

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|---|------|-----------|-----------|-----------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| All institutions | - | 2,108,912 | 2,144,414 | 2,440,465 | 2,693,891 | 583,161 | 921,482 | 891,194 | 298,054 |
| U. California, San Diego | 1 | 128,962 | 107,137 | 122,993 | 169,439 | 0 | 23,281 | 146,158 | 0 |
| Woods Hole Oceanographic Institution | 2 | 115,744 | 129,085 | 129,264 | 154,295 | 32,606 | 64,517 | 47,738 | 9,434 |
| U. Washington, Seattle | 3 | 114,555 | 105,493 | 131,461 | 135,638 | 58,249 | 11,003 | 61,819 | 4,567 |
| U. Colorado Boulder | 4 | 116,177 | 116,175 | 126,188 | 134,584 | 25,653 | 17,360 | 2,617 | 88,954 |
| Texas A&M U., College Station and Health Science Center | 5 | 82,072 | 81,667 | 97,109 | 99,602 | 5,372 | 6,156 | 84,815 | 3,259 |
| U. Alaska, Fairbanks | 6 | 54,408 | 76,984 | 102,308 | 95,819 | 10,191 | 58,030 | 27,264 | 334 |
| U. New Hampshire | 7 | 41,304 | 44,691 | 74,212 | 92,244 | 31,674 | 6,921 | 53,649 | 0 |
| U. Maryland ^a | 8 | 51,008 | 55,924 | 68,050 | 74,204 | 7,474 | 51,376 | 978 | 14,376 |
| Johns Hopkins U. ^b | 9 | 59,766 | 73,509 | 90,660 | 67,703 | 10,976 | 28,152 | 21,952 | 6,623 |
| U. Oklahoma, Norman and Health Science Center | 10 | 64,742 | 69,382 | 71,650 | 64,382 | 61,619 | 2,739 | 0 | 24 |
| Columbia U. in the City of New York | 11 | 54,388 | 53,955 | 59,425 | 63,561 | 6,981 | 20,187 | 36,393 | 0 |
| U. Hawaii, Manoa | 12 | 47,728 | 45,399 | 48,908 | 56,127 | 1,658 | 13,958 | 36,240 | 4,271 |
| U. Miami | 13 | 39,430 | 44,559 | 50,038 | 52,297 | 35,033 | 0 | 16,534 | 730 |
| Oregon State U. | 14 | 33,730 | 37,629 | 41,103 | 50,415 | 1,888 | 13,952 | 22,465 | 12,110 |
| Colorado State U., Fort Collins | 15 | 55,722 | 46,601 | 44,116 | 48,659 | 43,350 | 4,434 | 101 | 774 |
| U. Rhode Island | 16 | 25,349 | 33,815 | 42,342 | 45,185 | 0 | 2,507 | 33,565 | 9,113 |
| U. Wisconsin-Madison | 17 | 35,879 | 35,050 | 38,120 | 44,661 | 31,905 | 7,341 | 0 | 5,415 |
| Arizona State U. | 18 | 54,650 | 49,889 | 47,652 | 41,166 | 125 | 41,006 | 35 | 0 |
| U. California, Los Angeles | 19 | 27,134 | 31,060 | 37,619 | 38,858 | 10,025 | 26,680 | 0 | 2,153 |
| U. Maryland, Baltimore County | 20 | 12,497 | 12,883 | 16,989 | 30,538 | 24,765 | 3,101 | 2,448 | 224 |
| California Institute of Technology | 21 | 27,071 | 25,067 | 34,882 | 30,338 | 0 | 26,621 | 0 | 3,717 |
| U. Texas, Austin | 22 | 20,523 | 20,837 | 19,312 | 28,880 | 0 | 21,685 | 3,720 | 3,475 |
| Pennsylvania State U., University Park and Hershey Medical Center | 23 | 24,605 | 20,062 | 24,690 | 26,986 | 11,231 | 12,225 | 3,530 | 0 |
| U. Southern Mississippi | 24 | 21,092 | 20,411 | 21,980 | 22,242 | 0 | 7,471 | 3,542 | 11,229 |
| U. California, Santa Cruz | 25 | 15,234 | 15,976 | 20,767 | 21,751 | 0 | 5,416 | 11,075 | 5,260 |
| Princeton U. | 26 | 16,105 | 21,115 | 20,940 | 21,598 | 14,146 | 2,911 | 0 | 4,541 |
| U. Alabama, Huntsville | 27 | 14,123 | 14,376 | 18,414 | 21,468 | 18,599 | 2,755 | 114 | 0 |
| North Carolina State U. | 28 | 13,202 | 12,866 | 14,124 | 20,341 | 10,620 | 113 | 1,791 | 7,817 |
| Massachusetts Institute of Technology | 29 | 20,477 | 20,764 | 18,567 | 20,269 | 8,839 | 6,230 | 2,878 | 2,322 |
| Desert Research Institute | 30 | 15,748 | 16,608 | 17,341 | 20,061 | 5,084 | 14,977 | 0 | 0 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|---|------|--------|--------|--------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| U. Delaware | 31 | 10,785 | 11,596 | 19,133 | 19,081 | 0 | 3,216 | 7,708 | 8,157 |
| Harvard U. | 32 | 28,723 | 24,827 | 25,109 | 19,045 | 4,259 | 3,879 | 313 | 10,594 |
| U. Arizona | 33 | 13,625 | 13,788 | 14,396 | 18,827 | 4,298 | 12,967 | 1,098 | 464 |
| William & Mary | 34 | 12,158 | 12,138 | 15,166 | 16,880 | 0 | 440 | 16,440 | 0 |
| SUNY, Stony Brook U. | 35 | 10,824 | 12,214 | 14,178 | 16,828 | 0 | 4,810 | 12,015 | 3 |
| U. North Carolina, Chapel Hill | 36 | 12,873 | 11,575 | 14,864 | 16,172 | 0 | 4,159 | 6,507 | 5,506 |
| U. Illinois, Urbana-Champaign | 37 | 5,419 | 4,965 | 5,897 | 15,466 | 6,436 | 9,030 | 0 | 0 |
| Florida International U. | 38 | 9,463 | 9,569 | 10,615 | 15,441 | 4,039 | 576 | 10,826 | 0 |
| Rutgers, State U. New Jersey, New Brunswick | 39 | 16,060 | 12,836 | 12,612 | 14,997 | 0 | 2,738 | 11,574 | 685 |
| George Mason U. | 40 | 9,390 | 11,636 | 12,644 | 14,490 | 6,946 | 6,911 | 342 | 291 |
| U. Southern California | 41 | 9,079 | 8,192 | 13,278 | 13,949 | 0 | 7,892 | 6,057 | 0 |
