

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
All institutions	-	25,435,484	26,229,693	28,446,519	30,958,717	1,265,977	10,949,628	17,494,324	480,042	768,746
Johns Hopkins U. ^a	1	706,853	714,341	765,565	844,281	0	273,011	571,270	0	0
Duke U.	2	568,773	568,232	638,716	752,563	0	242,664	493,708	5,463	10,728
U. California, San Francisco	3	632,556	634,918	645,510	737,748	0	912	736,836	0	0
U. Pennsylvania	4	582,252	577,785	644,430	707,840	41	475,926	189,554	0	42,319
U. Pittsburgh, Pittsburgh	5	585,348	590,430	628,092	706,791	336	243,501	462,914	0	40
U. Washington, Seattle	6	664,192	667,996	683,132	678,979	0	180,761	472,149	13,475	12,594
Columbia U. in the City of New York	7	539,940	562,474	611,343	662,559	0	198,164	462,070	2,148	177
Stanford U.	8	519,870	529,667	578,172	619,699	0	196,494	392,879	834	29,492
U. California, Los Angeles	9	417,741	459,909	523,747	617,601	0	23,114	594,487	0	0
Icahn School of Medicine at Mount Sinai	10	443,745	480,452	554,582	610,646	0	261,518	349,128	0	0
U. North Carolina, Chapel Hill	11	513,100	521,691	569,385	610,132	0	156,412	453,720	0	0
Yale U.	12	497,350	512,821	570,441	608,877	0	158,700	445,289	4,888	0
U. Michigan, Ann Arbor	13	548,206	547,904	549,127	602,777	3	198,644	369,878	8,300	25,952
Washington U., Saint Louis	14	476,233	489,071	528,261	597,001	0	260,132	336,869	0	0
U. California, San Diego	15	408,818	413,628	465,019	577,453	234	46,028	531,157	0	34
New York U.	16	335,764	353,092	446,533	559,581	0	202,644	355,486	0	1,451
Vanderbilt U. and Vanderbilt U. Medical Center	17	391,543	413,212	484,119	551,132	0	127,970	422,950	0	212
Emory U.	18	393,978	419,593	478,989	529,963	0	186,219	333,946	0	9,798
Northwestern U.	19	370,062	393,156	426,804	470,576	0	129,866	332,325	0	8,385
U. Minnesota, Twin Cities	20	312,158	334,529	388,235	460,220	28,656	81,077	333,708	12,711	4,068
U. Wisconsin-Madison	21	366,311	373,989	385,530	451,388	47,235	199,721	204,259	145	28
U. Colorado Anschutz Medical Campus ^b	22	na	na	361,493	427,999	800	3,917	423,282	0	0
Cornell U.	23	321,219	352,059	385,534	426,964	33,304	174,559	214,450	3,291	1,360
Baylor C. of Medicine	24	309,354	315,101	365,472	420,054	0	222,712	197,342	0	0
Harvard U.	25	423,934	401,466	411,239	410,122	0	309,766	74,495	4,176	21,685
Ohio State U.	26	289,023	321,704	350,221	405,677	32,338	83,337	280,228	6,431	3,343
U. Alabama, Birmingham	27	345,887	341,725	366,366	385,457	0	101,964	283,493	0	0
U. Maryland ^c	28	377,610	360,827	362,219	368,394	30,149	122,265	211,533	683	3,764
U. California, Davis	29	287,847	293,608	279,849	344,180	45,346	136,955	161,879	0	0
Oregon Health and Science U.	30	287,578	312,023	318,175	336,077	0	19,214	208,921	802	107,140
U. Southern California	31	304,604	321,802	328,186	335,673	0	172,487	152,381	0	10,805

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(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Case Western Reserve U.	32	314,870	316,948	294,556	334,605	0	75,637	245,047	0	13,921
U. Cincinnati	33	228,266	263,035	282,277	313,607	0	36,168	268,101	0	9,338
U. Florida	34	261,847	265,894	281,503	306,946	58,134	73,499	169,021	6,292	0
U. Texas Southwestern Medical Center	35	203,544	242,679	257,611	298,154	0	112,127	185,558	469	0
U. Chicago	36	212,983	231,277	260,911	294,797	0	77,479	217,318	0	0
Boston U.	37	217,748	228,882	293,731	291,846	0	124,668	167,178	0	0
Indiana U., Bloomington	38	235,383	243,023	251,142	275,712	0	86,181	188,523	0	1,008
Rutgers, State U. New Jersey, New Brunswick	39	205,955	218,451	254,944	262,424	26,439	134,409	98,452	0	3,124
U. Massachusetts, Medical School	40	197,388	192,938	248,873	258,147	0	106,862	96,374	0	54,911
Scripps Research Institute	41	267,122	243,502	272,181	242,135	0	242,135	0	0	0
Albert Einstein C. of Medicine	42	202,513	204,635	214,619	220,780	0	0	220,780	0	0
U. Iowa	43	192,564	202,824	212,393	219,128	0	85,296	133,298	0	534
U. Utah	44	164,525	202,404	218,204	216,826	0	26,785	190,041	0	0
U. Arizona	45	177,953	179,457	206,315	212,681	14,200	110,999	80,959	6,523	0
U. Virginia, Charlottesville	46	167,585	186,706	190,160	204,298	0	143,465	60,833	0	0
U. Texas M. D. Anderson Cancer Center	47	154,878	163,540	194,972	197,412	4,050	73,169	120,193	0	0
Colorado State U., Fort Collins	48	144,035	160,153	187,839	194,216	21,449	41,838	16,529	110,832	3,568
U. Rochester	49	172,698	173,198	185,919	194,048	0	50,613	143,435	0	0
U. Illinois, Chicago	50	162,930	173,236	182,440	189,578	0	42,064	146,031	1,483	0
U. Miami	51	159,479	167,153	167,201	189,491	0	75,332	109,639	976	3,544
U. Kentucky	52	146,907	154,842	166,751	187,315	12,948	111,422	62,945	0	0
U. Texas Health Science Center, Houston	53	132,647	133,624	165,139	184,205	0	40,894	76,851	0	66,460
Uniformed Services U. of the Health Sciences	54	289,658	229,498	262,204	180,078	0	3,651	176,427	0	0
Texas A&M U., College Station and Health Science Center	55	127,756	275,643	250,689	179,326	48,682	62,196	55,668	11,140	1,640
Wake Forest U.	56	163,236	164,482	186,487	177,957	0	2,632	175,325	0	0
U. California, Irvine	57	128,408	142,756	154,668	174,170	0	86,211	87,959	0	0
Thomas Jefferson U.	58	74,816	74,594	109,364	173,778	0	72,604	101,174	0	0
