

TABLE D-12. Primary source of support for full-time S&E graduate students, by sex and field: 2004

Sex and field	All sources	Federal support											Other outside support			Self-support
		Total	DOD	DOE	HHS			NASA	NSF	USDA	Other	Institutional support	United States		Foreign	
					Total	NIH	Other						Total	States		
S&E	340,615	73,530	7,928	4,084	23,822	22,365	1,457	2,898	19,877	3,450	11,471	140,994	25,016	22,413	2,603	101,075
Science	253,570	52,686	3,087	2,316	21,668	20,458	1,210	1,466	13,058	3,046	8,045	109,930	14,921	13,219	1,702	76,033
Agricultural sciences	10,040	2,516	24	49	90	67	23	52	202	1,369	730	4,050	1,603	1,474	129	1,871
Biological sciences	55,819	21,729	437	219	16,184	15,623	561	106	2,254	1,067	1,462	22,269	3,849	3,591	258	7,972
Anatomy	821	271	6	0	231	229	2	3	13	5	13	320	46	39	7	184
Biochemistry	5,318	2,812	54	52	2,251	2,171	80	3	246	33	173	1,716	446	425	21	344
Biology	11,535	2,883	77	26	1,571	1,521	50	30	778	61	340	6,329	594	541	53	1,729
Biometry/epidemiology	3,218	1,191	17	0	1,023	940	83	0	41	8	102	832	151	131	20	1,044
Biophysics	1,115	565	8	21	476	468	8	2	49	2	7	324	129	126	3	97
Botany	1,653	493	4	33	31	27	4	5	129	212	79	909	152	137	15	99
Cell/molecular biology	5,395	2,852	52	22	2,444	2,429	15	12	207	31	84	1,811	386	368	18	346
Ecology	1,531	365	6	6	17	14	3	6	160	50	120	921	71	64	7	174
Entomology/parasitology	1,046	336	0	0	49	39	10	0	64	174	49	481	151	138	13	78
Genetics	2,047	1,082	15	4	926	891	35	3	88	22	24	608	149	148	1	208
Microbiology, immunology, and virology	5,083	2,738	57	25	2,391	2,355	36	20	120	54	71	1,682	387	367	20	276
Nutrition	3,371	706	18	1	238	212	26	10	7	349	83	1,146	311	290	21	1,208
Pathology	1,350	500	20	0	411	392	19	1	10	27	31	446	101	88	13	303
Pharmacology	2,974	1,634	50	1	1,485	1,434	51	0	27	6	65	860	238	213	25	242
Physiology	2,251	793	8	0	717	698	19	1	33	5	29	665	104	97	7	689
Zoology	1,072	282	8	0	39	38	1	0	118	12	105	654	96	95	1	40
Other	6,039	2,226	37	28	1,884	1,765	119	10	164	16	87	2,565	337	324	13	911
Computer sciences	29,281	5,115	1,187	151	296	260	36	140	2,757	35	549	9,062	1,733	1,547	186	13,371
Earth, atmospheric, and ocean sciences	11,685	3,343	128	172	41	24	17	457	1,513	93	939	5,213	920	848	72	2,209
Atmospheric	963	526	28	27	0	0	0	138	208	13	112	297	50	45	5	90
Earth	5,712	1,546	30	111	5	2	3	225	838	20	317	2,991	359	331	28	816
Ocean	2,284	838	50	13	14	9	5	59	343	14	345	856	247	236	11	343
Other	2,726	433	20	21	22	13	9	35	124	46	165	1,069	264	236	28	960
Mathematics and statistics	14,881	1,744	163	61	175	154	21	24	1,051	28	242	9,898	435	356	79	2,804
Mathematics/applied mathematics	11,880	1,388	147	60	61	49	12	21	874	12	213	8,071	280	210	70	2,141
Statistics	3,001	356	16	1	114	105	9	3	177	16	29	1,827	155	146	9	663
Physical sciences	31,686	10,969	874	1,585	2,559	2,349	210	565	4,126	42	1,218	16,902	2,141	2,041	100	1,674
Astronomy	1,078	470	7	22	18	17	1	154	197	0	72	484	98	95	3	26
Chemistry	18,311	6,128	440	466	2,352	2,155	197	116	2,086	36	632	9,998	1,357	1,318	39	828
Physics	12,028	4,356	427	1,097	180	168	12	293	1,841	6	512	6,311	683	625	58	678
Other	269	15	0	0	9	9	0	2	2	0	2	109	3	3	0	142
