# TABLE 55

Statistical profile of postgraduation plans of doctorate recipients, by sex and broad field of study: 2017 (Number and percent)

Characteristic	All fields	Life sciences <sup>a</sup>	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other
All doctorate recipients (number) <sup>c</sup>	54,664	12,592	6,081	3,843	9,079	9,843	4,823	5,290	3,113
Postgraduation status (number) <sup>d</sup>									
Definite postgraduation study	12,604	4,406	2,174	773	2,194	2,093	244	551	169
Definite employment	19,635	2,995	1,498	1,715	3,476	3,510	2,619	2,073	1,749
Seeking employment or study	14,806	3,515	1,809	865	2,039	2,954	1,162	1,850	612
0ther <sup>e</sup>	1,769	631	139	91	198	270	165	191	84
Definite postgraduation study (%) <sup>f</sup>									
Postdoc fellowship or research associateship	94.2	93.8	98.1	96.0	90.7	94.6	86.9	95.1	91.1
Other or unknown <sup>g</sup>	5.8	6.2	1.9	4.0	9.3	5.4	13.1	4.9	8.9
Definite employment (%) <sup>h</sup>									
Academe	48.2	42.6	25.7	33.3	58.3	17.1	61.6	76.7	80.3
Government	7.7	10.6	8.9	4.3	11.9	8.9	4.1	2.7	5.1
Industry or business <sup>i</sup>	32.9	35.2	59.7	58.1	18.1	69.9	5.3	5.9	9.8
Nonprofit organization	6.2	9.8	3.6	3.1	8.3	3.4	6.0	9.2	3.7
Other or unknown <sup>j</sup>	5.0	1.8	2.0	1.2	3.4	0.7	23.0	5.5	1.1
Primary activity <sup>k</sup>									
R&D	41.6	44.9	62.1	62.0	35.7	71.0	12.8	8.8	34.4
Teaching	32.9	24.7	19.8	24.3	35.5	9.8	41.6	71.1	48.0
Management or administration	10.4	9.4	3.5	2.3	8.4	4.3	32.7	9.5	9.9
Professional services	10.0	14.7	8.7	6.1	16.0	8.5	8.6	5.0	5.7
Other	5.1	6.3	5.9	5.2	4.4	6.5	4.3	5.6	1.9
Secondary activity <sup>l</sup>									
R&D	28.0		16.6	23.6	32.4	14.3		43.0	42.6
Teaching	14.6	12.2	4.6	8.9	20.5	7.3	18.8	11.3	33.1
Management or administration	10.2	13.2	14.2	6.5	10.7	11.4	9.6	8.0	5.4
Professional services	4.9		4.0	3.6	5.6	3.8		3.1	2.9
Other	2.3	2.0	3.0	2.1	2.0	2.9	2.0	3.6	1.1
No secondary activity	40.0		57.7	55.4	28.8	60.3	32.4	31.1	14.9
Activity unknown	3.6	3.4	4.3	3.7	3.7	4.3	3.6	2.6	3.2
Postgraduation location (%) <sup>m</sup>									
United States <sup>n</sup>	90.4	92.8	89.1	89.0	88.9	90.3	93.7	88.9	87.9
New England	8.5		10.0	8.1	9.0	7.9	4.6	8.2	5.5
Middle Atlantic	12.7		11.2	14.1	14.0	10.7		15.4	14.6
East North Central	11.9	11.4	12.1	9.2	12.0	11.5	13.7	13.3	13.6

#### National Center for Science and Engineering Statistics | NSF 19-301

### TABLE 55

Statistical profile of postgraduation plans of doctorate recipients, by sex and broad field of study: 2017 (Number and percent)

