TABLE 51

Federal obligations for applied research performed at higher education institutions, by detailed field of R&D: FY 2021
(Dollars in thousands)

Field	2021
All fields	15,586,00
Computer and information sciences	405,88
Geosciences, atmospheric sciences, and ocean sciences	547,8
Atmospheric science and meteorology	94,2
Geological and earth sciences	44,73
Ocean sciences and marine sciences	194,33
Other geosciences, atmospheric sciences, and ocean sciences	214,5
Life sciences	9,587,0
Agricultural sciences	78,0
Biological and biomedical sciences	5,082,4
Health sciences	3,358,2
Natural resources and conservation	12,1
Other life sciences	1,056,1
Mathematics and statistics	101,4
Physical sciences	191,7
Astronomy and astrophysics	3
Chemistry	107,6
Materials science	17,5
Physics	45,0
Other physical sciences	21,1
Psychology	1,176,2
Biological aspects	, -,
Social aspects	3,2
Other psychological sciences	1,173,0
Social sciences	383,3
Anthropology	8,0
Economics	52,4
Political science and government	7,4
Sociology, demography, and population studies	36,5
Other social sciences	278,7
Engineering	1,837,0
Aerospace, aeronautical, and astronautical engineering	66,8
Bioengineering and biomedical engineering	83,9
Chemical engineering	129,6
Civil engineering	44,1
Electrical, electronics, and communications engineering	98,1
Industrial and manufacturing engineering	16,2
Mechanical engineering	56,0
Metallurgical and materials engineering	106,0
Other engineering	1,236,0
Other fields	1,355,3
Business management and business administration	52,5
Communication and communications technologies	1,8
Education research	
	422,4
Humanities	
Law Social work	3
Social work	
Visual and performing arts  All other fields	878,1

<sup>\* =</sup> amount greater than \$0 but less than \$50,000.

## Note(s):

Because of rounding, detail may not add to total. FY 2021 obligations include additional funding provided by supplemental COVID-19 pandemic-related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act). As of volume 71 (FYs 2021–22), the fields of R&D (formerly, "fields of science and engineering") were revised for consistency with other National Center for Science and Engineering Statistics surveys; some fields were added, merged, or split, and some fields were renamed. Therefore, the data are not directly comparable with totals reported in previous years. See technical table A-3 for additional notes associated with the taxonomy changes to the fields listed in this table.

## Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2021–22.