TABLE 3-1

Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2021
(Number and percent)

|  |         | Federal |         | Institutional |         | Nonfederal<br>domestic |         | Foreign |         | Self-sı | upport  |
|--|---------|---------|---------|---------------|---------|------------------------|---------|---------|---------|---------|---------|
| Broad field  | Total   | Number  | Percent | Number        | Percent | Number                 | Percent | Number  | Percent | Number  | Percent |
| All graduate students  | 543,823 | 82,588  | 15.2    | 212,869       | 39.1    | 19,015                 | 3.5     | 3,581   | 0.7     | 225,770 | 41.5    |
| Science  | 366,207 | 52,801  | 14.4    | 153,947       | 42.0    | 10,877                 | 3.0     | 1,811   | 0.5     | 146,771 | 40.1    |
| Agricultural and veterinary sciences                                   | 7,754   | 1,755   | 22.6    | 3,744         | 48.3    | 791                    | 10.2    | 64      | 0.8     | 1,400   | 18.1    |
| Biological and biomedical sciences                                     | 82,218  | 20,832  | 25.3    | 36,255        | 44.1    | 3,519                  | 4.3     | 375     | 0.5     | 21,237  | 25.8    |
| Computer and information sciences                                      | 75,637  | 6,180   | 8.2     | 19,540        | 25.8    | 1,510                  | 2.0     | 356     | 0.5     | 48,051  | 63.5    |
| Geosciences, atmospheric sciences, and ocean sciences                  | 9,863   | 2,651   | 26.9    | 5,270         | 53.4    | 503                    | 5.1     | 98      | 1.0     | 1,341   | 13.6    |
| Mathematics and statistics   | 26,522  | 1,605   | 6.1     | 12,787        | 48.2    | 338                    | 1.3     | 105     | 0.4     | 11,687  | 44.1    |
| Multidisciplinary and interdisciplinary studies                        | 9,650   | 760     | 7.9     | 3,224         | 33.4    | 228                    | 2.4     | 37      | 0.4     | 5,401   | 56.0    |
| Natural resources and conservation                                     | 9,476   | 1,531   | 16.2    | 3,850         | 40.6    | 458                    | 4.8     | 57      | 0.6     | 3,580   | 37.8    |
| Physical sciences  | 38,847  | 11,216  | 28.9    | 22,660        | 58.3    | 1,540                  | 4.0     | 245     | 0.6     | 3,186   | 8.2     |
| Psychology   | 47,699  | 3,033   | 6.4     | 15,047        | 31.5    | 696                    | 1.5     | 63      | 0.1     | 28,860  | 60.5    |
| Social sciences  | 58,541  | 3,238   | 5.5     | 31,570        | 53.9    | 1,294                  | 2.2     | 411     | 0.7     | 22,028  | 37.6    |
| Engineering  | 122,853 | 25,302  | 20.6    | 44,890        | 36.5    | 6,841                  | 5.6     | 1,483   | 1.2     | 44,337  | 36.1    |
| Aerospace, aeronautical, and astronautical engineering                 | 5,161   | 1,291   | 25.0    | 1,812         | 35.1    | 287                    | 5.6     | 122     | 2.4     | 1,649   | 32.0    |
| Biological, biomedical, and biosystems engineering                     | 12,066  | 3,281   | 27.2    | 4,977         | 41.2    | 599                    | 5.0     | 63      | 0.5     | 3,146   | 26.1    |
| Chemical, petroleum, and chemical-<br>related engineering              | 9,416   | 2,589   | 27.5    | 4,149         | 44.1    | 939                    | 10.0    | 148     | 1.6     | 1,591   | 16.9    |