Characteristic	All fields	Life sciences <sup>a</sup>	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other
West North Central	5.2	6.6	3.7	3.4	5.3	3.6	8.5	5.4	4.8
South Atlantic	15.9	17.7	13.7	12.5	17.5	13.8	18.3	15.3	16.7
East South Central	4.0	4.1	2.4	2.5	3.1	3.1	8.8	5.0	5.4
West South Central	7.2	6.8	5.7	5.8	6.5	6.7	10.8	8.3	9.5
Mountain	5.5	4.6	6.5	4.3	5.2	6.0	7.6	4.9	5.0
Pacific and insular	18.9	17.8	23.2	28.5	15.6	26.3	10.3	12.8	11.9
Not in United States	9.5	7.2	10.9	11.0	11.1	9.7	6.3	11.0	12.0
Location unknown	*	0	0.1	*	*	*	0	*	0.1
Male doctorate recipients (number)	29,146	5,629	4,068	2,866	3,693	7,389	1,521	2,581	1,399
Postgraduation status (number) <sup>d</sup>									
Definite postgraduation study	7,036	2,155	1,537	602	732	1,609	66	264	71
Definite employment	10,658	1,260	990	1,318	1,614	2,753	856	1,010	857
Seeking employment or study	7,890	1,479	1,176	643	858	2,195	352	933	254
Other <sup>e</sup>	899	309	84	61	71	200	52	92	30
Definite postgraduation study (%) <sup>f</sup>									
Postdoc fellowship or research associateship	94.8	93.3	98.1	96.5	92.3	94.2	87.9	96.6	88.7
Other or unknown <sup>g</sup>	5.2	6.7	1.9	3.5	7.7	5.8	12.1	3.4	11.3
Definite employment (%) <sup>h</sup>									
Academe	41.5	39.6	23.9	30.0	57.7	15.3	60.9	73.4	79.0
Government	8.0	9.8	8.4	4.1	12.8	9.3	5.4	3.6	5.8
Industry or business <sup>i</sup>	41.8	41.5	62.2	62.1	19.6	71.4	5.3	6.8	11.3
Nonprofit organization	5.3	7.5	3.6	3.0	7.1	3.3	6.5	11.1	2.8
Other or unknown <sup>j</sup>	3.4	1.6	1.8	0.9	2.7	0.7	22.0	5.1	1.1
Primary activity <sup>k</sup> R&D	50.2	E0 1	65.0	647	40.9	72.0	10.0	0.6	27.0
Teaching	50.3		65.0	64.7	40.8	73.9	12.8	8.6	37.8 45.2
Management or administration	27.6 8.4		18.1 2.9	23.1	7.6	8.2 4.1	39.0 37.3	68.8 9.5	45.2
Professional services	8.6	13.2	8.7	5.8	12.8	7.7	7.1	6.4	5.2
Other	5.0	5.4	5.3	4.4	4.9	6.1	3.7	6.7	1.3
Secondary activity <sup>1</sup>	0.0	0.4	0.0		4.9	0.1	0.7	5.7	
R&D	25.0	25.1	15.6	22.1	31.9	13.0	30.5	40.9	41.2
Teaching	25.0		4.6	7.6	23.1	7.2		40.9	36.8

# TABLE 55

Statistical profile of postgraduation plans of doctorate recipients, by sex and broad field of study: 2017 (Number and percent)

Characteristic	All fields	Life sciences <sup>a</sup>	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other
Management or administration	10.3	13.5	15.3	6.5	9.2	11.8	9.0	8.6	5.5
Professional services	4.5	6.9	4.5	3.1	5.8	3.9	6.7	3.6	2.2
Other	2.3	2.0	2.8	2.1	1.5	2.9	2.3	3.6	0.7
No secondary activity	43.9	40.5	57.4	58.5	28.5	61.3	30.4	30.9	13.5
Activity unknown	3.8	4.1	4.7	3.8	3.5	4.4	3.0	2.6	2.7
Postgraduation location (%) <sup>m</sup>									
United States <sup>n</sup>	88.8	92.3	89.0	89.1	83.3	90.0	89.4	87.0	85.6
New England	8.1	9.8	9.5	7.7	8.3	7.3	4.6	8.1	6.1
Middle Atlantic	12.3	13.0	11.2	14.5	13.0	10.2	10.3	14.8	14.0
East North Central	11.8	11.6	12.7	9.3	11.2	11.7	14.9	13.3	12.7
West North Central	4.9	7.1	3.7	3.5	5.0	3.6	8.2	5.3	4.7
South Atlantic	14.7	15.9	12.9	11.8	17.1	13.6	16.9	15.5	16.3
East South Central	3.4	4.1	2.4	2.3	2.7	3.0	7.7	4.2	4.5
West South Central	6.8	7.1	5.7	5.0	6.1	6.9	9.1	8.4	10.0
Mountain	5.6	4.7	6.7	4.4	4.9	6.1	8.2	5.5	5.2
Pacific and insular	20.6	18.3	23.5	30.1	14.5	26.8	9.0	11.6	10.9
Not in United States	11.1	7.7	11.0	10.9	16.6	9.9	10.6	12.9	14.3
Location unknown	*	0	0	0.1	*	*	0	0.1	0.1
Female doctorate recipients (number)	25,495	6,958	2,011	976	5,381	2,448	3,300	2,708	1,713
Postgraduation status (number) <sup>d</sup>									
Definite postgraduation study	5,568	2,251	637	171	1,462	484	178	287	98
Definite employment	8,976	1,735	507	397	1,862	757	1,763	1,063	892
Seeking employment or study	6,916	2,036	633	222	1,181	759	810	917	358
Other <sup>e</sup>	870	322	55	30	127	70	113	99	54
Definite postgraduation study (%) <sup>f</sup>									
Postdoc fellowship or research associateship	93.4	94.3	98.0	94.2	89.9	96.1	86.5	93.7	92.9
Other or unknown <sup>g</sup>	6.6	5.7	2.0	5.8	10.1	3.9	13.5	6.3	7.1
Definite employment (%) <sup>h</sup>									
Academe	56.2	44.8	29.0	44.3	58.9	23.6	62.0	79.9	81.5
Government	7.2	11.2	10.1	5.0	11.0	7.5		2.0	4.5