Medical U. South Carolina	59	153,226	153,802	162,394	163,395	0	53,320	47,538	0	62,537
Pennsylvania State U., University Park and Hershey Medical Center	60	134,964	146,249	142,063	163,120	29,943	71,191	60,184	1,802	0
U. New Mexico	61	96,789	94,977	180,991	162,667	0	22,603	138,833	688	543
Michigan State U.	62	155,127	136,029	141,436	157,980	43,210	65,574	37,431	2,567	9,198
U. Georgia	63	114,935	124,753	135,261	155,393	38,838	102,961	12,287	0	1,307
Medical C. Wisconsin	64	113,007	122,394	131,164	147,255	0	53,829	93,426	0	0

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Connecticut	65	94,232	93,227	105,940	144,287	5,068	79,695	57,044	2,480	0
U. California, Berkeley	66	115,309	119,018	119,251	139,051	499	76,387	33,545	28,620	0
U. Illinois, Urbana-Champaign	67	97,918	110,331	121,883	133,116	23,940	57,463	1,814	49,899	0
U. Missouri, Columbia	68	92,664	99,475	109,626	125,007	31,511	40,162	44,542	8,792	0
U. Texas Medical Branch	69	107,395	113,827	117,490	122,912	0	92,808	30,104	0	0
SUNY, U. Buffalo	70	102,425	108,496	115,162	121,956	0	57,523	63,398	0	1,035
George Washington U.	71	114,065	117,325	122,600	121,121	0	47,496	73,625	0	0
Virginia Commonwealth U.	72	101,127	108,867	117,761	120,851	0	47,604	63,370	0	9,877
U. South Florida ^d	73	105,807	89,644	98,950	119,772	0	73,304	45,993	142	333
U. Texas Health Science Center, San Antonio	74	96,502	102,959	106,824	119,071	0	53,942	65,129	0	0
U. Kansas	75	102,440	113,305	115,370	118,264	0	31,227	84,531	2,506	0
Brown U.	76	94,797	99,779	108,063	115,907	0	44,492	42,112	0	29,303
U. Nebraska, Medical Center	77	102,604	105,158	111,042	114,754	0	72,482	42,272	0	0
Tulane U.	78	90,615	92,019	98,650	110,696	0	31,753	21,174	143	57,626
Temple U.	79	122,159	118,429	117,907	108,014	0	20,679	67,747	0	19,588
Georgetown U.	80	77,391	77,133	109,131	107,661	0	8,490	98,393	0	778
Washington State U.	81	86,617	84,222	101,065	107,093	40,797	21,086	41,980	760	2,470
U. Vermont	82	74,193	81,752	87,438	98,902	15,009	41,145	40,601	2,147	0
Wayne State U.	83	92,845	89,306	88,791	97,488	0	19,785	77,680	23	0
Dartmouth C. and Dartmouth Hitchcock Medical Center	84	94,317	94,419	98,639	96,688	0	53,746	42,037	905	0
U. Louisville	85	71,330	71,342	77,090	96,682	0	51,331	43,345	51	1,955
Purdue U., West Lafayette	86	73,576	76,677	84,604	95,465	43,025	13,382	39,058	0	0
U. Arkansas for Medical Sciences	87	63,498	70,508	83,387	95,080	0	39,773	54,269	0	1,038
Rockefeller U.	88	81,326	82,626	92,292	91,825	0	87,168	4,657	0	0
Tufts U.	89	83,149	102,746	115,629	91,344	1,993	76,869	8,512	0	3,970
U. Texas, Austin	90	70,469	70,386	84,849	89,915	21	45,637	40,012	1,474	2,771
North Carolina State U.	91	70,069	68,962	75,648	85,984	32,645	48,244	0	0	5,095
Oregon State U.	92	68,066	70,516	78,583	83,704	32,967	30,314	5,573	14,816	34
U. Oklahoma, Norman and Health Science Center	93	66,880	72,245	79,517	83,142	0	29,099	54,008	0	35
SUNY, Stony Brook U.	94	63,440	66,263	72,683	81,202	0	40,425	40,777	0	0
Massachusetts Institute of Technology	95	80,200	76,829	75,204	78,923	0	33,137	20,022	169	25,595
Virginia Polytechnic Institute and State U.	96	67,390	64,084	72,611	76,478	25,301	20,642	19,230	10,617	688
Rush U.	97	66,527	63,438	70,912	75,962	0	9,688	66,274	0	0

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California Institute of Technology	98	60,735	65,063	67,899	71,848	0	71,660	142	0	46
Arizona State U.	99	47,334	51,775	56,184	69,108	0	50,639	18,176	293	0
U. Mississippi	100	57,460	59,546	60,201	67,593	213	21,528	45,534	0	318
U. Hawaii, Manoa	101	66,036	62,548	62,074	67,072	9,722	30,300	22,632	1,160	3,258
Iowa State U.	102	54,905	60,272	56,344	66,732	32,767	18,729	402	0	14,834
Augusta U.	103	46,970	55,685	61,727	64,015	0	31,479	31,030	0	1,506
U. South Carolina, Columbia	104	53,489	52,350	51,029	61,828	0	11,314	50,514	0	0
U. Tennessee, Health Science Center	105	42,347	48,264	56,021	60,221	0	26,143	33,996	0	82
Cold Spring Harbor Laboratory	106	73,854	62,068	56,889	59,163	2,105	57,058	0	0	0
U. California, Riverside	107	31,966	41,696	45,420	56,290	12,449	29,798	14,043	0	0
West Virginia U.	108	39,527	41,367	51,717	56,203	5,719	15,616	28,335	5,641	892
Louisiana State U., Baton Rouge	109	47,731	45,823	51,067	56,162	19,140	33,532	167	3,323	0
U. Montana, Missoula	110	40,114	45,895	51,926	55,741	188	17,390	27,998	10,165	0
Drexel U.	111	51,968	49,999	58,129	55,083	0	26,035	28,377	671	0
Princeton U.	112	55,044	53,867	54,327	54,350	0	52,108	0	2,242	0
U. Nebraska, Lincoln	113	48,939	48,702	48,961	50,024	25,352	12,972	5,667	5,987	46
Mississippi State U.	114	35,061	37,520	42,435	49,785	33,392	5,487	1,328	6,814	2,764
U. Colorado Boulder	115	42,813	42,667	43,726	45,590	998	38,408	4,142	943	1,099
U. Nevada, Reno	116	31,278	33,564	43,804	44,587	4,350	23,391	11,806	3,392	1,648
Kansas State U.	117	46,819	43,367	40,991	43,414	32,226	10,804	384	0	0
Cleveland State U.	118	38,942	40,809	38,233	41,743	0	41,712	31	0	0
U. Massachusetts, Amherst	119	36,775	36,163	37,266	40,676	11,303	17,268	7,131	4,380	594
Montana State U., Bozeman	120	33,739	33,155	36,541	40,618	18,371	12,075	10,102	70	0
