

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution             | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| United States   | 6,708,143                           | 3,728,439                    | 1,207,117   | 1,182,182                  | 590,405                | 5,695,008                           | 3,283,593                    | 960,803     | 996,237                    | 454,375                |
| Alabama   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Alabama A&M U.  | 138                                 | 102                          | 17          | 19                         | 0                      | 138                                 | 102                          | 17          | 19                         | 0                      |
| Alabama State U.  | 124                                 | 124                          | 0           | 0                          | 0                      | 124                                 | 124                          | 0           | 0                          | 0                      |
| Auburn U., Auburn   | 3,337                               | 1,926                        | 659         | 205                        | 547                    | 3,099                               | 1,712                        | 635         | 205                        | 547                    |
| Jacksonville State U.                                     | 97                                  | 97                           | 0           | 0                          | 0                      | 97                                  | 97                           | 0           | 0                          | 0                      |
| U. Alabama, Birmingham                                    | 73,027                              | 39,093                       | 25,635      | 6,855                      | 1,444                  | 67,796                              | 38,936                       | 22,710      | 4,776                      | 1,374                  |
| U. Alabama, Huntsville                                    | 4,373                               | 3,544                        | 608         | 220                        | 1                      | 4,373                               | 3,544                        | 608         | 220                        | 1                      |
| U. Alabama, Tuscaloosa                                    | 4,070                               | 2,165                        | 1,483       | 211                        | 211                    | 3,858                               | 2,108                        | 1,413       | 185                        | 152                    |
| U. South Alabama  | 2,156                               | 877                          | 0           | 1                          | 1,278                  | 1,523                               | 638                          | 0           | 1                          | 884                    |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Tuskegee U.   | 1,255                               | 979                          | 85          | 191                        | 0                      | 1,255                               | 979                          | 85          | 191                        | 0                      |
| Alaska  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| U. Alaska, Anchorage                                      | 2,118                               | 108                          | NA          | 55                         | 1,955                  | 2,118                               | 108                          | 0           | 55                         | 1,955                  |
| U. Alaska, Fairbanks                                      | 7,059                               | 4,315                        | 1,986       | NA                         | 758                    | 7,059                               | 4,315                        | 1,986       | 0                          | 758                    |
| U. Alaska, Southeast                                      | 159                                 | 0                            | 0           | 0                          | 159                    | 159                                 | 0                            | 0           | 0                          | 159                    |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Alaska Pacific U.   | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Arizona   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Arizona State U.  | 64,661                              | 19,839                       | 27,339      | 14,293                     | 3,190                  | 60,233                              | 17,506                       | 26,597      | 13,755                     | 2,375                  |
| Dine C.   | 317                                 | 317                          | 0           | 0                          | 0                      | 317                                 | 317                          | 0           | 0                          | 0                      |
| Northern Arizona U.                                       | 4,265                               | 1,742                        | 200         | 1,139                      | 1,184                  | 3,809                               | 1,457                        | 181         | 998                        | 1,173                  |
| U. Arizona  | 46,541                              | 26,863                       | 6,931       | 10,916                     | 1,831                  | 45,620                              | 26,281                       | 6,897       | 10,630                     | 1,812                  |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Southwest C. of Naturopathic Medicine and Health Sciences | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Arkansas  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Arkansas State U., Jonesboro                              | 596                                 | 569                          | 0           | 0                          | 27                     | 559                                 | 532                          | 0           | 0                          | 27                     |
| U. Arkansas for Medical Sciences                          | 8,105                               | 6,220                        | 1,058       | 808                        | 19                     | 7,796                               | 5,958                        | 1,021       | 798                        | 19                     |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution    | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|--|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|  | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| U. Arkansas, Fayetteville                        | 7,558                               | 6,166                        | 633         | 407                        | 352                    | 5,531                               | 4,772                        | 408         | 173                        | 178                    |
| U. Arkansas, Little Rock                         | 2,279                               | 2,156                        | 123         | 0                          | 0                      | 2,245                               | 2,136                        | 109         | 0                          | 0                      |
| U. Arkansas, Pine Bluff                          | 467                                 | 290                          | 0           | 0                          | 177                    | 467                                 | 290                          | 0           | 0                          | 177                    |
| U. Central Arkansas                              | 103                                 | 103                          | 0           | 0                          | 0                      | 103                                 | 103                          | 0           | 0                          | 0                      |
| California                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| California Polytechnic State U., San Luis Obispo | 1,313                               | 607                          | 114         | 592                        | 0                      | 836                                 | 244                          | 0           | 592                        | 0                      |
| California State Polytechnic U., Pomona          | 16                                  | 16                           | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| California State U., Bakersfield                 | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| California State U., Channel Islands             | 114                                 | 114                          | 0           | 0                          | 0                      | 114                                 | 114                          | 0           | 0                          | 0                      |
| California State U., Chico                       | 140                                 | 140                          | 0           | 0                          | 0                      | 140                                 | 140                          | 0           | 0                          | 0                      |
| California State U., Dominguez Hills             | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| California State U., Fresno                      | 289                                 | 242                          | 30          | 0                          | 17                     | 62                                  | 45                           | 0           | 0                          | 17                     |
| California State U., Fullerton                   | 247                                 | 216                          | 26          | 4                          | 1                      | 236                                 | 205                          | 26          | 4                          | 1                      |
| California State U., Long Beach                  | 814                                 | 109                          | 144         | 477                        | 84                     | 239                                 | 69                           | 115         | 55                         | 0                      |
| California State U., Los Angeles                 | 568                                 | 413                          | 0           | 155                        | 0                      | 568                                 | 413                          | 0           | 155                        | 0                      |
| California State U., Maritime Academy            | 626                                 | 563                          | 0           | 0                          | 63                     | 0                                   | 0                            | 0           | 0                          | 0                      |
| California State U., Monterey Bay                | 509                                 | 488                          | 0           | 21                         | 0                      | 317                                 | 296                          | 0           | 21                         | 0                      |
| California State U., Northridge                  | 387                                 | 333                          | 0           | 54                         | 0                      | 343                                 | 333                          | 0           | 10                         | 0                      |
| California State U., Sacramento                  | 710                                 | 40                           | 668         | 2                          | 0                      | 39                                  | 39                           | 0           | 0                          | 0                      |
| California State U., San Bernardino              | 1,152                               | 892                          | 55          | 50                         | 155                    | 737                                 | 582                          | 0           | 0                          | 155                    |
| California State U., San Marcos                  | 493                                 | 162                          | 0           | 331                        | 0                      | 485                                 | 154                          | 0           | 331                        | 0                      |
| California State U., Stanislaus                  | 21                                  | 21                           | 0           | 0                          | 0                      | 21                                  | 21                           | 0           | 0                          | 0                      |
| Humboldt State U.                                | 1,775                               | 235                          | 38          | 62                         | 1,440                  | 7                                   | 0                            | 7           | 0                          | 0                      |
| Naval Postgraduate School                        | 742                                 | 155                          | 587         | 0                          | 0                      | 742                                 | 155                          | 587         | 0                          | 0                      |
| San Diego State U.                               | 4,817                               | 3,341                        | 191         | 733                        | 552                    | 4,592                               | 3,249                        | 191         | 615                        | 537                    |
| San Francisco State U.                           | 2,057                               | 1,759                        | 239         | 59                         | 0                      | 1,743                               | 1,695                        | 0           | 48                         | 0                      |
| San Jose State U.                                | 2,842                               | 1,819                        | 779         | 139                        | 105                    | 2,029                               | 1,006                        | 779         | 139                        | 105                    |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| U. California, Berkeley                       | 64,422                              | 36,314 i                     | 12,126 i    | 8,472 i                    | 7,510 i                | 45,653                              | 25,983 i                     | 8,651 i     | 6,108 i                    | 4,911 i                |
| U. California, Davis                          | 76,108                              | 42,806 i                     | 14,507 i    | 10,184 i                   | 8,611 i                | 65,464                              | 37,256 i                     | 12,408 i    | 8,758 i                    | 7,042 i                |
