

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
All institutions	-	3,691,494	3,790,504	3,847,941	4,212,405	581,652	1,322,328	195,404	1,941,833	171,188
Johns Hopkins U. ^a	1	306,572	372,067	321,641	300,741	29,841	22,992	3,789	225,387	18,732
California Institute of Technology	2	156,658	178,896	160,456	181,341	60,288	21,863	18,440	80,750	0
U. California, Berkeley	3	86,349	84,023	90,707	134,927	79,537	28,472	0	22,296	4,622
Michigan State U.	4	95,267	100,092	122,143	133,138	68	8,837	0	124,233	0
U. Colorado Boulder	5	99,527	106,414	111,234	127,772	41,580	9,696	0	69,385	7,111
Massachusetts Institute of Technology	6	94,635	105,097	114,108	127,635	34,855	22,375	2,798	53,744	13,863
U. Rochester	7	106,520	94,572	92,680	103,745	0	5,306	0	98,439	0
Cornell U.	8	95,625	96,374	93,608	94,346	7,166	22,442	1,670	40,260	22,808
U. Maryland ^b	9	82,395	81,584	83,425	86,830	38,182	5,326	4,271	29,928	9,123
U. Arizona	10	74,823	77,135	73,148	75,484	63,239	6,142	1,671	4,432	0
Stanford U.	11	71,817	68,199	72,190	74,962	2,876	26,211	9,504	33,960	2,411
U. California, San Diego	12	47,019	49,002	54,485	67,979	170	27,997	0	38,163	1,649
Harvard U.	13	53,614	55,363	59,262	66,072	6,151	20,608	0	37,997	1,316
U. Wisconsin-Madison	14	52,807	58,512	60,580	65,819	1,983	23,999	0	24,029	15,808
U. Texas, Austin	15	53,535	56,570	59,786	65,599	6,851	8,569	34,701	15,478	0
U. Chicago	16	43,322	43,904	47,425	59,248	11,387	26,860	4,290	16,277	434
Princeton U.	17	54,879	60,336	56,283	58,459	20,960	13,432	0	23,951	116
U. Washington, Seattle	18	49,064	52,913	52,053	56,218	8,036	23,761	1,140	19,998	3,283
Pennsylvania State U., University Park and Hershey Medical Center	19	56,943	54,776	53,869	53,722	10,174	13,319	12,886	17,343	0
U. Illinois, Urbana-Champaign	20	48,539	49,164	49,944	51,602	5,414	18,398	0	27,787	3
Northwestern U.	21	49,120	46,669	49,661	50,617	2,219	22,536	13,457	10,229	2,176
U. Iowa	22	21,267	18,913	28,692	50,134	458	4,215	0	45,461	0
U. California, Santa Barbara	23	38,560	36,695	34,841	48,512	2,093	5,850	13,827	19,648	7,094
U. Pennsylvania	24	38,518	38,206	39,630	46,353	0	17,415	11,925	17,013	0
Columbia U. in the City of New York	25	29,085	31,519	40,994	43,442	7,437	14,752	5,216	16,037	0
U. California, San Francisco	26	38,491	41,413	37,312	42,570	0	42,570	0	0	0
U. California, Los Angeles	27	39,856	37,430	36,246	42,141	0	17,355	0	24,786	0
Florida State U.	28	35,376	42,211	37,224	40,242	432	11,140	3,438	25,129	103
U. Michigan, Ann Arbor	29	37,944	35,572	38,670	39,773	3,277	20,011	0	16,485	0
SUNY, Stony Brook U.	30	32,009	30,902	33,285	34,829	1,925	10,457	0	22,447	0
U. North Carolina, Chapel Hill	31	24,236	27,083	25,924	34,295	1,202	22,796	0	7,468	2,829
Yale U.	32	33,736	28,840	29,641	33,421	850	16,105	0	16,466	0
U. Minnesota, Twin Cities	33	33,493	32,576	32,702	32,029	1,603	13,989	0	16,437	0

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					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Notre Dame	34	29,077	28,853	29,976	29,426	0	18,107	0	11,319	0
U. California, Irvine	35	27,916	26,725	24,451	28,779	0	15,716	0	13,063	0
Purdue U., West Lafayette	36	20,328	21,579	24,204	27,908	0	16,510	0	11,398	0
Ohio State U.	37	35,564	44,079	30,584	27,702	2,700	6,883	65	18,054	0
Texas A&M U., College Station and Health Science Center	38	21,954	21,208	22,946	27,656	1,361	11,112	2,727	11,657	799
U. Delaware	39	21,923	19,931	21,099	26,652	1,175	9,278	11,411	4,788	0
Boston U.	40	19,469	20,726	23,002	24,802	1,890	10,572	0	12,340	0
Iowa State U.	41	25,466	17,815	20,463	23,640	0	11,116	0	12,524	0
U. California, Davis	42	17,554	17,230	17,078	23,183	0	12,099	0	8,529	2,555
Catholic U. of America	43	16,992	17,261	18,569	23,076	0	12	0	19,597	3,467
Georgia Institute of Technology	44	25,844	22,417	22,213	22,817	0	15,762	0	7,055	0
U. Central Florida	45	18,300	18,837	20,915	22,509	0	2,548	0	19,961	0
U. Florida	46	15,416	16,445	17,471	21,896	1,048	9,638	0	11,210	0