Auburn U., Auburn	121	24,883	29,821	35,103	40,300	21,410	8,836	982	613	8,459
U. Tennessee, Knoxville ^e	122	11,210	30,983	32,204	39,901	10,585	20,233	4,553	4,530	0
Saint Louis U.	123	30,144	29,211	36,701	37,400	0	13,688	23,675	37	0
U. Oregon	124	29,759	29,342	29,640	36,637	0	36,500	0	137	0
U. Idaho	125	30,467	33,427	35,296	36,580	12,267	18,297	65	5,951	0
U. Wyoming	126	29,891	31,367	28,786	36,464	8,391	19,594	3,038	4,885	556
SUNY, U. Albany	127	71,179	45,162	38,544	35,709	0	21,007	14,702	0	0
U. Puerto Rico, Medical Sciences Campus	128	34,541	26,897	32,997	34,786	0	0	34,786	0	0
Georgia State U.	129	33,247	35,718	34,512	34,497	175	29,839	4,184	0	299
Florida State U.	130	31,905	34,311	30,746	34,254	99	11,397	20,449	1,484	825

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U. Delaware	131	30,421	34,456	32,572	33,921	9,031	5,591	19,299	0	0
Louisiana State U., Health Sciences Center, New Orleans	132	31,290	31,381	34,272	33,087	0	4,173	25,397	0	3,517
Morehouse School of Medicine	133	22,461	22,500	25,181	31,339	0	0	31,339	0	0
Utah State U.	134	27,195	24,904	24,945	29,461	15,093	3,632	1,003	9,733	0
Van Andel Research Institute	135	18,259	18,538	22,231	29,424	0	29,424	0	0	0
Northern Arizona U.	136	22,912	24,039	25,641	28,895	561	19,381	3,573	4,307	1,073
U. Louisiana, Lafayette	137	18,209	19,960	26,466	28,295	10	16,403	11,791	91	0
U. New Hampshire	138	27,400	30,725	29,183	27,850	7,990	4,717	10,148	4,995	0
SUNY, Upstate Medical U.	139	22,028	23,940	24,974	27,737	0	12,585	15,152	0	0
Florida International U.	140	21,908	23,279	20,713	27,280	36	22,144	2,664	2,436	0
SUNY, Downstate Health Sciences U.	141	26,914	26,454	27,620	25,081	0	25,081	0	0	0
Clemson U.	142	18,084	21,908	20,765	24,824	9,076	9,073	1,995	0	4,680
New Mexico State U.	143	15,987	17,602	21,918	24,375	6,869	16,255	385	117	749
U. Rhode Island	144	18,557	21,040	21,298	23,613	2,339	14,387	3,547	0	3,340
Loyola U., Chicago	145	20,625	21,189	23,288	23,194	0	12,644	9,931	619	0
Oklahoma State U., Stillwater	146	17,380	17,865	21,210	22,673	7,308	10,421	808	4,136	0
Brandeis U.	147	19,823	21,616	21,506	22,663	0	19,143	3,511	9	0
Florida A&M U.	148	18,275	18,174	19,995	21,483	8,610	113	9,517	1,259	1,984
North Dakota State U.	149	17,721	17,605	22,286	21,251	11,526	3,255	5,207	1,263	0
U. Arkansas, Fayetteville	150	21,808	16,887	15,881	21,204	14,728	4,428	2,048	0	0
U. Houston	151	18,470	18,438	19,471	20,895	68	4,376	16,451	0	0
Howard U.	152	16,333	15,752	19,875	20,671	0	2,446	17,127	0	1,098
U. Maine	153	18,122	19,256	19,690	20,521	9,330	5,219	115	5,857	0
U. North Dakota	154	13,647	15,954	17,046	20,205	0	10,098	10,107	0	0
Northeastern U.	155	18,983	20,238	18,436	20,043	0	13,886	3,828	0	2,329
U. Missouri, Kansas City	156	10,630	13,054	11,443	19,654	0	4,511	14,595	0	548
San Diego State U.	157	16,844	15,009	17,106	19,519	0	4,723	14,386	410	0
U. California, Santa Cruz	158	15,946	16,914	17,564	18,720	163	18,557	0	0	0
East Carolina U.	159	12,382	12,296	13,680	18,567	0	7,170	11,397	0	0
U. Alaska, Fairbanks	160	10,218	14,391	23,554	18,419	1,683	13,094	759	2,875	8
Eastern Virginia Medical School	161	19,408	15,748	14,774	17,616	0	8,868	8,748	0	0
U. Notre Dame	162	13,259	11,155	12,920	15,704	0	15,704	0	0	0
Louisiana State U., Health Sciences Center, Shreveport	163	12,185	11,452	12,359	15,503	0	13,388	2,115	0	0

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U. Texas, Dallas	164	13,916	16,603	13,432	15,344	0	2,814	12,530	0	0
Meharry Medical C.	165	16,443	12,573	13,784	14,983	0	14,983	0	0	0
U. Central Florida	166	11,466	12,485	15,068	14,789	0	10,111	4,678	0	0
U. Texas, El Paso	167	12,223	10,414	12,399	14,628	0	12,241	2,378	9	0
Texas Tech U., Health Sciences Center	168	11,262	12,977	12,114	14,602	0	7,988	6,614	0	0
Georgia Institute of Technology	169	15,691	22,969	11,713	14,410	0	14,130	280	0	0
U. Texas Health Science Center, Tyler	170	7,084	7,732	12,007	14,362	0	14,362	0	0	0
South Dakota State U.	171	22,888	16,767	11,133	14,272	8,851	2,030	1,842	1,549	0
U. Texas, San Antonio	172	12,135	10,733	11,786	14,215	0	12,418	994	0	803
U. Nebraska, central administration	173	11,875	12,521	12,391	13,722	772	9,938	2,810	0	202
Delaware State U.	174	8,139	8,311	9,554	13,648	3,593	8,574	276	932	273
Albany Medical C.	175	11,827	12,940	13,166	13,384	0	12,816	568	0	0
U. Toledo	176	13,213	12,830	13,665	13,301	0	2,786	10,411	0	104
U. Nevada, Las Vegas	177	12,545	14,582	13,583	13,038	84	7,450	4,878	244	382
U. South Alabama	178	12,364	12,175	13,027	12,537	0	162	11,821	0	554
Portland State U.	179	12,530	11,523	11,566	12,525	22	8,269	1,011	3,124	99
Florida Atlantic U.	180	9,452	11,087	11,315	12,398	27	6,104	5,628	0	639
Marshall U.	181	8,481	10,082	10,409	12,099	0	4,127	7,972	0	0
George Mason U.	182	9,658	8,803	10,609	11,781	274	6,316	4,658	533	0
U. Alabama, Tuscaloosa	183	3,525	4,483	6,041	11,663	0	3,941	7,688	0	34
U. California, Santa Barbara	184	16,345	12,927	12,283	11,268	0	10,601	0	667	0
Indiana U.-Purdue U., Indianapolis	185	9,805	11,548	11,825	11,144	0	5,192	5,515	0	437
CUNY, Queens C.	186	9,569	9,378	8,529	10,830	0	1,535	9,295	0	0
North Carolina A&T State U.	187	7,118	6,945	9,455	10,753	5,974	1,801	551	2,427	0