| U. California, Irvine                         | 25,096                              | 21,281 i                     | 1,305 i     | 2,382 i                    | 128 i                  | 22,547                              | 19,166 i                     | 1,126 i     | 2,255 i                    | 0 i                    |
| U. California, Los Angeles                    | 115,858                             | 63,964 i                     | 22,508 i    | 15,770 i                   | 13,616 i               | 94,026                              | 53,515 i                     | 17,820 i    | 12,580 i                   | 10,111 i               |
| U. California, Merced                         | 1,383                               | 571 i                        | 204 i       | 142 i                      | 466 i                  | 1,035                               | 571 i                        | 204 i       | 142 i                      | 118 i                  |
| U. California, Office of the President        | 61                                  | 0 i                          | 0 i         | 0 i                        | 61 i                   | 61                                  | 0 i                          | 0 i         | 0 i                        | 61 i                   |
| U. California, Riverside                      | 11,821                              | 11,128 i                     | 302 i       | 391 i                      | 0 i                    | 9,010                               | 8,422 i                      | 197 i       | 391 i                      | 0 i                    |
| U. California, San Diego                      | 93,150                              | 52,074 i                     | 17,769 i    | 12,429 i                   | 10,878 i               | 70,503                              | 40,126 i                     | 13,361 i    | 9,431 i                    | 7,585 i                |
| U. California, San Francisco                  | 140,015                             | 77,789 i                     | 26,938 i    | 18,854 i                   | 16,434 i               | 108,487                             | 61,744 i                     | 20,560 i    | 14,514 i                   | 11,669 i               |
| U. California, Santa Barbara                  | 20,848                              | 15,742 i                     | 1,872 i     | 681 i                      | 2,553 i                | 15,321                              | 12,427 i                     | 1,872 i     | 681 i                      | 341 i                  |
| U. California, Santa Cruz                     | 11,302                              | 8,054 i                      | 1,907 i     | 1,341 i                    | 0 i                    | 10,398                              | 7,268 i                      | 1,789 i     | 1,341 i                    | 0 i                    |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Azusa Pacific U.                              | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Biola U.                                      | 91 i                                | 47 i                         | 14 i        | 23 i                       | 7 i                    | 78 i                                | 43 i                         | 10 i        | 20 i                       | 5 i                    |
| California Institute of Technology            | 37,257                              | 31,131                       | 1,335       | 4,062                      | 729                    | 34,421                              | 28,666                       | 1,281       | 3,761                      | 713                    |
| California Lutheran U.                        | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Chapman U.                                    | 1,044                               | 982                          | 0           | 62                         | 0                      | 1,011                               | 949                          | 0           | 62                         | 0                      |
| Charles R. Drew U. of Medicine and Science    | 1,237                               | 81                           | 0           | 1,156                      | 0                      | 1,237                               | 81                           | 0           | 1,156                      | 0                      |
| Claremont Graduate U.                         | 430                                 | 75                           | 88          | 113                        | 154                    | 214                                 | 18                           | 0           | 113                        | 83                     |
| Claremont McKenna C.                          | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Harvey Mudd C.                                | 146                                 | 124                          | 0           | 0                          | 22                     | 146                                 | 124                          | 0           | 0                          | 22                     |
| Keck Graduate Institute                       | 389 i                               | 122 i                        | 256 i       | 0 i                        | 11 i                   | 389 i                               | 122 i                        | 256 i       | 0 i                        | 11 i                   |
| La Sierra U.                                  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Loma Linda U.                                 | 860 i                               | 576 i                        | 0 i         | 75 i                       | 209 i                  | 602 i                               | 572 i                        | 0 i         | 30 i                       | 0 i                    |
| Loyola Marymount U.                           | 239                                 | 239                          | 0           | 0                          | 0                      | 239                                 | 239                          | 0           | 0                          | 0                      |
| Marshall B. Ketchum U.                        | 0 i                                 | 0 i                          | 0 i         | 0 i                        | 0 i                    | 0 i                                 | 0 i                          | 0 i         | 0 i                        | 0 i                    |
| Mills C.                                      | 226                                 | 0                            | 0           | 226                        | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Occidental C.                                 | 213                                 | 137                          | 0           | 76                         | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Pepperdine U.                                 | NA                                  | NA                           | NA          | NA                         | NA                     | NA                                  | NA                           | NA          | NA                         | NA                     |
| Pomona C.                                     | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Santa Clara U.                                | 76                                  | 36                           | 0           | 0                          | 40                     | 33                                  | 33                           | 0           | 0                          | 0                      |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution  | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|--|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|  | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Scripps Research Institute                     | 44,230                              | 17,106                       | 16,684      | 10,284                     | 156                    | 43,374                              | 16,733                       | 16,684      | 9,827                      | 130                    |
| Stanford U.                                    | 78,624                              | 52,632                       | 7,765       | 7,518                      | 10,709                 | 57,949                              | 40,729                       | 3,874       | 5,955                      | 7,391                  |
| Touro U.                                       | 203                                 | 203                          | 0           | 0                          | 0                      | 203                                 | 203                          | 0           | 0                          | 0                      |
| U. of the Pacific                              | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. San Diego                                   | 505                                 | 293                          | 0           | 212                        | 0                      | 406                                 | 194                          | 0           | 212                        | 0                      |
| U. San Francisco                               | 96                                  | 40                           | 0           | 40                         | 16                     | 48                                  | 32                           | 0           | 0                          | 16                     |
| U. Southern California                         | 126,571                             | 76,872                       | 20,686      | 23,972                     | 5,041                  | 95,496                              | 58,227                       | 15,587      | 17,890                     | 3,792                  |
| Western U. of Health Sciences                  | 294                                 | 288                          | 0           | 0                          | 6                      | 294                                 | 288                          | 0           | 0                          | 6                      |
| Colorado                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Colorado School of Mines                       | 8,154                               | 5,252                        | 2,417       | 398                        | 87                     | 7,930                               | 5,166                        | 2,279       | 398                        | 87                     |
| Colorado State U., Fort Collins                | 25,766                              | 20,419                       | 2,936       | 1,551                      | 860                    | 24,023                              | 19,188                       | 2,732       | 1,374                      | 729                    |
| Colorado State U., Pueblo                      | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Fort Lewis C.                                  | 31                                  | 31                           | 0           | 0                          | 0                      | 31                                  | 31                           | 0           | 0                          | 0                      |
| U. Colorado Boulder                            | 54,077                              | 32,314                       | 11,110      | 3,087                      | 7,566                  | 42,554                              | 26,954                       | 6,633       | 2,613                      | 6,354                  |
| U. Colorado Colorado Springs                   | 170                                 | 170                          | 0           | 0                          | 0                      | 156                                 | 156                          | 0           | 0                          | 0                      |
| U. Colorado Denver and Anschutz Medical Campus | 53,983                              | 24,786                       | 4,736       | 18,636                     | 5,825                  | 44,216                              | 21,183                       | 3,156       | 15,402                     | 4,475                  |
| U. Northern Colorado                           | 13                                  | 13                           | 0           | 0                          | 0                      | 13                                  | 13                           | 0           | 0                          | 0                      |
| U.S. Air Force Academy                         | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Private  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Colorado C.                                    | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Denver                                      | 5,457                               | 1,788                        | 966         | 2,696                      | 7                      | 4,959                               | 1,637                        | 867         | 2,448                      | 7                      |
| Connecticut                                    |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Central Connecticut State U.                   | 14                                  | 14                           | 0           | 0                          | 0                      | 14                                  | 14                           | 0           | 0                          | 0                      |
| Eastern Connecticut State U.                   | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Southern Connecticut State U.                  | 125                                 | 48                           | 0           | 77                         | 0                      | 123                                 | 46                           | 0           | 77                         | 0                      |
| U. Connecticut                                 | 23,659                              | 16,262                       | 2,228       | 4,215                      | 954                    | 19,155                              | 13,737                       | 1,625       | 3,420                      | 373                    |
| Private  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Connecticut C.                                 | 5                                   | 5                            | 0           | 0                          | 0                      | 5                                   | 5                            | 0           | 0                          | 0                      |
| Fairfield U.                                   | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Trinity C., Hartford                           | 57                                  | 57                           | 0           | 0                          | 0                      | 57                                  | 57                           | 0           | 0                          | 0                      |











TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Bates C.                                      | 21                                  | 21                           | 0           | 0                          | 0                      | 21                                  | 21                           | 0           | 0                          | 0                      |
| Bowdoin C.                                    | 174                                 | 34                           | 0           | 140                        | 0                      | 174                                 | 34                           | 0           | 140                        | 0                      |
| Colby C.                                      | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. New England                                | 275                                 | 121                          | 58          | 96                         | 0                      | 249                                 | 121                          | 58          | 70                         | 0                      |
| Maryland                                      |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Bowie State U.                                | 19                                  | 19                           | 0           | 0                          | 0                      | 19                                  | 19                           | 0           | 0                          | 0                      |
| Morgan State U.                               | 1,136                               | 867                          | 173         | 96                         | 0                      | 1,120                               | 867                          | 173         | 80                         | 0                      |
| Salisbury U.                                  | 62                                  | 62                           | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Towson U.                                     | 335                                 | 257                          | 60          | 0                          | 18                     | 317                                 | 257                          | 60          | 0                          | 0                      |
| U. Baltimore                                  | 1,862                               | 404                          | 0           | 734                        | 724                    | 1,862                               | 404                          | 0           | 734                        | 724                    |
| U. Maryland <sup>a</sup>                      | 123,215                             | 92,794                       | 13,736      | 3,913                      | 12,772                 | 99,294                              | 75,867                       | 11,086      | 3,241                      | 9,100                  |
| U. Maryland Center for Environmental Science  | 3,772                               | 2,893                        | 168         | 106                        | 605                    | 3,282                               | 2,642                        | 166         | 106                        | 368                    |
| U. Maryland, Baltimore County                 | 5,331                               | 4,755                        | 257         | 97                         | 222                    | 5,032                               | 4,567                        | 161         | 82                         | 222                    |
| U. Maryland, Eastern Shore                    | NA                                  | NA                           | NA          | NA                         | NA                     | NA                                  | NA                           | NA          | NA                         | NA                     |
| U.S. Naval Academy                            | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Uniformed Services U. of the Health Sciences  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Johns Hopkins U. <sup>b</sup>                 | 176,601                             | 98,411                       | 17,970      | 37,068                     | 23,152                 | 135,783                             | 80,712                       | 12,535      | 25,995                     | 16,541                 |
| Massachusetts                                 |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| U. Massachusetts, Amherst                     | 15,385                              | 11,437                       | 2,704       | 870                        | 374                    | 11,768                              | 10,166                       | 384         | 844                        | 374                    |
| U. Massachusetts, Boston                      | 4,188                               | 2,783                        | 475         | 665                        | 265                    | 2,883                               | 1,674                        | 332         | 631                        | 246                    |
| U. Massachusetts, central office              | 168                                 | 39                           | 22          | 107                        | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Massachusetts, Dartmouth                   | 518                                 | 157                          | 197         | 46                         | 118                    | 266                                 | 157                          | 71          | 32                         | 6                      |
| U. Massachusetts, Lowell                      | 7,332                               | 2,733                        | 3,542       | 1,042                      | 15                     | 4,215                               | 2,667                        | 563         | 970                        | 15                     |
| U. Massachusetts, Medical School              | 28,401                              | 18,918                       | 1,964       | 7,514                      | 5                      | 27,821                              | 18,549                       | 1,906       | 7,361                      | 5                      |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Amherst C.                                    | 78                                  | 36                           | 0           | 42                         | 0                      | 36                                  | 36                           | 0           | 0                          | 0                      |
| Babson C.                                     | NA                                  | NA                           | NA          | NA                         | NA                     | 0                                   | 0                            | 0           | 0                          | 0                      |
| Boston C.                                     | 9,368                               | 6,244                        | 266         | 1,437                      | 1,421                  | 7,886                               | 5,924                        | 266         | 1,370                      | 326                    |



TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution                 | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Wayne State U.  | 11,239                              | 7,690                        | 1,442       | 2,107                      | 0                      | 9,640                               | 6,741                        | 905         | 1,994                      | 0                      |
| Western Michigan U. and Homer Stryker M.D. School of Medicine | 1,055                               | 633                          | 190         | 106                        | 126                    | 983                                 | 629                          | 135         | 93                         | 126                    |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Albion C.   | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Andrews U.  | 85                                  | 85                           | 0           | 0                          | 0                      | 85                                  | 85                           | 0           | 0                          | 0                      |
| Calvin U.   | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Hope C.   | 22                                  | 22                           | 0           | 0                          | 0                      | 22                                  | 22                           | 0           | 0                          | 0                      |
| Kettering U.  | 48                                  | 48                           | 0           | 0                          | 0                      | 48                                  | 48                           | 0           | 0                          | 0                      |
| Lawrence Technological U.                                     | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Detroit Mercy  | 529                                 | 529                          | 0           | 0                          | 0                      | 529                                 | 529                          | 0           | 0                          | 0                      |
| Van Andel Research Institute                                  | 1,637                               | 817                          | 0           | 820                        | 0                      | 1,637                               | 817                          | 0           | 820                        | 0                      |
| Minnesota   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Minnesota State U., Mankato                                   | 350 i                               | 191 i                        | 68 i        | 47 i                       | 44 i                   | 309 i                               | 172 i                        | 58 i        | 42 i                       | 37 i                   |
| St. Cloud State U.  | 140                                 | 116                          | 0           | 0                          | 24                     | 115                                 | 114                          | 0           | 0                          | 1                      |
| U. Minnesota, Duluth  | 216                                 | 113 i                        | 42 i        | 37 i                       | 24 i                   | 43 i                                | 27 i                         | 6 i         | 6 i                        | 4 i                    |
| U. Minnesota, Morris  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Minnesota, Twin Cities                                     | 87,794                              | 49,275 i                     | 16,763 i    | 11,764 i                   | 9,992 i                | 74,276                              | 42,275 i                     | 14,077 i    | 9,935 i                    | 7,989 i                |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Augsburg U.   | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| C. of Saint Benedict  | 0 i                                 | 0 i                          | 0 i         | 0 i                        | 0 i                    | 0 i                                 | 0 i                          | 0 i         | 0 i                        | 0 i                    |
| Carleton C.   | 243                                 | 243                          | 0           | 0                          | 0                      | 243                                 | 243                          | 0           | 0                          | 0                      |
| Macalester C.   | 180                                 | 180                          | 0           | 0                          | 0                      | 180                                 | 180                          | 0           | 0                          | 0                      |
| Saint John's U., Collegeville                                 | 0 i                                 | 0 i                          | 0 i         | 0 i                        | 0 i                    | 0 i                                 | 0 i                          | 0 i         | 0 i                        | 0 i                    |
| St. Olaf C.   | 5                                   | 5                            | 0           | 0                          | 0                      | 5                                   | 5                            | 0           | 0                          | 0                      |
| U. of St. Thomas (MN)   | 54                                  | 54                           | 0           | 0                          | 0                      | 4                                   | 4                            | 0           | 0                          | 0                      |
| Mississippi   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Alcorn State U.   | 313                                 | 313                          | 0           | 0                          | 0                      | 313                                 | 313                          | 0           | 0                          | 0                      |
| Jackson State U.  | 1,415                               | 1,371                        | 0           | 0                          | 44                     | 1,415                               | 1,371                        | 0           | 0                          | 44                     |
| Mississippi State U.  | 14,287                              | 7,280                        | 4,993       | 1,821                      | 193                    | 13,100                              | 7,116                        | 4,907       | 884                        | 193                    |
| U. Mississippi  | 7,283                               | 6,270                        | 405         | 603                        | 5                      | 7,149                               | 6,138                        | 405         | 601                        | 5                      |



TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution       | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |  |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|--|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |  |
| Nevada  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Desert Research Institute                           | 953                                 | 342                          | 424         | 20                         | 167                    | 598                                 | 342                          | 96          | 0                          | 160                    |  |
| U. Nevada, Las Vegas                                | 5,297                               | 4,802                        | 199         | 221                        | 75                     | 5,059                               | 4,779                        | 175         | 30                         | 75                     |  |
| U. Nevada, Reno                                     | 8,982                               | 6,917                        | 852         | 464                        | 749                    | 8,298                               | 6,425                        | 802         | 322                        | 749                    |  |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Roseman U. of Health Sciences                       | 52 i                                | 0 i                          | 0 i         | 52 i                       | 0 i                    | 0 i                                 | 0 i                          | 0 i         | 0 i                        | 0 i                    |  |
| New Hampshire                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Keene State C.                                      | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| U. New Hampshire                                    | 12,130                              | 7,548                        | 1,823       | 2,181                      | 578                    | 11,863                              | 7,281                        | 1,823       | 2,181                      | 578                    |  |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Dartmouth C. and Dartmouth Hitchcock Medical Center | 17,914                              | 14,108                       | 1,587       | 1,375                      | 844                    | 16,726                              | 13,735                       | 1,427       | 972                        | 592                    |  |
| New Jersey  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Montclair State U.                                  | 2,235                               | 455                          | 11          | 1,769                      | 0                      | 160                                 | 145                          | 0           | 15                         | 0                      |  |
| New Jersey City U.                                  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| New Jersey Institute of Technology                  | 32,942                              | 5,323                        | 21,382      | 1,175                      | 5,062                  | 32,447                              | 4,944                        | 21,276      | 1,165                      | 5,062                  |  |
| Rowan U.  | 604                                 | 468                          | 118         | 18                         | 0                      | 377                                 | 241                          | 118         | 18                         | 0                      |  |
| Rutgers, State U. New Jersey, Camden                | 81                                  | 81                           | 0           | 0                          | 0                      | 81                                  | 81                           | 0           | 0                          | 0                      |  |
| Rutgers, State U. New Jersey, New Brunswick         | 47,749                              | 30,854                       | 7,172       | 6,841                      | 2,882                  | 43,039                              | 28,760                       | 5,573       | 6,065                      | 2,641                  |  |
| Rutgers, State U. New Jersey, Newark                | 1,377                               | 1,282                        | 9           | 0                          | 86                     | 1,283                               | 1,188                        | 9           | 0                          | 86                     |  |
| Stockton U.   | 43                                  | 0                            | 43          | 0                          | 0                      | 43                                  | 0                            | 43          | 0                          | 0                      |  |
| William Paterson U.                                 | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Monmouth U.   | 665                                 | 153                          | 0           | 512                        | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| Princeton U.  | 30,139                              | 26,847                       | 660         | 1,828                      | 804                    | 29,679                              | 26,465                       | 582         | 1,828                      | 804                    |  |
| Rider U.  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| Seton Hall U.                                       | 230                                 | 230                          | 0           | 0                          | 0                      | 230                                 | 230                          | 0           | 0                          | 0                      |  |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution            | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|--|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|  | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Stevens Institute of Technology                          | 4,902                               | 4,715                        | 173         | 14                         | 0                      | 4,835                               | 4,670                        | 161         | 4                          | 0                      |
| New Mexico   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| New Mexico Institute of Mining and Technology            | 2,055                               | 1,248                        | 797         | 0                          | 10                     | 2,055                               | 1,248                        | 797         | 0                          | 10                     |
| New Mexico State U.                                      | 8,675                               | 3,436                        | 4,106       | 775                        | 358                    | 8,308                               | 3,131                        | 4,057       | 775                        | 345                    |
| U. New Mexico  | 21,696                              | 12,288                       | 3,177       | 4,328                      | 1,903                  | 19,826                              | 12,087                       | 3,039       | 3,332                      | 1,368                  |
| New York   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| CUNY, Advanced Science Research Center                   | 1,410                               | 1,410                        | 0           | 0                          | 0                      | 1,410                               | 1,410                        | 0           | 0                          | 0                      |
| CUNY, Baruch C.  | 80                                  | 39                           | 0           | 41                         | 0                      | 49                                  | 8                            | 0           | 41                         | 0                      |
| CUNY, Brooklyn C.  | 69                                  | 63                           | 6           | 0                          | 0                      | 45                                  | 45                           | 0           | 0                          | 0                      |
| CUNY, C. Staten Island                                   | 311                                 | 104                          | 35          | 172                        | 0                      | 236                                 | 104                          | 35          | 97                         | 0                      |
| CUNY, City C.  | 5,419                               | 4,526                        | 516         | 377                        | 0                      | 4,502                               | 4,257                        | 118         | 127                        | 0                      |
| CUNY, Graduate Center                                    | 1,423                               | 502                          | 0           | 921                        | 0                      | 1,199                               | 328                          | 0           | 871                        | 0                      |
| CUNY, Graduate School of Public Health and Health Policy | 428                                 | 204                          | 0           | 224                        | 0                      | 424                                 | 200                          | 0           | 224                        | 0                      |
| CUNY, Hunter C.  | 2,169                               | 1,192                        | 196         | 745                        | 36                     | 2,094                               | 1,122                        | 196         | 745                        | 31                     |
| CUNY, John Jay C. of Criminal Justice                    | 1,596                               | 1,345                        | 85          | 166                        | 0                      | 1,057                               | 972                          | 85          | 0                          | 0                      |
| CUNY, Lehman C.  | 99                                  | 99                           | 0           | 0                          | 0                      | 99                                  | 99                           | 0           | 0                          | 0                      |
| CUNY, Medgar Evers C.                                    | 112                                 | 112                          | 0           | 0                          | 0                      | 112                                 | 112                          | 0           | 0                          | 0                      |
| CUNY, New York City C. of Technology                     | 152                                 | 152                          | 0           | 0                          | 0                      | 152                                 | 152                          | 0           | 0                          | 0                      |
| CUNY, Queens C.  | 2,170                               | 734                          | 405         | 1,031                      | 0                      | 2,058                               | 622                          | 405         | 1,031                      | 0                      |
| CUNY, system office                                      | 553                                 | 553                          | 0           | 0                          | 0                      | 553                                 | 553                          | 0           | 0                          | 0                      |
| CUNY, York C.  | 105                                 | 0                            | 0           | 105                        | 0                      | 105                                 | 0                            | 0           | 105                        | 0                      |
| SUNY, Binghamton U.                                      | 6,584                               | 3,155                        | 3,263       | 166                        | 0                      | 4,660                               | 3,139                        | 1,355       | 166                        | 0                      |
| SUNY, Buffalo State                                      | 48                                  | 48                           | 0           | 0                          | 0                      | 48                                  | 48                           | 0           | 0                          | 0                      |
| SUNY, C. Brockport                                       | 55                                  | 0                            | 0           | 0                          | 55                     | 0                                   | 0                            | 0           | 0                          | 0                      |
| SUNY, C. of Environmental Science and Forestry           | 743                                 | 554                          | 182         | 7                          | 0                      | 518                                 | 412                          | 99          | 7                          | 0                      |
| SUNY, C. of Optometry                                    | 18                                  | 18                           | 0           | 0                          | 0                      | 18                                  | 18                           | 0           | 0                          | 0                      |



TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution  | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|--|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|  | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| New School   | 2,859                               | 0                            | 881         | 1,777                      | 201                    | 881                                 | 0                            | 881         | 0                          | 0                      |
| New York Institute of Technology   | 96                                  | 50                           | 0           | 46                         | 0                      | 96                                  | 50                           | 0           | 46                         | 0                      |
| New York Medical C.  | 948                                 | 874                          | 74          | NA                         | NA                     | 948                                 | 874                          | 74          | NA                         | NA                     |
| New York U.  | 66,007                              | 13,993                       | 6,403       | 43,815                     | 1,796                  | 58,666                              | 12,233                       | 5,831       | 39,976                     | 626                    |
| Niagara U.   | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Pace U.  | 720                                 | 336                          | 0           | 384                        | 0                      | 720                                 | 336                          | 0           | 384                        | 0                      |
| Rensselaer Polytechnic Institute   | 5,409                               | 3,500                        | 772         | 714                        | 423                    | 4,555                               | 3,185                        | 503         | 644                        | 223                    |
| Rochester Institute of Technology  | 1,569                               | 1,354                        | 119         | 16                         | 80                     | 1,230                               | 1,028                        | 106         | 16                         | 80                     |
| Rockefeller U.   | 12,886                              | 7,259                        | 76          | 4,246                      | 1,305                  | 9,193                               | 5,572                        | 76          | 2,872                      | 673                    |
| Skidmore C.  | 795                                 | 595                          | 0           | 200                        | 0                      | 795                                 | 595                          | 0           | 200                        | 0                      |
| St. John's U., New York  | 20 i                                | 20 i                         | 0 i         | 0 i                        | 0 i                    | 20 i                                | 20 i                         | 0 i         | 0 i                        | 0 i                    |
| Syracuse U.  | 5,874                               | 3,071                        | 717         | 2,082                      | 4                      | 4,014                               | 2,913                        | 591         | 506                        | 4                      |
| Teachers C., Columbia U.   | 3,623                               | 1,013                        | 0           | 1,588                      | 1,022                  | 2,266                               | 500                          | 0           | 1,134                      | 632                    |
| U. Rochester   | 28,645                              | 19,236                       | 2,250       | 4,418                      | 2,741                  | 26,028                              | 18,121                       | 1,488       | 3,970                      | 2,449                  |
| Union C., Schenectady  | 27                                  | 27                           | 0           | 0                          | 0                      | 27                                  | 27                           | 0           | 0                          | 0                      |
| Vassar C.  | 364                                 | 364                          | 0           | 0                          | 0                      | 364                                 | 364                          | 0           | 0                          | 0                      |
| Yeshiva U.   | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| North Carolina   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Appalachian State U.   | 90                                  | 44                           | 0           | 46                         | 0                      | 14                                  | 14                           | 0           | 0                          | 0                      |
| East Carolina U.   | 1,567                               | 1,003                        | 51          | 124                        | 389                    | 1,370                               | 806                          | 51          | 124                        | 389                    |
| Fayetteville State U.  | 60                                  | 60                           | 0           | 0                          | 0                      | 60                                  | 60                           | 0           | 0                          | 0                      |
| North Carolina Agricultural and Technical State U.   | 3,739                               | 3,207                        | 221         | 311                        | 0                      | 3,608                               | 3,207                        | 90          | 311                        | 0                      |
| North Carolina Central U.  | 119                                 | 93                           | 6           | 0                          | 20                     | 113                                 | 93                           | 0           | 0                          | 20                     |
| North Carolina State U.  | 44,859                              | 97 i                         | 19,571 i    | 13,776 i                   | 11,415 i               | 40,268                              | 97 i                         | 17,669 i    | 12,474 i                   | 10,028 i               |
| U. North Carolina, Asheville   | 996                                 | 25                           | 0           | 904                        | 67                     | 153                                 | 25                           | 0           | 61                         | 67                     |
| U. North Carolina, Chapel Hill   | 154,944                             | 69,537                       | 45,477      | 26,120                     | 13,810                 | 145,305                             | 65,390                       | 43,810      | 23,719                     | 12,386                 |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| U. North Carolina, Charlotte                  | 2,594                               | 2,449                        | 1           | 45                         | 99                     | 2,476                               | 2,449                        | 1           | 3                          | 23                     |
| U. North Carolina, general administration     | 4,105                               | 4,105                        | 0           | 0                          | 0                      | 178                                 | 178                          | 0           | 0                          | 0                      |
| U. North Carolina, Greensboro                 | 2,114                               | 1,530                        | 282         | 4                          | 298                    | 2,112                               | 1,530                        | 282         | 4                          | 296                    |
| U. North Carolina, Wilmington                 | 1,831                               | 1,154                        | 474         | 26                         | 177                    | 1,357                               | 1,154                        | 0           | 26                         | 177                    |
| Western Carolina U.                           | 81                                  | 55                           | 0           | 0                          | 26                     | 81                                  | 55                           | 0           | 0                          | 26                     |
| Winston-Salem State U.                        | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Davidson C.                                   | 111                                 | 111                          | 0           | 0                          | 0                      | 71                                  | 71                           | 0           | 0                          | 0                      |
| Duke U.                                       | 165,088                             | 41,362                       | 121,269     | 2,167                      | 290                    | 100,492                             | 37,246                       | 61,750      | 1,373                      | 123                    |
| Elon U.                                       | 36                                  | 36                           | 0           | 0                          | 0                      | 36                                  | 36                           | 0           | 0                          | 0                      |
| Johnson C. Smith U.                           | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Wake Forest U.                                | 36,282                              | 29,670                       | 869         | 5,487                      | 256                    | 33,535                              | 27,528                       | 869         | 5,138                      | 0                      |
| North Dakota                                  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| North Dakota State U.                         | 7,724                               | 6,851                        | 760         | 0                          | 113                    | 6,867                               | 6,044                        | 725         | 0                          | 98                     |
| U. North Dakota                               | 13,906                              | 2,595                        | 10,364      | 900                        | 47                     | 12,641                              | 2,589                        | 9,220       | 830                        | 2                      |
| Ohio  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Air Force Institute of Technology             | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Bowling Green State U.                        | 984                                 | 720                          | 0           | 62                         | 202                    | 715                                 | 532                          | 0           | 12                         | 171                    |
| Central State U.                              | 148                                 | 94                           | 0           | 0                          | 54                     | 119                                 | 92                           | 0           | 0                          | 27                     |
| Cleveland State U.                            | 1,535                               | 701                          | 206         | 628                        | 0                      | 1,503                               | 669                          | 206         | 628                        | 0                      |
| Kent State U.                                 | 1,130                               | 879                          | 37          | 210                        | 4                      | 1,110                               | 879                          | 37          | 190                        | 4                      |
| Miami U.                                      | 764                                 | 731                          | 29          | 0                          | 4                      | 590                                 | 581                          | 9           | 0                          | 0                      |
| Northeast Ohio Medical U.                     | 233                                 | 230                          | 0           | 3                          | 0                      | 203                                 | 203                          | 0           | 0                          | 0                      |
| Ohio State U.                                 | 108,996                             | 56,333                       | 27,917      | 21,297                     | 3,449                  | 60,820                              | 36,935                       | 3,333       | 17,800                     | 2,752                  |
| Ohio U.                                       | 2,812                               | 2,288                        | 241         | 155                        | 128                    | 1,038                               | 605                          | 187         | 155                        | 91                     |
| U. Akron                                      | 1,452                               | 435                          | 952         | 3                          | 62                     | 320                                 | 258                          | 0           | 0                          | 62                     |
| U. Cincinnati                                 | 18,377                              | 7,089                        | 529         | 10,404                     | 355                    | 15,773                              | 6,604                        | 529         | 8,285                      | 355                    |
| U. Toledo                                     | 3,765                               | 2,508                        | 169         | 1,062                      | 26                     | 3,218                               | 2,013                        | 163         | 1,037                      | 5                      |
| Wright State U.                               | 20,926                              | 10,548                       | 6,993       | 3,310                      | 75                     | 14,057                              | 3,921                        | 6,848       | 3,271                      | 17                     |
| Youngstown State U.                           | 1,175                               | 384                          | 390         | 388                        | 13                     | 1,175                               | 384                          | 390         | 388                        | 13                     |



TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution                     | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |  |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|--|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |  |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Indiana U. Pennsylvania   | 86                                  | 86                           | 0           | 0                          | 0                      | 40                                  | 40                           | 0           | 0                          | 0                      |  |
| Pennsylvania State U., Behrend                                    | 269                                 | 151 i                        | 65 i        | 30 i                       | 23 i                   | 232                                 | 143 i                        | 44 i        | 23 i                       | 22 i                   |  |
| Pennsylvania State U., Harrisburg                                 | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| Pennsylvania State U., University Park and Hershey Medical Center | 65,689                              | 36,597 i                     | 12,719 i    | 8,945 i                    | 7,428 i                | 60,932                              | 34,679 i                     | 11,548 i    | 8,152 i                    | 6,553 i                |  |
| Temple U.   | 20,500                              | 15,879                       | 1,690       | 2,837                      | 94                     | 18,138                              | 14,558                       | 1,130       | 2,439                      | 11                     |  |
| U. Pittsburgh, Pittsburgh   | 89,199                              | 59,496                       | 12,220      | 17,305                     | 178                    | 82,322                              | 54,909                       | 11,278      | 15,971                     | 164                    |  |
| U.S. Army War C.  | 36 i                                | 22 i                         | 4 i         | 7 i                        | 3 i                    | 25 i                                | 18 i                         | 2 i         | 4 i                        | 1 i                    |  |
| West Chester U. Pennsylvania                                      | 16                                  | 16                           | 0           | 0                          | 0                      | 15                                  | 15                           | 0           | 0                          | 0                      |  |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |  |
| Allegheny C.  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| Bryn Mawr C.  | 720                                 | 0                            | 0           | 720                        | 0                      | 720                                 | 0                            | 0           | 720                        | 0                      |  |
| Bucknell U.   | 161                                 | 26                           | 0           | 135                        | 0                      | 45                                  | 26                           | 0           | 19                         | 0                      |  |
| Carnegie Mellon U.  | 19,751                              | 16,459                       | 2,305       | 367                        | 620                    | 18,725                              | 15,863                       | 2,125       | 363                        | 374                    |  |
| Dickinson C.  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| Drexel U.   | 15,425                              | 9,438                        | 1,366       | 2,575                      | 2,046                  | 13,756                              | 9,302                        | 1,133       | 2,528                      | 793                    |  |
| Duquesne U.   | 949                                 | 939                          | 0           | 10                         | 0                      | 936                                 | 926                          | 0           | 10                         | 0                      |  |
| Franklin and Marshall C.  | 39                                  | 0                            | 0           | 39                         | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| Gettysburg C.   | 386                                 | 253                          | 0           | 133                        | 0                      | 192                                 | 59                           | 0           | 133                        | 0                      |  |
| Haverford C.  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| Lafayette C.  | 66                                  | 66                           | 0           | 0                          | 0                      | 66                                  | 66                           | 0           | 0                          | 0                      |  |
| Lehigh U.   | 2,416                               | 1,903                        | 98          | 235                        | 180                    | 1,473                               | 960                          | 98          | 235                        | 180                    |  |
| Mercyhurst U.   | 68 i                                | 0 i                          | 19 i        | 27 i                       | 22 i                   | 38 i                                | 0 i                          | 9 i         | 18 i                       | 11 i                   |  |
| Philadelphia C. of Osteopathic Medicine                           | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |  |
| Saint Joseph's U.   | 84                                  | 43                           | 0           | 41                         | 0                      | 43                                  | 43                           | 0           | 0                          | 0                      |  |
| Salus U.  | 40                                  | 39                           | 0           | 1                          | 0                      | 40                                  | 39                           | 0           | 1                          | 0                      |  |
| Swarthmore C.   | 102                                 | 102                          | 0           | 0                          | 0                      | 102                                 | 102                          | 0           | 0                          | 0                      |  |
| Thomas Jefferson U.   | 11,290                              | 4,744                        | 51          | 3,223                      | 3,272                  | 10,533                              | 4,396                        | 51          | 2,899                      | 3,187                  |  |
| U. of the Sciences Philadelphia                                   | 101                                 | 101                          | 0           | 0                          | 0                      | 78                                  | 78                           | 0           | 0                          | 0                      |  |
| U. Pennsylvania   | 114,549                             | 59,893                       | 3,074       | 34,595                     | 16,987                 | 89,604                              | 53,583                       | 2,361       | 26,959                     | 6,701                  |  |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Villanova U.                                  | 655                                 | 423                          | 161         | 71                         | 0                      | 483                                 | 384                          | 28          | 71                         | 0                      |
| Rhode Island                                  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Naval War C.                                  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Rhode Island C.                               | 347                                 | 214                          | 0           | 133                        | 0                      | 78                                  | 78                           | 0           | 0                          | 0                      |
| U. Rhode Island                               | 13,603                              | 8,541                        | 3,121       | 852                        | 1,089                  | 13,141                              | 8,219                        | 3,029       | 804                        | 1,089                  |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Brown U.                                      | 28,088                              | 18,241                       | 1,683       | 7,180                      | 984                    | 26,853                              | 17,669                       | 1,356       | 6,844                      | 984                    |
| Providence C.                                 | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Rhode Island School of Design                 | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Roger Williams U.                             | 178                                 | 174                          | 0           | 0                          | 4                      | 178                                 | 174                          | 0           | 0                          | 4                      |
| South Carolina                                |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| C. Charleston                                 | 972                                 | 972                          | 0           | 0                          | 0                      | 972                                 | 972                          | 0           | 0                          | 0                      |
| Clemson U.                                    | 14,611                              | 5,895                        | 2,446       | 3,839                      | 2,431                  | 10,240                              | 5,895                        | 2,029       | 1,121                      | 1,195                  |
| Coastal Carolina U.                           | 55                                  | 55                           | 0           | 0                          | 0                      | 55                                  | 55                           | 0           | 0                          | 0                      |
| Medical U. South Carolina                     | 21,254                              | 12,692                       | 3,377       | 2,152                      | 3,033                  | 19,302                              | 11,110                       | 3,198       | 1,961                      | 3,033                  |
| South Carolina State U.                       | 499                                 | 499                          | NA          | NA                         | NA                     | 499                                 | 499                          | 0           | 0                          | 0                      |
| U. South Carolina, Aiken                      | 125                                 | 125                          | 0           | 0                          | 0                      | 125                                 | 125                          | 0           | 0                          | 0                      |
| U. South Carolina, Columbia                   | 15,787                              | 12,217                       | 930         | 1,516                      | 1,124                  | 13,238                              | 10,591                       | 660         | 863                        | 1,124                  |
| Winthrop U.                                   | 5                                   | 5                            | 0           | 0                          | 0                      | 5                                   | 5                            | 0           | 0                          | 0                      |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Benedict C.                                   | 78                                  | 78                           | 0           | 0                          | 0                      | 78                                  | 78                           | 0           | 0                          | 0                      |
| Clafin U.                                     | 40                                  | 40                           | 0           | 0                          | 0                      | 40                                  | 40                           | 0           | 0                          | 0                      |
| Furman U.                                     | 22                                  | 22                           | 0           | 0                          | 0                      | 22                                  | 22                           | 0           | 0                          | 0                      |
| South Dakota                                  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Black Hills State U.                          | 175                                 | 175                          | 0           | 0                          | 0                      | 175                                 | 175                          | 0           | 0                          | 0                      |
| Dakota State U.                               | 63                                  | 63                           | 0           | 0                          | 0                      | 63                                  | 63                           | 0           | 0                          | 0                      |
| South Dakota School of Mines and Technology   | 1,398                               | 1,265                        | 79          | 52                         | 2                      | 1,105                               | 972                          | 79          | 52                         | 2                      |
| South Dakota State U.                         | 9,838                               | 9,367                        | 125         | 81                         | 265                    | 9,157                               | 8,767                        | 125         | 0                          | 265                    |
| U. South Dakota                               | 2,878                               | 2,293                        | 264         | 321                        | 0                      | 2,848                               | 2,264                        | 264         | 320                        | 0                      |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution           | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Augustana U.  | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Tennessee   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Austin Peay State U.                                    | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| East Tennessee State U.                                 | 937                                 | 913                          | 24          | 0                          | 0                      | 880                                 | 880                          | 0           | 0                          | 0                      |
| Middle Tennessee State U.                               | 694                                 | 667                          | 0           | 27                         | 0                      | 694                                 | 667                          | 0           | 27                         | 0                      |
| Tennessee State U.                                      | 144                                 | 58                           | 81          | 0                          | 5                      | 60                                  | 47                           | 8           | 0                          | 5                      |
| Tennessee Technological U.                              | 563                                 | 264                          | 0           | 2                          | 297                    | 563                                 | 264                          | 0           | 2                          | 297                    |
| U. Memphis  | 3,751                               | 2,715                        | 166         | 283                        | 587                    | 3,567                               | 2,710                        | 0           | 270                        | 587                    |
| U. Tennessee, Chattanooga                               | 155                                 | 131                          | 0           | 0                          | 24                     | 155                                 | 131                          | 0           | 0                          | 24                     |
| U. Tennessee, Health Science Center                     | 3,177                               | 2,036                        | 282         | 199                        | 660                    | 2,504                               | 1,864                        | 282         | 199                        | 159                    |
| U. Tennessee, Knoxville                                 | 16,995                              | 13,681                       | 1,456       | 1,032                      | 826                    | 16,624                              | 13,345                       | 1,442       | 1,018                      | 819                    |
| U. Tennessee, Knoxville, Institute of Agriculture       | 4,685                               | 3,884                        | 561         | 0                          | 240                    | 4,425                               | 3,864                        | 561         | 0                          | 0                      |
| Private   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Fisk U.   | 204                                 | 100                          | 104         | 0                          | 0                      | 204                                 | 100                          | 104         | 0                          | 0                      |
| Meharry Medical C.                                      | 578                                 | 553                          | 0           | 25                         | 0                      | 578                                 | 553                          | 0           | 25                         | 0                      |
| Vanderbilt U. and Vanderbilt U. Medical Center          | 90,897                              | 65,661                       | 14,040      | 8,533                      | 2,663                  | 83,871                              | 59,573                       | 13,498      | 8,273                      | 2,527                  |
| Texas   |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Lamar U.  | 199                                 | 199                          | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Prairie View A&M U.                                     | 334                                 | 331                          | 3           | 0                          | 0                      | 334                                 | 331                          | 3           | 0                          | 0                      |
| Sam Houston State U.                                    | 443                                 | 255                          | 18          | 0                          | 170                    | 273                                 | 255                          | 18          | 0                          | 0                      |
| Stephen F. Austin State U.                              | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Sul Ross State U.                                       | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Tarleton State U.                                       | 384                                 | 34                           | 0           | 0                          | 350                    | 240                                 | 34                           | 0           | 0                          | 206                    |
| Texas A&M International U.                              | 107                                 | 35                           | 10          | 62                         | 0                      | 107                                 | 35                           | 10          | 62                         | 0                      |
| Texas A&M U., College Station and Health Science Center | 43,517                              | 28,209                       | 6,990       | 3,346                      | 4,972                  | 32,774                              | 22,222                       | 5,362       | 3,000                      | 2,190                  |
| Texas A&M U.-Central Texas                              | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Texas A&M U.-Commerce                                   | 33                                  | 33                           | 0           | 0                          | 0                      | 33                                  | 33                           | 0           | 0                          | 0                      |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution  | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|--|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|  | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Texas A&M U.-Corpus Christi                    | 6,329                               | 3,861                        | 2,347       | 111                        | 10                     | 4,323                               | 3,502                        | 710         | 111                        | 0                      |
| Texas A&M U.-Kingsville                        | 652                                 | 620                          | 0           | 0                          | 32                     | 613                                 | 581                          | 0           | 0                          | 32                     |
| Texas Southern U.                              | 345                                 | 345                          | 0           | 0                          | 0                      | 345                                 | 345                          | 0           | 0                          | 0                      |
| Texas State U.                                 | 4,437                               | 2,020                        | 1,518       | 50                         | 849                    | 3,961                               | 1,897                        | 1,455       | 0                          | 609                    |
| Texas Tech U.                                  | 4,492                               | 1,887                        | 1,121       | 0                          | 1,484                  | 3,117                               | 811                          | 849         | 0                          | 1,457                  |
| Texas Tech U., Health Sciences Center          | 655                                 | 419                          | 71          | 165                        | 0                      | 655                                 | 419                          | 71          | 165                        | 0                      |
| Texas Tech U., Health Sciences Center, El Paso | 41                                  | 0                            | 0           | 0                          | 41                     | 0                                   | 0                            | 0           | 0                          | 0                      |
| Texas Woman's U.                               | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Houston                                     | 4,346                               | 4,221                        | 125         | 0                          | 0                      | 4,234                               | 4,168                        | 66          | 0                          | 0                      |
| U. Houston-Clear Lake                          | 10                                  | 5                            | 5           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Houston-Downtown                            | 174                                 | 139                          | 0           | 0                          | 35                     | 174                                 | 139                          | 0           | 0                          | 35                     |
| U. North Texas, Denton                         | 1,736                               | 1,633                        | 33          | 0                          | 70                     | 1,666                               | 1,579                        | 33          | 0                          | 54                     |
| U. North Texas, Health Science Center          | 3,091                               | 2,389                        | 4           | 421                        | 277                    | 3,066                               | 2,387                        | 0           | 402                        | 277                    |
| U. Texas Health Science Center, Houston        | 16,731                              | 11,432                       | 379         | 4,021                      | 899                    | 15,086                              | 10,870                       | 203         | 3,494                      | 519                    |
| U. Texas Health Science Center, San Antonio    | 15,615                              | 13,642                       | 536         | 749                        | 688                    | 15,118                              | 13,247                       | 536         | 749                        | 586                    |
| U. Texas Health Science Center, Tyler          | 980                                 | 0                            | 0           | 0                          | 980                    | 980                                 | 0                            | 0           | 0                          | 980                    |
| U. Texas M. D. Anderson Cancer Center          | 21,106                              | 14,557                       | 512         | 5,206                      | 831                    | 15,794                              | 10,444                       | 406         | 4,315                      | 629                    |
| U. Texas Medical Branch                        | 13,320                              | 7,795                        | 1,814       | 171                        | 3,540                  | 12,339                              | 7,795                        | 1,814       | 171                        | 2,559                  |
| U. Texas Rio Grande Valley                     | 2,162                               | 1,937                        | 0           | 210                        | 15                     | 2,078                               | 1,853                        | 0           | 210                        | 15                     |
| U. Texas Southwestern Medical Center           | 25,397                              | 10,680                       | 3,126       | 9,032                      | 2,559                  | 21,335                              | 9,934                        | 3,100       | 6,353                      | 1,948                  |
| U. Texas, Arlington                            | 8,750                               | 6,615                        | 569         | 1,487                      | 79                     | 8,119                               | 5,984                        | 569         | 1,487                      | 79                     |
| U. Texas, Austin                               | 39,297                              | 28,497                       | 4,719       | 3,321                      | 2,760                  | 30,214                              | 23,956                       | 2,752       | 1,944                      | 1,562                  |
| U. Texas, Dallas                               | 1,049                               | 1,049                        | 0           | 0                          | 0                      | 781                                 | 781                          | 0           | 0                          | 0                      |
| U. Texas, El Paso                              | 5,236                               | 3,828                        | 51          | 491                        | 866                    | 4,969                               | 3,773                        | 51          | 279                        | 866                    |
| U. Texas, San Antonio                          | 6,509                               | 3,266                        | 625         | 2,618                      | 0                      | 4,992                               | 1,986                        | 388         | 2,618                      | 0                      |
| U. Texas, Tyler                                | 46                                  | 46                           | 0           | 0                          | 0                      | 46                                  | 46                           | 0           | 0                          | 0                      |
| West Texas A&M U.                              | 36                                  | 36                           | 0           | 0                          | 0                      | 36                                  | 36                           | 0           | 0                          | 0                      |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Baylor C. of Medicine                         | 53,548                              | 41,928                       | 5,087       | 6,274                      | 259                    | 46,145                              | 36,218                       | 4,711       | 4,957                      | 259                    |
| Baylor U.                                     | 714                                 | 589                          | 85          | 40                         | 0                      | 499                                 | 472                          | 0           | 27                         | 0                      |
| Rice U.                                       | 13,447                              | 9,908                        | 2,492       | 497                        | 550                    | 10,300                              | 9,181                        | 466         | 439                        | 214                    |
| Southern Methodist U.                         | 1,849                               | 1,368                        | 0           | 0                          | 481                    | 1,849                               | 1,368                        | 0           | 0                          | 481                    |
| St. Edward's U.                               | 70                                  | 70                           | 0           | 0                          | 0                      | 70                                  | 70                           | 0           | 0                          | 0                      |
| Texas Christian U.                            | 3                                   | 0                            | 0           | 0                          | 3                      | 3                                   | 0                            | 0           | 0                          | 3                      |
| Trinity U.                                    | 108                                 | 93                           | 0           | 15                         | 0                      | 108                                 | 93                           | 0           | 15                         | 0                      |
| U. of the Incarnate Word                      | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| Utah  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| U. Utah                                       | 38,659                              | 1,990                        | 923         | 2,943                      | 32,803                 | 34,885                              | 1,379                        | 28          | 1,079                      | 32,399                 |
| Utah State U.                                 | 43,415                              | 10,414                       | 31,019      | 12                         | 1,970                  | 42,493                              | 10,146                       | 30,504      | 12                         | 1,831                  |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Brigham Young U., Provo                       | 3,320                               | 2,564                        | 207         | 107                        | 442                    | 2,713                               | 2,243                        | 142         | 15                         | 313                    |
| Vermont                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| U. Vermont                                    | 12,491                              | 9,886                        | 297         | 2,308                      | 0                      | 8,912                               | 7,779                        | 160         | 973                        | 0                      |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Middlebury C.                                 | 34                                  | 34                           | 0           | 0                          | 0                      | 34                                  | 34                           | 0           | 0                          | 0                      |
| Saint Michael's C.                            | 79                                  | 79                           | 0           | 0                          | 0                      | 79                                  | 79                           | 0           | 0                          | 0                      |
| Virginia                                      |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Christopher Newport U.                        | 282                                 | 0                            | 7           | 132                        | 143                    | 161                                 | 0                            | 0           | 116                        | 45                     |
| Eastern Virginia Medical School               | 4,436                               | 3,593                        | 0           | 500                        | 343                    | 4,182                               | 3,511                        | 0           | 328                        | 343                    |
| George Mason U.                               | 42,211                              | 5,810                        | 34,101      | 813                        | 1,487                  | 41,365                              | 5,434                        | 33,917      | 692                        | 1,322                  |
| James Madison U.                              | 239                                 | 239                          | NA          | NA                         | NA                     | 239                                 | 239                          | 0           | 0                          | 0                      |
| Norfolk State U.                              | 3,187                               | 3,187                        | 0           | 0                          | 0                      | 3,187                               | 3,187                        | 0           | 0                          | 0                      |
| Old Dominion U.                               | 4,085                               | 2,029                        | 1,469       | 472                        | 115                    | 3,158                               | 1,721                        | 1,191       | 184                        | 62                     |
| U. of Mary Washington                         | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Virginia, Charlottesville                  | 42,801                              | 30,728                       | 1,564       | 7,018                      | 3,491                  | 36,464                              | 27,898                       | 825         | 5,736                      | 2,005                  |
| Virginia Commonwealth U.                      | 22,152                              | 13,705                       | 3,392       | 3,973                      | 1,082                  | 18,721                              | 11,703                       | 2,121       | 3,872                      | 1,025                  |

TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Virginia Polytechnic Institute and State U.   | 29,085                              | 17,780                       | 3,512       | 3,834                      | 3,959                  | 25,654                              | 17,023                       | 3,155       | 2,463                      | 3,013                  |
| Virginia State U.                             | 496                                 | 213                          | 0           | 283                        | 0                      | 496                                 | 213                          | 0           | 283                        | 0                      |
| William & Mary                                | 5,360                               | 2,885                        | 468         | 1,065                      | 942                    | 5,104                               | 2,652                        | 452         | 1,065                      | 935                    |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Edward Via C. of Osteopathic Medicine         | 147                                 | 65                           | 32          | 50                         | 0                      | 50                                  | 0                            | 0           | 50                         | 0                      |
| Hampton U.                                    | 3,393                               | 3,393                        | 0           | 0                          | 0                      | 3,393                               | 3,393                        | 0           | 0                          | 0                      |
| Liberty U.                                    | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Richmond                                   | 383                                 | 352                          | 0           | 0                          | 31                     | 362                                 | 331                          | 0           | 0                          | 31                     |
| Washington                                    |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Central Washington U.                         | 45                                  | 45                           | 0           | 0                          | 0                      | 45                                  | 45                           | 0           | 0                          | 0                      |
| Eastern Washington U.                         | 117                                 | 117                          | 0           | 0                          | 0                      | 117                                 | 117                          | 0           | 0                          | 0                      |
| Northwest Indian C.                           | 572                                 | 572                          | 0           | 0                          | 0                      | 572                                 | 572                          | 0           | 0                          | 0                      |
| U. Washington, Bothell                        | 13                                  | 0                            | 0           | 13                         | 0                      | 13                                  | 0                            | 0           | 13                         | 0                      |
| U. Washington, Seattle                        | 143,419                             | 81,972                       | 4,109       | 44,490                     | 12,848                 | 121,467                             | 69,867                       | 3,253       | 36,783                     | 11,564                 |
| U. Washington, Tacoma                         | 62                                  | 5                            | 7           | 0                          | 50                     | 62                                  | 5                            | 7           | 0                          | 50                     |
| Washington State U.                           | 22,194                              | 14,015                       | 1,636       | 6,134                      | 409                    | 20,495                              | 13,232                       | 1,453       | 5,447                      | 363                    |
| Western Washington U.                         | 254                                 | 158                          | 11          | 25                         | 60                     | 89                                  | 78                           | 11          | 0                          | 0                      |
| Private                                       |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Seattle U.                                    | 11                                  | 11                           | 0           | 0                          | 0                      | 11                                  | 11                           | 0           | 0                          | 0                      |
| Whitman C.                                    | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| West Virginia                                 |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Marshall U.                                   | 2,302                               | 2,302                        | 0           | 0                          | 0                      | 2,044                               | 2,044                        | 0           | 0                          | 0                      |
| West Virginia State U.                        | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| West Virginia U.                              | 11,390                              | 8,283                        | 1,844       | 872                        | 391                    | 10,765                              | 8,000                        | 1,761       | 725                        | 279                    |
| Wisconsin                                     |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| U. Wisconsin-Eau Claire                       | 12                                  | 12                           | 0           | 0                          | 0                      | 12                                  | 12                           | 0           | 0                          | 0                      |
| U. Wisconsin-Green Bay                        | 0                                   | 0                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Wisconsin-La Crosse                        | 1                                   | 1                            | 0           | 0                          | 0                      | 0                                   | 0                            | 0           | 0                          | 0                      |
| U. Wisconsin-Madison                          | 86,010                              | 56,441                       | 4,336       | 17,990                     | 7,243                  | 79,651                              | 53,676                       | 3,561       | 15,381                     | 7,033                  |



TABLE 76

## Total and federally financed higher education R&amp;D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2019

(Dollars in thousands)

| State, institutional control, and institution | Total                               |                              |             |                            |                        | Federally financed                  |                              |             |                            |                        |
|---|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|-------------------------------------|------------------------------|-------------|----------------------------|------------------------|
|   | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients | All R&D expenditures passed through | To educational subrecipients | To business | To nonprofit organizations | To other subrecipients |
| Public  |                                     |                              |             |                            |                        |                                     |                              |             |                            |                        |
| U. of the Virgin Islands                      | 77                                  | 8                            | 0           | 0                          | 69                     | 77                                  | 8                            | 0           | 0                          | 69                     |

i = imputed. NA = not available; data were not provided by institution.

<sup>a</sup> 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.

<sup>b</sup> Johns Hopkins University includes the Applied Physics Laboratory, with zero in both total and federally financed R&D expenditures passed through to subrecipients in FY 2019.

**Note(s):**

This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2018. Institutions reporting less than \$1 million in total R&D expenditures in 2018 completed a shorter version of the survey form in FY 2019, and that form requested R&D expenditures passed through only to higher education institutions. For a list of R&D expenditures passed through to higher education institutions at institutions completing the shorter version of the survey, see table 84.

**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2019.