Washington U., Saint Louis	47	18,746	18,393	20,017	21,448	0	8,850	6,479	6,119	0
Duke U.	48	18,436	19,178	19,826	20,898	0	11,135	0	9,763	0
U. Virginia, Charlottesville	49	17,967	19,333	20,408	20,481	2,855	7,895	0	9,731	0
U. Pittsburgh, Pittsburgh	50	18,857	17,786	16,509	19,723	1,096	10,128	0	8,499	0
Indiana U., Bloomington	51	20,230	21,233	19,340	19,586	529	11,725	0	7,332	0
U. California, Santa Cruz	52	15,755	17,723	16,115	19,002	5,462	8,006	0	5,534	0
U. Nebraska, Lincoln	53	18,047	15,583	15,445	18,966	0	7,271	0	11,693	2
Florida International U.	54	9,893	11,642	14,476	18,951	0	16,674	0	2,262	15
Rice U.	55	17,279	16,313	17,271	18,067	1,162	6,657	5	10,243	0
New York U.	56	19,720	18,606	19,664	17,913	0	10,225	0	7,688	0
U. Utah	57	31,461	19,006	19,543	17,611	8,609	9,002	0	0	0
U. Maryland, Baltimore County	58	14,774	17,092	17,339	17,591	11,891	1,987	92	3,621	0
Emory U.	59	15,695	15,380	18,181	17,121	0	14,402	0	2,719	0
Northeastern U.	60	12,859	13,194	16,081	17,077	0	7,517	0	9,555	5
North Carolina State U.	61	13,392	13,657	15,032	16,847	0	7,854	0	7,960	1,033
Vanderbilt U. and Vanderbilt U. Medical Center	62	14,537	15,195	15,636	16,621	0	9,796	0	6,825	0
U. Massachusetts, Amherst	63	16,405	18,261	15,054	16,202	3,960	6,492	0	5,750	0
U. California, Riverside	64	12,908	14,276	14,667	15,648	0	9,452	0	6,196	0
U. Illinois, Chicago	65	9,941	10,533	12,875	15,452	0	6,233	0	9,219	0
Virginia Polytechnic Institute and State U.	66	14,250	13,854	13,944	14,686	14	9,174	82	5,300	116
Arizona State U.	67	11,735	12,385	14,065	14,612	0	4,492	0	10,119	1

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					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Washington State U.	68	18,436	14,813	16,946	14,433	189	5,918	1,052	7,274	0
U. Hawaii, Manoa	69	17,498	19,021	16,519	14,059	9,283	1,205	0	3,488	83
U. Tennessee, Knoxville ^c	70	16,674	12,121	11,804	13,906	0	4,331	0	9,575	0
U. Alabama, Huntsville	71	9,213	9,595	10,716	13,902	11,925	165	0	1,722	90
Montana State U., Bozeman	72	9,841	10,794	16,551	13,784	0	5,469	0	8,315	0
Rutgers, State U. New Jersey, New Brunswick	73	17,535	12,991	13,160	13,707	1,067	3,264	1,695	7,519	162
Carnegie Mellon U.	74	10,233	11,165	11,139	13,327	347	5,091	1,107	6,575	207
U. Southern California	75	12,667	13,605	13,175	13,210	5,716	7,494	0	0	0
Wayne State U.	76	11,130	9,101	12,051	12,936	0	9,016	0	3,356	564
Louisiana State U., Baton Rouge	77	12,967	13,295	13,940	12,932	0	4,636	0	8,020	276
U. Kansas	78	7,110	6,488	12,448	12,742	726	9,108	0	2,908	0
Colorado State U., Fort Collins	79	10,106	7,884	10,355	12,006	0	7,643	977	3,053	333
Brown U.	80	14,103	11,133	11,410	11,868	0	3,763	0	5,729	2,376
U. Texas, Arlington	81	7,459	8,422	8,778	11,568	0	2,520	0	9,048	0
U. Southern Mississippi	82	9,357	8,527	11,564	11,417	0	11,271	0	0	146
Colorado School of Mines	83	7,404	9,353	9,963	11,243	116	3,293	2,783	4,850	201
U. Oklahoma, Norman and Health Science Center	84	12,491	11,446	8,751	11,218	0	6,981	0	4,237	0
U. Massachusetts, Lowell	85	8,207	11,202	11,048	11,112	0	1,527	0	9,585	0
U. Oregon	86	8,572	9,034	9,747	10,590	0	5,429	305	2,556	2,300
Dartmouth C. and Dartmouth Hitchcock Medical Center	87	6,303	7,751	9,181	10,411	0	4,388	0	6,023	0
Georgia State U.	88	11,524	13,754	10,035	10,406	3,052	4,929	0	2,425	0
Temple U.	89	11,881	10,820	10,707	10,386	0	4,372	0	3,258	2,756
Georgetown U.	90	5,133	7,424	8,304	10,109	0	2,764	0	7,318	27
CUNY, City C.	91	6,681	7,007	7,213	9,999	0	4,496	0	3,771	1,732
Kansas State U.	92	9,827	8,746	9,082	9,933	0	1,834	0	8,099	0
Tufts U.	93	2,102	6,118	8,268	9,794	93	7,192	0	2,509	0
U. Texas, Dallas	94	7,812	9,295	9,314	9,735	3,359	3,448	0	2,928	0
Boston C.	95	7,406	7,098	8,597	9,471	0	7,144	0	2,327	0
Brandeis U.	96	7,777	7,218	6,779	9,444	3,517	4,076	274	1,577	0
Rochester Institute of Technology	97	8,077	7,787	8,426	9,087	0	304	0	2,990	5,793
U. Alaska, Fairbanks	98	9,634	9,919	11,116	9,045	8,958	67	0	6	14
U. Toledo	99	4,915	5,136	7,627	9,009	726	3,024	0	5,259	0