Psychology	37,805	3,624	140	24	1,883	1,666	217	31	363	16	1,167	13,559	1,404	1,358	46	19,218
Clinical	10,195	836	23	4	403	330	73	7	17	1	381	2,552	461	460	1	6,346
General	11,776	1,456	44	16	892	810	82	14	221	0	269	5,446	387	355	32	4,487
Nonclinical	15,834	1,332	73	4	588	526	62	10	125	15	517	5,561	556	543	13	8,385
Social sciences	62,373	3,646	134	55	440	315	125	91	792	396	1,738	28,977	2,836	2,004	832	26,914
Agricultural economics	1,888	454	2	0	8	2	6	1	10	280	153	786	118	100	18	530
Anthropology (cultural and social)	5,832	450	5	4	38	29	9	3	175	3	222	3,300	226	203	23	1,856

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Sex and field	All sources	Federal support											Other outside support			Self-support
		Total	DOD	DOE	HHS			NASA	NSF	USDA	Other	Institutional support	United States		Foreign	
					Total	NIH	Other						Total	States		
Economics	9,969	430	38	3	54	40	14	0	158	40	137	5,757	501	256	245	3,281
Geography	3,172	411	17	6	21	14	7	74	99	19	175	1,677	186	158	28	898
History and philosophy of science	533	9	0	0	0	0	0	0	6	0	3	318	28	20	8	178
Linguistics	2,364	147	0	0	26	24	2	0	61	0	60	1,319	47	35	12	851
Political science and public administration	21,139	789	57	39	28	12	16	8	121	11	525	8,518	906	571	335	10,926
Sociology	6,428	425	4	1	209	168	41	0	90	31	90	4,001	242	220	22	1,760
Other	11,048	531	11	2	56	26	30	5	72	12	373	3,301	582	441	141	6,634
Engineering	87,045	20,844	4,841	1,768	2,154	1,907	247	1,432	6,819	404	3,426	31,064	10,095	9,194	901	25,042
Aerospace	3,243	1,215	537	50	12	10	2	423	117	0	76	920	364	298	66	744
Agricultural	808	239	9	0	14	3	11	14	25	136	41	337	128	115	13	104
Biomedical	5,103	1,531	92	7	1,016	990	26	36	245	5	130	1,530	750	711	39	1,292
Chemical	6,379	2,146	218	357	296	260	36	95	871	46	263	2,440	996	941	55	797
Civil	13,587	2,154	168	90	61	33	28	59	700	73	1,003	5,651	1,252	1,120	132	4,530
Electrical	26,732	6,007	1,973	209	350	290	60	334	2,368	45	728	8,567	2,820	2,656	164	9,338
Engineering science/physics	1,741	556	166	65	42	37	5	22	207	14	40	776	176	157	19	233
Industrial/manufacturing	6,591	968	303	45	66	43	23	43	334	12	165	2,329	600	520	80	2,694
Mechanical	12,787	3,134	732	360	179	150	29	286	1,042	22	513	4,966	1,558	1,407	151	3,129
Metallurgical/materials	4,359	1,571	363	270	50	43	7	52	652	3	181	1,511	752	679	73	525
Mining	238	50	0	18	13	1	12	0	7	2	10	112	19	17	2	57
Nuclear	809	336	48	197	12	6	6	13	7	0	59	272	102	99	3	99
Petroleum	660	58	2	47	1	0	1	0	3	1	4	302	144	80	64	156
Other	4,008	879	230	53	42	41	1	55	241	45	213	1,351	434	394	40	1,344
Female	143,705	27,747	1,528	925	12,095	11,375	720	783	6,234	1,538	4,644	60,005	8,658	7,900	758	47,295
Science	123,849	23,213	797	585	11,417	10,753	664	527	4,581	1,426	3,880	52,717	6,469	5,893	576	41,450
Agricultural sciences	4,736	1,116	5	13	44	31	13	17	95	597	345	2,026	712	667	45	882
Biological sciences	30,883	11,553	218	105	8,641	8,327	314	47	1,203	572	767	12,473	1,966	1,847	119	4,891
Anatomy	421	129	2	0	108	107	1	2	5	3	9	172	22	20	2	98
Biochemistry	2,498	1,324	27	23	1,069	1,030	39	0	114	12	79	794	204	197	7	176
Biology	6,348	1,551	39	12	822	800	22	13	447	33	185	3,476	316	288	28	1,005
