

Report on the 2015-2016 New Doctoral Recipients

Amanda L. Golbeck, Thomas H. Barr, and Colleen A. Rose

This report presents a statistical profile of recipients of doctoral degrees awarded by departments in the mathematical sciences at universities in the United States during the period July 1, 2015 through June 30, 2016. Information in this report was provided by 298 of the 322 doctoral-granting departments surveyed, with additional information provided by the individual new doctoral recipients. Readers should keep in mind that the drops seen in the Statistics and Biostatistics groups are likely the result of nonresponse; 23 (10 Statistics & 13 Biostatistics) of 105 departments did not respond in time for the publication of this report.

The 2015–2016 Report on Employment Experiences of New Doctoral Recipients immediately following this report provides an analysis of the fall 2016 employment plans, of the 730 PhD recipients who responded to this survey, and a demographic profile summarizing characteristics of their citizenship status, gender, and racial/ethnic group.

Detailed information, including tables not appearing in this report, is available on the AMS website at www.ams.org/annual-survey.

Doctoral Degrees Awarded

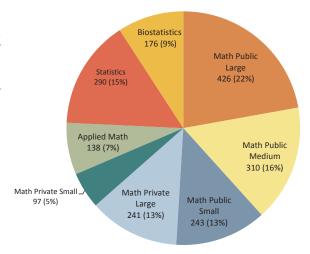
In mathematical sciences 1,921 PhDs were awarded by 279 doctoral-granting departments; 19 of these departments awarded no doctoral degrees.

The highest percentage, 30% (575) of the new PhDs had a dissertation in statistics/biostatistics, followed by algebra/number theory with 15% (279) and applied mathematics with 13% (248).

Comparing PhDs awarded in 2015-16 to 2014-15 the number of PhDs awarded:

- Increased about 1% from 1,901 to 1,921. Of the 272 departments that responded both this year and last year the number of PhDs awarded decreased to 1,871 from 1,901
- Increased in all groups except Applied Math, Statistics, and Biostatistics
- Increased 22% in Math Public Small, 28% in Math Private Small, 10% in Math Private large, and less than 3% in both Math Public Large and Medium
- Decreased 7% in Applied Math, 16% in Statistics, and 9% in Biostatistics

Figure A.1: Number and Percentage of Degrees Awarded by Department Grouping*



Total Degrees Awarded: 1,921

*See page 781 for a description of the department groupings.

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Total Doctoral Degrees Awarded --- Doctoral Mathematics Combined → Statistics & Biostatistics Combined 2200 1921 2000 1800 1600 1455 1311 1400 1200 984 1000 800 600 465 327 200 2009-10 -16 2002-03 2003-04 2005-06 -400 2007 2001

Figure A.2: New PhDs Awarded by Group

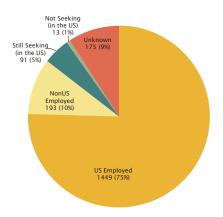
Comparing PhDs awarded in 2015-16 with those awarded in 2005-06:

- PhDs awarded have increased more than 48% over the last 10 years.
- Degrees awarded by Doctoral Math and by Statistics/Biostatistics combined have increased 47% and 42%, respectively.

Employment

The overall US unemployment rate for the new doctoral recipients is 5.9%, essentially the same as the 6.1% in 2014–15. (Details on the calculations are on page 781.) The employment plans are known for 1,746 of the 1,921 new doctoral recipients. The number of new doctoral recipients employed in the US is 1,449, essentially the same as last year. Among those new PhDs employed in Doctoral Math departments, 68% are in postdoc positions, down from 75% last year. The number of new PhDs taking positions in Business & Industry is 495; last year's count was 492. All groups except Math Public Medium, Statistics and Biostatistics showed an increase in Business & Industry.

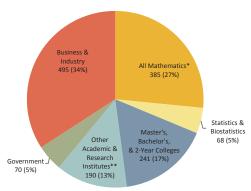




 52% (757) of those who are employed in the US are US citizens, up from 50% last year.

- 79% (692) of non-US citizens whose employment status is known are employed in the US, the remaining 179 non-US citizens are either employed outside of the US or are unemployed.
- 8% (133) of the new PhDs who are employed are working at the institution that granted their degree, down from 9% last year.
 These individuals constitute 15% of total US academic employed.
- 57% of those still seeking employment in the US are US citizens.

Figure E.2: US Employed by Type of Employer

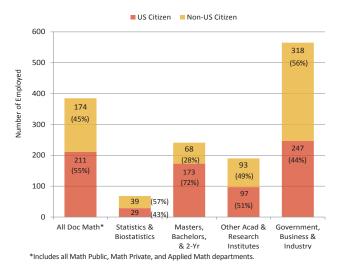


^{*}Includes all Math Public, Math Private, and Applied Math departments.

- US academic hiring increased 2% to 884 compared to 864 last year.
- Government hiring decreased 21% (from 88 to 70); all doctoral-granting groups except Math Public Medium, Math Private Large, Math Private Small, and Applied Math showed decreases in the number of PhDs taking positions in this

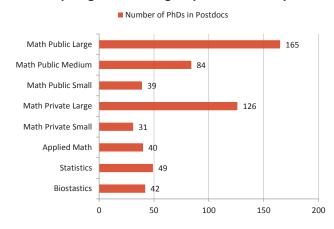
^{**}Other Academic consists of departments outside the mathematical sciences including numerous medical-related units.

Figure E.3: Employment in the US by Type of Employer and Citizenship Total: 1,449



- Total known to be employed: 1,642
- 35% (576) of the new PhDs that are employed are reported to be in postdoc positions, down 5% from 603 in 2014–15.
- 52% of the new PhDs awarded by the Math Private Large group are employed in postdocs, while only 16% of new PhDs awarded by the Math Public Small group and 17% of PhDs awarded by the Statistics group are in postdocs.
- 48% of the new PhDs having US academic employment are in postdocs, down from 51% last year.