| Civil, environmental, transportation and related engineering fields    | 14,218  | 2,350   | 16.5    | 6,113         | 43.0    | 754                    | 5.3     | 224     | 1.6     | 4,777   | 33.6    |
| Electrical, electronics,<br>communications and computer<br>engineering | 33,744  | 5,987   | 17.7    | 10,498        | 31.1    | 1,537                  | 4.6     | 327     | 1.0     | 15,395  | 45.6    |
| Industrial, manufacturing, systems engineering and operations research | 9,338   | 1,206   | 12.9    | 2,805         | 30.0    | 320                    | 3.4     | 83      | 0.9     | 4,924   | 52.7    |
| Mechanical engineering   | 20,236  | 4,255   | 21.0    | 7,806         | 38.6    | 1,115                  | 5.5     | 315     | 1.6     | 6,745   | 33.3    |
| Metallurgical, mining, materials and related engineering fields        | 6,171   | 1,884   | 30.5    | 2,384         | 38.6    | 446                    | 7.2     | 110     | 1.8     | 1,347   | 21.8    |
| Other engineering  | 12,503  | 2,459   | 19.7    | 4,346         | 34.8    | 844                    | 6.8     | 91      | 0.7     | 4,763   | 38.1    |
| Health   | 54,763  | 4,485   | 8.2     | 14,032        | 25.6    | 1,297                  | 2.4     | 287     | 0.5     | 34,662  | 63.3    |
| Clinical medicine <sup>a</sup>   | 23,888  | 1,918   | 8.0     | 5,416         | 22.7    | 647                    | 2.7     | 66      | 0.3     | 15,841  | 66.3    |
| Other health   | 30,875  | 2,567   | 8.3     | 8,616         | 27.9    | 650                    | 2.1     | 221     | 0.7     | 18,821  | 61.0    |
| Master's students  | 286,954 | 14,918  | 5.2     | 63,468        | 22.1    | 4,908                  | 1.7     | 1,001   | 0.3     | 202,659 | 70.6    |
| Science  | 184,719 | 8,608   | 4.7     | 41,725        | 22.6    | 2,704                  | 1.5     | 534     | 0.3     | 131,148 | 71.0    |
| Agricultural and veterinary sciences                                   | 4,034   | 766     | 19.0    | 1,723         | 42.7    | 400                    | 9.9     | 28      | 0.7     | 1,117   | 27.7    |
| Biological and biomedical sciences                                     | 27,949  | 1,577   | 5.6     | 6,707         | 24.0    | 459                    | 1.6     | 68      | 0.2     | 19,138  | 68.5    |
| Computer and information sciences                                      | 58,913  | 1,602   | 2.7     | 10,378        | 17.6    | 484                    | 0.8     | 128     | 0.2     | 46,321  | 78.6    |
| Geosciences, atmospheric sciences, and ocean sciences                  | 3,731   | 704     | 18.9    | 1,891         | 50.7    | 119                    | 3.2     | 28      | 0.8     | 989     | 26.5    |
| Mathematics and statistics   | 14,157  | 220     | 1.6     | 2,888         | 20.4    | 119                    | 0.8     | 24      | 0.2     | 10,906  | 77.0    |
| Multidisciplinary and interdisciplinary studies                        | 6,602   | 271     | 4.1     | 1,290         | 19.5    | 110                    | 1.7     | 19      | 0.3     | 4,912   | 74.4    |
| Natural resources and conservation                                     | 6,343   | 749     | 11.8    | 2,104         | 33.2    | 253                    | 4.0     | 28      | 0.4     | 3,209   | 50.6    |
| Physical sciences  | 3,834   | 336     | 8.8     | 1,608         | 41.9    | 95                     | 2.5     | 29      | 0.8     | 1,766   | 46.1    |
| Psychology   | 30,052  | 994     | 3.3     | 4,380         | 14.6    | 153                    | 0.5     | 14      | *       | 24,511  | 81.6    |

