	1,987
California State U., Stanislaus	561	ne	1,487	1,881	1,342	1,136	1,080	1,248	1,365	1,394	1,477	1,843	2,085	1,966
CUNY, New York City C. of Technology	562	231	343	ne	ne	ne	ne	ne	ne	2,418	2,711	2,130	1,367	1,955
Monmouth U.	563	2,195	1,956	904	ne	865	ne	900	ne	ne	1,294	1,729	1,667	1,938
Elizabeth City State U.	564	5,576	10,455	4,455	4,515	2,988	2,277	1,889	1,340	978	ne	1,473	1,717	1,934
CUNY, York C.	565	ne	2,180	1,544	999	ne	716	ne	ne	ne	1,621	1,691	1,133	1,912
Utah Valley U.	566	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,895
Seattle U.	567	1,337	1,274	642	ne	2,692	2,847	2,050	1,623	2,535	2,223	2,060	1,562	1,894
Northern Michigan U.	568	910	841	ne	ne	ne	ne	1,118	1,339	1,728	1,520	1,523	1,364	1,888
Savannah State U.	568	1,874	2,700	1,996	2,613	2,210	1,801	2,267	1,407	1,793	1,720	1,804	1,804	1,888
Hamilton C.	570	3,192	3,109	3,069	2,942	2,846	2,291	2,662	2,354	1,796	2,050	1,869	1,747	1,879
Connecticut C.	571	1,532	1,801	1,740	1,842	1,966	1,900	1,972	1,875	1,349	1,894	1,598	1,244	1,875

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Kettering U.	630	6,880	5,087	4,059	3,449	3,517	3,673	3,463	4,233	2,531	1,765	2,081	1,315	816
Augustana U.	631	912	1,578	1,160	1,045	1,106	782	ne	1,212	1,170	841	ne	1,013	724
Plymouth State U.	632	1,752	i 3,729	2,913	2,872	2,786	2,318	1,340	1,131	990	ne	ne	ne	669
Mercyhurst U.	633	2,040	1,206	1,539	1,414	1,914	1,987	1,647	1,669	i ne	1,434	i 1,177	i 920	i 661
California Lutheran U.	634	ne	741	ne	ne	ne	ne	ne	ne	ne	1,143	630	ne	627
California State U., Maritime Academy	635	ne	3,005	2,793	2,480	1,011	1,542	2,205	1,921	3,039	2,959	3,202	2,799	526
Sonoran U. Health Sciences	636	ne	ne	ne	ne	ne	ne	ne	ne	ne	230	ne	ne	520
U. Charleston	637	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	217
All other surveyed institutions	-	1,878,985	2,322,758	2,289,227	2,193,462	1,534,411	1,526,850	1,560,077	1,635,469	1,705,045	700,910	634,727	53,692	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Note(s):

Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see table 6.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.