Figure E.4: PhDs Employed in Postdocs by Degree-Granting Department Group



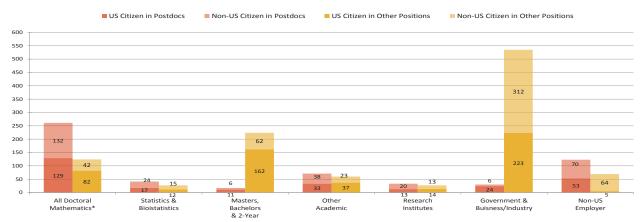
Of the US citizens whose employment status is known, 87% (757) are employed in the US, and of these:

- 32% are employed in PhD-granting departments
- 36% are employed in all other academic categories
- 33% are employed in government, business and industry

Looking at Figure E.5, we see that:

- 22% of the new PhDs in postdoc positions are employed outside the US; the same percentage as last year.
- 68% of the new PhDs employed in Doctoral Math departments are in postdoc positions, down from 75% last year.

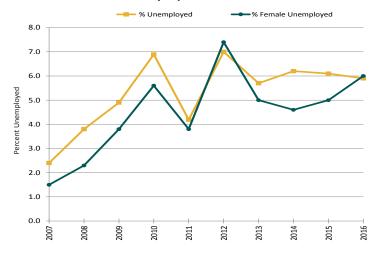
Figure E.5: New PhDs Employment by Citizenship, Type of Position, and Type of Employer



^{*}Includes all Math Public, Math Private, and Applied Math departments.

Figure E.6 displays the US unemployment rate for new doctorates; details on the calculations are on page 781.

Figure E.6: Percentage of New Doctoral Recipents
Unemployed 2006-15*



Among new doctorates reported to be in the US and whose employment status is known:

- Overall unemployment is 5.9%.
- 6.4% of US citizens are unemployed, compared to 6.7% in fall 2015.
- 5.3% of non-US citizens are unemployed, essentially the same as the 2015 rate.
- New doctorates from the Math Public Small Group reported the highest unemployment rate at 13.7%, essentially unchanged from 13.1% last year.
- New doctorates from the Biostatistics Group reported the lowest unemployment at 2.3%.

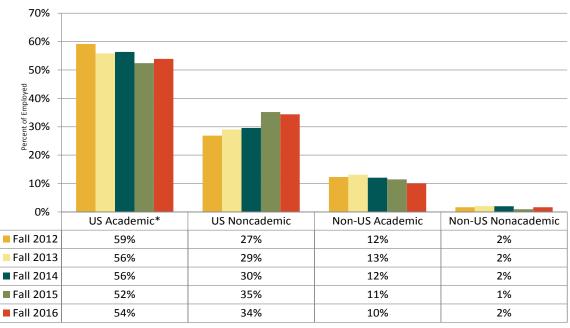


Figure E.7: Percentage of Employed New PhDs by Type of Employer

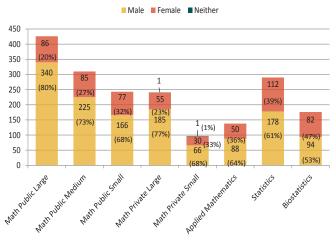
 ${\color{black} *}$ Includes other academic departments and research institutes/other non-profits.

- US academic hiring increased to 54%, while US nonacademic hiring has dropped to 34%.
- Non-US academic hiring has dropped to 10% (a five-year low).
- Detailed information on new PhDs employed in the US by degree-granting department group is available on the AMS website at www.ams.org/annual-survey.

Demographics

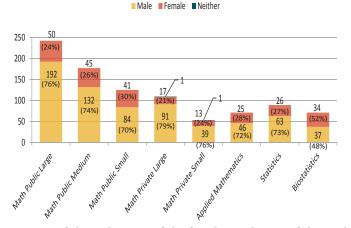
Gender and citizenship were known for all 1,921 new PhDs reported for 2015–16. The percentage of US citizens is 49%, up from 46% last year. Females accounted for 27% of the US citizen total, down from 31% last year. Non-US citizens receiving a PhD decreased to 51% from 54% last year. 10% (66) of the non-US citizens employed in the US have permanent visa status, almost unchanged from 9% last year.

Figure D.1: Gender of Doctoral Recipients by Degree-Granting Grouping



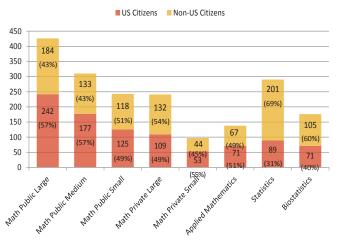
- Females account for 30% (577) of 1,921 PhDs, down from 31% last year.
- Two individuals gender-identified as neither male or female.

Figure D.3: Gender of US Citizen Doctoral Recipients by Degree-Granting Grouping



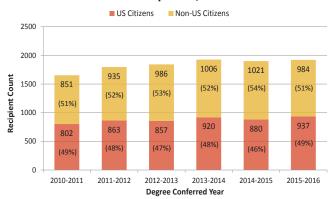
- 51% of the males, 44% of the females, and 100% of the neither are US citizens.
- Females accounted for 27% of the US citizens.
- Among the US citizens: 2 are American Indian or Alaska Native, 75 are Asian, 29 are Black or African American, 45 are Hispanic or Latino, 7 are Native Hawaiian or Other Pacific Islander, 754 are White, and 25 are of unknown race/ethnicity.
- Math Public Large awarded the highest number (23) of PhDs to US citizen minorities, while Biostatistics awarded the smallest number (2), followed by Statistics with 3.

Figure D.2: Citizenship of Doctoral Recipients by Degree-Granting Grouping



- 57% of all the PhDs awarded by the Math Public Medium group were to US citizens, while only 30% of the PhDs awarded by the Statistics group were to US citizens.
- All groups except Math Private Large, Statistics, and Biostatistics awarded more PhDs to US citizens than Non-US citizens.

Figure D.4: Citizenship of New PhD Recipients, 2010-16



Looking at the last six years, we see that:

- The proportion of PhDs awarded to US citizens is at a five-year high, 49% (937). While this is a 7% increase from last year, it is the same percentage as in fall 2010-11.
- Non-US citizen counts decreased 4% to 984 from 1,021 last year. While this is the first year-to-year drop in six-years the non-US citizen count has increased 16% over that in 2010–11.

Female New Doctoral Recipients

The proportion of female new doctoral recipients is 30% essentially unchanged from 31% last year. Of the 1,049 new PhDs hired into academic positions, 31% (320) were women, compared with 30% as last year. Twenty-six percent of those hired into postdoc positions were women, with 42% of the women in postdocs being US citizens, down from 45% last year. The US unemployment rate for females is 6.0%, compared to 5.9% for males and 5.9% overall.

Figure F.1: Females as a Percentage of New Doctoral Recipients Produced by and Hired by Department Grouping

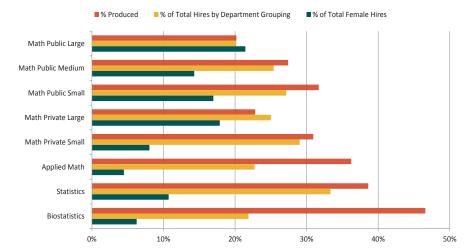
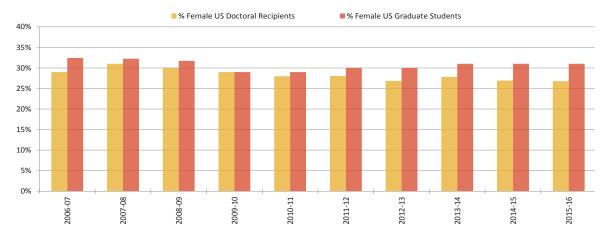


Table F.1: Number of Female New Doctoral Recipients Produced by and Hired by Department Groupings

Department Grouping	Females Produced	Females Hired
Math Public Large	86	24
Math Public Medium	85	16
Math Public Small	77	19
Math Private Large	55	20
Math Private Small	30	9
Applied Math	50	5
Statistics	111	12
Biostatistics	82	7
Total	576	112

- 32% of those hired into US academic positions were female (up from 31% last year).
- 42% of those hired by the Bachelor's Group were women (same as last year), 38% of those hired by the Master's Group were women (up from 26% last year), and 22% of those hired by the PhD Math groups combined were women.
- 40% of those hired into Research Institutes/Other non-profit positions were women (up from 26% last year).
- 33% of those hired into Government positions were women (down from 42% last year).
- 60% of the women employed in all doctoral groups are in postdoc positions, compared to 69% of males employed in these groups.

Figure F.2: Females as a Percentage of US Citizen Doctoral Recipients and Graduate Students



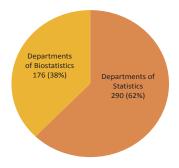
PhDs Awarded by Statistics and Biostatistics (Stat/Biostat) Departments

This section contains information about new doctoral recipients in 59 statistics and 46 biostatistics departments. Stat/Biostat produced 466 new doctorates, all of whom had dissertations in statistics/biostatistics. This is a 13% decrease in the number reported for fall 2015, which was 538. In addition, Math Public, Math Private and Applied Math departments combined had 110 PhD recipients with dissertations in statistics. 34% (160) of the new PhDs awarded by Stat/Biostat are US citizens (while in the other groups combined, 53% are US citizens). The unemployment rate amount US citizens with new Stat/Biostat PhDs is 3.0%, essentially the same as in 2014-15...

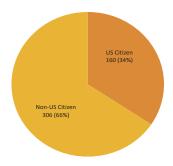
Figure S.1: PhDs Awarded by Statistics/Biostatistics Departments

Figure S.2: Gender of **PhD Recipients from** Statistics/Biostatistics Departments Statistics/Biostatistics Departments

Figure S.3: Citizenship of PhD Recipients from



193 (41%) Male 273 (59%)



- 24% of all mathematical sciences PhDs awarded were in the Stat/ Biostat group.
- Females account for 39% of Statistics and 47% of Biostatistics PhDs awarded.

Females accounted for 42% of • the 466 PhDs in Stat/Biostat. compared to Doctoral Math, where 26% are female.

38% of Stat/Biostat US citizen PhD recipients are females, while in Doctoral Math 25% of the US citizens are females.

Figure S.4: Employment Status of PhD Recipients from Statistics/Biostatistics Departments

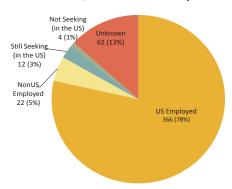
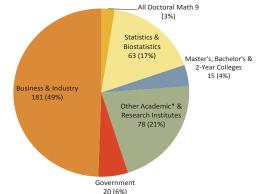


Figure S.5: US-Employed PhD Recipients from Statistics/Biostatistics Departments by Type of Employer



Total PhDs Awarded: 466

- Total US Employed: 366 3.2% of Stat/Biostat PhDs are unemployed,
- Unemployment among new PhDs with dissertations in statistics/biostatistics is 4.2%, up from 3.4%. Among all other dissertation groupings, 5.6% are unemployed.

(compared to 6.8% among Doctoral Math),

unchanged from 2014-15.

*Other Academic consists of departments outside the mathematical sciences including numerous medical-related units.