TABLE 3-1

Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2021
(Number and percent)

|  |         | Fed    | eral    | Institutional |         | Nonfederal<br>domestic |         | Foreign |         | Self-sı | upport  |
|--|---------|--------|---------|---------------|---------|------------------------|---------|---------|---------|---------|---------|
| Broad field  | Total   | Number | Percent | Number        | Percent | Number                 | Percent | Number  | Percent | Number  | Percent |
| Social sciences  | 29,104  | 1,389  | 4.8     | 8,756         | 30.1    | 512                    | 1.8     | 168     | 0.6     | 18,279  | 62.8    |
| Engineering  | 58,790  | 4,044  | 6.9     | 13,313        | 22.6    | 1,567                  | 2.7     | 324     | 0.6     | 39,542  | 67.3    |
| Aerospace, aeronautical, and astronautical engineering                 | 2,755   | 412    | 15.0    | 753           | 27.3    | 115                    | 4.2     | 20      | 0.7     | 1,455   | 52.8    |
| Biological, biomedical, and biosystems engineering                     | 3,900   | 194    | 5.0     | 912           | 23.4    | 80                     | 2.1     | 6       | 0.2     | 2,708   | 69.4    |
| Chemical, petroleum, and chemical-related engineering                  | 2,053   | 95     | 4.6     | 534           | 26.0    | 124                    | 6.0     | 24      | 1.2     | 1,276   | 62.2    |
| Civil, environmental, transportation and related engineering fields    | 7,426   | 567    | 7.6     | 2,455         | 33.1    | 212                    | 2.9     | 64      | 0.9     | 4,128   | 55.6    |
| Electrical, electronics,<br>communications and computer<br>engineering | 18,540  | 836    | 4.5     | 3,244         | 17.5    | 271                    | 1.5     | 49      | 0.3     | 14,140  | 76.3    |
| Industrial, manufacturing, systems engineering and operations research | 6,307   | 544    | 8.6     | 1,067         | 16.9    | 110                    | 1.7     | 46      | 0.7     | 4,540   | 72.0    |
| Mechanical engineering   | 9,930   | 793    | 8.0     | 2,693         | 27.1    | 348                    | 3.5     | 58      | 0.6     | 6,038   | 60.8    |
| Metallurgical, mining, materials and related engineering fields        | 1,662   | 178    | 10.7    | 385           | 23.2    | 73                     | 4.4     | 27      | 1.6     | 999     | 60.1    |
| Other engineering  | 6,217   | 425    | 6.8     | 1,270         | 20.4    | 234                    | 3.8     | 30      | 0.5     | 4,258   | 68.5    |
| Health   | 43,445  | 2,266  | 5.2     | 8,430         | 19.4    | 637                    | 1.5     | 143     | 0.3     | 31,969  | 73.6    |
| Clinical medicine <sup>a</sup>   | 20,189  | 1,147  | 5.7     | 3,735         | 18.5    | 353                    | 1.7     | 37      | 0.2     | 14,917  | 73.9    |
| Other health   | 23,256  | 1,119  | 4.8     | 4,695         | 20.2    | 284                    | 1.2     | 106     | 0.5     | 17,052  | 73.3    |
| Doctoral students  | 256,869 | 67,670 | 26.3    | 149,401       | 58.2    | 14,107                 | 5.5     | 2,580   | 1.0     | 23,111  | 9.0     |
| Science  | 181,488 | 44,193 | 24.4    | 112,222       | 61.8    | 8,173                  | 4.5     | 1,277   | 0.7     | 15,623  | 8.6     |
| Agricultural and veterinary sciences                                   | 3,720   | 989    | 26.6    | 2,021         | 54.3    | 391                    | 10.5    | 36      | 1.0     | 283     |         |
| Biological and biomedical sciences                                     | 54,269  | 19,255 | 35.5    | 29,548        | 54.4    | 3,060                  | 5.6     | 307     | 0.6     | 2,099   | 3.9     |
| Computer and information sciences                                      | 16,724  | 4,578  | 27.4    | 9,162         | 54.8    | 1,026                  | 6.1     | 228     | 1.4     | 1,730   | 10.3    |
| Geosciences, atmospheric   | 10,724  | 4,570  | 27.4    | 3,102         | 34.0    | 1,020                  | 0.1     | 220     | 1.4     | 1,730   | 10.5    |
| sciences, and ocean sciences   | 6,132   | 1,947  | 31.8    | 3,379         | 55.1    | 384                    | 6.3     | 70      | 1.1     | 352     | 5.7     |
| Mathematics and statistics   | 12,365  | 1,385  | 11.2    | 9,899         | 80.1    | 219                    | 1.8     | 81      | 0.7     | 781     | 6.3     |
| Multidisciplinary and interdisciplinary studies                        | 3,048   | 489    | 16.0    | 1,934         | 63.5    | 118                    | 3.9     | 18      | 0.6     | 489     | 16.0    |
| Natural resources and conservation                                     | 3,133   | 782    | 25.0    | 1,746         | 55.7    | 205                    | 6.5     | 29      | 0.9     | 371     | 11.8    |
| Physical sciences  | 35,013  |        | 31.1    | 21,052        | 60.1    | 1,445                  | 4.1     | 216     | 0.6     | 1,420   | 4.1     |
| Psychology   | 17,647  | 2,039  | 11.6    | 10,667        | 60.4    | 543                    | 3.1     | 49      | 0.3     | 4,349   |         |
| Social sciences  | 29,437  | 1,849  | 6.3     | 22,814        | 77.5    | 782                    | 2.7     | 243     | 0.8     | 3,749   |         |
| Engineering  | 64,063  | 21,258 | 33.2    | 31,577        | 49.3    | 5,274                  | 8.2     | 1,159   | 1.8     | 4,795   | 7.5     |
| Aerospace, aeronautical, and astronautical engineering                 | 2,406   | 879    | 36.5    | 1,059         | 44.0    | 172                    | 7.1     | 102     | 4.2     | 194     | 8.1     |
| Biological, biomedical, and biosystems engineering                     | 8,166   | 3,087  | 37.8    | 4,065         | 49.8    | 519                    | 6.4     | 57      | 0.7     | 438     | 5.4     |
| Chemical, petroleum, and chemical-related engineering                  | 7,363   | 2,494  | 33.9    | 3,615         | 49.1    | 815                    | 11.1    | 124     | 1.7     | 315     | 4.3     |
| Civil, environmental, transportation and related engineering fields    | 6,792   | 1,783  | 26.3    | 3,658         | 53.9    | 542                    | 8.0     | 160     | 2.4     | 649     | 9.6     |
| Electrical, electronics,<br>communications and computer<br>engineering | 15,204  | 5,151  | 33.9    | 7,254         | 47.7    | 1,266                  | 8.3     | 278     | 1.8     | 1,255   | 8.3     |

