

Appendix table 5-36

(Page 1 of 2)

**U.S. S&E articles, by field and sector: Selected years, 1988–2001**

(Percent distribution)

Field and sector	1988	1991	1993	1995	1997	1999	2001
All fields (number of articles).....	177,662	194,015	197,397	202,887	197,531	198,524	200,870
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic .....	71.6	71.8	72.0	72.1	73.2	73.3	73.6
Industry.....	8.5	8.7	8.3	8.1	7.4	7.3	7.0
Federal Government .....	8.1	7.8	7.8	7.6	7.2	7.0	7.0
Nonprofit institutions .....	7.0	7.0	7.3	7.5	7.5	7.7	7.9
FFRDCs .....	2.8	2.7	2.4	2.7	2.7	2.6	2.6
State/local government.....	1.2	1.1	1.0	1.0	1.0	1.0	1.0
Joint.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Unknown.....	0.7	0.9	1.0	0.8	1.0	1.0	0.8
Clinical medicine (number of articles) .....	55,016	59,488	61,312	63,367	62,676	63,190	63,709
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic.....	69.1	69.1	68.4	68.9	69.4	69.1	68.8
Industry.....	4.6	5.4	5.5	6.0	5.8	5.8	5.9
Federal Government.....	9.6	8.9	8.7	8.0	7.8	7.5	7.5
Nonprofit institutions .....	13.5	13.4	14.1	14.2	14.0	14.6	15.1
FFRDCs .....	0.4	0.4	0.4	0.4	0.4	0.4	0.3
State/local government .....	2.0	1.7	1.6	1.4	1.4	1.4	1.4
Joint.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown.....	0.8	1.1	1.3	1.0	1.2	1.3	1.0
Biomedical research (number of articles).....	27,455	31,177	33,117	35,048	33,661	33,423	34,041
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic.....	75.0	74.6	74.8	74.3	75.1	75.9	76.0
Industry.....	5.6	6.4	6.4	6.6	6.0	6.2	5.7
Federal Government.....	8.9	8.4	8.4	8.0	7.5	7.2	7.3
Nonprofit institutions .....	7.6	7.6	7.7	8.4	8.5	8.2	8.6
FFRDCs .....	1.5	1.7	1.3	1.6	1.6	1.4	1.3
State/local government .....	1.0	0.9	0.9	0.8	0.7	0.7	0.7
Joint.....	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Unknown.....	0.3	0.4	0.4	0.4	0.5	0.4	0.4
Biology (number of articles) .....	12,862	13,898	12,671	12,664	12,027	11,271	12,499
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic.....	76.9	75.5	75.4	74.2	75.6	74.8	74.6
Industry.....	2.9	3.4	3.5	4.3	3.4	3.4	3.8
Federal Government.....	14.1	14.7	14.3	15.1	14.1	14.3	13.7
Nonprofit institutions .....	3.2	3.4	3.5	3.4	3.6	4.1	4.3
FFRDCs .....	0.8	0.5	0.6	0.6	0.7	0.5	0.5
State/local government .....	1.6	1.6	1.7	1.8	1.9	1.9	2.3
Joint.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown.....	0.4	0.9	1.0	0.6	0.8	1.0	0.7
Chemistry (number of articles).....	13,186	14,681	15,089	14,915	14,375	14,491	14,342
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic.....	71.0	71.9	72.8	72.3	74.5	74.9	75.8
Industry.....	17.4	16.7	16.6	16.3	14.0	13.4	12.2
Federal Government.....	5.7	5.3	4.8	5.1	4.9	4.2	4.6
Nonprofit institutions .....	1.6	1.7	1.9	1.9	1.9	2.2	2.1
FFRDCs .....	3.8	3.7	3.3	4.1	4.3	4.6	4.8
State/local government .....	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Joint.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown.....	0.2	0.4	0.4	0.2	0.3	0.5	0.4
Physics (number of articles).....	18,023	20,515	19,602	19,709	18,048	18,074	17,385
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic.....	63.0	64.3	67.6	69.0	71.6	70.5	71.0
Industry.....	17.9	16.9	14.1	11.4	10.0	10.0	10.4
Federal Government.....	5.5	5.8	6.1	6.0	5.5	5.9	5.4
Nonprofit institutions .....	1.2	1.2	1.2	1.2	0.9	0.9	0.9
FFRDCs .....	12.1	11.4	10.5	11.9	11.2	11.9	11.8
State/local government .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Joint.....	0.1	0.1	0.2	0.1	0.2	0.2	0.2
Unknown.....	0.2	0.3	0.4	0.3	0.5	0.5	0.3
Earth/space sciences (number of articles).....	8,053	9,113	9,830	10,886	10,540	11,209	11,272
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic.....	64.0	62.7	64.6	64.1	65.4	65.1	65.7
Industry.....	6.8	7.9	6.8	6.5	6.3	5.8	5.9
Federal Government.....	14.8	14.4	14.0	14.2	13.7	13.5	12.8