49% of Stat/Biostat PhDs are employed in Business/Industry, compared to 22% in Math.

42% of those hired by Stat/Biostat were females, compared to 27% in Math.

Remarks on US Unemployment Rate Calculations

In the unemployment calculations provided in this report, the individuals employed outside the US have been removed from the denominator used in the calculation of the rate, in addition to the routine removal of all individuals whose employment status is unknown. This is a change from Annual Survey Reports prior to 2009. As a consequence, the unemployment rate now being reported more accurately reflects the US labor market experienced by the new doctoral recipients. This change tends to increase the rate of unemployment over that reported in prior years.

Another small change from prior years is that, those individuals reported as not seeking employment have also been removed from the denominator. The number of individuals so designated is small each year, and the impact of this change is to produce a slight increase in the rate over that reported in prior years.

The unemployment rates for years prior to 2009 shown in this report have been recalculated using this method. One can view a comparison of the unemployment rates using the earlier method and the currentmethod by visiting the AMS website at www.ams.org/annual-survey/surveyreports.html.

Departmental Groupings and Response Rates

Starting with reports on the 2012 AMS-ASA-IMS-MAA-SIAM Annual Survey of the Mathematical Sciences, the Joint Data Committee has implemented a new method for grouping the doctorate-granting mathematics departments. These departments are first grouped into those at public institutions and those at private institutions. These groups are further subdivided based on the size of their doctoral program as reflected in the average annual number of PhDs awarded between 2000 and 2010, based on their reports to the Annual Survey during this period. Furthermore, doctorate-granting

departments which self-classify their PhD program as being in applied mathematics will join with the other applied mathematics departments previously in Group Va to form their own group. The former Group IV will be divided into two groups, one for departments in statistics and one for departments in biostatistics.

For further details on the change in the doctoral department groupings, see the article in the October 2012 issue of *Notices of the AMS* at www.ams.org/notices/201209/rtx120901262p.pdf.

Department Grouping Response Rates

Doctorates Granted Departmental Response Rates by Grouping

Math Public Large	26 of 26 including 0	with no degrees
Math Public Medium	40 of 40 including 0	with no degrees
Math Public Small	62 of 64 including 8	with no degrees
Math Private Large	24 of 24 including 0	with no degrees
Math Private Small	28 of 29 including 1	with no degrees
Applied Math	30 of 30 including 2	with no degrees
Statistics	49 of 59 including 4	with no degrees
Biostatistics	33 of 46 including 4	with no degrees
Total	298 of 322 including 19	9 with no degrees

As of press time for this issue of *Notices*, the following departments had not responded to the survey. Therefore, any PhDs which may have been awarded by these departments are not included in this report.

Mathematics Departments

Yeshiva University

Statistics Departments

George Washington University
Michigan State University
North Carolina State University
Oklahoma State University
University of Arizona
University of California, Davis
University of California, Los Angeles
University of California, Santa Barbara
University of Virginia
Western Michigan University

Biostatistics Departments

Brown University

Columbia Univesity

Georgia Southern University, College of Public Health Saint Louis University College for Public Health & Social Justice

University of Cincinnati, Medical College

University of Colorado, Denver

University of Illinois at Chicago

University of Kentucky

University of Louisville

University of Oklahoma, Health Science Center

University of South Carolina

University of South Florida

Virginia Commonwealth University, Medical Center

Department Groupings

In this report, *Mathematical Sciences* departments are those in four-year institutions in the US that refer to themselves with a name that incorporates (with a few exceptions) "Mathematics" or "Statistics" in some form. For instance, the term includes, but is not limited to, departments of "Mathematics," "Mathematical Sciences," "Mathematics and Statistics," "Mathematics and Computer Science," "Applied Mathematics," "Statistics," and "Biostatistics." Also, *Mathematics (Math)* refers to departments that (with exceptions) have "mathematics" in the name; *Stat/Biostat* refers to departments that incorporate (again, with exceptions) "statistics" or "biostatistics" in the name but do not use "mathematics." The streamlining of language here militates against the possible objection to foreshortening the full subject names.

Starting with reports on the 2012 AMS-ASA-IMS-MAA-SIAM Annual Survey of the Mathematical Sciences, the Joint Data Committee implemented a new method for grouping doctorate-granting Mathematics departments. These departments are first grouped into those at public institutions and those at private institutions. These groups are further subdivided based on the size of their doctoral program as reflected in the average annual number of PhDs awarded between 2000 and 2010, based on their reports to the Annual Survey during that period.

For further details on the change in the doctoral department groupings, see the article in the October 2012 issue of *Notices of the AMS* at www.ams.org/journals/notices/201209/rtx120901262p.pdf.

Math Public Large consists of departments with the highest annual rate of production of PhDs, ranging between 7.0 and 24.2 per year.

Math Public Medium consists of departments with an annual rate of production of PhDs, ranging between 3.9 and 6.9 per year.

Math Public Small consists of departments with an annual rate of production of PhDs of 3.8 or less per year.

Math Private Large consists of departments with an annual rate of production of PhDs, ranging between 3.9 and 19.8 per year.

Math Private Small consists of departments with an annual rate of production of PhDs of 3.8 or less per year.

Applied Mathematics consists of doctoral-degree-granting applied mathematics departments.

Statistics consists of doctoral-degree-granting statistics departments.

Biostatistics consists of doctoral-degree-granting biostatistics departments.

Masters contains US departments granting a master's degree as the highest graduate degree.

Bachelors contains US departments granting a baccalaureate degree only.

Doctoral Math contains all US math public, math private, and applied math mathematics departments granting a PhD as the highest graduate degree.

Mathematics (Math) contains all US Math Public, Math Private, and Applied Math, Masters, and Bachelors Groups above.

Stat/Biostat contains all doctoral-degree-granting statistics and biostatistics departments.