TABLE 3-1

Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2021

(Number and percent)

|  |        | Federal |         | Institutional |         | Nonfederal<br>domestic |         | Foreign |         | Self-support |         |
|--|--------|---------|---------|---------------|---------|------------------------|---------|---------|---------|--------------|---------|
| Broad field  | Total  | Number  | Percent | Number        | Percent | Number                 | Percent | Number  | Percent | Number       | Percent |
| Industrial, manufacturing, systems<br>engineering and operations<br>research | 3,031  | 662     | 21.8    | 1,738         | 57.3    | 210                    | 6.9     | 37      | 1.2     | 384          | 12.7    |
| Mechanical engineering   | 10,306 | 3,462   | 33.6    | 5,113         | 49.6    | 767                    | 7.4     | 257     | 2.5     | 707          | 6.9     |
| Metallurgical, mining, materials and related engineering fields              | 4,509  | 1,706   | 37.8    | 1,999         | 44.3    | 373                    | 8.3     | 83      | 1.8     | 348          | 7.7     |
| Other engineering  | 6,286  | 2,034   | 32.4    | 3,076         | 48.9    | 610                    | 9.7     | 61      | 1.0     | 505          | 8.0     |
| Health   | 11,318 | 2,219   | 19.6    | 5,602         | 49.5    | 660                    | 5.8     | 144     | 1.3     | 2,693        | 23.8    |
| Clinical medicine <sup>a</sup>   | 3,699  | 771     | 20.8    | 1,681         | 45.4    | 294                    | 7.9     | 29      | 0.8     | 924          | 25.0    |
| Other health   | 7,619  | 1,448   | 19.0    | 3,921         | 51.5    | 366                    | 4.8     | 115     | 1.5     | 1,769        | 23.2    |

<sup>\* =</sup> value < 0.05%.

## Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see technical table A-17.

## Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2021.

<sup>&</sup>lt;sup>a</sup> Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences.