

TABLE 51

**Federal obligations for applied research performed at higher education institutions, by detailed field of R&D: FY 2022**

(Dollars in thousands)

| Field   | 2022       |
|---|------------|
| All fields  | 16,808,860 |
| Computer and information sciences                           | 399,645    |
| Geosciences, atmospheric sciences, and ocean sciences       | 704,711    |
| Atmospheric science and meteorology                         | 124,205    |
| Geological and earth sciences                               | 32,873     |
| Ocean sciences and marine sciences                          | 219,250    |
| Other geosciences, atmospheric sciences, and ocean sciences | 328,383    |
| Life sciences   | 10,073,227 |
| Agricultural sciences                                       | 107,211    |
| Biological and biomedical sciences                          | 5,381,993  |
| Health sciences   | 3,399,190  |
| Natural resources and conservation                          | 18,432     |
| Other life sciences   | 1,166,400  |
| Mathematics and statistics                                  | 109,915    |
| Physical sciences   | 480,015    |
| Astronomy and astrophysics                                  | 75         |
| Chemistry   | 375,980    |
| Materials science   | 17,543     |
| Physics   | 48,202     |
| Other physical sciences                                     | 38,215     |
| Psychology  | 1,469,912  |
| Biological aspects  | 502        |
| Social aspects  | 3,935      |
| Other psychological sciences                                | 1,465,475  |
| Social sciences   | 573,349    |
| Anthropology  | 6,979      |
| Economics   | 49,249     |
| Political science and government                            | 1,502      |
| Sociology, demography, and population studies               | 38,421     |
| Other social sciences                                       | 477,198    |
| Engineering   | 2,015,822  |
| Aerospace, aeronautical, and astronautical engineering      | 104,449    |
| Bioengineering and biomedical engineering                   | 86,558     |
| Chemical engineering  | 122,297    |
| Civil engineering   | 55,613     |
| Electrical, electronics, and communications engineering     | 117,530    |
| Industrial and manufacturing engineering                    | 53,344     |
| Mechanical engineering                                      | 47,152     |
| Metallurgical and materials engineering                     | 118,619    |
| Other engineering   | 1,310,261  |
| Other fields  | 982,265    |
| Business management and business administration             | 35,992     |
| Communication and communications technologies               | 7,760      |
| Education research  | 485,123    |
| Humanities  | *          |
| Law   | 91         |
| Social work   | 0          |
| Visual and performing arts                                  | 0          |
| All other fields  | 453,300    |

\* = amount greater than \$0 but less than \$500.

**Note(s):**

Because of rounding, detail may not add to total. FY 2022 obligations include additional funding provided by supplemental COVID-19 pandemic-related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act).

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2022–23.