Listings of the actual departments that compose these groups are available on the AMS website at www.ams.org/annual-survey/groups.

Doctoral Degrees Conferred 2015-2016

Supplementary List

The following list supplements the list of thesis titles published in the February 2017 Notices, pages 281–301.

TEXAS

Southern Methodist University (1)

STATISTICAL SCIENCES

Chang, Po-Yao, Self-shrinkers to the mean curvature flow asymptotic to isoparametric cones.

Ohio

University of Toledo (5)

MATHEMATICS AND STATISTICS

Karki, Manoj, Invariant Riemannian metrics in four dimensional Lie groups.

Liu, Gang, A new approach to ANOVA methods for autocorrelated data.

Mei, Jingning, Inference for autoregressive coefficients and error distribution.

Pokharel, Krishna, An isospectral flow for complex upper Hessenberg matrices.

Tang, Lin, Efficient inference for periodic autoregressive coefficients with polynomial spline smooth approach.

PENNSYLVANIA

Bryn Mawr College (1)

MATHEMATICS

 ${\it Bryant, Kathryn, Slice implies mutant ribbon for odd, stranded pretzel knots.}$

VIRGINIA

George Mason University (2)

MATHEMATICAL SCIENCES

Locke, Rachel, Multiplication operators in discrete settings of an infinite graph and the discrete Zygmund space.

 $\label{eq:continuous} \textit{Stephens, Thomas}, Topological \ methods \ for \ evolution \\ equations.$

TEXAS

$Southern\ Methodist\ University\ {\scriptstyle (1)}$

STATISTICAL SCIENCES

Liao, Yijie, Marginal posterior distribution of regression parameters for the Cox model under Dirichlet and gamma process priors.

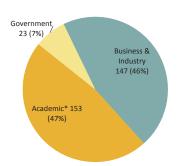
Report on the 2015-2016 Employment Experiences of the New Doctoral Recipients

Amanda L. Golbeck, Thomas H. Barr, and Colleen A. Rose

This report provides information on employment gathered from a subset of the 2014–15 new PhDs on the EENDR Survey. It expands on the details of employment that are not available through the departments.

The EENDR survey was sent to the 1,656 new PhDs for which departments provided current contact information by early October of 2016. Of these individuals, 730 (44%) responded. The employment status is known for 721 of these individuals; the US unemployment among this group is 2.8%. Of the 698 who reported being employed, 4% are part-time and 25% indicated they were actively looking for new employment.

Figure EE.1: EENDR Respondents Reporting Permanent US Employment by Sector

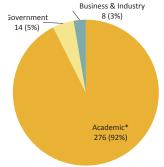


* Includes research institutes and other non-profits.

Of the 323 permanently employed:

- 37% are women.
- 63% of those reporting academic employment hold tenured/ tenure-track positions (up from 58% last year).

Figure EE.2: EENDR Respondents Reporting Temporary US Employment by Sector

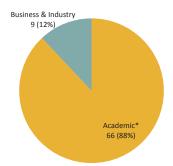


* Includes research institutes and other non-profits.

Of the 298 temporarily employed:

- 31% are women.
- 46% were unable to find a suitable permanent position (down from 47% last year).
- 72% are employed in postdocs, and 38% of these reported they could not find a suitable permanent position.

Figure EE.3. EENDR Respondents Employed Outside the US by Sector



* Includes research institutes and other non-profits.

Of the 75 employed outside the US:

- 17% are women.
- 17% are US citizens.
- 72% are employed in postdocs.

Table EE.1: Number and Percentage of EENDR Respondents Employed in the US by Job Status

					Temp	Temporary Postdocs					
Year	Perm	%	Temp	%	Perm	% of Temp	Total	% of Temp	Perm	% of Temp	#(%)
Teal	Total	70	Total	70	Not Avail	Total	TOLAI	Total	Not Avail	Postdocs	Unknown
Fall 2012	261	44%	328	56%	127	39%	242	74%	108	45%	0
Fall 2013	374	53%	335	47%	173	52%	247	74%	106	43%	0
Fall 2014	363	51%	343	49%	148	43%	260	76%	88	34%	0
Fall 2015	357	51%	341	49%	160	47%	258	76%	102	40%	0
Fall 2016	323	52%	298	48%	136	46%	214	72%	82	38%	2 (<1%)

Table EE.1 compares the status of EENDR respondents employed in the US over the last five years:

- 52% of those employed for fall 2016 are in permanent positions. While this is higher than the proportion reported for fall 2015, it is lower than the high of 53% for fall 2013.
- The proportion of those in temporary positions is 48%, this is a drop from last year's figure and 8 percentage points lower than the five-year high of 56%.
- 46% of those holding temporary positions were unable to find suitable permanent positions. While this is down from last year, it is higher than the five-year low of 39% for fall 2012.
- 38% of those holding postdoc positions were unable to find suitable permanent positions. This figure is down seven percentage points from the five-year high of 45%; and up four percentage points from the low in Fall 2014.

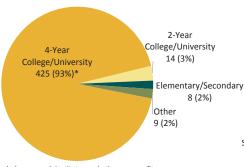
Table EE.2: Percentage of EENDR Respondents Employed in the US by Employment Sector within Job Status

Year		Permanent		Temporary			
	Acad	Govn	B/I	Acad	Govn	B/I	
Fall 2012	61%	8%	32%	92%	5%	2%	
Fall 2013	53%	7%	40%	92%	4%	4%	
Fall 2014	54%	6%	40%	92%	5%	3%	
Fall 2015	44%	8%	48%	93%	3%	4%	
Fall 2016	47%	7%	46%	93%	5%	3%	

Looking at Table EE.2, we see that

- Permanent employment in the academic sector rebounded to 47% after dropping to a five-year low of 44% last year, whereas employment in business/industry and goverment dropped to 46% and 7%, respectively.
- Temporary employment in all three sectors has remained essentially unchanged over this fiveyear period.