Charles R. Drew U. of Medicine and Science	188	10,427	9,863	9,945	10,656	0	0	10,656	0	0
U. Massachusetts, Lowell	189	3,898	4,573	5,842	10,577	0	4,877	5,700	0	0
Southern Illinois U., Carbondale	190	9,580	9,899	9,451	10,576	4,093	2,251	4,232	0	0
Texas Tech U.	191	6,199	4,978	5,784	10,240	4,039	3,833	954	1,414	0
U. South Dakota	192	9,660	9,733	8,496	10,126	0	9,224	600	198	104
CUNY, Graduate School of Public Health and Health Policy	193	3,933	7,444	11,244	9,886	0	784	9,102	0	0
Tennessee State U.	194	6,743	14,785	13,145	9,474	7,328	2,132	14	0	0
East Tennessee State U.	195	7,011	6,785	8,010	9,397	0	4,149	5,248	0	0
Rice U.	196	8,245	8,540	7,628	9,357	0	9,357	0	0	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Creighton U.	197	6,159	5,651	6,649	9,311	0	3,886	5,425	0	0
Northeast Ohio Medical U.	198	10,029	10,649	9,982	9,121	0	5,404	3,111	0	606
U. Guam	199	6,201	6,625	8,519	9,112	2,533	475	2,786	3,318	0
New York Medical C.	200	11,061	12,106	10,739	9,070	0	4,095	2,824	0	2,151
Tuskegee U.	201	6,703	6,837	6,933	9,000	4,508	4,469	23	0	0
U. Maryland, Baltimore County	202	9,297	8,644	7,736	8,873	341	8,463	35	17	17
U. Texas, Arlington	203	5,586	7,558	7,783	8,854	0	3,410	5,444	0	0
Carnegie Mellon U.	204	9,677	9,523	9,072	8,708	211	7,785	471	0	241
Lincoln U., Jefferson City	205	2,319	3,351	5,444	8,695	8,310	0	0	385	0
U. Texas Rio Grande Valley	206	8,649	7,403	7,186	8,582	1,460	2,538	4,545	0	39
Loma Linda U.	207	11,804	10,619	9,436	8,497	0	4,963	3,534	0	0
Illinois Institute of Technology	208	10,066	8,605	7,769	8,418	778	6,956	619	0	65
U. Southern Mississippi	209	6,662	7,241	7,633	8,267	0	7,840	427	0	0
Boise State U.	210	6,384	7,021	8,959	7,885	558	4,946	1,719	621	41
Wright State U.	211	9,735	8,029	7,544	7,639	0	5,195	2,444	0	0
Rutgers, State U. New Jersey, Newark	212	5,847	7,681	8,709	7,627	0	7,627	0	0	0
San Francisco State U.	213	8,950	7,959	8,039	7,503	0	7,048	48	174	233
Chapman U.	214	4,091	4,431	5,563	7,450	401	3,712	2,984	353	0
U. North Carolina, Greensboro	215	5,771	5,045	5,785	7,347	0	4,791	2,556	0	0
Lehigh U.	216	3,846	3,834	4,707	7,323	0	5,913	14	0	1,396
U. Alaska, Anchorage	217	6,313	4,779	6,170	7,222	57	4,540	1,229	1,396	0
U. of the Virgin Islands	218	8,079	5,976	5,203	7,183	2,227	2,708	0	0	2,248
Fort Valley State U.	219	4,228	4,492	4,313	7,103	6,919	184	0	0	0
Rosalind Franklin U. of Medicine and Science	220	8,765	8,421	9,041	6,905	0	6,320	585	0	0
Ohio U.	221	4,619	5,296	6,837	6,781	0	3,118	3,568	0	95
Morgan State U.	222	3,939	4,679	5,281	6,754	162	2,986	3,606	0	0
Central Michigan U.	223	4,898	4,396	4,171	6,652	0	3,810	2,537	305	0
U. Nebraska, Omaha	224	3,243	4,927	6,315	6,620	0	1,492	5,128	0	0
Baylor U.	225	2,096	3,385	5,327	6,263	372	3,866	1,479	357	189
U. Wisconsin-Milwaukee	226	4,503	5,581	5,486	6,205	0	2,203	4,002	0	0
Western U. of Health Sciences	227	2,573	4,055	5,020	6,202	453	5,747	2	0	0
North Carolina Central U.	228	8,027	6,664	5,699	6,112	0	6,112	0	0	0
Boston C.	229	11,274	7,119	7,427	6,009	0	4,556	1,453	0	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Maryland Center for Environmental Science	230	8,003	5,850	5,603	5,997	498	781	0	4,530	188
Rowan U.	231	6,069	6,151	6,086	5,977	0	3,209	2,622	0	146
Brigham Young U., Provo	232	4,516	4,659	5,937	5,963	1,597	3,282	988	0	96
Marquette U.	233	6,572	5,298	5,446	5,929	155	3,777	1,997	0	0
SUNY, C. of Environmental Science and Forestry	234	6,664	6,831	5,510	5,839	642	1,969	0	3,204	24
CUNY, City C.	235	5,293	4,054	6,672	5,466	0	4,534	932	0	0
Alabama A&M U.	236	4,847 i	3,305 i	4,368 i	5,421 i	345 i	1,746 i	3,196 i	134 i	0 i
Prairie View A&M U.	237	5,363	5,164	5,337	5,393	5,022	255	26	90	0
U. Massachusetts, Boston	238	4,620	4,525	5,050	5,321	67	2,889	2,282	83	0
Texas State U.	239	2,579	2,260	4,329	5,297	644	4,378	0	0	275
U. Maryland, Eastern Shore	240	616	2,567	4,039	5,260	4,276	616	347	21	0
Kent State U.	241	3,094	3,056	4,224	5,117	0	3,063	2,020	1	33
U. California, Merced	242	3,916	3,874	4,426	5,102	683	2,722	1,215	0	482
Syracuse U.	243	5,223	5,108	5,223	5,050	0	3,138	1,055	857	0
New Jersey Institute of Technology	244	19,806	14,836	7,820	5,041	0	1,055	3,986	0	0
Texas Southern U.	245	1,851	3,925	3,112	4,949	0	4,253	0	0	696
Rensselaer Polytechnic Institute	246	3,609	4,483	3,934	4,807	0	4,807	0	0	0
Alcorn State U.	247	4,833	4,090	3,883	4,787	4,470 i	0 i	317 i	0 i	0 i
Jackson State U.	248	1,686	1,848	2,686	4,783	0	668	4,115	0	0
U. Minnesota, Duluth	249	4,019	4,023	3,952	4,714	0	876	0	3,838	0
MGH Institute of Health Professions	250	3,494	3,014	2,500	4,628	0	2,428	2,200	0	0
Kentucky State U.	251	4,398	4,299	3,506	4,615	4,615	0	0	0	0
Nova Southeastern U.	252	4,725	4,572	5,098	4,574	0	0	4,574	0	0
Duquesne U.	253	3,265	3,359	3,706	4,508	0	1,080	3,428	0	0
CUNY, Hunter C.	254	3,958	5,303	4,388	4,334	0	3,719	615	0	0
Tarleton State U.	255	4,293	3,534	3,983	4,308	3,942	0	0	366	0
U. North Texas, Denton	256	2,969	2,446	2,767	4,277	242	3,469	566	0	0
West Virginia State U.	257	4,282	3,540	4,117	4,276	3,734	0	8	534	0
Southern U. and A&M C., Agricultural Research and Extension Center	258	3,057	2,085	3,588	4,261	4,121	140	0	0	0
