TABLE 47. Postdoctoral appointees in science, engineering, and health in all institutions, by detailed field, citizenship, and doctoral degree type: 2010

| Field | Total | U.S. citizens and permanent residents | | | | Temporary visa holders | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Doctoral degree[a] | Professional degree[a] | Dual degree[a] | Doctoral degree type unknown/not reported[a] | Doctoral degree[a] | Professional degree[a] | Dual degree[a] | Doctoral degree type unknown/not reported[a] |
| All surveyed fields | 63,415 | 17,430 | 2,481 | 481 | 9,377 | 22,296 | 1,908 | 805 | 8,637 |
| Science and engineering | 44,051 | 12,948 | 495 | 156 | 6,820 | 16,974 | 545 | 312 | 5,801 |
| Science | 37,095 | 11,539 | 470 | 148 | 5,604 | 13,995 | 517 | 296 | 4,526 |
| Agricultural sciences | 1,195 | 399 | 7 | 1 | 204 | 425 | 7 | 3 | 149 |
| Biological sciences | 21,537 | 6,906 | 418 | 123 | 2,741 | 8,074 | 458 | 260 | 2,557 |
| Anatomy | 437 | 120 | 17 | 3 | 107 | 97 | 7 | 7 | 79 |
| Biochemistry | 2,533 | 821 | 9 | 4 | 330 | 965 | 17 | 20 | 367 |
| Biology | 2,555 | 969 | 14 | 4 | 330 | 1,004 | 6 | 3 | 225 |
| Biometry/epidemiology | 466 | 139 | 18 | 4 | 72 | 166 | 9 | 5 | 53 |
| Biophysics | 240 | 57 | 0 | 0 | 48 | 84 | 0 | 1 | 50 |
| Botany | 603 | 172 | 3 | 0 | 111 | 207 | 3 | 0 | 107 |
| Cell biology | 2,796 | 732 | 14 | 14 | 462 | 1,153 | 19 | 58 | 344 |
| Ecology | 238 | 93 | 1 | 1 | 63 | 46 | 0 | 0 | 34 |
| Entomology/parasitology | 233 | 88 | 1 | 1 | 40 | 68 | 1 | 0 | 34 |
| Genetics | 1,389 | 459 | 21 | 31 | 177 | 452 | 24 | 29 | 196 |
| Microbiology/immunology/virology | 2,374 | 794 | 44 | 15 | 281 | 875 | 44 | 22 | 299 |
| Nutrition | 219 | 77 | 7 | 0 | 28 | 70 | 4 | 1 | 32 |
| Pathology | 1,797 | 427 | 97 | 12 | 214 | 697 | 92 | 26 | 232 |
| Pharmacology | 1,656 | 479 | 28 | 12 | 209 | 616 | 34 | 36 | 242 |
| Physiology | 1,448 | 512 | 30 | 12 | 131 | 525 | 43 | 28 | 167 |
| Zoology | 76 | 42 | 0 | 0 | 19 | 11 | 0 | 0 | 4 |
| Biological sciences, nec | 2,477 | 925 | 114 | 10 | 119 | 1,038 | 155 | 24 | 92 |
| Communication[b] | 60 | 25 | 0 | 0 | 12 | 13 | 3 | 0 | 7 |
| Computer sciences | 748 | 197 | 3 | 1 | 112 | 315 | 3 | 0 | 117 |
| Earth, atmospheric, and ocean sciences | 1,760 | 527 | 8 | 0 | 416 | 618 | 5 | 2 | 184 |
| Atmospheric sciences | 184 | 47 | 0 | 0 | 29 | 97 | 0 | 2 | 9 |
| Geosciences | 601 | 195 | 4 | 0 | 80 | 239 | 1 | 0 | 82 |
| Oceanography | 332 | 165 | 1 | 0 | 26 | 130 | 0 | 0 | 10 |
| Earth/atmospheric/ocean sciences, nec | 643 | 120 | 3 | 0 | 281 | 152 | 4 | 0 | 83 |
| Family and consumer sciences/ human sciences[b] | 30 | 14 | 0 | 0 | 8 | 5 | 0 | 0 | 3 |
| Mathematical sciences | 756 | 276 | 1 | 1 | 113 | 270 | 2 | 0 | 93 |
| Mathematics/applied mathematics | 680 | 258 | 1 | 1 | 98 | 243 | 2 | 0 | 77 |
| Statistics | 76 | 18 | 0 | 0 | 15 | 27 | 0 | 0 | 16 |
| Multidisciplinary/interdisciplinary studies[b] | 765 | 132 | 9 | 1 | 308 | 180 | 10 | 0 | 125 |
| Neuroscience[b] | 818 | 246 | 5 | 14 | 125 | 266 | 12 | 26 | 124 |
| Physical sciences | 7,703 | 1,922 | 9 | 2 | 1,265 | 3,413 | 12 | 2 | 1,078 |
| Astronomy | 532 | 154 | 2 | 0 | 119 | 206 | 0 | 0 | 51 |
| Chemistry | 4,241 | 1,006 | 4 | 1 | 671 | 1,902 | 10 | 2 | 645 |
| Physics | 2,628 | 735 | 3 | 1 | 368 | 1,244 | 2 | 0 | 275 |
| Physical sciences, nec | 302 | 27 | 0 | 0 | 107 | 61 | 0 | 0 | 107 |
| Psychology | 1,077 | 598 | 6 | 2 | 159 | 273 | 4 | 2 | 33 |
| Clinical psychology | 123 | 88 | 2 | 0 | 24 | 8 | 1 | 0 | 0 |
| Psychology, general | 634 | 316 | 2 | 1 | 115 | 170 | 0 | 2 | 28 |
| Psychology, nec | 320 | 194 | 2 | 1 | 20 | 95 | 3 | 0 | 5 |
| Social sciences | 646 | 297 | 4 | 3 | 141 | 143 | 1 | 1 | 56 |
| Agricultural economics | 44 | 13 | 1 | 0 | 10 | 17 | 0 | 0 | 3 |
| Anthropology (cultural/social) | 83 | 46 | 1 | 0 | 18 | 13 | 0 | 0 | 5 |

TABLE 47. Postdoctoral appointees in science, engineering, and health in all institutions, by detailed field, citizenship, and doctoral degree type: 2010

| Field | Total | U.S. citizens and permanent residents | | | | Temporary visa holders | | | |
|---|---|---|---|---|---|---|---|---|---|
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| Economics (except agricultural) | 47 | 10 | 0 | 0 | 14 | 10 | 0 | 0 | 13 |
| Geography | 62 | 29 | 0 | 0 | 17 | 14 | 0 | 1 | 1 |
| History and philosophy of science | 13 | 4 | 0 | 1 | 2 | 4 | 0 | 0 | 2 |
| Linguistics | 27 | 14 | 0 | 0 | 0 | 7 | 0 | 0 | 6 |
| Political science | 85 | 43 | 0 | 0 | 23 | 14 | 0 | 0 | 5 |
| Sociology | 81 | 44 | 1 | 0 | 20 | 11 | 0 | 0 | 5 |
| Sociology/anthropology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Social sciences, nec | 204 | 94 | 1 | 2 | 37 | 53 | 1 | 0 | 16 |
| Engineering | 6,956 | 1,409 | 25 | 8 | 1,216 | 2,979 | 28 | 16 | 1,275 |
| Aerospace engineering | 191 | 34 | 0 | 0 | 35 | 95 | 0 | 0 | 27 |
| Agricultural engineering | 119 | 28 | 3 | 0 | 6 | 62 | 0 | 0 | 20 |
| Architecture[b] | 10 | 2 | 0 | 0 | 3 | 5 | 0 | 0 | 0 |
| Biomedical engineering | 1,036 | 238 | 6 | 0 | 255 | 343 | 3 | 5 | 186 |
| Chemical engineering | 1,092 | 222 | 2 | 0 | 230 | 453 | 2 | 0 | 183 |
| Civil engineering[b] | 570 | 117 | 1 | 0 | 126 | 243 | 3 | 0 | 80 |
| Electrical engineering | 1,097 | 191 | 9 | 4 | 120 | 490 | 12 | 5 | 266 |
| Engineering science | 243 | 85 | 0 | 0 | 9 | 137 | 0 | 0 | 12 |
| Industrial engineering | 163 | 19 | 0 | 0 | 59 | 46 | 0 | 0 | 39 |
| Mechanical engineering | 1,009 | 191 | 2 | 2 | 167 | 468 | 7 | 4 | 168 |
| Metallurgical/materials engineering | 835 | 163 | 1 | 0 | 121 | 395 | 1 | 0 | 154 |
| Mining engineering | 6 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 4 |
| Nuclear engineering | 107 | 19 | 0 | 0 | 36 | 29 | 0 | 0 | 23 |
| Petroleum engineering | 46 | 10 | 0 | 2 | 0 | 31 | 0 | 0 | 3 |
| Engineering, nec | 432 | 89 | 1 | 0 | 49 | 181 | 0 | 2 | 110 |
| Health | 19,364 | 4,482 | 1,986 | 325 | 2,557 | 5,322 | 1,363 | 493 | 2,836 |
| Clinical medicine | 16,610 | 3,675 | 1,821 | 307 | 2,155 | 4,480 | 1,278 | 455 | 2,439 |
| Anesthesiology | 477 | 71 | 41 | 2 | 108 | 93 | 67 | 17 | 78 |
| Cardiology | 700 | 113 | 93 | 22 | 64 | 152 | 79 | 36 | 141 |
| Endocrinology | 457 | 88 | 52 | 10 | 35 | 144 | 39 | 32 | 57 |
| Gastroenterology | 320 | 36 | 56 | 5 | 50 | 75 | 24 | 9 | 65 |
| Hematology | 352 | 79 | 35 | 17 | 30 | 123 | 23 | 6 | 39 |
| Neurology[b] | 1,328 | 349 | 75 | 24 | 147 | 432 | 62 | 24 | 215 |
| Obstetrics/gynecology | 333 | 56 | 53 | 7 | 44 | 98 | 13 | 10 | 52 |
| Oncology/cancer research | 1,903 | 550 | 81 | 55 | 126 | 786 | 83 | 48 | 174 |
| Ophthalmology | 523 | 81 | 29 | 10 | 87 | 138 | 51 | 15 | 112 |
| Otorhinolaryngology | 140 | 36 | 9 | 3 | 19 | 42 | 14 | 8 | 9 |
| Pediatrics | 1,209 | 282 | 258 | 23 | 117 | 364 | 49 | 21 | 95 |
| Preventive medicine/community health | 580 | 196 | 43 | 5 | 145 | 139 | 9 | 3 | 40 |
| Psychiatry | 1,066 | 410 | 78 | 11 | 259 | 157 | 25 | 8 | 118 |
| Pulmonary disease | 287 | 49 | 74 | 5 | 49 | 40 | 17 | 8 | 45 |
| Radiology | 1,034 | 262 | 62 | 6 | 108 | 346 | 75 | 9 | 166 |
| Surgery | 1,257 | 179 | 200 | 6 | 170 | 276 | 198 | 38 | 190 |
| Clinical medicine, nec | 4,644 | 838 | 582 | 96 | 597 | 1,075 | 450 | 163 | 843 |
| Other health | 2,754 | 807 | 165 | 18 | 402 | 842 | 85 | 38 | 397 |
| Dental sciences | 358 | 73 | 45 | 7 | 28 | 118 | 36 | 22 | 29 |
| Nursing | 55 | 38 | 2 | 0 | 11 | 4 | 0 | 0 | 0 |
| Pharmaceutical sciences | 1,102 | 353 | 26 | 1 | 134 | 403 | 10 | 3 | 172 |