Biometry/epidemiology	2,028	742	14	0	642	583	59	0	16	2	68	540	87	81	6	659
Biophysics	409	191	0	3	169	167	2	0	15	2	2	140	36	36	0	42
Botany	887	251	1	14	16	13	3	3	71	106	40	518	70	65	5	48
Cell/molecular biology	2,827	1,493	19	12	1,295	1,286	9	4	111	14	38	972	191	182	9	171
Ecology	849	194	4	4	5	5	0	5	86	22	68	532	34	29	5	89
Entomology/parasitology	482	154	0	0	28	22	6	0	27	73	26	225	62	58	4	41
Genetics	1,233	623	11	3	525	508	17	3	55	15	11	355	89	89	0	166
Microbiology, immunology, and virology	2,886	1,492	30	14	1,310	1,290	20	6	66	26	40	1,012	215	201	14	167
Nutrition	2,620	515	15	1	191	174	17	7	6	232	63	878	209	194	15	1,018
Pathology	793	281	12	0	237	226	11	1	6	13	12	265	44	41	3	203
Pharmacology	1,614	899	22	1	828	797	31	0	13	5	30	474	129	118	11	112
Physiology	1,154	389	3	0	350	338	12	0	20	3	13	352	58	53	5	355

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Sex and field	All sources	Federal support										Other outside support			Self-support	
		Total	DOD	DOE	HHS			NASA	NSF	USDA	Other	Institutional support	United States			Foreign
					Total	NIH	Other						Total	States		
Zoology	554	138	4	0	23	22	1	0	65	5	41	359	34	34	0	23
Other	3,280	1,187	15	18	1,023	959	64	3	80	6	42	1,409	166	161	5	518
Computer sciences	7,224	1,028	173	26	63	57	6	37	575	9	145	2,132	352	308	44	3,712
Earth, atmospheric, and ocean sciences	5,356	1,430	54	61	21	13	8	203	645	40	406	2,436	405	385	20	1,085
Atmospheric	321	174	7	9	0	0	0	53	65	4	36	101	16	16	0	30
Earth	2,399	637	11	34	3	1	2	106	362	9	112	1,311	133	128	5	318
Ocean	1,215	433	25	9	12	8	4	34	175	5	173	459	117	115	2	206
Other	1,421	186	11	9	6	4	2	10	43	22	85	565	139	126	13	531
Mathematics and statistics	5,177	542	34	22	77	69	8	8	305	10	86	3,410	169	139	30	1,056
Mathematics/applied mathematics	3,748	385	24	22	19	16	3	7	238	5	70	2,524	98	75	23	741
Statistics	1,429	157	10	0	58	53	5	1	67	5	16	886	71	64	7	315
Physical sciences	9,884	3,238	211	325	999	913	86	164	1,187	14	338	5,530	602	577	25	514
Astronomy	345	156	2	0	5	5	0	59	70	0	20	158	25	24	1	6
Chemistry	7,183	2,308	140	154	952	871	81	37	784	14	227	4,078	471	456	15	326
Physics	2,241	768	69	171	40	35	5	68	331	0	89	1,244	106	97	9	123
Other	115	6	0	0	2	2	0	0	2	0	2	50	0	0	0	59
Psychology	27,830	2,522	71	16	1,298	1,143	155	19	226	10	882	9,702	1,014	989	25	14,592
Clinical	7,846	625	12	4	305	247	58	5	14	0	285	1,884	335	334	1	5,002
General	8,084	968	19	11	607	548	59	9	132	0	190	3,765	261	244	17	3,090
Nonclinical	11,900	929	40	1	386	348	38	5	80	10	407	4,053	418	411	7	6,500
Social sciences	32,759	1,784	31	17	274	200	74	32	345	174	911	15,008	1,249	981	268	14,718
Agricultural economics	738	184	0	0	1	0	1	0	2	121	60	309	50	44	6	195
Anthropology (cultural and social)	3,710	288	4	1	31	23	8	0	110	1	141	2,093	140	129	11	1,189
Economics	3,628	132	2	3	22	13	9	0	40	17	48	2,140	149	96	53	1,207
Geography	1,321	144	6	1	4	1	3	25	29	7	72	741	69	57	12	367
History and philosophy of science	224	3	0	0	0	0	0	0	1	0	2	139	11	7	4	71
Linguistics	1,521	80	0	0	16	14	2	0	27	0	37	817	27	21	6	597
Political science and public administration	11,055	364	12	11	15	6	9	5	52	3	266	4,216	400	299	101	6,075