U. Memphis	259	4,013	3,520	3,928	4,155	0	1,888	2,106	152	9
Central State U.	260	1,674	2,444	3,552	4,108	3,810	203	0	82	13
U. Detroit Mercy	261	4,728	4,002	3,709	4,069	0	3,802	267	0	0
U. Denver	262	2,505	2,721	3,327	4,031	0	3,941	0	90	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Oakland U.	263	3,351	2,266	3,422	3,956	0	1,822	524	0	1,610
Virginia State U.	264	4,100	3,775	3,350	3,945	3,774	44	127	0	0
Miami U.	265	4,944	4,845	3,131	3,941	0	3,259	617	0	65
Texas A&M U.-Kingsville	266	5,248	5,908	4,752	3,904	2,152	1,559	0	193	0
California State U., Northridge	267	8,190	5,678	3,292	3,898	0	3,026	0	0	872
Illinois State U.	267	2,873	2,405	3,685	3,898	21	3,027	730	0	120
Ball State U.	269	1,120	1,315	1,336	3,735	0	1,036	2,654	45	0
CUNY, Advanced Science Research Center	270	3,452	4,166	4,399	3,669	0	2,942	0	727	0
Idaho State U.	271	1,624	1,949	2,035	3,644	0	3,441	203	0	0
U. Wisconsin-Superior	272	1,498	1,343	1,800	3,536	0	0	0	3,536	0
Xavier U. Louisiana	273	1,890	2,371	2,040	3,460	0	385	3,075	0	0
U. New England	274	4,189	4,383	3,453	3,382	0	2,969	395	18	0
Langston U.	275	6,300	8,473	2,873	3,361	2,341	1,020	0	0	0
U. North Carolina, Charlotte	276	2,720	2,239	2,589	3,320	0	2,572	748	0	0
California State U., Long Beach	277	4,444	3,635	2,651	3,212	0	1,306	1,905	1	0
U. North Texas, Health Science Center	278	26,489	25,461	32,464	3,172	0	772	2,400	0	0
Old Dominion U.	279	4,018	4,053	3,286	3,163	0	1,782	1,381	0	0
U. Missouri, Saint Louis	280	3,773	3,833	3,443	3,129	0	1,354	1,727	48	0
California Polytechnic State U., San Luis Obispo	281	3,672	2,989	3,178	3,113	755	632	1,340	326	60
Clark Atlanta U.	282	3,859	3,468	3,496	2,923	0	2,923	0	0	0
Texas A&M U.-Corpus Christi	283	4,889	4,521	2,899	2,912	148	2,452	0	213	99
U. Arkansas, Pine Bluff	284	3,947	3,975	3,065	2,883	2,877	6	0	0	0
U. Hawaii, Hilo	285	2,996	2,989	3,113	2,826	1,186	293	826	297	224
U. Central del Caribe	286	2,705	2,743	2,492	2,807	0	0	2,807	0	0
U. Puerto Rico, Rio Piedras	287	2,968	2,911	3,247	2,524	0	2,373	151	0	0
U. of Health Sciences and Pharmacy in St. Louis	288	ne	3,767	4,063	2,514	0	0	2,514	0	0
California State U., Monterey Bay	289	2,695	2,140	2,186	2,496	352	1,987	157	0	0
U. North Carolina, Wilmington	290	3,558	3,327	2,861	2,495	0	1,431	30	1,003	31
Alabama State U.	291	2,577	1,989	2,265	2,471	0	1,929	0	0	542
Oklahoma State U., Center for Health Sciences	292	851	2,469	1,934	2,421	0	634	1,787	0	0
Winston-Salem State U.	293	650	2,043	2,515	2,419	0	467	1,952	0	0
SUNY, Binghamton U.	294	2,526	2,273	1,649	2,334	0	1,517	817	0	0
Arkansas State U., Jonesboro	295	3,346	3,344	2,909	2,317	552	1,765	0	0	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
California State U., Fullerton	295	2,270	1,896	1,943	2,317	81	1,887	349	0	0
Tennessee Technological U.	297	1,092	1,282	1,621	2,304	56	1,300	233	715	0
Colorado School of Mines	298	1,799	1,784	2,479	2,233	188	1,985	60	0	0
Chicago State U.	299	52	ne	ne	2,223	0	2,223	0	0	0
Mercer U.	300	1,677	1,912	2,344	2,175	0	0	1,537	0	638
Hope C.	301	407	282	408	2,130	0	2,130	0	0	0
Dine C.	302	1,074	347	ne	2,091	329	0	1,762	0	0
Long Island U.	303	1,397	1,161	2,207	2,084	0	61	2,023	0	0
SUNY, C. of Optometry	304	1,823	1,688	2,105	2,080	0	0	2,080	0	0
San Jose State U.	305	1,005	1,268	1,047	2,038	0	1,924	114	0	0
DePaul U.	306	299	313	423	2,030	0	865	773	0	392
William & Mary	307	1,585	1,499	1,635	2,027	0	1,485	0	542	0
Wichita State U.	308	2,435	2,632	6,332	2,016	0	1,992	24	0	0
U. of the District of Columbia	309	1,083	235	1,896	1,978	1,786	0	0	0	192
Middle Tennessee State U.	310	972	1,080	1,394	1,944	841	918	21	164	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	311	2,063	2,291	1,972	1,930	0	1,766	157	7	0
Western Illinois U.	312	1,089	1,636	2,152	1,811	1,803	8	0	0	0
Texas Tech U., Health Sciences Center, El Paso	313	2,238	1,675	1,566	1,751	0	905	846	0	0
Florida Gulf Coast U.	314	73	636	954	1,734	0	45	1,689	0	0
California State Polytechnic U., Pomona	315	1,279	1,692	1,607	1,717	467	1,250	0	0	0
New York Institute of Technology	316	2,194	981	1,118	1,716	0	372	1,344	0	0
Bowling Green State U.	317	478	652	1,140	1,712	336	842	404	130	0
SUNY, Polytechnic Institute	318	1,406	1,297	1,408	1,673	0	1,529	144	0	0
U. Nebraska, Kearney	319	936	1,035	1,126	1,663	361	645	491	166	0
Hampton U.	320	1,777	1,745	1,685	1,659	0	1,056	603	0	0
U. Louisiana, Monroe	321	1,393	1,788	1,232	1,612	0	291	1,321	0	0
Midwestern U.	322	1,045	936	1,502	1,609	0	715	846	0	48
New England C. of Optometry	322	928	785	1,623	1,609	0	0	1,609	0	0
Northern Kentucky U.	324	420	552	1,374	1,606	0	368	1,238	0	0
Villanova U.	325	338	358	960	1,599	0	690	909	0	0
St. John's U., New York	326	1,284	1,375	1,541	1,595	0	769	826	0	0
Teachers C., Columbia U.	327	1,525	1,856	1,660	1,589	0	0	0	0	1,589
Worcester Polytechnic Institute	327	1,087	954	1,065	1,589	0	1,589	0	0	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Palmer C. of Chiropractic, Davenport	329	1,100	1,400	1,733	1,550	0	0	0	0	1,550
South Carolina State U.	330	1,318	1,367 i	1,416 i	1,537 i	0 i	1,321 i	216 i	0 i	0 i
Sam Houston State U.	331	533	637	1,212	1,532	130	837	565	0	0
