Table 9-2

Non-science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2022

(Number and percent)

Characteristic	All fields	Non-science and engineering						
		Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering	
Doctorate recipients reporting	50.000	40044	1001	0.404	0.007	757	1.00	
postgraduation status (number)	52,232	10,311	1,234	3,421	2,997	757	1,90	
Definite postdoctoral training plans	28.1	11.0	7.1	6.6	16.1	11.0	13.	
Definite employment plans	44.9	59.0	74.2	68.3	47.8	44.5	55.	
Seeking employment or study	23.5	26.2	15.0	22.4	31.1	41.0	26.	
Other status <sup>a</sup>	3.4	3.7	3.6	2.7	4.9	3.6	3.	
Definite postdoctoral training plans (%) <sup>b</sup>								
Postdoc fellowship or research associateship	95.1	96.4	95.5	95.6	96.5	92.8	98.	
Other training or unknown <sup>C</sup>	4.9	3.6	4.5	4.4	3.5	7.2	1.	
Definite employment plans (%) <sup>d</sup>								
Academe	34.7	61.4	75.1	54.2	63.3	64.4	62.	
In tenure track faculty position (%)	43.5	43.6	83.9	28.9	31.8	30.4	50.	
Not in tenure track position (%)	53.6	54.0	15.3	68.1	65.6	67.3	47.	
Government	7.0	4.7	D	4.7	3.4	D	8.	
Industry or business <sup>e</sup>	46.0	11.4	16.7	8.2	9.6	16.6	14.	
Nonprofit organization	6.5	8.4	2.1	7.2	13.3	13.4	8.	
Other or unknown <sup>f</sup>	5.8	14.1	D	25.7	10.4	D	6.	
	3.0	14.1		25.7	10.4	<u> </u>	0.	
Primary activity <sup>g</sup> Research and development	46.7	10.4	52.3	12.0	8.7	12.0	24	
·		19.4					24.	
Teaching  Management or administration	9.0	45.9 20.5	29.7 8.1	40.4 34.7	63.7 11.0	9.3	42. 16.	
Professional services and other	21.0	14.3	9.9	12.9	16.6	17.3	16.	
	21.0	14.3	9.9	12.9	10.0	17.3	10.	
Secondary activity <sup>g</sup>	00.0	00.5	01.4	05.0	05.0	00.0	20	
Research and development	23.2	30.5	31.4	25.0	35.8	33.0	33.	
Teaching	12.0	21.3	49.0	16.9	14.1	10.5	20.	
Management or administration	12.7	11.3	4.5	13.1	12.6	9.9	11.	
Professional services and other	12.7	8.0	4.8	9.7	6.3	9.6	8.	
No secondary activity	39.4	28.9	10.4	35.4	31.2	37.0	24.	
Activity unknown	4.2	4.6	4.4	4.8	3.7	3.9	5.	
Postgraduation location (%) <sup>h</sup>								
United States <sup>i</sup>	91.1	89.7	82.3	94.2	87.8	87.9	89.	
Midwest	15.3	18.9		21.3	18.8	15.7	16.	
Northeast	21.6	17.8	15.0	14.8	21.2	28.1	17.	
South	26.4	35.2	34.2	40.3	30.8	23.1	36.	
West	27.2	17.1	15.4	17.3		19.3	18.	
Outside the United States	8.8	10.3		5.8	12.1	12.1	10.	
Location unknown	0.1	0.1	0.1	0.0	0.1	0.0	0.	
Postgraduation location in same state as	20.1	440	17.0	61.7	40.0	27.6	26	
doctorate institution (%)  Male doctorate recipients reporting	38.1	44.0	17.8	61.7	40.3	37.6	36.	
postgraduation status (number)	27,771	4,268		1,010		331	74	
Definite postdoctoral training plans	28.2	11.0	7.8	6.3	15.2	8.2	13.	
Definite employment plans	45.4	58.9		71.8		44.4	56.	
Seeking employment or study	23.1	26.3	14.3	19.8	32.1	44.4	26.	
Other status <sup>a</sup>	3.1	3.6	4.0	2.0	4.5	3.0	3.	
Definite postdoctoral training plans (%) <sup>b</sup>								

Table 9-2

Non-science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2022

(Number and percent)