U. New Mexico	100	6,320	7,146	6,179	8,996	1,842	2,785	0	4,363	6
West Virginia U.	101	9,683	8,805	8,900	8,912	1,512	3,118	0	4,282	0

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U. Houston	102	6,147	6,336	6,931	8,607	0	5,173	0	3,255	179
New Jersey Institute of Technology	103	8,044	8,354	8,145	8,524	6,192	757	0	1,575	0
U. Connecticut	104	6,696	8,124	7,346	8,473	0	4,189	0	4,284	0
U. Texas M. D. Anderson Cancer Center	105	7,922	8,114	8,179	8,306	0	0	0	8,306	0
Syracuse U.	106	9,127	7,140	8,073	8,255	0	2,465	0	5,790	0
Air Force Institute of Technology	107	4,457	4,973	8,037	8,136	0	0	0	8,136	0
SUNY, U. Buffalo	108	7,714	7,195	8,075	8,088	0	6,337	0	1,751	0
U. Kentucky	109	6,607	6,785	7,061	7,897	0	4,657	0	3,240	0
Clemson U.	110	6,692	6,157	6,037	7,828	0	3,076	0	4,752	0
New Mexico State U.	111	18,114	18,373	14,524	7,819	3,873	783	0	1,355	1,808
Case Western Reserve U.	112	8,213	7,203	7,538	7,764	198	2,285	3,586	1,695	0
Auburn U., Auburn	113	6,107	6,866	6,649	7,721	413	2,214	178	4,791	125
U. Mississippi	114	9,706	7,993	7,712	7,655	0	1,945	0	5,710	0
Xavier U. Louisiana	115	5,797	7,077	8,325	7,504	0	7,426	0	78	0
CUNY, Advanced Science Research Center	116	2,115	3,018	4,719	7,392	0	1,760	0	5,277	355
U. Wisconsin-Milwaukee	117	7,884	5,010	7,800	7,058	5,333	572	0	1,153	0
Jackson State U.	118	8,463	9,305	7,625	6,788	0	5,101	0	1,687	0
U. Missouri, Columbia	119	6,686	7,654	6,710	6,664	0	4,739	0	1,925	0
North Dakota State U.	120	3,546	2,853	6,937	6,438	0	5,516	481	441	0
U. Arkansas, Fayetteville	121	4,313	4,452	4,371	6,309	0	2,586	0	3,723	0
California State U., Northridge	122	3,063	4,750	6,665	6,308	339	283	0	1,574	4,112
U. Montana, Missoula	123	5,718	5,428	6,313	5,843	49	1,560	0	125	4,109
U. Nevada, Reno	124	4,815	4,702	4,912	5,829	0	3,227	0	2,602	0
U. Alabama, Tuscaloosa	125	4,785	4,720	4,913	5,722	198	2,995	0	2,529	0
George Washington U.	126	5,610	5,366	4,872	5,637	0	1,968	0	3,669	0
U. Texas, San Antonio	127	4,195	4,702	5,338	5,547	0	3,062	0	2,485	0
U. Miami	128	4,645	4,172	4,482	5,415	0	1,355	0	4,060	0
U. South Florida ^d	129	5,648	5,306	4,803	5,335	0	2,369	0	2,196	770
Oregon State U.	130	4,888	4,523	4,453	5,326	84	1,595	726	2,831	90
Brigham Young U., Provo	131	4,833	4,133	4,414	5,323	0	2,836	0	2,487	0
U. Cincinnati	132	4,724	4,041	4,501	5,296	0	3,145	0	2,151	0
SUNY, Binghamton U.	133	6,111	7,642	5,541	5,229	0	4,076	0	1,153	0
U. Texas, El Paso	134	4,384	4,257	4,537	5,077	0	3,402	0	1,675	0
George Mason U.	135	4,738	4,656	3,561	5,050	2,612	746	1,147	434	111

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Old Dominion U.	136	5,260	4,601	4,475	5,033	0	1,609	0	3,424	0
Howard U.	137	4,548	4,381	4,733	4,953	0	4,288	0	665	0
William & Mary	138	4,249	4,428	4,140	4,946	0	655	0	4,291	0
California State U., Los Angeles	139	4,917	4,255	4,085	4,910	0	4,219	0	691	0
U. Nevada, Las Vegas	140	4,521	4,073	4,170	4,861	354	2,869	0	1,638	0
U. Akron	141	3,992	4,238	4,026	4,811	0	4,811	0	0	0
Embry-Riddle Aeronautical U.	142	1,623	1,859	2,482	4,744	0	0	0	512	4,232
Northern Illinois U.	143	4,280	3,713	3,668	4,712	0	1,879	0	2,833	0
Boise State U.	144	2,420	2,678	4,976	4,686	307	209	3,907	263	0
Naval Postgraduate School	145	7,594	8,513	5,658	4,668	0	379	148	2,674	1,467
North Carolina Central U.	146	2,729	2,888	2,990	4,596	0	345	0	4,251	0
San Diego State U.	147	3,377	2,992	2,931	4,461	327	3,490	0	644	0
U. Puerto Rico, Rio Piedras	148	3,804	3,427	4,104	4,386	0	3,384	0	1,002	0
Ohio U.	149	2,605	3,467	4,143	4,370	0	647	0	3,723	0
U. California, Merced	150	4,304	4,891	2,865	4,363	0	2,372	0	1,571	420
Rensselaer Polytechnic Institute	151	4,304	4,184	4,033	4,338	0	3,057	0	1,281	0
Hampton U.	152	4,044	3,142	3,409	4,282	0	657	0	3,625	0
CUNY, Hunter C.	153	3,024	3,552	4,840	4,191	0	3,002	0	1,189	0
U. North Carolina, Greensboro	154	3,019	2,612	2,761	4,149	0	2,207	1,942	0	0
Mississippi State U.	155	3,630	2,267	2,399	4,142	57	1,419	1,270	1,396	0
U. Georgia	156	6,362	4,815	4,936	4,090	330	2,971	0	789	0