# TABLE 55

Statistical profile of postgraduation plans of doctorate recipients, by sex and broad field of study: 2017 (Number and percent)

Characteristic	All fields	Life sciences <sup>a</sup>	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other
Industry or business <sup>i</sup>	22.3	30.5	55.0	44.8	16.8	64.1	5.3	5.0	8.3
Nonprofit organization	7.3	11.5	3.6	3.5	9.3	4.0	5.7	7.4	4.6
Other or unknown <sup>j</sup>	6.9	2.0	2.4	2.3	4.1	0.8	23.5	5.7	1.1
Primary activity <sup>k</sup>									
R&D	31.4	39.1	56.6	53.3	31.3	60.6	12.8	9.0	31.2
Teaching	39.0	27.7	22.7	28.5	36.9	15.5	42.8	73.4	50.8
Management or administration	12.8	10.6	4.7	3.1	9.1	4.7	30.5	9.6	9.3
Professional services	11.6	15.7	8.8	7.3	18.8	11.4	9.4	3.6	6.2
Other	5.3	6.9	7.2	7.8	4.0	7.8	4.5	4.5	2.6
Secondary activity <sup>l</sup>									
R&D	31.5	26.6	18.2	28.5	32.9	19.1	30.1	45.0	44.0
Teaching	15.3	12.3	4.7	13.1	18.3	7.8	17.7	10.1	29.6
Management or administration	10.1	13.1	12.3	6.3	12.0	10.0	9.9	7.3	5.2
Professional services	5.4	7.7	3.1	5.2	5.4	3.6	7.1	2.7	3.6
Other	2.3	2.0	3.5	1.8	2.4	2.9	1.9	3.6	1.4
No secondary activity	35.4	38.4	58.4	45.2	29.0	56.6	33.5	31.3	16.2
Activity unknown	3.5	2.9	3.6	3.5	3.9	3.8	3.9	2.5	3.7
Postgraduation location (%) <sup>m</sup>									
United States <sup>n</sup>	92.4	93.3	89.2	88.7	92.8	91.3	95.8	90.7	90.1
New England	8.9	10.7	11.0	9.7	9.4	10.0	4.6	8.3	4.8
Middle Atlantic	13.2	12.5	11.2	12.9	14.7	12.2	11.1	15.9	15.2
East North Central	12.0	11.2	10.8	9.2	12.6	10.8	13.1	13.3	14.4
West North Central	5.7	6.3	3.7	2.8	5.5	3.4	8.6	5.6	4.9
South Atlantic	17.5	19.2	15.4	15.0	17.8	14.3	18.9	15.1	17.1
East South Central	4.7	4.1	2.4	3.0	3.4	3.5	9.3	5.6	6.3
West South Central	7.6	6.5	5.5	8.6	6.8	6.2	11.5	8.2	9.1
Mountain	5.3	4.6	6.0	4.0	5.4	5.5	7.3	4.4	4.8
Pacific and insular	16.9	17.4	22.5	23.1	16.4	24.7	10.9	14.0	12.9
Not in United States	7.6	6.7	10.7	11.3	7.2	8.7	4.2	9.3	9.9
Location unknown	*	0	0.2	0	0	0	0	0	0

\* = value < 0.05%.

#### National Center for Science and Engineering Statistics | NSF 19-301

#### TABLE 55

Statistical profile of postgraduation plans of doctorate recipients, by sex and broad field of study: 2017

(Number and percent)

<sup>a</sup> Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

<sup>b</sup> Includes other non-science and engineering fields not shown separately.

<sup>c</sup> Includes respondents who did not report sex.

<sup>d</sup> Includes only respondents who reported postgraduation status.

<sup>e</sup> Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

<sup>f</sup> Excludes respondents who indicated plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postgraduation plans for study.

<sup>g</sup> "Other" includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

<sup>h</sup> Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

<sup>i</sup> Includes doctorate recipients who indicated self-employment.

<sup>j</sup> "Other" is mainly composed of elementary and secondary schools.

<sup>k</sup> Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.

Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.

<sup>m</sup> Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.

<sup>n</sup> Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

#### Note(s)

Due to rounding, percentages may not sum to 100.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2017.