Pacific U.	332	2,366	1,597	1,288	1,522	0	77	1,434	11	0
Saginaw Valley State U.	333	1,278	1,083	1,137 i	1,515 i	0 i	0 i	1,515 i	0 i	0 i
Bates C.	334	720	1,128	1,610	1,491	0	1,292	0	0	199
U. Arkansas, Little Rock	335	1,693	2,187	1,978	1,488	17	1,471	0	0	0
U. Colorado Denver ^b	336	na	na	1,487	1,484	29	941	450	50	14
Bowie State U.	337	122	414	96	1,462	0	319	1,143	0	0
Northeastern Illinois U.	338	1,325	1,122	1,111	1,447	20	335	1,092	0	0
Murray State U.	339	2,201	1,539	2,159	1,439	20	1,419	0	0	0
Texas Woman's U.	340	604	805	991	1,420	0	977	443	0	0
Saint Joseph's U.	341	116	460	362	1,405	0	1,035	370	0	0
Southern Illinois U., Edwardsville	342	1,171	1,232	1,631	1,340	117	457	766	0	0
Eastern Michigan U.	343	1,349	2,234	1,677	1,293	0	317	811	165	0
Amherst C.	344	757	608	527	1,269	0	1,269	0	0	0
U. Texas, Tyler	345	604	677	781	1,258	318	596	344	0	0
California State U., East Bay	346	ne	212	349	1,224	712	13	499	0	0
California State Polytechnic U., Humboldt	347	1,556	1,636	1,020	1,216	81	227	0	813	95
Tougaloo C.	348	1,444	1,741	1,733 i	1,207 i	0 i	1,207 i	0 i	0 i	0 i
Fisk U.	349	4,473	3,585	1,579	1,196	0	1,196	0	0	0
California State U., Fresno	350	1,010	823	698	1,185	620	548	17	0	0
Lake Superior State U.	351	ne	ne	ne	1,178	0	892	0	286	0
Southern Methodist U.	352	1,283	1,061	1,365	1,161	0	1,161	0	0	0
Louisiana Tech U.	353	608	619	562	1,158	412	210	536	0	0
C. Charleston	354	761	619	894	1,146	157	740	19	230	0
James Madison U.	354	698	618	1,031	1,146	0	1,068	34	44	0
Black Hills State U.	356	489	691	650	1,142	0	1,114	0	28	0
Appalachian State U.	357	486	465	473	1,137	119	762	59	197	0
U. Wisconsin-Stevens Point	358	1,768 i	2,058	1,573	1,111	402	6	0	703	0
Albany C. of Pharmacy and Health Sciences	359	1,690	1,938	1,900	1,110	0	958	152	0	0
Reed C.	360	1,031	1,180	1,252 i	1,105 i	0 i	718 i	387 i	0 i	0 i
Pennsylvania State U., Harrisburg	361	25	381	1,278	1,094	0	311	783	0	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Nevada State C.	362	ne	ne	ne	1,085	0	994	0	91	0
Barnard C.	363	356	489	897	1,082	0	1,082	0	0	0
Butler U.	364	ne	ne	ne	1,081	50	544	487	0	0
Missouri State U.	365	1,070	1,349	1,411	1,062	306	422	0	334	0
Montclair State U.	366	1,053	1,323	1,115	1,058	0	643	306	109	0
CUNY, C. Staten Island	367	177	377	849	1,047	0	527	520	0	0
Western Kentucky U.	368	1,607	1,385	889	1,041	169	310	304	0	258
Grand Valley State U.	369	845	935	784	1,028	0	273	755	0	0
Yeshiva U.	370	380	486	1,256	1,013	63	0	950	0	0
U. North Carolina, Asheville	371	590	797	953	996	0	35	481	0	480
Hawaii Pacific U.	372	1,159	1,224	1,211	990	458	520	12	0	0
U. of the Pacific	373	953	654	606	981	0	767	214	0	0
California State U., Los Angeles	374	2,205	1,747	554	980	0	597	383	0	0
Western Carolina U.	375	682	750	998	970	138	229	588	15	0
Touro U., California	376	1,540	1,546	1,375	964	0	238	0	0	726
Bowdoin C.	377	1,083	869	1,002	957	0	957	0	0	0
Colorado State U., Pueblo	378	1,220	1,108	1,248	952	0	853	0	99	0
Pennsylvania State U., Behrend	379	17	15	176	951	30	238	238	445	0
Gallaudet U.	380	408	383	372	946	0	63	883	0	0
U. West Florida	381	296	548	703	927	0	702	183	0	42
Franklin and Marshall C.	382	593	502	676	908	0	782	126	0	0
Wesleyan U.	383	954	382	581	878	0	878	0	0	0
Smith C.	384	1,017	881	775	866	0	761	105	0	0
Des Moines U.	385	657	265	554	865	0	661	187	0	17
Wellesley C.	386	1,179	1,326	1,418	859	0	859	0	0	0
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	387	191	342	376	858	0	858	0	0	0
Northern Illinois U.	388	601	401	1,088	852	0	415	306	131	0
U. Akron	389	793	837	550	851	0	655	196	0	0
Michigan Technological U.	390	1,714	1,300	859	841	0	567	274	0	0
Stevens Institute of Technology	391	33	3	83	833	0	833	0	0	0
Swarthmore C.	392	468	439	428	820	0	820	0	0	0
Indiana U. Pennsylvania	393	869	667	989	814	0	814	0	0	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Trinity C., Hartford	394	886	903	885	811	0	811	0	0	0
Southern U. and A&M C., Baton Rouge	395	401	336	395	810	0	605	120	85	0
Southeastern Louisiana U.	396	422	473	429	805	0	712	93	0	0
Elizabeth City State U.	397	ne	428	751	802	0	628	0	174	0
U. Texas of the Permian Basin	398	ne	328	962	797	0	797	0	0	0
U. North Florida	399	307	310	720	786	0	786	0	0	0
CUNY, Baruch C.	400	284	117	749	780	0	760	0	0	20
U. Dayton	400	676	542	529	780	0	211	434	135	0
Bucknell U.	402	245	361 i	354	777	0	777	0	0	0
Georgia Southern U.	403	1,024	681	1,414	775	0	363	239	87	86
Rochester Institute of Technology	404	594	668	763	765	0	765	0	0	0
U. Central Oklahoma	405	291	288 i	302 i	758 i	0 i	465 i	293 i	0 i	0 i
Florida Institute of Technology	406	965	423	1,574	745	204	541	0	0	0
Hobart and William Smith Colleges	407	700	730	630	737	0	217	0	520	0
Fort Lewis C.	408	538	240	353	725	112	493	32	88	0
Kenyon C.	409	484	520	ne	724	0	689	0	35	0
U. South Carolina, Aiken	410	610	870	554	721	0	721	0	0	0
Kennesaw State U.	411	722	933	636	715	0	715	0	0	0
Naval Postgraduate School	412	1,939	1,655	1,209	704	0	0	456	0	248
CUNY, Brooklyn C.	413	1,842 i	1,919	1,341	698	0	547	151	0	0
Spelman C.	414	536	624	633	685	242	347	96	0	0
Clarkson U.	415	636	496	565	667	0	667	0	0	0
U. Washington, Bothell	415	455	558	468	667	0	254	413	0	0