Texas Tech U.	157	4,426	4,217	4,067	4,026	0	2,315	320	1,391	0
Northern Arizona U.	158	2,688	3,147	3,885	3,894	2,769	99	193	369	464
Utah State U.	159	4,133	3,982	3,395	3,837	0	2,204	0	1,633	0
Kent State U.	160	3,062	3,715	3,843	3,722	87	1,065	597	1,717	256
Baylor U.	161	2,033	2,110	2,661	3,708	19	2,103	0	1,586	0
Southern Methodist U.	162	2,499	2,855	3,420	3,652	0	1,216	0	2,436	0
U. Alabama, Birmingham	163	4,929	3,934	4,292	3,395	0	933	0	2,462	0
Oklahoma State U., Stillwater	164	3,135	2,870	2,640	3,379	0	1,536	0	1,843	0
Lehigh U.	165	2,157	2,166	2,534	3,322	0	1,702	0	1,620	0
Delaware State U.	166	1,615	1,595	1,833	3,172	235	0	425	2,175	337
U. North Texas, Denton	167	2,588	2,329	2,696	3,134	0	2,139	0	995	0
Tulane U.	168	3,533	3,343	3,041	3,091	0	1,444	0	1,647	0
American U.	169	2,922	3,401	3,136	3,078	0	324	0	2,754	0

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Illinois Institute of Technology	170	3,253	2,734	2,909	3,072	0	188	0	2,884	0
SUNY, U. Albany	171	3,545	3,917	3,663	2,984	0	2,388	0	596	0
Texas State U.	172	2,235	1,798	2,774	2,960	0	2,038	0	922	0
Rutgers, State U. New Jersey, Newark	173	1,444	1,436	2,020	2,906	0	1,979	0	927	0
U. Denver	174	2,869	3,373	2,532	2,877	0	1,891	0	986	0
Missouri U. of Science and Technology	175	2,082	4,591	2,652	2,838	0	2,243	0	595	0
California State U., Long Beach	176	4,062	2,502	2,574	2,698	277	2,420	1	0	0
U. Rhode Island	176	2,269	2,579	2,203	2,698	0	1,629	0	86	983
U. North Carolina, Charlotte	178	2,977	2,878	2,577	2,574	0	1,057	0	1,517	0
Virginia Commonwealth U.	179	2,425	2,194	2,348	2,560	0	1,370	0	1,190	0
Oakland U.	180	1,679	1,852	2,062	2,522	0	1,206	0	1,316	0
CUNY, Lehman C.	181	1,495	2,021	1,964	2,487	559	1,928	0	0	0
U. New Hampshire	182	1,859	3,335	2,355	2,402	0	825	0	1,577	0
Morehouse C.	183	1,704	1,517	1,831	2,393	0	463	0	277	1,653
Clark Atlanta U.	184	1,135	1,422	1,407	2,379	0	2,195	0	184	0
San Jose State U.	185	1,765	2,035	2,129	2,376	0	1,146	0	1,198	32
South Dakota School of Mines and Technology	186	1,583	1,384	1,504	2,305	0	834	0	1,471	0
U. Vermont	187	1,925	2,710	2,061	2,302	0	1,649	0	653	0
U. Maine	188	2,654	1,868	2,289	2,278	0	41	0	2,237	0
Morgan State U.	189	30	393	759	2,225	0	920	0	1,305	0
Rockefeller U.	190	2,637	2,882	3,581	2,185	0	1,998	0	187	0
U.S. Air Force Academy	191	2,933	2,714	2,348	2,175	661	54	0	1,110	350
Saint Louis U.	192	944	1,302	1,237	2,088	0	2,081	0	7	0
Miami U.	193	167	408	2,638	2,078	0	1,815	0	263	0
Haverford C.	194	1,862	2,259	2,216	2,070	277	286	1,329	178	0
Central Michigan U.	195	2,318	2,044	1,814	2,053	202	314	0	1,537	0
Indiana U.-Purdue U., Indianapolis	196	1,186	1,374	1,871	1,998	0	1,086	0	912	0
North Carolina A&T State U.	197	1,517	1,163	1,125	1,996	0	727	0	1,269	0
California State U., Fresno	198	823	868	1,192	1,984	0	1,557	0	345	82
California State U., San Bernardino	199	1,153	1,448	1,809	1,939	0	1,781	112	46	0
Troy U.	200	ne	1,216	1,094	1,910	0	0	1,910	0	0
Tuskegee U.	200	163	166	169	1,910	0	97	1,792	21	0
Prairie View A&M U.	202	407	489	807	1,881	0	1,708	43	130	0
U. South Dakota	203	2,205	1,968	1,754	1,877	0	623	0	1,254	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Florida A&M U.	204	3,358	1,366	1,344	1,874	0	13	0	1,861	0
Worcester Polytechnic Institute	205	2,006	1,603	2,171	1,869	0	925	0	944	0
U. Colorado Denver ^e	206	na	na	1,561	1,798	0	1,090	0	708	0
U. Massachusetts, Boston	207	1,745	2,239	2,420	1,793	0	1,343	0	450	0
CUNY, Brooklyn C.	208	812	845	1,297	1,779	0	1,613	0	166	0
Portland State U.	209	2,356	1,937	1,462	1,762	0	1,524	0	238	0
Fisk U.	210	0	212	1,525	1,693	0	116	527	1,050	0
Michigan Technological U.	211	728	1,282	1,248	1,659	0	1,095	0	564	0
New Mexico Institute of Mining and Technology	212	1,928	1,348	1,139	1,645	0	102	0	1,543	0
Clarkson U.	213	652	767	422	1,636	0	1,188	0	157	291
Western Washington U.	214	820	989	1,321	1,629	247	1,196	186	0	0
Marquette U.	215	1,305	1,649	2,614	1,620	0	1,324	0	296	0
Drexel U.	216	1,611	1,582	1,429	1,597	0	284	0	1,313	0