Sociology	4,159	280	2	0	143	121	22	0	57	17	61	2,629	138	128	10	1,112
Other	6,403	309	5	1	42	22	20	2	27	8	224	1,924	265	200	65	3,905
Engineering	19,856	4,534	731	340	678	622	56	256	1,653	112	764	7,288	2,189	2,007	182	5,845
Aerospace	454	153	44	5	2	2	0	62	26	0	14	133	62	51	11	106
Agricultural	252	77	3	0	7	2	5	4	8	44	11	107	41	39	2	27
Biomedical	1,930	561	25	1	387	380	7	9	94	1	44	597	275	263	12	497
Chemical	1,817	649	52	99	101	88	13	28	274	12	83	689	265	249	16	214
Civil	4,175	648	47	31	20	11	9	24	228	20	278	1,781	334	294	40	1,412
Electrical	5,087	1,004	265	42	63	54	9	52	456	13	113	1,607	479	456	23	1,997
Engineering science/physics	378	130	17	10	15	13	2	5	60	7	16	163	34	28	6	51
Industrial/manufacturing	1,594	213	55	9	16	12	4	10	73	3	47	650	144	126	18	587

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		Total	DOD	DOE	HHS			NASA	NSF	USDA	Other	Institutional support	United States		Foreign	
					Total	NIH	Other						Total	States		
Mechanical	1,789	448	93	40	25	23	2	42	186	1	61	711	235	211	24	395
Metallurgical/materials	1,142	404	82	52	23	22	1	14	189	1	43	414	198	183	15	126
Mining	30	4	0	0	2	0	2	0	2	0	0	13	0	0	0	13
Nuclear	168	60	5	35	7	5	2	3	0	0	10	62	19	19	0	27
Petroleum	120	6	0	6	0	0	0	0	0	0	0	67	28	18	10	19
Other	920	177	43	10	10	10	0	3	57	10	44	294	75	70	5	374
Male	196,910	45,783	6,400	3,159	11,727	10,990	737	2,115	13,643	1,912	6,827	80,989	16,358	14,513	1,845	53,780
Science	129,721	29,473	2,290	1,731	10,251	9,705	546	939	8,477	1,620	4,165	57,213	8,452	7,326	1,126	34,583
Agricultural sciences	5,304	1,400	19	36	46	36	10	35	107	772	385	2,024	891	807	84	989
Biological sciences	24,936	10,176	219	114	7,543	7,296	247	59	1,051	495	695	9,796	1,883	1,744	139	3,081
Anatomy	400	142	4	0	123	122	1	1	8	2	4	148	24	19	5	86
Biochemistry	2,820	1,488	27	29	1,182	1,141	41	3	132	21	94	922	242	228	14	168
Biology	5,187	1,332	38	14	749	721	28	17	331	28	155	2,853	278	253	25	724
Biometry/epidemiology	1,190	449	3	0	381	357	24	0	25	6	34	292	64	50	14	385
Biophysics	706	374	8	18	307	301	6	2	34	0	5	184	93	90	3	55
Botany	766	242	3	19	15	14	1	2	58	106	39	391	82	72	10	51
Cell/molecular biology	2,568	1,359	33	10	1,149	1,143	6	8	96	17	46	839	195	186	9	175
Ecology	682	171	2	2	12	9	3	1	74	28	52	389	37	35	2	85
Entomology/parasitology	564	182	0	0	21	17	4	0	37	101	23	256	89	80	9	37
Genetics	814	459	4	1	401	383	18	0	33	7	13	253	60	59	1	42
Microbiology, immunology, and virology	2,197	1,246	27	11	1,081	1,065	16	14	54	28	31	670	172	166	6	109
Nutrition	751	191	3	0	47	38	9	3	1	117	20	268	102	96	6	190
Pathology	557	219	8	0	174	166	8	0	4	14	19	181	57	47	10	100
Pharmacology	1,360	735	28	0	657	637	20	0	14	1	35	386	109	95	14	130
Physiology	1,097	404	5	0	367	360	7	1	13	2	16	313	46	44	2	334
Zoology	518	144	4	0	16	16	0	0	53	7	64	295	62	61	1	17
Other	2,759	1,039	22	10	861	806	55	7	84	10	45	1,156	171	163	8	393
Computer sciences	22,057	4,087	1,014	125	233	203	30	103	2,182	26	404	6,930	1,381	1,239	142	9,659
Earth, atmospheric, and ocean sciences	6,329	1,913	74	111	20	11	9	254	868	53	533	2,777	515	463	52	1,124
Atmospheric	642	352	21	18	0	0	0	85	143	9	76	196	34	29	5	60
Earth	3,313	909	19	77	2	1	1	119	476	11	205	1,680	226	203	23	498
