

Table 8-4. Biological and biomedical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2025

(Number, percent, and median years)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	Biological and biomedical sciences, general	Cell/ cellular biology and anatomy	Ecology, evolutionary biology, and epidemiology	Genetics and genomics	Microbiology and immunology	Neurobiology and neurosciences	Pharmacology and toxicology	Physiology, oncology, and cancer biology	Biological and biomedical sciences, other
All doctorate recipients (number) ^a	9,950	1,521	742	968	784	1,078	488	1,136	1,343	393	845	652
Sex (%)												
Male	43.4	51.9	54.4	39.9	38.0	36.4	39.3	41.1	41.7	36.9	47.5	43.1
Female	56.6	48.1	45.6	60.1	62.0	63.6	60.7	58.9	58.3	63.1	52.5	56.9
Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)												
U.S. citizen or permanent resident	72.7	66.5	53.6	68.5	77.6	80.4	73.4	80.2	78.2	75.3	73.1	69.2
Temporary visa holder	23.2	29.6	44.1	22.4	19.8	17.2	21.9	16.7	18.3	19.3	23.0	25.5
Unknown	4.1	3.9	2.3	9.1	2.7	2.4	4.7	3.1	3.5	5.3	3.9	5.4
Marital status (%)												
Never married	42.0	46.2	48.1	36.7	38.6	37.8	41.8	45.3	43.6	40.7	39.8	39.0
Married	33.5	30.8	D	31.3	34.9	36.1	D	34.3	31.0	32.8	38.0	34.4
Marriage-like relationship	13.5	13.4	8.9	11.0	15.8	16.8	11.9	13.0	16.3	12.5	11.7	13.8
Separated, divorced, widowed	2.0	1.5	D	1.9	2.7	3.5	D	1.4	2.0	2.8	2.1	2.1
Unknown	9.0	8.2	9.4	19.2	7.9	5.8	9.0	5.9	7.1	11.2	8.4	10.7
Has dependent age 18 or younger (%)	12.5	11.8	12.0	13.5	13.7	15.0	15.3	11.4	9.5	15.0	13.1	12.0
Has one or more functional limitations (%)	16.1	16.1	11.0	15.3	16.1	16.9	17.2	14.6	19.4	14.7	15.3	18.7
Age at doctorate (median years)	30.4	30.0	30.0	30.4	30.3	31.8	30.2	30.2	30.3	30.0	30.4	30.7
Bachelor's in same field as doctorate (%) ^b	65.0	63.6	33.7	71.6	81.2	56.6	77.1	83.0	61.7	63.5	58.4	64.3
Master's earned (%)	43.7	38.0	61.8	41.0	34.6	67.2	38.6	32.0	35.5	37.4	47.9	51.7
Master's earned at same doctorate institution (%)	35.3	38.1	41.2	32.5	38.3	30.1	34.7	32.5	45.8	36.8	29.5	29.0
Time to doctorate (median years)												
Years since earning bachelor's degree	8.0	7.3	7.6	8.0	7.8	9.3	7.8	7.7	7.9	7.4	8.0	8.0
From graduate school start	6.3	6.3	6.5	6.3	6.3	7.6	6.3	6.3	6.3	6.0	6.3	6.7

Table 8-4. Biological and biomedical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2025