| U. South Florida ^c | 42 | 10,327 | 9,935 | 12,202 | 13,777 | 406 | 2,002 | 11,369 | 0 |
| U. Hawaii, system office | 43 | 11,673 | 11,375 | 11,996 | 13,576 | 13,379 | 0 | 0 | 197 |
| U. Wyoming | 44 | 10,107 | 8,601 | 10,884 | 13,191 | 5,738 | 7,263 | 188 | 2 |
| U. Alabama, Tuscaloosa | 45 | 1,168 | 822 | 1,239 | 12,947 | 0 | 12,945 | 2 | 0 |
| Mississippi State U. | 46 | 13,635 | 11,429 | 13,476 | 12,719 | 1,087 | 6,179 | 5,340 | 113 |
| Louisiana State U., Baton Rouge | 47 | 8,178 | 7,740 | 10,240 | 12,616 | 0 | 1,527 | 9,507 | 1,582 |
| Michigan Technological U. | 48 | 8,015 | 9,646 | 12,460 | 12,604 | 4,081 | 39 | 6,386 | 2,098 |
| U. California, Santa Barbara | 49 | 16,190 | 16,253 | 17,150 | 12,410 | 0 | 513 | 11,897 | 0 |
| Stanford U. | 50 | 8,906 | 8,901 | 13,060 | 12,175 | 0 | 9,342 | 2,213 | 620 |
| U. Maine | 51 | 9,064 | 8,996 | 10,119 | 11,688 | 0 | 3,251 | 8,437 | 0 |
| U. Minnesota, Twin Cities | 52 | 7,624 | 8,548 | 8,067 | 11,431 | 0 | 11,431 | 0 | 0 |
| U. Florida | 53 | 8,484 | 8,334 | 9,729 | 11,348 | 0 | 8,929 | 2,419 | 0 |
| U. California, Davis | 54 | 7,014 | 5,881 | 9,146 | 10,879 | 1,848 | 2,745 | 2,353 | 3,933 |
| Naval Postgraduate School | 55 | 6,300 | 6,195 | 4,481 | 10,695 | 6,429 | 273 | 3,710 | 283 |
| U. Michigan, Ann Arbor | 56 | 8,059 | 7,910 | 8,308 | 10,505 | 0 | 10,505 | 0 | 0 |
| Florida State U. | 57 | 8,871 | 7,904 | 8,711 | 10,234 | 1,311 | 1,798 | 5,739 | 1,386 |
| U. Pittsburgh, Pittsburgh | 58 | 7,374 | 7,431 | 8,410 | 9,854 | 0 | 1,966 | 0 | 7,888 |
| U. Chicago | 59 | 8,514 | 8,384 | 9,530 | 9,341 | 0 | 9,341 | 0 | 0 |
| U. Utah | 60 | 11,112 | 30,710 | 1,435 | 9,127 | 4,461 | 4,666 | 0 | 0 |
| U. of the Virgin Islands | 61 | 2,990 | 5,241 | 8,544 | 8,544 | 0 | 157 | 6,000 | 2,387 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|---|------|-------|-------|-------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| U. Nevada, Reno | 62 | 6,910 | 6,038 | 9,087 | 8,364 | 409 | 7,262 | 155 | 538 |
| Morgan State U. | 63 | 3,351 | 3,298 | 5,512 | 8,288 | 0 | 8,288 | 0 | 0 |
| New Mexico Institute of Mining and Technology | 64 | 6,328 | 6,427 | 7,855 | 8,266 | 0 | 8,266 | 0 | 0 |
| U. Georgia | 65 | 6,304 | 7,051 | 7,577 | 8,259 | 0 | 471 | 7,788 | 0 |
| U. Connecticut | 66 | 7,020 | 7,650 | 7,812 | 8,186 | 0 | 1,060 | 7,126 | 0 |
| U. Maryland Center for Environmental Science | 67 | 8,462 | 7,217 | 7,586 | 7,975 | 0 | 261 | 7,672 | 42 |
| U. California, Irvine | 68 | 9,301 | 9,271 | 8,168 | 7,903 | 0 | 7,903 | 0 | 0 |
| U. South Alabama | 69 | 2,048 | 1,883 | 2,641 | 7,899 | 0 | 226 | 7,673 | 0 |
| SUNY, U. Albany | 70 | 6,953 | 6,809 | 5,828 | 7,730 | 7,076 | 654 | 0 | 0 |
| Texas A&M U.-Corpus Christi | 71 | 3,609 | 3,075 | 4,463 | 7,728 | 427 | 1,431 | 4,678 | 1,192 |
| U. Guam | 72 | 2,585 | 5,001 | 6,841 | 7,610 | 0 | 436 | 6,933 | 241 |
| Brown U. | 73 | 3,436 | 5,321 | 6,164 | 7,463 | 443 | 1,134 | 114 | 5,772 |
| Boston C. | 74 | 3,871 | 5,459 | 7,552 | 7,462 | 5,601 | 1,861 | 0 | 0 |
| U. California, Berkeley | 75 | 5,816 | 5,198 | 6,156 | 7,459 | 0 | 7,459 | 0 | 0 |
| Georgia Institute of Technology | 76 | 7,862 | 7,744 | 8,730 | 7,393 | 0 | 6,969 | 424 | 0 |
| U. Kansas | 77 | 4,622 | 4,531 | 6,530 | 7,241 | 649 | 6,592 | 0 | 0 |
| San Jose State U. | 78 | 7,847 | 6,871 | 7,076 | 7,151 | 1,411 | 345 | 5,368 | 27 |
| U. New Mexico | 79 | 6,249 | 6,164 | 6,868 | 6,936 | 334 | 6,508 | 94 | 0 |
| U. California, Riverside | 80 | 4,821 | 4,764 | 6,008 | 6,910 | 0 | 2,708 | 0 | 4,202 |
| Boston U. | 81 | 6,447 | 6,053 | 7,310 | 6,716 | 0 | 6,716 | 0 | 0 |
| U. Massachusetts, Dartmouth | 82 | 2,680 | 4,040 | 6,132 | 6,699 | 0 | 0 | 6,699 | 0 |
| Washington State U. | 83 | 5,323 | 5,103 | 6,455 | 6,514 | 0 | 770 | 0 | 5,744 |
| Colorado School of Mines | 84 | 4,424 | 3,708 | 4,590 | 6,428 | 0 | 6,188 | 149 | 91 |
| U. Oregon | 85 | 5,073 | 5,371 | 5,204 | 6,186 | 0 | 5,628 | 558 | 0 |
| Washington U., Saint Louis | 86 | 5,000 | 5,585 | 5,869 | 6,169 | 0 | 6,169 | 0 | 0 |
| Ohio State U. | 87 | 6,489 | 5,685 | 5,813 | 6,142 | 0 | 6,142 | 0 | 0 |
| Duke U. | 88 | 6,194 | 5,406 | 5,542 | 6,097 | 0 | 1,150 | 4,947 | 0 |
| Purdue U., West Lafayette | 89 | 4,079 | 3,938 | 5,251 | 5,949 | 5,949 | 0 | 0 | 0 |
| Texas Tech U. | 90 | 3,340 | 4,463 | 6,462 | 5,564 | 333 | 4,128 | 0 | 1,103 |
| Tulane U. | 91 | 1,796 | 2,074 | 2,954 | 5,364 | 0 | 5,364 | 0 | 0 |