TABLE 47. Postdoctoral appointees in science, engineering, and health in all institutions, by detailed field, citizenship, and doctoral degree type: 2010

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| | | Doctoral degree[a] | Professional degree[a] | Dual degree[a] | Doctoral degree type unknown/not reported[a] | Doctoral degree[a] | Professional degree[a] | Dual degree[a] | Doctoral degree type unknown/not reported[a] |
| Speech pathology/audiology | 54 | 15 | 0 | 0 | 23 | 7 | 2 | 0 | 7 |
| Veterinary sciences | 464 | 125 | 54 | 5 | 104 | 106 | 12 | 9 | 49 |
| Other health, nec | 721 | 203 | 38 | 5 | 102 | 204 | 25 | 4 | 140 |

nec = not elsewhere classified.

[a] Doctoral degree = PhD, ScD, DEng, etc.; Professional degree = MD, DVM, DO, DDS, etc.; Dual degree = both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).
[b] In 2007, eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. "Communication" and "family and consumer sciences/human sciences" are newly eligible; data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; data may have been reported under other fields before 2007. "Neuroscience" is reported as separate field of science in 2007new; data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as separate field of engineering in 2007new; data were reported under "civil engineering" in 2007old and previous years. See appendix A in http://www.nsf.gov/statistics/nsf10307/ for more detail.

NOTES: In 2010, postdoc section of survey was expanded, and significant effort was made to ensure that appropriate personnel were providing postdoc data (see appendix A for more information). Thus it is unclear how much of increase reported in 2010 represents growth in postdoctoral appointments and how much results from improved data collection. More information on changes in postdoc data will be available in forthcoming InfoBrief at http://www.nsf.gov/statistics/gradpostdoc. Doctoral degree type for postdocs was collected for first time in 2010, and any missing data in this item were not imputed in 2010 because of lack of historical data.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2010.