(Number, percent, and median years)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	Biological and biomedical sciences, general	Cell/ cellular biology and anatomy	Ecology, evolutionary biology, and epidemiology	Genetics and genomics	Microbiology and immunology	Neurobiology and neurosciences	Pharmacology and toxicology	Physiology, oncology, and cancer biology	Biological and biomedical sciences, other
From doctoral program start ^c	5.8	5.8	5.3	5.7	5.8	5.7	5.8	5.8	5.8	5.3	5.3	5.5
Received tuition remission (%)	89.6	90.1	90.1	91.1	91.6	88.7	88.4	90.7	89.6	86.4	88.5	87.4
Male doctorate recipients (number)	4,316	790	404	386	298	392	192	467	560	145	401	281
Citizenship status (%)												
U.S. citizen or permanent resident	71.0	66.1	53.0	70.7	76.2	78.6	72.4	79.4	74.5	71.7	77.8	63.3
Temporary visa holder	24.9	29.7	45.3	21.5	21.1	20.4	22.4	16.5	21.3	20.7	19.5	30.2
Unknown	4.1	4.2	1.7	7.8	2.7	1.0	5.2	4.1	4.3	7.6	2.7	6.4
Marital status (%)												
Never married	44.1	47.8	53.2	37.8	43.3	37.2	40.1	46.0	47.0	42.1	39.4	40.6
Married	32.2	28.9	D	31.9	30.5	36.2	D	32.3	28.9	D	39.2	34.5
Marriage-like relationship	13.0	13.9	7.4	10.6	16.1	19.1	12.5	12.6	14.3	10.3	11.0	12.5
Separated, divorced, widowed	1.6	1.1	D	1.3	1.7	3.3	D	1.1	2.0	D	2.7	1.8
Unknown	9.2	8.2	10.1	18.4	8.4	4.1	8.9	7.9	7.9	12.4	7.7	10.7
Has dependent age 18 or younger (%)	13.4	12.6	10.3	14.9	13.2	16.0	18.3	13.0	9.3	16.7	15.4	15.6
Has one or more functional limitations (%)	15.3	16.4	10.7	12.8	14.3	16.7	16.8	13.9	17.6	13.7	15.3	19.0
Age at doctorate (median years)	30.8	30.3	30.1	31.0	30.8	32.0	30.7	31.0	30.9	30.7	30.9	30.9
Bachelor's in same field as doctorate (%) ^b	62.4	61.0	30.1	67.3	82.1	57.7	78.0	81.5	58.6	64.8	56.0	65.8
Master's earned (%)	44.8	37.9	62.4	47.1	37.3	64.0	38.4	32.9	37.3	37.5	49.1	53.5
Master's earned at same doctorate institution (%)	35.3	36.3	41.9	33.6	41.3	30.1	44.1	29.7	43.4	31.3	28.5	29.2
Time to doctorate (median years)												
Years since earning bachelor's degree	8.0	7.5	7.9	8.3	8.3	9.3	7.9	8.3	8.2	8.0	8.1	8.3

Table 8-4. Biological and biomedical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2025

(Number, percent, and median years)

[illegible]

Table 8-4. Biological and biomedical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2025

(Number, percent, and median years)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	Biological and biomedical sciences, general	Cell/ cellular biology and anatomy	Ecology, evolutionary biology, and epidemiology	Genetics and genomics	Microbiology and immunology	Neurobiology and neurosciences	Pharmacology and toxicology	Physiology, oncology, and cancer biology	Biological and biomedical sciences, other
Years since earning bachelor's degree	7.7	7.3	7.3	7.6	7.4	9.3	7.8	7.3	7.7	7.3	7.7	7.8
From graduate school start	6.3	6.2	6.5	6.2	6.3	7.8	6.3	6.0	6.1	5.8	6.1	6.4
From doctoral program start ^c	5.7	5.8	5.3	5.5	5.8	5.5	5.8	5.5	5.8	5.3	5.3	5.3
Received tuition remission (%)	89.1	87.9	88.2	91.8	90.5	87.0	87.2	91.3	90.3	86.7	86.6	89.2

D = suppressed to avoid disclosure of confidential information.

^a All doctorate recipients includes doctorate recipients who did not report sex.

^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.

^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):

Due to rounding, percentages may not sum to 100. The survey data collection for the field of study changed in 2021, which may affect the data comparisons across years. This table uses the new field taxonomy based on a modified version of the 2020 Classification of Instructional Programs (CIP) codes and does not match data that uses the trend field taxonomy. For more information about the field taxonomy changes, see the "Technical Notes."

Source(s):

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