| Florida A&M U. | 92 | 5,329 | 5,255 | 6,246 | 5,183 | 0 | 0 | 4,686 | 497 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|---|------|-------|-------|-------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| U. Houston | 93 | 2,948 | 3,418 | 3,403 | 5,045 | 949 | 3,270 | 434 | 392 |
| Nova Southeastern U. | 94 | 5,381 | 5,135 | 4,514 | 4,795 | 0 | 0 | 4,795 | 0 |
| Rice U. | 95 | 2,747 | 2,546 | 3,342 | 4,759 | 0 | 4,759 | 0 | 0 |
| U. Virginia, Charlottesville | 96 | 4,059 | 3,582 | 4,842 | 4,724 | 0 | 0 | 0 | 4,724 |
| Cornell U. | 97 | 6,428 | 4,852 | 5,066 | 4,631 | 3 | 4,380 | 248 | 0 |
| SUNY, U. Buffalo | 98 | 2,537 | 2,325 | 3,066 | 4,556 | 74 | 4,436 | 44 | 2 |
| Northern Arizona U. | 99 | 5,975 | 4,968 | 4,468 | 4,316 | 198 | 3,073 | 0 | 1,045 |
| Southern Methodist U. | 100 | 4,026 | 3,893 | 3,697 | 4,268 | 0 | 4,268 | 0 | 0 |
| Montana State U., Bozeman | 101 | 3,123 | 3,609 | 3,353 | 4,029 | 0 | 2,567 | 0 | 1,462 |
| U. South Carolina, Columbia | 102 | 3,889 | 3,288 | 3,255 | 4,012 | 0 | 0 | 4,012 | 0 |
| Montana Technological U. | 103 | 725 | 1,056 | 1,177 | 4,011 | 0 | 4,011 | 0 | 0 |
| Virginia Polytechnic Institute and State U. | 104 | 1,619 | 1,732 | 2,538 | 3,961 | 123 | 3,704 | 6 | 128 |
| East Carolina U. | 105 | 1,051 | 1,198 | 2,494 | 3,778 | 0 | 1,807 | 1,971 | 0 |
| U. North Dakota | 106 | 3,730 | 2,794 | 3,816 | 3,762 | 3,612 | 150 | 0 | 0 |
| U. Vermont | 107 | 1,471 | 1,824 | 2,946 | 3,691 | 2,306 | 840 | 0 | 545 |
| U. Wisconsin-Superior | 108 | 30 | 11 | 28 | 3,532 | 0 | 0 | 3,532 | 0 |
| U. Nevada, Las Vegas | 109 | 3,541 | 3,096 | 2,540 | 3,419 | 97 | 3,318 | 0 | 4 |
| Michigan State U. | 110 | 2,792 | 3,071 | 3,028 | 3,391 | 0 | 3,391 | 0 | 0 |
| Northeastern U. | 111 | 2,235 | 2,358 | 3,160 | 3,357 | 0 | 833 | 2,524 | 0 |
| U. Central Florida | 112 | 1,768 | 1,498 | 2,753 | 3,273 | 3,273 | 0 | 0 | 0 |
| Indiana U., Bloomington | 113 | 1,602 | 2,420 | 3,155 | 3,250 | 2,230 | 727 | 293 | 0 |
| U. Toledo | 114 | 3,227 | 3,371 | 2,642 | 3,228 | 0 | 3,228 | 0 | 0 |
| Iowa State U. | 115 | 2,890 | 2,725 | 3,061 | 3,218 | 0 | 3,218 | 0 | 0 |
| U. Maryland, Eastern Shore | 116 | 3,454 | 4,182 | 3,743 | 3,188 | 0 | 0 | 3,188 | 0 |
| Yale U. | 117 | 2,704 | 2,553 | 2,789 | 3,134 | 0 | 3,134 | 0 | 0 |
| U. Massachusetts, Amherst | 118 | 2,803 | 2,117 | 2,553 | 3,057 | 0 | 3,057 | 0 | 0 |
| Dartmouth C. and Dartmouth Hitchcock Medical Center | 119 | 1,203 | 1,085 | 2,054 | 3,046 | 0 | 3,046 | 0 | 0 |
| U. Texas, San Antonio | 120 | 991 | 2,037 | 2,814 | 2,904 | 0 | 846 | 0 | 2,058 |
| U. Montana, Missoula | 121 | 3,195 | 3,391 | 3,072 | 2,846 | 0 | 1,326 | 1,520 | 0 |
| U. Wisconsin-Milwaukee | 122 | 1,862 | 2,323 | 2,767 | 2,777 | 818 | 81 | 1,878 | 0 |
| Boise State U. | 123 | 2,730 | 2,250 | 2,061 | 2,766 | 34 | 2,079 | 0 | 653 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|--------------------------------------|------|-------|-------|-------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| U. Texas, El Paso | 124 | 1,251 | 1,512 | 1,927 | 2,652 | 0 | 2,652 | 0 | 0 |
| Old Dominion U. | 125 | 2,793 | 2,096 | 2,057 | 2,642 | 0 | 0 | 2,559 | 83 |
| New Mexico State U. | 126 | 3,870 | 3,286 | 3,216 | 2,452 | 9 | 795 | 0 | 1,648 |
| West Virginia U. | 127 | 6,352 | 1,749 | 2,844 | 2,448 | 0 | 1,958 | 0 | 490 |
| U. Idaho | 128 | 1,662 | 1,924 | 3,065 | 2,410 | 130 | 2,239 | 0 | 41 |
| U. Tennessee, Knoxville | 129 | 2,644 | 2,558 | 1,799 | 2,380 | 0 | 1,959 | 0 | 421 |
| U. Rochester | 130 | 2,392 | 2,207 | 2,157 | 2,366 | 0 | 2,366 | 0 | 0 |
| U. Arkansas, Fayetteville | 131 | 2,460 | 3,326 | 3,266 | 2,351 | 107 | 211 | 0 | 2,033 |
| U. Puerto Rico, Rio Piedras | 132 | 3,108 | 2,639 | 1,978 | 2,289 | 0 | 2,026 | 263 | 0 |
| Emory U. | 133 | 684 | 1,856 | 1,947 | 2,266 | 0 | 0 | 0 | 2,266 |
| U. Memphis | 134 | 1,887 | 1,590 | 1,724 | 2,220 | 8 | 2,156 | 0 | 56 |
| U. Washington, Tacoma | 135 | 1,861 | 2,290 | 3,103 | 2,207 | 0 | 0 | 2,207 | 0 |
| Auburn U., Auburn | 136 | 1,003 | 1,675 | 1,743 | 2,077 | 148 | 904 | 186 | 839 |
| U. Louisiana, Lafayette | 137 | 1,050 | 3,772 | 1,843 | 2,029 | 0 | 1,137 | 892 | 0 |
| Florida Institute of Technology | 138 | 780 | 1,326 | 1,051 | 2,014 | 1,404 | 65 | 529 | 16 |
| Texas State U. | 139 | 2,870 | 2,168 | 2,759 | 1,984 | 0 | 893 | 0 | 1,091 |
| Rutgers, State U. New Jersey, Newark | 140 | 1,372 | 1,587 | 1,450 | 1,983 | 0 | 1,983 | 0 | 0 |
| C. Charleston | 141 | 857 | 918 | 2,328 | 1,978 | 142 | 1,360 | 435 | 41 |
| Portland State U. | 142 | 1,784 | 1,510 | 1,660 | 1,972 | 590 | 1,303 | 79 | 0 |
| U. Alaska, Anchorage | 143 | 6,432 | 4,761 | 4,424 | 1,966 | 267 | 161 | 1,538 | 0 |
| U. California, Merced | 144 | 1,783 | 1,948 | 2,364 | 1,956 | 160 | 676 | 38 | 1,082 |
| U. Puerto Rico, Mayaguez | 145 | 3,896 | 2,014 | 3,870 | 1,913 | 0 | 790 | 1,123 | 0 |
| Hampton U. | 146 | 3,454 | 2,881 | 2,576 | 1,880 | 952 | 0 | 925 | 3 |
| Tufts U. | 147 | 230 | 215 | 702 | 1,875 | 0 | 1,868 | 7 | 0 |
| U. Kentucky | 148 | 1,466 | 1,652 | 1,429 | 1,868 | 0 | 1,868 | 0 | 0 |
| U. Mississippi | 149 | 617 | 1,220 | 1,524 | 1,849 | 9 | 1,519 | 301 | 20 |
| U. Hawaii, Hilo | 150 | 871 | 1,157 | 1,597 | 1,796 | 0 | 845 | 916 | 35 |
| Bowling Green State U. | 151 | 1,330 | 1,495 | 1,443 | 1,781 | 0 | 371 | 1,410 | 0 |
| Sonoma State U. | 152 | 529 | 1,412 | 1,675 | 1,719 | 0 | 28 | 138 | 1,553 |
| Ohio U. | 153 | 677 | 1,120 | 1,925 | 1,704 | 7 | 1,697 | 0 | 0 |
| California State U., Northridge | 154 | 1,514 | 663 | 1,015 | 1,670 | 0 | 1,220 | 317 | 133 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|--|------|---------|-------|-------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| Carleton C. | 155 | 670 | 759 | 1,112 | 1,627 i | 0 i | 1,627 i | 0 i | 0 i |
| San Diego State U. | 156 | 1,093 | 1,091 | 1,792 | 1,615 | 0 | 349 | 926 | 340 |
| Central Washington U. | 157 | 1,161 | 1,066 | 1,289 | 1,597 | 0 | 1,597 | 0 | 0 |
| U. Nebraska, Lincoln and Medical Center ^d | 158 | na | na | na | 1,588 | 0 | 1,588 | 0 | 0 |
| CUNY, City C. | 159 | 1,578 | 1,460 | 2,024 | 1,578 | 0 | 1,578 | 0 | 0 |
| Idaho State U. | 160 | 1,248 | 1,136 | 1,460 | 1,467 | 0 | 1,104 | 0 | 363 |
| Western Washington U. | 161 | 760 | 1,041 | 1,971 | 1,396 | 0 | 753 | 643 | 0 |
| U. North Carolina, Wilmington | 162 | 1,369 | 1,318 | 1,541 | 1,389 | 0 | 80 | 1,309 | 0 |
| U. Missouri, Columbia | 163 | 924 | 729 | 930 | 1,388 | 0 | 1,388 | 0 | 0 |
| Vanderbilt U. and Vanderbilt U. Medical Center | 164 | 966 | 852 | 746 | 1,374 | 0 | 1,374 | 0 | 0 |
| Syracuse U. | 165 | 1,334 | 1,073 | 846 | 1,360 | 0 | 1,260 | 0 | 100 |
| Rensselaer Polytechnic Institute | 166 | 1,673 | 1,299 | 1,521 | 1,339 | 0 | 1,339 | 0 | 0 |
| Embry-Riddle Aeronautical U. | 167 | 807 | 575 | 1,338 | 1,308 | 1,308 | 0 | 0 | 0 |
| Southern Illinois U., Carbondale | 168 | 593 | 772 | 672 | 1,264 | 0 | 503 | 0 | 761 |
| Florida Gulf Coast U. | 169 | 1,344 | 1,329 | 1,896 | 1,245 | 51 | 57 | 1,046 | 91 |
| SUNY, Buffalo State U. | 170 | 821 | 834 | 1,061 | 1,220 | 0 | 373 | 0 | 847 |
| U. Massachusetts, Boston | 171 | 1,478 | 984 | 924 | 1,208 | 0 | 413 | 795 | 0 |
| Lehigh U. | 172 | 1,258 | 939 | 989 | 1,205 | 0 | 1,205 | 0 | 0 |
| U. Texas Rio Grande Valley | 173 | 745 | 605 | 879 | 1,196 | 0 | 307 | 783 | 106 |
| California State U., Monterey Bay | 174 | 867 | 837 | 1,021 | 1,166 | 0 | 105 | 1,061 | 0 |
| U. Iowa | 175 | 673 | 348 | 1,168 | 1,130 | 0 | 920 | 0 | 210 |
| Air Force Institute of Technology | 176 | 490 | 175 | 778 | 1,123 | 1,123 | 0 | 0 | 0 |
| Carnegie Mellon U. | 177 | 440 | 360 | 665 | 1,122 | 516 | 572 | 25 | 9 |
| San Francisco State U. | 178 | 1,755 i | 1,773 | 1,988 | 1,102 | 0 | 160 | 789 | 153 |
| Northern Illinois U. | 179 | 375 | 676 | 805 | 1,058 | 162 | 591 | 0 | 305 |
| California Polytechnic State U., San Luis Obispo | 180 | 963 | 973 | 1,249 | 1,038 | 0 | 0 | 1,038 | 0 |
| Indiana U.-Purdue U., Indianapolis | 181 | 679 | 583 | 972 | 1,019 | 0 | 1,019 | 0 | 0 |
| Utah State U. | 182 | 67 | 690 | 867 | 1,018 | 300 | 718 | 0 | 0 |
| Baylor U. | 183 | 496 | 408 | 873 | 985 | 503 | 279 | 140 | 63 |
| Oklahoma State U., Stillwater | 184 | 763 | 801 | 949 | 973 | 0 | 969 | 4 | 0 |
| South Dakota State U. | 185 | 602 | 604 | 721 | 936 | 0 | 936 | 0 | 0 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|---|------|-------|-------|-------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| Northwestern U. | 186 | 730 | 782 | 835 | 929 | 0 | 929 | 0 | 0 |
| U. Cincinnati | 187 | 304 | 303 | 506 | 896 | 0 | 896 | 0 | 0 |
| U. Colorado Denver ^e | 188 | na | 330 | 642 | 887 | 876 | 11 | 0 | 0 |
| Coastal Carolina U. | 189 | 998 | 509 | 478 | 880 | 235 | 147 | 498 | 0 |
| Western Michigan U. and Homer Stryker M.D. School of Medicine | 190 | 346 | 453 | 582 | 800 | 0 | 800 | 0 | 0 |
| U. Massachusetts, Lowell | 191 | 1,399 | 1,789 | 1,672 | 792 | 0 | 792 | 0 | 0 |
| Georgia State U. | 192 | 575 | 682 | 912 | 782 | 0 | 782 | 0 | 0 |
| California State U., Sacramento | 193 | 716 | 700 | 672 | 747 | 0 | 747 | 0 | 0 |
| U. Illinois, Chicago | 194 | 567 | 553 | 582 | 731 | 0 | 731 | 0 | 0 |
| U. Dayton | 195 | 352 | 461 | 798 | 728 | 534 | 194 | 0 | 0 |
| Grand Valley State U. | 196 | 287 | 331 | 484 | 697 | 0 | 0 | 0 | 697 |
| Roger Williams U. | 197 | 369 | 466 | 314 | 687 | 8 | 0 | 679 | 0 |
| U. North Carolina, Charlotte | 198 | 666 | 573 | 673 | 675 | 0 | 675 | 0 | 0 |
| Case Western Reserve U. | 199 | 478 | 493 | 572 | 667 | 0 | 667 | 0 | 0 |
| Colgate U. | 200 | 295 | 580 | 501 | 658 | 0 | 606 | 0 | 52 |
| Central Michigan U. | 201 | 177 | 316 | 582 | 647 | 323 | 118 | 196 | 10 |
| Occidental C. | 202 | 630 | 510 | 570 | 645 | 0 | 87 | 558 | 0 |
| SUNY, C. Plattsburgh | 203 | 391 | 400 | 446 | 634 | 0 | 167 | 467 | 0 |
| U. Pennsylvania | 204 | 872 | 749 | 542 | 625 | 0 | 625 | 0 | 0 |
| Delaware State U. | 205 | 215 | 247 | 615 | 590 | 0 | 106 | 484 | 0 |
| U. New Orleans | 206 | 897 | 680 | 1,005 | 582 | 0 | 577 | 5 | 0 |
| Middlebury C. | 207 | 239 | 413 | 509 | 581 | 0 | 270 | 0 | 311 |
| Saint Louis U. | 207 | 774 | 278 | 224 | 581 | 392 | 189 | 0 | 0 |
| Miami U. | 209 | 872 | 496 | 616 | 568 | 0 | 567 | 0 | 1 |
| U. Scranton | 210 | ne | ne | ne | 555 | 555 | 0 | 0 | 0 |
| Wesleyan U. | 211 | 531 | 322 | 470 | 547 | 0 | 547 | 0 | 0 |
| Alaska Pacific U. | 212 | 83 | 158 | 522 | 539 | 0 | 43 | 171 | 325 |
| American U. | 212 | 216 | 493 | 604 | 539 | 0 | 0 | 0 | 539 |
| Montclair State U. | 214 | 499 | 508 | 723 | 537 | 0 | 348 | 119 | 70 |
| Villanova U. | 215 | 460 | 162 | 165 | 528 | 0 | 311 | 217 | 0 |
| Monmouth U. | 216 | 109 | 86 | 294 | 527 | 0 | 0 | 527 | 0 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|--|------|-------|------|------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| Savannah State U. | 217 | 728 | 815 | 694 | 522 | 146 | 0 | 296 | 80 |
| Kent State U. | 218 | 439 | 296 | 357 | 520 | 124 | 389 | 0 | 7 |
| SUNY, C. of Environmental Science and Forestry | 219 | 493 | 551 | 583 | 518 | 57 | 147 | 117 | 197 |
| Towson U. | 220 | 667 | 481 | 554 | 506 | 0 | 506 | 0 | 0 |
| Illinois State U. | 221 | 394 | 381 | 394 | 504 | 0 | 504 | 0 | 0 |
| Murray State U. | 222 | 19 | 35 | 131 | 486 | 0 | 486 | 0 | 0 |
| Florida Atlantic U. | 223 | 307 | 638 | 348 | 482 | 317 | 0 | 0 | 165 |
| CUNY, York C. | 224 | 462 | 472 | 888 | 479 | 0 | 479 | 0 | 0 |
| Clark U. | 225 | 306 | 271 | 534 | 470 | 66 | 157 | 247 | 0 |
| DePaul U. | 226 | 76 | 246 | 88 | 456 | 0 | 413 | 0 | 43 |
| Pennsylvania State U., Behrend | 227 | 104 | 706 | 573 | 443 | 0 | 17 | 426 | 0 |
| U.S. Naval Academy | 228 | 771 | 613 | 516 | 438 | 0 | 0 | 438 | 0 |
| Temple U. | 229 | 410 | 449 | 458 | 431 | 0 | 431 | 0 | 0 |
| Appalachian State U. | 230 | 242 | 144 | 132 | 429 | 0 | 429 | 0 | 0 |
| U. Minnesota, Duluth | 231 | 1,609 | 199 | 277 | 427 | 0 | 427 | 0 | 0 |
| California State U., Chico | 232 | 395 | 414 | 590 | 424 | 0 | 424 | 0 | 0 |
| Brigham Young U., Provo | 233 | 122 | 287 | 537 | 420 | 0 | 420 | 0 | 0 |
| California State U., Long Beach | 234 | 492 | 220 | 370 | 406 | 0 | 406 | 0 | 0 |
| Hawaii Pacific U. | 234 | 183 | 252 | 793 | 406 | 0 | 0 | 406 | 0 |
| California State U., Fullerton | 236 | 145 | 94 | 136 | 402 | 0 | 250 | 152 | 0 |
| Bowdoin C. | 237 | 493 | 310 | 230 | 397 | 0 | 155 | 242 | 0 |
| George Washington U. | 238 | 243 | 59 | 190 | 392 | 0 | 29 | 0 | 363 |
| Georgia Southern U. | 239 | 115 | 253 | 199 | 388 | 0 | 94 | 294 | 0 |
| CUNY, Hunter C. | 240 | 219 | 162 | 251 | 365 | 0 | 0 | 0 | 365 |
| Amherst C. | 241 | 0 | 41 | 251 | 353 | 0 | 353 | 0 | 0 |
| U. Northern Colorado | 242 | 247 | 120 | 151 | 347 | 8 | 339 | 0 | 0 |
| Texas Christian U. | 243 | 197 | 121 | 258 | 346 | 0 | 126 | 173 | 47 |
| CUNY, Queens C. | 244 | 322 | 251 | 295 | 342 | 0 | 342 | 0 | 0 |
| Western Carolina U. | 244 | 255 | 233 | 226 | 342 | 0 | 27 | 315 | 0 |
| Spelman C. | 246 | 0 | 0 | 0 | 336 | 336 | 0 | 0 | 0 |
| West Texas A&M U. | 247 | 62 | 676 | 305 | 322 | 313 | 0 | 0 | 9 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|---|------|------|------|------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| Marshall U. | 248 | 201 | 233 | 170 | 320 | 0 | 0 | 0 | 320 |
| Southern Illinois U., Edwardsville | 249 | 461 | 546 | 587 | 316 | 0 | 147 | 0 | 169 |
| Union C., Schenectady | 249 | 130 | 198 | 158 | 316 | 0 | 316 | 0 | 0 |
| Johnson C. Smith U. | 251 | 0 | 0 | 0 | 308 | 0 | 0 | 308 | 0 |