Wesleyan U.	217	1,784	1,540	1,429	1,542	215	819	0	508	0
U. Wyoming	218	1,750	1,206	1,748	1,541	241	814	0	463	23
U. North Dakota	219	977	739	703	1,540	0	1,398	0	142	0
U.S. Naval Academy	220	2,654	2,096	1,499	1,515	0	746	0	769	0
Florida Atlantic U.	221	1,253	1,317	1,135	1,498	75	926	0	460	37
CUNY, Queens C.	222	1,141	1,041	1,475	1,488	0	1,135	0	353	0
U. Louisville	223	1,827	1,446	1,406	1,481	48	1,124	187	68	54
Villanova U.	224	1,141	1,658	1,412	1,467	449	390	0	628	0
Chapman U.	225	824	1,655	936	1,434	0	342	0	95	997
Barnard C.	226	928	805	1,246	1,411	675	736	0	0	0
U. South Carolina, Columbia	227	3,103	2,264	1,467	1,401	0	0	0	1,401	0
California Polytechnic State U., San Luis Obispo	228	1,124	1,202	932	1,347	0	385	0	962	0
Chicago State U.	229	842	ne	ne	1,339	0	688	0	651	0
South Dakota State U.	230	1,266	1,058	1,448	1,312	0	1,267	0	45	0
Wake Forest U.	231	1,741	1,499	1,470	1,310	0	436	0	874	0
Rowan U.	232	887	407	1,404	1,309	0	462	0	658	189
U. Texas Rio Grande Valley	233	1,865	2,215	1,083	1,299	331	0	51	917	0
U. Puerto Rico, Mayaguez	234	832	904	687	1,280	0	913	0	367	0
Stevens Institute of Technology	235	1,960	1,648	1,500	1,257	0	69	0	1,188	0
Loyola U., Chicago	236	913	610	716	1,253	0	903	0	350	0
Creighton U.	237	878	806	881	1,234	0	434	0	800	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
California State Polytechnic U., Pomona	238	673	1,393	1,105	1,229	977	225	0	27	0
U. Idaho	239	1,249	771	831	1,224	939	112	10	163	0
Illinois State U.	240	690	511	923	1,219	0	835	0	219	165
East Carolina U.	241	821	1,135	1,387	1,216	0	946	0	270	0
James Madison U.	242	653	531	919	1,195	149	554	0	223	269
Texas A&M U.-Corpus Christi	243	1,062	1,250	808	1,169	0	46	0	0	1,123
U. Washington, Bothell	244	215	156	681	1,152	0	0	0	1,152	0
Bowling Green State U.	245	1,238	1,331	1,402	1,145	0	843	61	241	0
U. of the Virgin Islands	246	0	908	1,069	1,130	0	0	0	0	1,130
California State U., Fullerton	247	897	1,003	1,058	1,108	562	138	83	325	0
SUNY, Geneseo	247	663	624	888	1,108	0	460	0	648	0
San Francisco State U.	249	1,223	1,206	1,218	1,106	173	413	95	425	0
South Carolina State U.	250	930	965	1,000	1,086	195	0	0	205	686
Marshall U.	251	462	99	155	1,068	0	1,065	0	3	0
Western Kentucky U.	252	1,013	1,072	717	1,058	202	462	0	394	0
Norfolk State U.	253	819	726	763	1,051	0	0	0	1,051	0
Wichita State U.	254	851	912	853	1,037	0	665	0	372	0
Southern Illinois U., Carbondale	255	1,020	1,270	1,081	1,027	0	721	0	306	0
California State U., Dominguez Hills	256	635	393	317	1,019	0	426	0	593	0
U. Memphis	257	1,039	1,100	1,309	1,018	84	625	21	0	288
U. Puerto Rico, Humacao	258	494	922	899	1,014	0	50	678	286	0
U. West Florida	259	373	1,049	1,014	1,012	0	0	0	0	1,012
Wright State U.	260	1,362	1,369	1,268	1,011	0	49	0	689	273
California State U., San Marcos	261	901	1,667	1,060	981	0	23	0	482	476
U. Missouri, Kansas City	262	1,407	1,102	1,104	969	191	223	0	428	127
CUNY, C. Staten Island	263	1,310	770	478	955	0	537	0	57	361
Central State U.	264	63	6	67	954	0	954	0	0	0
Florida Institute of Technology	265	1,268	2,109	2,448	951	163	48	0	490	250
Hope C.	266	824	648	1,276	947	0	618	0	329	0
Middle Tennessee State U.	267	142	412	1,769	945	53	744	0	148	0
Bucknell U.	268	247	604	592	929	102	633	0	194	0
Abilene Christian U.	269	ne	ne	712	905	0	0	0	905	0
Texas A&M U.-Commerce	270	667	746	834	891	0	150	0	741	0
Texas Southern U.	271	179	1,069	1,036	874	0	703	0	97	74

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Northern Iowa	272	1,016	796	894	848	0	680	0	168	0
Montclair State U.	273	121	263	466	845	45	762	0	38	0
C. New Jersey	274	ne	354	351	840	0	110	0	730	0
Amherst C.	275	1,124	892	476	797	119	88	0	590	0
Winston-Salem State U.	276	320	496	871	786	0	586	0	100	100
U. New Orleans	277	1,052	782	1,171	771	0	393	0	378	0
Furman U.	278	558	358	523	768	0	767	0	1	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	279	723	844	838	741	0	348	0	393	0
Alabama A&M U.	280	705 i	481 i	596 i	739 i	0 i	334 i	0 i	405 i	0 i
Fort Lewis C.	281	0	435	786	733	0	32	701	0	0
Seton Hall U.	282	0	401	396	722	0	571	0	151	0
Clark U.	283	384	747	717	719	0	250	0	469	0
CUNY, New York City C. of Technology	284	315	200	319	710	0	187	0	523	0
Arkansas State U., Jonesboro	285	787	753	537	706	0	706	0	0	0
Christopher Newport U.	286	534	571	546	690	0	43	0	647	0
Colgate U.	287	278	248	259	686	7	500	0	179	0
U. Missouri, Saint Louis	288	1,896	1,229	1,007	683	21	606	0	56	0
Yeshiva U.	289	0	286	253	682	0	0	0	682	0
U. Dayton	290	1,175	849	820	680	0	148	220	312	0
U. North Carolina, Asheville	291	418	687	443	672	23	179	0	0	470
Idaho State U.	292	2,191	889	1,034	647	0	187	17	443	0
Fordham U.	293	107	294	251	642	0	642	0	0	0
Bryn Mawr C.	294	471	388	325	636	0	268	0	368	0
Northern Kentucky U.	295	448	514	401	633	0	532	0	101	0
Trinity U.	296	495	604	586	620	3	520	0	97	0
CUNY, John Jay C. of Criminal Justice	297	222	405	235	618	0	185	0	0	433
U. North Carolina, Wilmington	298	512	336	419	615	0	99	0	0	516
Occidental C.	299	177	340	522	583 i	0 i	512 i	0 i	71 i	0 i
California State U., East Bay	300	ne	444	543	580	135	248	0	197	0
Middlebury C.	301	410	388	644	547	65	286	0	196	0
Hofstra U.	302	38	4	2	538	0	538	0	0	0
Tougaloo C.	303	849	361	359 i	537 i	0 i	340 i	0 i	197 i	0 i
Santa Clara U.	304	394	445	454	535	0	397	0	138	0
U. Tulsa	305	202	114	125	531	0	243	0	288	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Pomona C.	306	250	490	263	522	43	305	0	174	0
Central Washington U.	307	182	255	213	517	0	20	0	497	0
Franklin and Marshall C.	308	279	350	415	508	49	318	0	141	0
Macalester C.	309	322	149	335	505	153	352	0	0	0
Ball State U.	310	578	315	449	497	0	458	0	39	0
Utah Valley U.	311	ne	ne	ne	494	0	178	0	316	0
Towson U.	312	564	187	300	493	63	184	0	246	0
Reed C.	313	81	150	159	492	0	312	0	180	0
Swarthmore C.	314	550	366	655	486	132	244	0	110	0
Grambling State U.	315	476	356	436	483	0	428	0	55	0
Bowie State U.	316	246	272	438	481	304	0	0	0	177
U. South Alabama	317	355	363	499	479	0	373	0	106	0
C. Charleston	318	787	573	847	474	255	29	0	190	0
Saint Joseph's U.	319	0	0	0	456	0	456	0	0	0
Tennessee Technological U.	320	1,042	914	672	446	0	128	0	318	0
SUNY, C. of Environmental Science and Forestry	321	52	136	303	443	127	263	0	0	53
U. San Diego	321	928	837	658	443	0	171	0	272	0
Duquesne U.	323	725	664	426	441	0	358	0	83	0
Rhode Island C.	323	120	356	320	441	0	0	0	0	441
U. Wisconsin-Eau Claire	325	504	456	641	438	0	351	87	0	0
U. Massachusetts, Dartmouth	326	216	275	485	437	0	363	0	74	0
U. North Florida	327	348	374	352	436	0	258	0	178	0
Appalachian State U.	328	211	172	171	434	0	43	0	391	0
California State U., Monterey Bay	329	65	0	57	431	0	431	0	0	0
St. John's U., New York	330	221	325	304	418	0	418	0	0	0
Spelman C.	331	595	713	523	410	0	391	0	19	0
Lafayette C.	332	333	299	231	407	0	201	0	206	0
U. of the Incarnate Word	332	372	176	298	407	0	228	0	179	0
Harvey Mudd C.	334	160	297	257	399	0	55	0	344	0
Cleveland State U.	335	488	716	313	394	0	225	0	169	0
Georgia Southern U.	336	164	607	580	393	47	324	0	22	0
Louisiana Tech U.	337	403	323	378	392	0	178	0	214	0
C. Wooster	338	251	126	271	391	0	331	0	60	0
Claremont McKenna C.	339	140	144	136	385	0	81	0	304	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Kennesaw State U.	340	721	558	427	381	0	220	0	161	0
SUNY, Oswego	341	266	182	228	377	0	377	0	0	0
Pacific U.	342	283	29	233	367	0	346	0	21	0
Southern Illinois U., Edwardsville	343	390	231	315	361	0	100	0	261	0
Texas Christian U.	344	341	388	321	356	0	136	0	220	0
Youngstown State U.	344	105	327	321	356	162	194	0	0	0
U. Colorado Anschutz Medical Campus ^e	346	na	na	344	353	0	0	0	353	0
Winthrop U.	347	256	231	316	350	0	350	0	0	0
U. Richmond	348	187	286	280	346	0	265	0	81	0
CUNY, Baruch C.	349	330	296	253	330	0	32	0	298	0
Bowdoin C.	350	177	184	252	328	0	202	0	106	20
U. Wisconsin-Oshkosh	351	225 i	224 i	222	327	0	316	0	11	0
Mount Holyoke C.	352	894	471	434	322	167	0	0	155	0
Skidmore C.	353	150	250	557	318	0	318	0	0	0