Colby C.	417	581	289	217	665	0	490	0	0	175
Loyola Marymount U.	417	310	261	243	665	0	665	0	0	0
U. Tennessee, Chattanooga	419	564	552	594	662	0	657	5	0	0
C. New Jersey	420	ne	328	347	651	0	631	20	0	0
Keck Graduate Institute	421	769 i	727 i	685 i	643 i	0	643	0	0	0
Middlebury C.	421	296	483	999	643	0	643	0	0	0
U. Northern Colorado	423	600	549	622	634	0	465	32	0	137
Rhode Island C.	424	555	504	1,043	629	0	607	22	0	0
Clark U.	425	1,553	1,502	898	621	52	518	0	0	51
U. Puget Sound	425	ne	223	ne	621	0	572	0	0	49

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Towson U.	427	503	374	323	618	0	490	0	128	0
Williams C.	428	413	396 i	420 i	614 i	0 i	614 i	0 i	0 i	0 i
California State U., San Marcos	429	1,011	896	311	613	0	440	30	0	143
Stephen F. Austin State U.	430	590	619	680	602	602	0	0	0	0
Austin Peay State U.	431	88	410	411	601	0	29	0	572	0
New Mexico Institute of Mining and Technology	432	387	255	244	593	0	593	0	0	0
U. Central Arkansas	433	263	357	386	583	0	405	114	64	0
U. Puerto Rico, Mayaguez	433	1,777	1,426	1,729	583	166	348	0	0	69
U. Wisconsin-Green Bay	435	452 i	490 i	487 i	582 i	0 i	206 i	376 i	0 i	0 i
Fordham U.	436	995	883	717	575	0	575	0	0	0
U. Richmond	437	708	648	604	574	0	574	0	0	0
Lafayette C.	438	80	50	55	573	0	573	0	0	0
Dillard U.	439	920	502	464	548	0	288	94	0	166
U. Houston-Clear Lake	440	9	20	478	546	0	83	0	463	0
Vassar C.	441	13	16	87	544	0	544	0	0	0
Embry-Riddle Aeronautical U.	442	92	17	0	540	0	26	514	0	0
Roger Williams U.	443	178	166	378	535	46	482	7	0	0
Harvey Mudd C.	444	323	444	316	534	0	534	0	0	0
SUNY, C. Brockport	445	360	444	213	529	0	20	0	509	0
Catholic U. of America	446	2,174	1,660	1,255	521	0	491	30	0	0
Pittsburg State U.	447	297	306	258	518	0	254	0	264	0
U. Wisconsin-Oshkosh	448	639 i	635 i	630	511	0	511	0	0	0
Northwest Indian C.	449	104	365 i	435 i	504 i	0	0	504	0	0
Northland C.	450	ne	ne	450 i	502 i	0 i	487 i	0 i	15 i	0 i
Mount Holyoke C.	451	87	333	434	493	0	418	0	75	0
Hofstra U.	452	360	308	385	487	0	483	0	4	0
U. Wisconsin-La Crosse	453	492	402	397	486	0	486	0	0	0
Edward Via C. of Osteopathic Medicine	454	749	566	537	482	0	0	482	0	0
Santa Clara U.	454	456	503	410	482	0	282	0	200	0
California State U., Stanislaus	456	514	752	702	481	0	401	80	0	0
CUNY, John Jay C. of Criminal Justice	457	156	48	48	479	0	0	0	0	479
West Virginia School of Osteopathic Medicine	458	ne	414	418	468	0	119	349	0	0
William Paterson U.	458	32	103	210	468	0	461	7	0	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Seton Hall U.	460	810	138	607	463	0	463	0	0	0
Clafin U.	461	350	854	505	458	0	382	76	0	0
Minnesota State U., Mankato	461	136	205	300	458	145	313	0	0	0
Sonoma State U.	463	ne	178	298	452	0	341	7	104	0
Haverford C.	464	133	109	98	451	0	325	126	0	0
Morehouse C.	464	116	120	90	451	0	263	0	0	188
Bryn Mawr C.	466	212	100	194	448	0	448	0	0	0
Fayetteville State U.	467	1,236	408	30	437	0	56	381	0	0
U. Alaska, Southeast	468	625	521	745	420	7	285	0	128	0
U. Oklahoma, Tulsa	469	496	493	260	416	0	0	416	0	0
St. Edward's U.	470	2,150	1,575	1,400	414	50	270	0	94	0
Willamette U.	471	143	35	367	411	0	411	0	0	0
Occidental C.	472	657	289	367	410	98 i	312 i	0 i	0 i	0 i
Robert Morris U.	472	ne	ne	ne	410	0 i	170 i	240 i	0 i	0 i
Texas A&M U.-Commerce	474	15	26	165	409	409	0	0	0	0
Augustana U.	475	483	ne	546	403	0	0	403	0	0
California State U., Sacramento	476	294	434	379	400	0	132	17	251	0
National Defense U.	476	0	200	400	400	0	400	0	0	0
U. Alabama, Huntsville	478	681	622	330	398	24	366	8	0	0
Eastern Washington U.	479	484	391	414	394	0	63	114	217	0
West Chester U. Pennsylvania	480	540	410	310	385	0	228	157	0	0
Marshall B. Ketchum U.	481	336 i	323 i	343 i	383 i	0 i	0 i	383 i	0 i	0 i
Texas Christian U.	482	850	228	341	363	26	209	128	0	0
U. Tulsa	483	357	295	330	360	0	360	0	0	0
CUNY, York C.	484	340	450	71	355	0	221	134	0	0
Texas A&M International U.	484	1,710	123	65	355	0	66	289	0	0
Southern Connecticut State U.	486	212	141	128	353	49	126	178	0	0
Lewis and Clark C.	487	526	538	258	345	0	345	0	0	0
California State U., Channel Islands	488	64	151	143	342	0	311	0	31	0
U. of the Incarnate Word	489	576	545	597	340	0	194	146	0	0
Montana Technological U.	490	478	339	305	335	0	335	0	0	0
Western Washington U.	491	249	243	175	328	0	328	0	0	0
Davidson C.	492	272	200	259	325	0	325	0	0	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
California State U., Chico	493	458	380	267	314	251	63	0	0	0
U. Colorado Colorado Springs	494	441	705	741	313	0	313	0	0	0
U. Washington, Tacoma	495	385	161	241	309	0	276	0	33	0
California State U., San Bernardino	496	1,055	435	199	305	0	304	0	1	0
Northern Michigan U.	497	184	127	163	303	0	230	0	73	0
CUNY, Lehman C.	498	0	136	146	302	0	283	19	0	0
Christopher Newport U.	499	132	160	70	293	0	293	0	0	0
CUNY, New York City C. of Technology	499	487	394	311	293	0	293	0	0	0
St. Catherine U.	501	ne	ne	ne	292	0	0	256	0	36
Stockton U.	502	50	85	247	291	0	62	0	202	27
Sul Ross State U.	503	330	463	486 i	290 i	94 i	101 i	63 i	32 i	0 i
Morehead State U.	504	601	223	782	287	0	90	0	197	0
Furman U.	505	328	356	307	283	0	283	0	0	0
Calvin U.	506	449	273 i	273 i	274 i	0	274	0	0	0
Claremont McKenna C.	507	337	396	274	272	0	272	0	0	0