Characteristic	All fields	Non-science and engineering							
		Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering		
Postdoc fellowship or research associateship	95.3	95.9	94.4	96.9	95.2	92.6	99.0		
Other training or unknown <sup>c</sup>	4.7	4.1	5.6	3.1	4.8	7.4	1.0		
Definite employment plans (%) <sup>d</sup>									
Academe	29.1	61.6	72.7	55.9	59.0	66.0	61.1		
In tenure track faculty position (%)	46.6	46.2	84.6	30.9	27.6	26.8	52.7		
Not in tenure track position (%)	50.6	51.7	14.6	65.7	70.1	73.2	44.9		
Government	7.0	5.2	D	4.6	4.2	D	11.2		
Industry or business <sup>e</sup>	54.5	12.0	18.8	8.0	9.1	16.3	14.1		
Nonprofit organization	5.2	9.6	2.5	6.9	18.8	10.2	6.9		
Other or unknown <sup>f</sup>	4.3	11.6	D D	24.7	9.0	D	6.7		
	4.3	11.0	D	24.7	9.0	U	0.7		
Primary activity <sup>g</sup>	FO. 4	01.0	50.0	10.5	7.6	44.5	00.5		
Research and development	53.4	21.0	52.2	13.5	7.6	11.5	22.5		
Teaching	19.1	46.1	30.8	38.6	60.7	64.0	46.3		
Management or administration	6.6	18.4	7.4		11.7	7.9	17.0		
Professional services and other	20.8	14.4	9.7	12.0	20.0	16.5	14.2		
Secondary activity <sup>g</sup>									
Research and development	21.9	32.4	33.5	25.4	34.7	29.5	40.5		
Teaching	10.8	22.2	46.0	17.4	15.8	11.5	16.5		
Management or administration	12.5	10.9	4.9	12.3	12.4	13.7	12.4		
Professional services and other	14.4	7.3	4.5	9.3	5.8	6.5	9.9		
No secondary activity	40.5	27.1	11.1	35.7	31.2	38.8	20.8		
Activity unknown	4.5	4.7	4.5	4.8	4.1	5.4	5.7		
Postgraduation location (%) <sup>h</sup>									
United States <sup>i</sup>	89.8	87.5	80.5	93.0	87.2	89.1	86.8		
Midwest	14.6	18.5	16.0	20.5	20.0	14.9	16.5		
Northeast	20.8	16.8	13.5	15.2	19.7	24.7	14.9		
South	24.6	34.6	35.3	38.8	31.9	26.4	34.9		
West	29.2	17.1	15.6	18.1	15.3	21.8	18.6		
Outside the United States	10.1	12.3	19.3	7.0	12.6	10.9	12.8		
Location unknown	0.1	0.1	0.2	0.0	0.1	0.0	0.4		
Postgraduation location in same state as doctorate institution (%)	36.0	39.4	17.7	57.3	39.0	41.4	35.7		
Female doctorate recipients reporting postgraduation status (number)	24,456	6,039	542	2,411	1,504	426	1,156		
Definite postdoctoral training plans	28.0	11.0	6.3		17.0	13.1	13.8		
Definite employment plans	44.4	59.0	74.9		47.7	44.6	55.5		
Seeking employment or study	23.8	26.1	15.9		30.1	38.3	27.0		
Other status <sup>a</sup>	3.6	3.7	3.0	3.0	5.3	4.0	3.5		
Definite postdoctoral training plans (%) <sup>b</sup>	0.0	0.7	0.0	0.0	0.0				
Postdoc fellowship or research associateship	94.8	96.7	97.1	95.1	97.6	92.9	98.1		
Other training or unknown <sup>C</sup>	5.2	3.3	2.9	4.9	2.4	7.1	1.9		
Definite employment plans (%) <sup>d</sup>									
Academe	41.1	61.3	78.1	53.5	67.6	63.2	62.6		
In tenure track faculty position (%)	41.0	41.8	83.0		35.5	33.3			
Not in tenure track position (%)	56.0	55.6	16.1	69.2	61.6	62.5	48.3		
Government	7.1	4.3			2.6	D	6.4		

Table 9-2

Non-science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2022

(Number and percent)

Characteristic		Non-science and engineering						
	All fields	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering	
Industry or business <sup>e</sup>	36.1	11.0	14.0	8.3	10.2	16.8	15.	
Nonprofit organization	8.1	7.5	1.5	7.3	7.8	15.8	8.9	
Other or unknown <sup>f</sup>	7.6	15.9	D	26.2	11.7	D	7.0	
Primary activity <sup>g</sup>								
Research and development	38.9	18.2	52.4	11.3	9.8	12.4	25.:	
Teaching	28.0	45.8	28.3	41.3	66.5	59.5	40.	
Management or administration	11.8	21.9	9.0	34.2	10.4	10.3	15.8	
Professional services and other	21.3	14.1	10.3	13.3	13.3	17.8	18.	
Secondary activity <sup>g</sup>								
Research and development	24.6	29.2	28.8	24.8	36.9	35.7	29.	
Teaching	13.5	20.7	52.7	16.6	12.4	9.7	23.	
Management or administration	13.0	11.5	3.9	13.4	12.8	7.0	11.	
Professional services and other	10.7	8.5	5.1	9.8	6.6	11.9	8.	
No secondary activity	38.2	30.1	9.5	35.3	31.2	35.7	27.	
Activity unknown	3.9	4.5	4.2	4.7	3.3	2.6	6.	
Postgraduation location (%) <sup>h</sup>								
United States <sup>i</sup>	92.6	91.2	84.5	94.7	88.4	87.0	91.	
Midwest	16.1	19.2	18.6	21.6	17.6	16.3	17.	
Northeast	22.6	18.6	17.0	14.7	22.5	30.5	19.	
South	28.5	35.6	32.7	40.9	29.7	20.7	37.	
West	24.9	17.1	15.2	16.9	17.8	17.5	17.	
Outside the United States	7.3	8.8	15.5	5.3	11.5	13.0	8.	
Location unknown	0.1	*	0.0	0.0	0.1	0.0	0.	
Postgraduation location in same state as doctorate institution (%)	40.5	47.2	18.0	63.7	41.6	35.0	37.	

<sup>\* =</sup> value between 0.00% and 0.05%; D = suppressed to avoid disclosure of confidential information.

## Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in table A-4. Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information, see the "Technical Notes" and the SED 2021 Taxonomy Changes Working Paper (available at https://ncses.nsf.gov/pubs/ncses23200).

## Source(s):

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

<sup>&</sup>lt;sup>a</sup> Includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

<sup>&</sup>lt;sup>b</sup> Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.

<sup>&</sup>lt;sup>c</sup> Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

<sup>&</sup>lt;sup>d</sup> Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

<sup>&</sup>lt;sup>e</sup> Includes doctorate recipients reporting self-employment.

f Other is mainly composed of elementary and secondary schools.

<sup>&</sup>lt;sup>9</sup> Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

<sup>&</sup>lt;sup>h</sup> Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.

<sup>&</sup>lt;sup>i</sup> Includes doctorate recipients with an unknown U.S. region of employment after doctorate, thus the percentages by regions will not sum to the value for United States; see the "Technical Notes" for states or territories included in regions.