Davidson C.	354	232	157	245	317	0	107	0	210	0
St. Edward's U.	354	400	994	1,021	317	0	271	0	46	0
Smith C.	356	389	264	334	315	0	234	0	81	0
U. Alaska, Anchorage	356	16	154	1,010	315	179	94	0	42	0
U. Minnesota, Duluth	356	498	303	337	315	0	163	0	152	0
U. Colorado Colorado Springs	359	68	69	131	314	0	149	0	112	53
Indiana U. Pennsylvania	360	128	268	255	313	0	132	0	181	0
Montana Technological U.	361	54	97	133	309	0	309	0	0	0
Augustana U.	362	301	ne	457	306	0	141	0	165	0
U. Arkansas, Pine Bluff	363	352	418	895	296	0	296	0	0	0
U. Arkansas, Little Rock	364	616	828	590	284	0	271	0	13	0
Kenyon C.	365	292	194	ne	279	0	0	0	279	0
U. Central Arkansas	366	576	490	375	273	0	141	0	132	0
Williams C.	366	263	253 i	268 i	273 i	30 i	154 i	0 i	89 i	0 i
U. Hawaii, Hilo	368	128	214	64	270	0	111	0	159	0
Southeastern Louisiana U.	369	35	179	145	263	0	145	0	118	0
West Chester U. Pennsylvania	370	84	73	135	252	33	17	0	202	0
Grand Valley State U.	371	246	350	172	248	0	247	0	1	0
Calvin U.	372	388	245 i	245 i	246	43	203	0	0	0
Carleton C.	373	210	248	230	245	11	157	0	77	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Murray State U.	374	328	155	141	240	0	205	0	35	0
Southern Connecticut State U.	375	246	579	333	232	219	0	0	13	0
Connecticut C.	376	384	113	97	229	0	229	0	0	0
West Texas A&M U.	377	75	166	169	218	0	218	0	0	0
California State U., Sacramento	378	199	196	130	213	0	63	0	150	0
Colorado C.	379	14	15	4	211	0	178	0	33	0
Drake U.	379	118	ne	200	211	0	0	0	211	0
Ithaca C.	381	ne	301	246	205	28	135	0	42	0
U. Central Oklahoma	382	657	651 i	683 i	200 i	0 i	111 i	0 i	89 i	0 i
Colby C.	383	297	299	184	197	19	147	0	31	0
Hobart and William Smith Colleges	384	186	132	104	195	0	6	0	179	10
U. Louisiana, Lafayette	385	336	208	3,392	194	68	63	0	63	0
Whitman C.	385	347	241	ne	194	0	191	0	3	0
Lewis and Clark C.	387	153	494	110	193	0	127	0	66	0
East Tennessee State U.	388	249	315	134	192	168	0	0	24	0
Sam Houston State U.	389	420	414	298	189	0	77	0	112	0
Augusta U.	390	0	0	0	187	0	187	0	0	0
Southern U. and A&M C., Baton Rouge	391	646	466	292	186	0	118	0	68	0
Texas A&M International U.	391	0	38	101	186	0	66	77	43	0
New Mexico Highlands U.	393	ne	541	568 i	184 i	0 i	102 i	0 i	82 i	0 i
SUNY, C. Brockport	394	6	41	54	179	70	30	0	79	0
U.S. Military Academy	395	35	814	338	178	0	23	0	155	0
Eastern Michigan U.	396	185	126	98	173	61	25	87	0	0
Long Island U.	397	171	51	123	172	0	96	0	76	0
Florida Gulf Coast U.	398	116	344	106	166	0	166	0	0	0
Fayetteville State U.	399	200	260	147	165	0	0	0	0	165
Purdue U., Northwest	400	111	168	102	160	0	160	0	0	0
Canisius C.	401	191	ne	173	159	0	0	0	0	159
Missouri State U.	401	336	380	258	159	71	0	0	88	0
Wellesley C.	403	1,109	251	286	157	0	157	0	0	0
California State U., Chico	404	166	150	166	155	0	51	0	104	0
Dillard U.	404	122	662	252	155	0	0	0	155	0
CUNY, York C.	406	862	510	186	152	0	152	0	0	0
U. of the Pacific	406	422	307	223	152	29	123	0	0	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Maryland Center for Environmental Science	408	80	174	256	141	0	67	0	74	0
Manhattan C.	409	55	71	112	140	0	140	0	0	0
Lawrence Technological U.	410	0	6	48	132	0	0	0	132	0
U. Guam	411	0	0	86	131	131	0	0	0	0
U. Nebraska, Kearney	411	248	142	130	131	0	74	0	57	0
Bates C.	413	340	318	227	127	78	49	0	0	0
Seattle U.	414	50	58	79	126	0	0	0	126	0
U. Louisiana, Monroe	415	67	55	10	125	0	125	0	0	0
U. New Haven	416	300	142	216	120	0	0	120	0	0
Eastern Washington U.	417	152	66	62	118	0	0	0	118	0
Indiana State U.	418	155	160	86	115	0	11	0	104	0
Coastal Carolina U.	419	0	0	60	111	0	0	0	111	0
Union C., Schenectady	420	522	222	122	107	29	56	0	22	0
Butler U.	421	ne	ne	ne	105	0	105	0	0	0
California State U., Bakersfield	421	313	29	159	105	0	105	0	0	0
Clafin U.	423	508	258	129	102	0	75	0	27	0
U. San Francisco	423	0	0	84	102	102	0	0	0	0
California State U., Stanislaus	425	0	0	60	101	0	101	0	0	0
New York Institute of Technology	425	0	0	3	101	0	0	0	101	0