U. Ana G. Mendez, Gurabo	507	347	556	230	272	0 i	143 i	0 i	0 i	129 i
West Texas A&M U.	509	313	409	236	268	88	0	0	180	0
Ithaca C.	510	ne	408	187	262	0	170	92	0	0
Utah Valley U.	511	ne	ne	ne	261	0	261	0	0	0
Savannah State U.	512	320	234	268	255	0	6	155	0	94
California State U., Dominguez Hills	513	162	81	61	254	0	254	0	0	0
American U.	514	605	531	292	252	0	252	0	0	0
Youngstown State U.	515	0	0	20	251	0	231	20	0	0
Indiana State U.	516	502	339	86	245	0	75	170	0	0
U.S. Air Force Academy	517	140	0	369	244	0	194	0	0	50
Pepperdine U.	518	303	121	282	238	0	213	25	0	0
Trinity U.	519	95	296	184	230	0	230	0	0	0
Pomona C.	520	81	180	202	223	0	223	0	0	0
U. Charleston	521	ne	ne	ne	217	0	217	0	0	0
U. Michigan, Dearborn	522	172	283	215	215	0	99	116	0	0
Drake U.	523	52	ne	123	205	0	58	40	107	0
Winthrop U.	524	359	465	103	204	0	166	38	0	0
Texas A&M U.-San Antonio	525	ne	ne	ne	200	0	48	0	152	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Coastal Carolina U.	526	268	157	216	195	0	109	0	86	0
U. New Orleans	527	108	148	245	193	0	191	0	2	0
U. Massachusetts, Dartmouth	528	621	253	211	191	0	191	0	0	0
Skidmore C.	529	1,070	799	873	188	0	108	80	0	0
New Mexico Highlands U.	530	ne	170	178 i	184 i	76 i	82 i	0 i	26 i	0 i
Seattle U.	531	116	86	29	180	8	103	69	0	0
U. Wisconsin-Platteville	532	118 i	117 i	145 i	179 i	56 i	65 i	42 i	16 i	0 i
Pace U.	533	477	753	298	178	0	178	0	0	0
Missouri U. of Science and Technology	534	143	130	97	172	0	172	0	0	0
Colgate U.	535	246	84	331	170	0	170	0	0	0
Oregon Institute of Technology	536	90 i	67	123 i	166 i	0 i	89 i	57 i	20 i	0 i
Plymouth State U.	537	ne	ne	ne	159	0	133	0	26	0
U. California, Office of the President	538	319	217	342	158	149	0	0	0	9
U. San Francisco	538	19	0	19	158	0	102	56	0	0
Purdue U., Northwest	540	110	176	155	153	0	47	106	0	0
Connecticut C.	541	95	48	89	152	0	152	0	0	0
U. Northern Iowa	542	122	129	48	147	103	44	0	0	0
Johnson C. Smith U.	543	362	412	160 i	146 i	0	146	0	0	0
Kean U.	544	ne	0	18	142	24	89	29	0	0
Western New England U.	545	ne	ne	ne	134	0	0	134	0	0
U. New Haven	546	30	9	45	131	0	31	96	4	0
U.S. Military Academy	547	578	295	2,574	130	0	130	0	0	0
East Stroudsburg U. Pennsylvania	548	ne	ne	ne	128	0	0	0	66	62
Citadel Military C. South Carolina	549	ne	49	77	124	0	124	0	0	0
Framingham State U.	550	ne	0	0 i	119 i	0 i	73 i	46 i	0 i	0 i
Troy U.	551	ne	269	216	117	0	2	0	115	0
C. Wooster	552	110	81	80 i	116 i	14	102	0	0	0
Salisbury U.	553	4	32	88	112	0	82	0	30	0
SUNY, C. Plattsburgh	553	373	429	279	112	0	0	112	0	0
U. of Mary Washington	555	64	85	119	111	0	111	0	0	0
U. Virginia's C. Wise	556	ne	ne	111	110	2	0	108	0	0
U. Southern Maine	557	28	94	143	107	45	55	0	7	0
Whitman C.	558	338	302	ne	103	0	89	0	14	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. of St. Thomas (MN)	559	196	242	113	102	0	102	0	0	0
Norfolk State U.	560	108	114	88	101	0	93	8	0	0
Elon U.	561	0	16	39	97	0	0	97	0	0
U. Houston-Downtown	562	0	0	0	93	0	93	0	0	0
Carleton C.	563	108	82	115	87	0	87	0	0	0
SUNY, Geneseo	564	150	58	61	85	0	85	0	0	0
SUNY, Oswego	565	218	190	72	82	0	82	0	0	0
Monmouth U.	566	0	0	16	81	0	51	0	30	0
St. Cloud State U.	566	386	126	91	81	24	56	1	0	0
Macalester C.	568	108	121	10	77	0	61	16	0	0
Hamilton C.	569	51	26	86	75	0	75	0	0	0
U. Hartford	570	38	101	77	70	0	3	67	0	0
Lamar U.	571	440	221	357	63	0	28	35	0	0
California State U., Bakersfield	572	92	70	61	58	29	29	0	0	0
U. North Georgia	573	92	91	39	54	23	26	0	5	0
Albion C.	574	0	0	0	46	0	30	16	0	0
Central Washington U.	575	206	198	128	42	0	42	0	0	0
Union C., Schenectady	576	14	13	4	41	0	41	0	0	0
Philadelphia C. of Osteopathic Medicine	577	346	422	318	40	0	40	0	0	0
U. San Diego	578	44	65	28	39	0	39	0	0	0
CUNY, system office	579	3	84	37	38	0	38	0	0	0
Eastern Connecticut State U.	580	169	177	108	36	1	35	0	0	0
Roseman U. of Health Sciences	581	37	56	53	30	0	0	30	0	0
U. Puerto Rico, Cayey	581	45	604	316	30	0	30	0	0	0
SUNY, Buffalo State	583	188	176	29	29	0	29	0	0	0
U. Illinois, Springfield	584	0	0	1	28	0	0	28	0	0
C. of Saint Benedict	585	0	0	24	27	0	16	11	0	0
California Lutheran U.	586	107	144	ne	23	0	23	0	0	0
Central Connecticut State U.	586	31	73	97	23	0	23	0	0	0
Alaska Pacific U.	588	216	38	29	20	20	0	0	0	0
Grinnell C.	588	41	29	17	20	0	20	0	0	0
Purdue U., Fort Wayne	588	122	117	44	20	0	20	0	0	0
Marymount U.	591	ne	ne	163	17	0	0	17	0	0

TABLE 43

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

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Suffolk U.	592	ne	29	33	14	0	14	0	0	0
Northwestern State U. Louisiana	593	34	1	0	13	0	0	13	0	0
Azusa Pacific U.	594	49	116	42	7	0	0	7	0	0
New School	595	0	12	35	1	0	1	0	0	0
U. Puerto Rico, Humacao	595	286	255	111	1	0	1	0	0	0
All other surveyed institutions	-	384,377	355,074	22,261	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 \$38,722 thousand in federally financed R&D expenditures in life sciences in FY 2022.

^b 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.

^c 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.

^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):

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.