Figure EE.4. Employment by Type of Educational Institution (Educ)

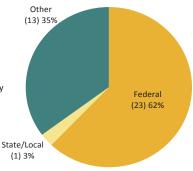


 \ast Includes research institutes and other non-profits.

Looking at those employed in education we see that:

- US citizens hold 65% of these positions; 62% are employed at a 4-Year college/ university.
- Females hold 33% of these positions; 63% of these are US citizens and 30% hold temporary positions.
- 66% of these positions are temporary; of those in Temporary positions 62% are US citizens and 46% could not find a suitable permanent position.
- 31% of those employed in Educ are currently looking for another position.

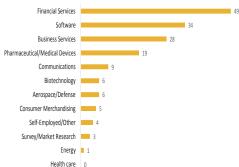
Figure EE.5. Employment by Type of Government (Gov)



Looking at those employed in government we see that:

- US citizens hold 47% of these positions.
- 38% are female; of these women, 64% work in the federal government.
- 38% hold temporary positions; 86% are US citizens and 8% could not find a suitable permanent position.
- 87% of those employed in Gov are currently looking for another position.

Figure EE.6. Employment by Type of Business/Industry (BI)



Looking at those employed by type of Business/Industry we see that:

- 47% are US citizens.
- Females hold 32% of BI positions; 51% of these are US citizens and 23% work in financial services.
- 6% hold temporary positions; almost all are held by non-US citizens and 10% could not find a suitable permanent position.
- 14% of those employed in BI are currently looking form another position.

Figure EE.7. Age Distribution of New PhD Respondents

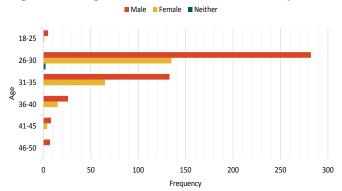


Figure EE.7 gives the age distribution of the 683 new doctoral recipients who respond to this question. The median age of new doctoral recipients was 29 while the mean was 30.5.

- The youngest new PhD recipient was 18 and the oldest was 50.
- 61% of all new PhD recipients are between the ages of 26–30
- The mode is 28 (21% of females and 18% of males reported being age 28).

Starting Salaries of the 2015-2016 Doctoral Recipients

The starting salary figures were compiled from information gathered on the EENDR questionnaires sent to 1,656 individuals using addresses provided by the departments granting the degrees; 730 individuals responded between late October 2016 and June 2017. Responses with insufficient data or from individuals who indicated they had part-time or non-US employment were excluded. Numbers of usable responses for each salary category are reported in the following tables.

Readers should be warned that the data in this report are obtained from a self-selected sample, and inferences from them may not be representative of the full population. Detailed information, including boxplots which traditionally appeared in this report, is available on the AMS website at www.ams.org/annual-survey/survey-reports.

Academic Teaching/Teaching and Research 9-10-Month Starting Salaries[†] (in thousands of dollars)

			•				,		
F	PhD								
Y	ear	Min	Q_1	Me	dian	Q_3	Max		
То	tal (148	male/9	95 fema	le/1 ne	ither)				
20	016 M	30.0	50.0	5 !	5.5	63.0	99.0		
)16 F	35.0	50.0		5.0	60.5	82.0		
1 '	016 N		w to rep						
						/84 fema		ither)	
	016 M	30.0	50.0		5.0	63.0	99.0		
1 -	016 F	35.0	50.0		5.0	60.0	77.0		
20	016 N	too fe	w to rep	ort					
	220+			*					
	200-								
	180		*						
	160		*	*		*	*		
	160			*					
llars)						*			
op 91	140			*					
Salary (in thousands of 2016 dollars)	120						*		
lgs		•	*		*	* *		* *	
esno	100-	8	8	0	0	8		0	8
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	40+	Τ	Ι	1	8	Ţ	00	Ą	
	20-				ŏ	000	0	0	
	0⊥	2009	2010	2011	2012	2013	2014	2015	2016

Academic Postdoctorates Only† 9-10-Month Starting Salaries (in thousands of dollars)

PhD		0		10	•			
Year	Min	Q ₁		edian	Q_3	Ma	X	
Total (64 r			-					
2016 M	30.0	49.3		5.0	61.3	81.0		
2016 F	45.0	53.5	5	5.0	62.6	78.0)	
2016 N		to repoi						
One year	or less	experie	nce (59	9 male/	23 fema	le/0 ne	ither)	
2016 M	30.0	49.2	5	5.0	60.5	81.0)	
2016 F	45.0	54.3	5	9.0	62.8	78.0)	
2016 N	none	to repoi	t					
					*			
160-			*					
					*			
140								
S 120								
eg				*	*			
Salary (in thousands of 2016 dollars)					*			
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40-	Τ	Τ	-			1		1
		0	0	8	0 0	0	_	0
20				0	0			
0	2009	2010	2011	2012	2013	2014	2015	2016

[†] Includes postdoctoral salaries.

[†] A postdoctoral appointment is a temporary position primarily intended to provide an opportunity to extend graduate training or to further research experience.