Loyola Marymount U.	427	132	140	104	99	0	99	0	0	0
Monmouth U.	427	0	0	15	99	0	0	0	99	0
U. Nebraska, Omaha	427	130	0	47	99	0	0	0	99	0
Black Hills State U.	430	371	91	103	95	0	0	0	95	0
U. Wisconsin-Stevens Point	431	73 i	85	14	87	0	86	0	1	0
U. Houston-Clear Lake	432	476	377	208	86	0	0	0	0	86
Trinity C., Hartford	433	92	5	86	85	0	85	0	0	0
U. of Mary Washington	434	48	54	75	84	0	56	0	28	0
Western Illinois U.	434	36	60	63	84	0	47	0	37	0
Fort Valley State U.	436	104	72	76	83	0	83	0	0	0
Citadel Military C. South Carolina	437	ne	0	7	82	0	9	0	73	0
U. Wisconsin-Green Bay	438	66 i	72 i	66 i	80 i	0 i	36 i	0 i	44 i	0 i
Virginia State U.	438	0	0	0	80	0	80	0	0	0
Pennsylvania State U., Behrend	440	33	31	138	78	0	32	11	35	0
California State U., Channel Islands	441	54	0	73	77	0	77	0	0	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Sul Ross State U.	442	0	0	0	76	0	76	0	0	0
U. Wisconsin-La Crosse	443	113	205	323	74	0	1	0	73	0
Central Connecticut State U.	444	78	60	41	64	0	64	0	0	0
Austin Peay State U.	445	207	13	50	63	0	0	0	0	63
Vassar C.	446	168	160	138	61	0	61	0	0	0
Texas A&M U.-Kingsville	447	129	108	87	60	0	60	0	0	0
U. Puget Sound	447	ne	174	ne	60	0	60	0	0	0
Gallaudet U.	449	22	0	92	59	0	0	0	59	0
U. Puerto Rico, Cayey	449	140	185	127	59	0	2	0	57	0
Purdue U., Fort Wayne	451	101	123	82	56	0	56	0	0	0
Willamette U.	451	194	66	83	56	0	0	0	0	56
Virginia Military Institute	453	ne	ne	ne	55	0	55	0	0	0
Savannah State U.	454	63	50	34	53	0	53	0	0	0
U. of St. Thomas (MN)	455	61	90	70	52	0	52	0	0	0
Albion C.	456	180	272	289	46	0	29	0	17	0
Langston U.	456	29	109	26	46	0	0	0	0	46
U. Wisconsin-Platteville	456	36	36	37	46	0	26	0	20	0
Suffolk U.	459	ne	97	69	45	0	45	0	0	0
Roger Williams U.	460	139	98	0	44	0	14	0	30	0
Grinnell C.	461	44	410	124	43	36	7	0	0	0
California Lutheran U.	462	36	59	ne	42	0	42	0	0	0
Hamilton C.	462	12	3	8	42	0	33	0	9	0
Salisbury U.	464	335	21	148	40	0	40	0	0	0
Pace U.	465	47	0	0	38	0	31	0	0	7
U. Ana G. Mendez, Gurabo	466	29	25	29	33	0	33	0	0	0
California State Polytechnic U., Humboldt	467	48	76	7	32	0	0	0	32	0
Framingham State U.	468	ne	169	177	31	0	31	0	0	0
Lamar U.	469	101	20	49	30	0	0	0	30	0
Minnesota State U., Mankato	470	94	2	9	29	18	11	0	0	0
Sonoma State U.	471	ne	123	209	28	0	28	0	0	0
Pittsburg State U.	472	30	22	24	27	0	27	0	0	0
SUNY, C. Plattsburgh	473	259	110	107	26	0	13	0	13	0
U. Alaska, Southeast	474	0	30	47	25	25	0	0	0	0
Mercyhurst U.	475	143	104	64	24	0	0	0	24	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Virginia's C. Wise	476	ne	ne	18	23	0	23	0	0	0
U. Michigan, Dearborn	477	107	26	6	22	0	0	0	0	22
Alfred U.	478	13	7	5	16	16	0	0	0	0
U. North Georgia	479	52	0	2	15	2	13	0	0	0
U. Northern Colorado	479	20	19	83	15	0	3	0	12	0
U. Illinois, Springfield	481	12	12	15	14	0	14	0	0	0
Rutgers, State U. New Jersey, Camden	482	0	0	0	13	0	13	0	0	0
C. of Saint Benedict	483	21 i	20 i	10 i	11 i	0 i	7 i	1 i	3 i	0 i
U. of Health Sciences and Pharmacy in St. Louis	484	ne	0	0	9	0	0	0	9	0
Western Carolina U.	484	172	118	0	9	9	0	0	0	0
U. South Carolina, Aiken	486	0	8	4	8	0	8	0	0	0
Pennsylvania State U., Harrisburg	487	5	0	0	7	0	7	0	0	0
U. Houston-Downtown	487	0	0	88	7	0	0	0	0	7
Azusa Pacific U.	489	28	12	9	6	0	6	0	0	0
Johnson C. Smith U.	490	66	300	4 i	4	0	4	0	0	0
Texas Woman's U.	490	0	49	7	4	0	0	0	0	4
Kettering U.	492	116	305	14	2	0	0	0	2	0
Kean U.	493	ne	0	0	1	0	1	0	0	0
All other surveyed institutions	-	8,513	6,754	3,019	0	0	0	0	0	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.

nec = not elsewhere classified.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$270,143 thousand in federally financed R&D expenditures in physical sciences 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 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.^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 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.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. 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.