Appendix table 5-36

(Page 2 of 2)

**U.S. S&E articles, by field and sector: Selected years, 1988–2001**

(Percent distribution)

Field and sector	1988	1991	1993	1995	1997	1999	2001
Nonprofit institutions .....	4.5	4.8	5.0	4.9	4.5	4.7	4.9
FFRDCs .....	6.9	6.7	6.4	7.2	6.9	7.0	7.0
State/local government .....	1.5	1.7	1.2	1.2	1.0	1.2	1.5
Joint .....	1.0	1.1	1.3	1.2	1.5	1.9	1.7
Unknown .....	0.5	0.7	0.8	0.6	0.7	0.8	0.6
Engineering/technology (number of articles) .....	11,817	12,838	13,303	13,801	12,907	13,564	13,889
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic .....	57.4	59.4	61.4	62.9	62.2	63.7	65.5
Industry .....	26.3	25.4	23.1	21.8	20.8	20.3	19.1
Federal Government .....	6.4	6.8	6.8	7.4	7.1	6.8	6.4
Nonprofit institutions .....	2.0	1.6	1.7	1.5	1.3	1.3	1.2
FFRDCs .....	6.8	5.7	5.6	5.5	7.2	6.1	6.8
State/local government .....	0.3	0.2	0.2	0.3	0.3	0.7	0.2
Joint .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown .....	0.8	0.9	1.2	0.7	1.1	1.1	0.7
Mathematics (number of articles) .....	3,880	3,382	3,453	3,190	3,051	3,561	3,657
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic .....	90.4	91.4	90.6	92.1	92.8	91.7	92.8
Industry .....	4.2	3.2	3.8	3.3	2.9	3.6	3.4
Federal Government .....	2.3	2.0	2.3	1.7	1.5	1.9	1.3
Nonprofit institutions .....	1.3	1.6	1.5	1.5	1.2	1.3	1.2
FFRDCs .....	1.5	1.5	1.5	1.0	1.4	1.0	0.9
State/local government .....	0.1	0.1	0.1	0.0	0.1	0.1	0.0
Joint .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown .....	0.2	0.3	0.2	0.3	0.2	0.4	0.3
Psychology (number of articles) .....	7,171	7,194	6,986	7,830	8,130	7,806	7,809
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic .....	87.4	87.6	87.1	87.6	86.7	87.7	87.9
Industry .....	2.1	1.9	2.3	2.1	2.0	2.1	2.2
Federal Government .....	2.9	3.0	2.8	2.9	3.0	3.1	2.8
Nonprofit institutions .....	3.9	4.1	4.2	3.8	4.5	4.3	4.7
FFRDCs .....	0.1	0.1	0.1	0.1	0.1	0.0	0.0
State/local government .....	1.3	1.3	1.4	1.4	1.4	1.2	0.9
Joint .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown .....	2.3	2.0	2.1	2.0	2.3	1.7	1.5
Social sciences (number of articles) .....	8,738	9,595	9,690	9,150	9,163	9,171	9,384
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic .....	83.5	84.3	84.0	84.3	85.3	86.8	87.9
Industry .....	3.1	2.6	2.4	2.2	2.7	2.0	1.7
Federal Government .....	5.0	4.9	5.2	5.0	4.0	3.7	3.5
Nonprofit institutions .....	6.0	6.0	6.1	6.3	5.9	5.7	5.4
FFRDCs .....	0.7	0.6	0.6	0.6	0.4	0.2	0.3
State/local government .....	0.6	0.5	0.6	0.5	0.6	0.5	0.4
Joint .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown .....	1.1	1.0	1.0	1.0	1.0	1.1	0.7
Health sciences/professional fields (number of articles) .....	11,461	12,133	12,343	12,326	12,954	12,764	12,882
All sectors .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic .....	78.6	80.8	79.9	79.1	80.7	81.6	81.6
Industry .....	8.5	7.2	7.3	7.1	6.4	5.5	5.0
Federal Government .....	3.6	3.1	3.6	3.6	3.4	3.0	4.3
Nonprofit institutions .....	5.2	5.0	5.1	6.1	5.5	6.0	6.0
FFRDCs .....	0.3	0.3	0.3	0.3	0.3	0.1	0.0
State/local government .....	1.8	1.7	1.8	1.7	1.4	1.5	1.4
Joint .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown .....	2.0	2.0	2.0	2.1	2.3	2.3	1.6

FFRDC federally funded research and development center

NOTES: Article counts are based on fractional assignments; for example, an article with two authors from different sectors is counted as one-half of an article for each sector. Articles with coauthors from more than one country are counted similarly. Articles are assigned to fields based on journal field classifications developed by CHI Research. Details may not add to totals because of rounding.

SOURCES: Institute for Scientific Information, Science Citation Index and Social Sciences Citation Index; CHI Research, Inc.; and National Science Foundation, Division of Science Resources Statistics, special tabulations.