| SUNY, Oswego | 251 | 43 | 58 | 55 | 308 | 55 | 253 | 0 | 0 |
| U. Alaska, Southeast | 253 | 145 | 176 | 393 | 298 | 0 | 272 | 26 | 0 |
| U. Missouri, Kansas City | 254 | 151 | 96 | 208 | 281 | 0 | 281 | 0 | 0 |
| Lincoln U., Jefferson City | 255 | 0 | 60 | 28 | 278 | 0 | 0 | 0 | 278 |
| South Carolina State U. | 255 | 213 | 234 | 256 | 278 | 0 | 278 | 0 | 0 |
| U. Texas, Dallas | 257 | 163 | 128 | 316 | 277 | 0 | 277 | 0 | 0 |
| Hobart and William Smith Colleges | 258 | 127 | 19 | 237 | 270 | 270 | 0 | 0 | 0 |
| CUNY, Advanced Science Research Center | 259 | 56 | 877 | 172 | 267 | 0 | 232 | 35 | 0 |
| U. Washington, Bothell | 259 | 371 | 331 | 351 | 267 | 145 | 48 | 24 | 50 |
| Rowan U. | 261 | 227 | 158 | 136 | 253 | 0 | 253 | 0 | 0 |
| U. Puerto Rico, Medical Sciences Campus | 262 | 136 | 265 | 264 | 250 | 0 | 250 | 0 | 0 |
| Providence C. | 263 | 124 | 144 | ne | 243 | 17 | 0 | 226 | 0 |
| New School | 264 | 414 | 143 | 131 | 239 | 0 | 0 | 0 | 239 |
| California State U., Los Angeles | 265 | 0 | 23 | 202 | 236 | 0 | 236 | 0 | 0 |
| U. San Francisco | 266 | 67 | 113 | 179 | 227 | 115 | 73 | 0 | 39 |
| Western Kentucky U. | 267 | 254 | 284 | 470 | 226 | 36 | 190 | 0 | 0 |
| U. of the Pacific | 268 | 0 | 43 | 53 | 221 | 0 | 221 | 0 | 0 |
| U. New England | 269 | 681 | 411 | 278 | 217 | 0 | 0 | 215 | 2 |
| U. Hawaii, Maui C. | 270 | ne | 144 | ne | 214 | 0 | 0 | 214 | 0 |
| Wellesley C. | 271 | 154 | 77 | 157 | 212 | 0 | 212 | 0 | 0 |
| California State U., San Bernardino | 272 | 86 | 51 | 61 | 210 | 0 | 210 | 0 | 0 |
| Barnard C. | 273 | 45 | 156 | 70 | 209 | 209 | 0 | 0 | 0 |
| Macalester C. | 274 | 268 | 172 | 142 | 206 | 0 | 206 | 0 | 0 |
| SUNY, Binghamton U. | 274 | 196 | 207 | 215 | 206 | 0 | 206 | 0 | 0 |
| North Carolina Central U. | 276 | 264 | 171 | 185 | 205 | 0 | 205 | 0 | 0 |
| California State U., East Bay | 277 | 63 | 70 | 249 | 202 | 0 | 202 | 0 | 0 |
| Heidelberg U. | 278 | 188 | 308 | 262 | 197 | 0 | 0 | 197 | 0 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|--------------------------------|------|------|------|------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| California State U., Fresno | 279 | 116 | 371 | 0 | 193 | 0 | 193 | 0 | 0 |
| U. Colorado Colorado Springs | 280 | 150 | 127 | 150 | 190 | 113 | 65 | 0 | 12 |
| Hofstra U. | 281 | 3 | 50 | 222 | 188 | 0 | 0 | 50 | 138 |
| New York U. | 281 | 133 | 71 | 148 | 188 | 0 | 188 | 0 | 0 |
| Chapman U. | 283 | 206 | 242 | 258 | 186 | 0 | 50 | 0 | 136 |
| Vassar C. | 284 | 0 | 0 | 2 | 183 | 0 | 183 | 0 | 0 |
| Missouri State U. | 285 | 72 | 146 | 280 | 179 | 55 | 124 | 0 | 0 |
| James Madison U. | 286 | 508 | 125 | 79 | 168 | 0 | 168 | 0 | 0 |
| Lewis and Clark C. | 287 | 164 | 278 | 208 | 167 | 0 | 167 | 0 | 0 |
| Trinity U. | 288 | 3 | 14 | 90 | 164 | 0 | 164 | 0 | 0 |
| Central State U. | 289 | 125 | 102 | 124 | 163 | 0 | 163 | 0 | 0 |
| U. Akron | 290 | 202 | 194 | 554 | 162 | 0 | 162 | 0 | 0 |
| C. Wooster | 291 | 21 | 107 | 155 | 154 | 0 | 154 | 0 | 0 |
| North Dakota State U. | 292 | 139 | 164 | 355 | 153 | 0 | 152 | 0 | 1 |
| U. Wisconsin-Stevens Point | 292 | 3 | 57 | 37 | 153 | 0 | 153 | 0 | 0 |
| New Mexico Highlands U. | 294 | 189 | 81 | 116 | 151 | 0 | 151 | 0 | 0 |
| U. Southern Maine | 295 | 0 | 7 | 39 | 148 | 17 | 0 | 131 | 0 |
| U. of the District of Columbia | 296 | 41 | 82 | 95 | 146 | 0 | 146 | 0 | 0 |
| U. Wisconsin-Eau Claire | 297 | 4 | 5 | 35 | 143 | 0 | 143 | 0 | 0 |
| Bentley U. | 298 | ne | ne | 13 | 138 | 0 | 0 | 138 | 0 |
| Minnesota State U., Mankato | 298 | 0 | 6 | 5 | 138 | 0 | 138 | 0 | 0 |
| U.S. Military Academy | 298 | 98 | 2 | 25 | 138 | 0 | 0 | 0 | 138 |
| Wright State U. | 298 | 127 | 104 | 132 | 138 | 0 | 138 | 0 | 0 |
| Colorado C. | 302 | 52 | 96 | 440 | 132 | 0 | 132 | 0 | 0 |
| Indiana State U. | 302 | 103 | 73 | 125 | 132 | 0 | 132 | 0 | 0 |
| Salisbury U. | 304 | 91 | 57 | 89 | 131 | 0 | 0 | 0 | 131 |
| Oregon Institute of Technology | 305 | 56 | 24 | 32 | 129 | 0 | 0 | 0 | 129 |
| Kansas State U. | 306 | 627 | 444 | 501 | 128 | 0 | 128 | 0 | 0 |
| Middle Tennessee State U. | 307 | 0 | 0 | 0 | 127 | 0 | 127 | 0 | 0 |
| St. Mary's C. Maryland | 307 | ne | ne | ne | 127 | 0 | 0 | 127 | 0 |
| U. Louisiana, Monroe | 307 | 39 | 61 | 103 | 127 | 127 | 0 | 0 | 0 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|---|------|------|-------|------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| Hamilton C. | 310 | 6 | 0 | 49 | 126 | 0 | 126 | 0 | 0 |
| Wheaton C., Wheaton | 310 | 116 | 76 | ne | 126 | 0 | 126 | 0 | 0 |
| Indiana U. Pennsylvania | 312 | 107 | 32 | 229 | 123 | 0 | 117 | 0 | 6 |
| Willamette U. | 312 | 0 | 0 | 85 | 123 | 0 | 123 | 0 | 0 |
| Whitman C. | 314 | 0 | ne | 107 | 121 | 0 | 121 | 0 | 0 |
| U. North Georgia | 315 | 55 | 59 | 62 | 119 | 0 | 119 | 0 | 0 |
| California State U., Bakersfield | 316 | 118 | 40 | 47 | 117 | 0 | 117 | 0 | 0 |
| Austin Peay State U. | 317 | 52 | 136 | 206 | 115 | 0 | 115 | 0 | 0 |
| Northeast Ohio Medical U. | 317 | 0 | 0 | 0 | 115 | 0 | 115 | 0 | 0 |
| Williams C. | 319 | 99 i | 105 i | 97 i | 110 i | 0 i | 110 i | 0 i | 0 i |
| U. South Carolina, Aiken | 320 | 119 | 0 | 0 | 107 | 0 | 21 | 86 | 0 |
| U. Puerto Rico, Humacao | 321 | 0 | 17 | 92 | 105 | 0 | 0 | 0 | 105 |
| U. North Carolina, Asheville | 322 | 36 | 93 | 96 | 100 | 90 | 10 | 0 | 0 |
| Utah Valley U. | 323 | ne | ne | 140 | 96 | 0 | 96 | 0 | 0 |
| Illinois Institute of Technology | 324 | 356 | 217 | 142 | 94 | 14 | 80 | 0 | 0 |
| U. South Carolina, Beaufort | 324 | ne | ne | ne | 94 | 0 | 0 | 94 | 0 |
| Eastern Michigan U. | 326 | 18 | 64 | 47 | 92 | 0 | 59 | 33 | 0 |
| Tarleton State U. | 326 | 428 | 431 | 219 | 92 | 0 | 92 | 0 | 0 |
| Colby C. | 328 | 175 | 144 | 349 | 85 | 0 | 85 | 0 | 0 |
| U. Denver | 328 | 145 | 31 | 47 | 85 | 23 | 62 | 0 | 0 |
| U. Richmond | 328 | 43 | 217 | 365 | 85 | 0 | 85 | 0 | 0 |
| Bates C. | 331 | 91 | 26 | 41 | 83 | 0 | 83 | 0 | 0 |
| California State U., San Marcos | 331 | 0 | 0 | 0 | 83 | 0 | 66 | 17 | 0 |
| Stockton U. | 333 | 578 | 239 | 420 | 82 | 45 | 0 | 37 | 0 |
| U. Texas, Arlington | 333 | 322 | 254 | 251 | 82 | 0 | 82 | 0 | 0 |
| William Paterson U. | 333 | 414 | 309 | 144 | 82 | 6 | 63 | 0 | 13 |
| CUNY, Brooklyn C. | 336 | 18 | 13 | 102 | 79 | 0 | 79 | 0 | 0 |
| California State Polytechnic U., Humboldt | 337 | 450 | 334 | 139 | 78 | 0 | 54 | 24 | 0 |
| Furman U. | 338 | 7 | 33 | 99 | 77 | 0 | 77 | 0 | 0 |
| Northern Michigan U. | 338 | 81 | 100 | 141 | 77 | 0 | 77 | 0 | 0 |
| Sam Houston State U. | 340 | 0 | 85 | 118 | 75 | 0 | 75 | 0 | 0 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|--|------|------|------|------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| U. Colorado Anschutz Medical Campus ^e | 340 | na | 212 | 19 | 75 | 75 | 0 | 0 | 0 |
| U. Texas, Tyler | 340 | 0 | 0 | 0 | 75 | 0 | 0 | 75 | 0 |
| St. Olaf C. | 343 | 0 | 13 | ne | 73 | 30 | 0 | 43 | 0 |
| Suffolk U. | 343 | 28 | 28 | 14 | 73 | 0 | 73 | 0 | 0 |
| U. Central Arkansas | 343 | 0 | 0 | 0 | 73 | 0 | 73 | 0 | 0 |
| Northland C. | 346 | ne | 56 i | 63 i | 71 i | 0 i | 61 i | 0 i | 10 i |
| Clarkson U. | 347 | 21 | 77 | 9 | 70 | 0 | 0 | 70 | 0 |
| Fort Valley State U. | 347 | 0 | 18 | 79 | 70 | 0 | 70 | 0 | 0 |
| U. Texas of the Permian Basin | 349 | 0 | 0 | 0 | 69 | 0 | 69 | 0 | 0 |
| St. Edward's U. | 350 | 409 | 359 | 0 | 68 | 68 | 0 | 0 | 0 |
| U. Wisconsin-Green Bay | 351 | 53 i | 48 i | 57 i | 67 i | 0 i | 67 i | 0 i | 0 i |
| Pomona C. | 352 | 103 | 42 | 108 | 66 | 0 | 66 | 0 | 0 |
| Gustavus Adolphus C. | 353 | ne | ne | ne | 65 | 0 | 65 | 0 | 0 |
| Northwest Indian C. | 354 | 43 i | 52 i | 60 | 64 i | 0 i | 0 i | 64 i | 0 i |
| U. Puget Sound | 355 | 0 | ne | 41 | 63 | 10 | 0 | 0 | 53 |
| U. New Haven | 356 | 104 | 80 | 128 | 62 | 62 | 0 | 0 | 0 |
| Virginia Commonwealth U. | 357 | 280 | 200 | 164 | 59 | 0 | 0 | 0 | 59 |
| Lafayette C. | 358 | 0 | 0 | 0 | 57 | 0 | 57 | 0 | 0 |
| Duquesne U. | 359 | 290 | 241 | 470 | 54 | 0 | 54 | 0 | 0 |
| Southern Connecticut State U. | 359 | 1 | 63 | 23 | 54 | 7 | 0 | 47 | 0 |
| U. Tulsa | 359 | 76 | 151 | 92 | 54 | 0 | 54 | 0 | 0 |
| Clafin U. | 362 | 37 | 26 | 105 | 53 | 52 | 1 | 0 | 0 |
| Mount Holyoke C. | 362 | 0 | 0 | 0 | 53 | 0 | 53 | 0 | 0 |
| Wayne State U. | 362 | 129 | 63 | 132 | 53 | 0 | 53 | 0 | 0 |
| U. Nebraska, Omaha | 365 | 0 | 16 | 15 | 52 | 0 | 52 | 0 | 0 |
| Norwich U. | 366 | ne | ne | ne | 51 | 0 | 51 | 0 | 0 |
| Texas A&M International U. | 367 | 19 | 0 | 0 | 50 | 0 | 50 | 0 | 0 |
| Smith C. | 368 | 0 | 5 | 5 | 47 | 0 | 47 | 0 | 0 |
| SUNY, Geneseo | 368 | 104 | 115 | 68 | 47 | 0 | 47 | 0 | 0 |
| U. Louisville | 370 | 169 | 171 | 138 | 46 | 36 | 10 | 0 | 0 |
| U.S. Air Force Academy | 370 | 0 | 34 | 97 | 46 | 0 | 0 | 0 | 46 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|------------------------------------|------|------|------|------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| Virginia State U. | 372 | 0 | 8 | 37 | 45 | 45 | 0 | 0 | 0 |
| Northeastern Illinois U. | 373 | 50 | 68 | 54 | 44 | 44 | 0 | 0 | 0 |
| U. San Diego | 374 | 152 | 101 | 134 | 43 | 0 | 0 | 43 | 0 |
| Bryn Mawr C. | 375 | 0 | 0 | 0 | 40 | 0 | 40 | 0 | 0 |
| Pennsylvania State U., Harrisburg | 376 | 3 | 22 | 3 | 39 | 39 | 0 | 0 | 0 |
| Texas A&M U.-San Antonio | 377 | ne | ne | 7 | 38 | 0 | 0 | 0 | 38 |
| Eastern Washington U. | 378 | 58 | 46 | 16 | 37 | 0 | 37 | 0 | 0 |
| Citadel Military C. South Carolina | 379 | 0 | 0 | 0 | 35 | 8 | 15 | 12 | 0 |
| Dillard U. | 380 | 0 | 87 | 89 | 33 | 0 | 33 | 0 | 0 |
| Tennessee Technological U. | 381 | 22 | 21 | 13 | 31 | 0 | 31 | 0 | 0 |
| U. North Carolina, Greensboro | 381 | 0 | 0 | 121 | 31 | 0 | 31 | 0 | 0 |
| Nevada State C. | 383 | ne | ne | 82 | 26 | 0 | 0 | 0 | 26 |
| Rockefeller U. | 383 | 466 | 334 | 524 | 26 | 0 | 0 | 0 | 26 |
| CUNY, Baruch C. | 385 | 137 | 8 | 0 | 24 | 0 | 0 | 24 | 0 |
| Albion C. | 386 | 0 | 26 | 25 | 23 | 0 | 23 | 0 | 0 |
| CUNY, Lehman C. | 387 | 35 | 0 | 44 | 19 | 0 | 19 | 0 | 0 |
| Oberlin C. | 387 | 51 | 25 | ne | 19 | 9 | 10 | 0 | 0 |
| Troy U. | 389 | 47 | 31 | 67 | 18 | 0 | 0 | 0 | 18 |
| U. of Mary Washington | 389 | 38 | 29 | 28 | 18 | 0 | 18 | 0 | 0 |
| Grambling State U. | 391 | 0 | 0 | 24 | 16 | 16 | 0 | 0 | 0 |
| Skidmore C. | 391 | 577 | 202 | 157 | 16 | 0 | 16 | 0 | 0 |
| CUNY, Graduate Center | 393 | 0 | 0 | 3 | 15 | 0 | 15 | 0 | 0 |
| Eastern Connecticut State U. | 394 | 0 | 0 | 6 | 12 | 0 | 0 | 12 | 0 |
| Seattle U. | 395 | 42 | 54 | 0 | 10 | 0 | 10 | 0 | 0 |
| Stephen F. Austin State U. | 395 | 1 | 0 | 23 | 10 | 0 | 10 | 0 | 0 |
| Haverford C. | 397 | 103 | 79 | 31 | 9 | 0 | 9 | 0 | 0 |
| U. North Florida | 397 | 0 | 11 | 25 | 9 | 0 | 0 | 0 | 9 |
| Loyola Marymount U. | 399 | 32 | 24 | 5 | 8 | 0 | 8 | 0 | 0 |
| Bryant U. | 400 | ne | ne | ne | 7 | 7 | 0 | 0 | 0 |
| U. of the Incarnate Word | 401 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 |
| U. Virginia's C. Wise | 401 | ne | 0 | 0 | 6 | 0 | 6 | 0 | 0 |

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2023 geosciences, atmospheric sciences, and ocean sciences: FYs 2020–23 and by subfield for FY 2023

(Dollars in thousands)

| Institution | Rank | 2020 | 2021 | 2022 | 2023 | | | | |
|---------------------------------|------|-------|-------|-------|---|-------------------------------------|-------------------------------|------------------------------------|---|
| | | | | | All geosciences, atmospheric sciences, and ocean sciences | Atmospheric science and meteorology | Geological and earth sciences | Ocean sciences and marine sciences | Geosciences, atmospheric sciences, and ocean sciences nec |
| Hope C. | 403 | 0 | 18 | 0 | 5 | 0 | 5 | 0 | 0 |
| U. of St. Thomas (MN) | 403 | 0 | 222 | 7 | 5 | 0 | 5 | 0 | 0 |
| Claremont McKenna C. | 405 | 29 | 17 | 4 | 4 | 0 | 0 | 0 | 4 |
| St. Cloud State U. | 405 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| U.S. Coast Guard Academy | 407 | ne | ne | ne | 3 | 0 | 0 | 3 | 0 |
| Des Moines U. | 408 | 1 | 285 | 444 | 2 | 0 | 2 | 0 | 0 |
| Fort Lewis C. | 408 | 34 | 24 | 3 | 2 | 0 | 2 | 0 | 0 |
| Prairie View A&M U. | 408 | 5 | 0 | 0 | 2 | 0 | 2 | 0 | 0 |
| U. Wisconsin-Oshkosh | 408 | 115 | 114 | 24 | 2 | 0 | 2 | 0 | 0 |
| Alfred U. | 412 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 |
| Franklin and Marshall C. | 412 | 37 | 0 | 2 | 1 | 0 | 0 | 0 | 1 |
| West Chester U. Pennsylvania | 412 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| All other surveyed institutions | - | 9,907 | 3,514 | 2,635 | 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 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.

^b Johns Hopkins University includes the Applied Physics Laboratory, with \$56,171 thousand in federally financed R&D expenditures in geosciences, atmospheric sciences, and ocean sciences in FY 2023.

^c 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.

^d The University of Nebraska, Lincoln and Medical Center includes expenditures from the University of Nebraska, Lincoln; University of Nebraska, Medical Center; and University of Nebraska, Central Administration campuses. Due to a realignment within the University of Nebraska system that occurred on 22 June 2023, the three campuses fall under the leadership of one president. Prior to FY 2023, these 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 2023 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.