Ocean	1,069	405	25	4	2	1	1	25	168	9	172	397	130	121	9	137
Other	1,305	247	9	12	16	9	7	25	81	24	80	504	125	110	15	429
Mathematics and statistics	9,704	1,202	129	39	98	85	13	16	746	18	156	6,488	266	217	49	1,748
Mathematics/applied mathematics	8,132	1,003	123	38	42	33	9	14	636	7	143	5,547	182	135	47	1,400
Statistics	1,572	199	6	1	56	52	4	2	110	11	13	941	84	82	2	348
Physical sciences	21,802	7,731	663	1,260	1,560	1,436	124	401	2,939	28	880	11,372	1,539	1,464	75	1,160
Astronomy	733	314	5	22	13	12	1	95	127	0	52	326	73	71	2	20
Chemistry	11,128	3,820	300	312	1,400	1,284	116	79	1,302	22	405	5,920	886	862	24	502

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		Total	DOD	DOE	HHS			NASA	NSF	USDA	Other	Institutional support	United States			Foreign
					Total	NIH	Other						Total	States		
Physics	9,787	3,588	358	926	140	133	7	225	1,510	6	423	5,067	577	528	49	555
Other	154	9	0	0	7	7	0	2	0	0	0	59	3	3	0	83
Psychology	9,975	1,102	69	8	585	523	62	12	137	6	285	3,857	390	369	21	4,626
Clinical	2,349	211	11	0	98	83	15	2	3	1	96	668	126	126	0	1,344
General	3,692	488	25	5	285	262	23	5	89	0	79	1,681	126	111	15	1,397
Nonclinical	3,934	403	33	3	202	178	24	5	45	5	110	1,508	138	132	6	1,885
Social sciences	29,614	1,862	103	38	166	115	51	59	447	222	827	13,969	1,587	1,023	564	12,196
Agricultural economics	1,150	270	2	0	7	2	5	1	8	159	93	477	68	56	12	335
Anthropology (cultural and social)	2,122	162	1	3	7	6	1	3	65	2	81	1,207	86	74	12	667
Economics	6,341	298	36	0	32	27	5	0	118	23	89	3,617	352	160	192	2,074
Geography	1,851	267	11	5	17	13	4	49	70	12	103	936	117	101	16	531
History and philosophy of science	309	6	0	0	0	0	0	0	5	0	1	179	17	13	4	107
Linguistics	843	67	0	0	10	10	0	0	34	0	23	502	20	14	6	254
Political science and public administration	10,084	425	45	28	13	6	7	3	69	8	259	4,302	506	272	234	4,851
Sociology	2,269	145	2	1	66	47	19	0	33	14	29	1,372	104	92	12	648
Other	4,645	222	6	1	14	4	10	3	45	4	149	1,377	317	241	76	2,729
Engineering	67,189	16,310	4,110	1,428	1,476	1,285	191	1,176	5,166	292	2,662	23,776	7,906	7,187	719	19,197
Aerospace	2,789	1,062	493	45	10	8	2	361	91	0	62	787	302	247	55	638
Agricultural	556	162	6	0	7	1	6	10	17	92	30	230	87	76	11	77
Biomedical	3,173	970	67	6	629	610	19	27	151	4	86	933	475	448	27	795
Chemical	4,562	1,497	166	258	195	172	23	67	597	34	180	1,751	731	692	39	583
Civil	9,412	1,506	121	59	41	22	19	35	472	53	725	3,870	918	826	92	3,118
Electrical	21,645	5,003	1,708	167	287	236	51	282	1,912	32	615	6,960	2,341	2,200	141	7,341
Engineering science/physics	1,363	426	149	55	27	24	3	17	147	7	24	613	142	129	13	182
Industrial/manufacturing	4,997	755	248	36	50	31	19	33	261	9	118	1,679	456	394	62	2,107
Mechanical	10,998	2,686	639	320	154	127	27	244	856	21	452	4,255	1,323	1,196	127	2,734
Metallurgical/materials	3,217	1,167	281	218	27	21	6	38	463	2	138	1,097	554	496	58	399
Mining	208	46	0	18	11	1	10	0	5	2	10	99	19	17	2	44
Nuclear	641	276	43	162	5	1	4	10	7	0	49	210	83	80	3	72
Petroleum	540	52	2	41	1	0	1	0	3	1	4	235	116	62	54	137
Other	3,088	702	187	43	32	31	1	52	184	35	169	1,057	359	324	35	970

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2004.