Government 11-12-Month Starting Salaries (in thousands of dollars)

			(111 1110	usunus (oi dollar	3)		
	PhD	Min	0	Madian		May		
-	Year	Min	Q_1	Median	Q_3	Max		
			,	'0 neither)				
	016 M	57.0	74.8	85.7	93.3	130.0)	
2	016 F	68.5	86.8	98.2	101.1	112.0)	
2	016 N	none	to report					
			•	e (20 male	:/9 female/	'0 neithe	er)	
2	016 M	77.0	74.5	85.4	97.0	130.0)	
2	016 F	68.5	81.0	98.0	98.2	112.0)	
2	016 N	none	to report					
	180							
	100							
	160				0	0		
	100					0		
	140-		0	0	_			
_	140	Т	т			T	Τ	
llars				T				
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E				イ 1				
Salary (in thousands or 2016 dollars)	60-							1
ľ		1	1	1	1	Τ	Τ	
	40-							
	20-							
	οŢ	2009	2010	2011 2012	2013	2014	2015	2016
			20.0	2012	2010	20.4	2010	2010

Business and Industry 11-12-Month Starting Salaries (in thousands of dollars)

PhD Year Min Q1 Median Q3 Max Total (102 male/49 female/0 neither) 2016 M 36.0 86.8 110.0 125.0 175.0 2016 F 65.0 89.5 107.0 125.0 160.0 2016 N none to report One year or less experience (76 male/39 female/0 neither)	
Total (102 male/49 female/0 neither) 2016 M 36.0 86.8 110.0 125.0 175.0 2016 F 65.0 89.5 107.0 125.0 160.0 2016 N none to report One year or less experience (76 male/39 female/0 neither)	
2016 M 36.0 86.8 110.0 125.0 175.0 2016 F 65.0 89.5 107.0 125.0 160.0 2016 N none to report One year or less experience (76 male/39 female/0 neither)	
2016 F 65.0 89.5 107.0 125.0 160.0 2016 N none to report One year or less experience (76 male/39 female/0 neither)	
2016 N none to report One year or less experience (76 male/39 female/0 neither)	
One year or less experience (76 male/39 female/0 neither)	
2016 M 45.0 84.2 106.5 125.0 175.0	
2016 F 70.0 91.5 105.4 125.0 143.0	
2016 N none to report	
300-	
280-	
260-	
240	
* 0	
R 200+	
8 * 8 T	Т
* * * * * * * * * * * * * * * * * * *	
	Τ
60-	
40-	1
20-	
o 2009 2010 2011 2012 2013 2014 2015	2016

Remarks on Starting Salaries

Key to Tables and Graphs. Salaries are those reported for the fall immediately following the survey cycle. Years listed denote the survey cycle in which the doctorate was received—for example, survey cycle July 1, 2015–June 30, 2016 is designated as 2016. Salaries reported as 9–10 months exclude stipends for summer grants or summer teaching or the equivalent. M and F are male and female, respectively. Male and female figures are not provided when the number of salaries available for analysis in a particular category was five or fewer. All categories of "Teaching/Teaching and Research" and "Research Only" contain those recipients employed at academic institutions only.

Graphs. The graphs show standard boxplots summarizing salary distribution information for the years 2009 through 2016. Values plotted for 2009 through 2015 are converted to 2016 dollars using the implicit price deflator prepared annually by the Bureau of Economic Analysis, US Department of Commerce. These categories are based on work activities reported in EENDR. Salaries of postdoctorates are shown separately. They are also

included in other academic categories with matching work activities.

For each boxplot the box shows the first quartile (Q1), the median (M), and the third quartile (Q3). Upper whiskers extend from Q_3 to the largest data value below $Q_3+1.5IQR$, and lower whiskers from Q_1 down to the smallest data value below $Q_1-1.5IQR$. Data points falling between $Q_3+1.5IQR$ and Q_3+3IQR or $Q_1-1.5IQR$ and Q_3-3IQR are designated as <u>outliers</u> and plotted as circles (o). Data outside the range Q_1+3IQR to Q_3+3IQR designated as extreme outliers and plotted as stars (*).

Response Rates

New PhD Recipient Response Rates by Granting Department Grouping

Granting Department Group	Number	Percent
Math Public Large	152 of 348	44%
Math Public Medium	130 of 305	43%
Math Public Small	103 of 218	47%
Math Private Large	112 of 215	52%
Math Private Small	41 of 84	49%
Applied Math	51 of 97	53%
Statistics	82 of 246	33%
Biostatistics	59 of 143	41%
Total	730 of 1656	44%

Distribution of New PhD Recipient Responses by Employer Type

Employer Type	Number	Percent
Math Public Large	49	7%
Math Public Medium	31	4%
Math Public Small	34	5%
Math Private Large	32	4%
Math Private Small	17	2%
Applied Math	7	1%
Statistics	11	2%
Biostatistics	16	2%
Masters	33	5%
Bachelors	96	13%
Two-Year institutions	14	2%
Other Academic	57	8%
Research Institute/Other Non-profit	33	5%
Government	37	5%
Business/Industry	157	22%
Non-US Academic	66	9%
Non-US Nonacademic	8	1%
Not Seeking (US)	5	1%
Still Seeking (US)	18	2%
Unknown (US)	1	0%
Non-US: Not seeking, Still seeking, Unkn	own 8	1%
Total	730	100%

Table A.1: Field of Thesis of 2015-2016 Doctoral Recipients by Degree-Granting Department

Granting	Algebra/ Number Theory	Real, Comp., Funct., & Harmonic Analysis	Geometry/ Topology	Discr. Math./ Combin. /Logic/ Comp. Sci.	Probability	Statistics	Biostatistics	Applied Math.	Numerical Analysis/ Approxi- mations	Linear Nonlinear Optim./ Control	Differential, Integral, & Difference Equations	Math. Educ.	Other/ Unknown	Total
Math Public Large	91	40	60	45	16	13	0	49	36	9	65	2	0	426
Math Public Medium	62	23	30	27	9	36	0	53	31	4	25	6	4	310
Math Public Small	39	22	16	21	13	28	0	37	21	7	16	21	2	243
Math Private Large	69	15	48	22	17	8	0	35	7	1	18	0	1	241
Math Private Small	15	7	25	10	3	2	0	11	9	0	12	0	3	97
Applied Mathematics	3	0	1	9	4	21	2	63	10	4	16	1	4	138
Statistics	0	0	0	0	1	289	0	0	0	0	0	0	0	290
Biostatistics	0	0	0	0	0	0	176	0	0	0	0	0	0	176
Total	279	107	180	134	63	397	178	248	114	25	152	30	14	1921
Female	70	22	33	30	8	158	82	78	28	10	32	20	5	576
Male	209	85	146	104	55	239	96	170	86	15	119	10	9	1343
Neither	0	0	1	0	0	0	0	0	0	0	1	0	0	2

Table D.1: Gender and Citizenship of 2015-2016 New Doctoral Recipients by Degree-Granting Department

		Citizensh		
	Gender	U.S.	Non-U.S.	Total
	Male	192	148	340
Math Public Large	Female	50	36	86
	Neither	0	0	0
	Male	132	93	225
Math Public Medium	Female	45	40	85
	Neither	0	0	0
	Male	84	82	166
Math Public Small	Female	41	36	77
	Neither	0	0	0
	Male	91	94	185
Math Private Large	Female	17	38	55
	Neither	1	0	1
	Male	39 27		66
Math Private Small	Female	13	17	30
	Neither	1	0	1
	Male	46	42	88
Applied Math	Female	25	25	50
	Neither	0	0	0
	Male	63	116	179
Statistics	Female	26	85	111
	Neither	0	0	0
	Male	37	57	94
Biostatistics	Female	34	48	82
	Neither	0	0	0
	Male	684	659	1343
Total by Gender	Female	251	325	576
	Neither	2	0	2
Total		937	984	1921

Table D.2: U.S. Citizen Doctoral Recipients, Fall 2006 to Fall 2016

Year	Total Doctorates Granted by U.S. Institutions	Total U.S. Citizen Doctoral Total	%
2006-07	1333	576	43%
2007-08	1378	622	45%
2008-09	1605	742	46%
2009-10	1632	789	48%
2010-11	1653	802	49%
2011-12	1798	863	48%
2012-13	1843	857	47%
2013-14	1926	920	48%
2014-15	1901	880	46%
2015-16	1921	937	49%

Table D.3: Gender of U.S. Citizen Doctoral Recipients, Fall 2006 to Fall 2016

Year	Total U.S. Citizen Doctoral Recipients	Male	Female	Neither	% Female
2006-07	576	396	180		31%
2007-08	622	431	191		31%
2008-09	742	515	227		31%
2009-10	789	564	225		29%
2010-11	802	574	228		28%
2011-12	863	621	242		28%
2012-13	857	627	230		27%
2013-14	920	664	256		28%
2014-15	880	636	244		28%
2015-16*	937	684	251	2	27%

^{*} Total US Citizen Doctoral Recipient counts includes two individual whose gender was reported as neither female or male.

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Table D.4: Gender, Race/Ethnicity & Citizenship of 2015-2016 New Doctoral Recipients, July 1, 2015- June 30, 2016

All Groups Combined

19

20

270

576

0

5

with no degrees)

0

2

2

0

0

0

0

0

0

92

942

1921

43

322 departments responding

72

670

1343

11

201

251

298

14

55

551

684

TOTAL

Hisp/Lat

Haw/Pac Is White

Unknown

of

35

102

575

MEN Citizenship Citizenship Citizenship Non-U US Perm Temp Unk Total Perm Temp Unk Total Perm Temp Unk Total TOTAL Am Ind/Alas Asian 52 30 416 20 518 23 22 203 14 262 0 0 0 780 BI/Afr Am 18 34 0

1

8

34

56

271

All Math Public Groups Combined

Doctorate Granting Departments of Mathematics

			134	of	134	departn	nents res	ponding		(8	with no	degrees)			
				MEN					WOMEN					Neither			
			Citize	nship				Citize	nship				Citize	nship			
		US Perm Temp Unk 0 0 0 22 11 201							Non-US					Non-US			
		US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian		22	11	201	6	240	5	5	65	1	76	0	0	0	0	0	316
Bl/Afr Am		10	3	6	0	19	8	1	1	0	10	0	0	0	0	0	29
Hisp/Lat		25	1	23	1	50	3	0	2	0	5	0	0	0	0	0	55
Haw/Pac Is		5	0	1	0	6	2	0	1	0	3	0	0	0	0	0	9
White		338	9	52	3	402	116	5	28	1	150	0	0	0	0	0	552
Unknown		8	0	3	3	14	2	1	0	1	4	0	0	0	0	0	18
TO ⁻	TAL	408	24	286	13	731	136	12	97	3	248	0	0	0	0	0	979

All Math Private Groups Combined

Doctorate Granting Departments of Mathematics

			52	of	53	departn	nents res	ponding		(1	with no	degrees)			
				MEN					WOMEN					Neither			
			Citize	nship				Citize	nship				Citize	enship			
			US Perm Temp Unk To						Non-US					Non-US			
		US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian		12	4	68	4	88	4	2	30	0	36	0	0	0	0	0	124
BI/Afr Am		4	0	3	0	7	1	0	0	0	1	0	0	0	0	0	8
Hisp/Lat		5	0	7	0	12	1	1	0	0	2	0	0	0	0	0	14
Haw/Pac Is		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White		105	1	33	0	139	24	3	18	1	46	2	0	0	0	2	187
Unknown		4	0	1	0	5	0	0	0	0	0	0	0	0	0	0	5
	TOTAL	130	5	112	4	251	30	6	48	1	85	2	0	0	0	2	338

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Math Public Large Group

Doctorate Granting Departments of Mathematics

		26	of	26	departn	nents res	ponding		(0	with no	degrees)			
			MEN					WOMEN					Neither			
		Citize	nship				Citize	nship				Citize	nship			
		0 0 0						Non-US					Non-US			
	US	US Perm Temp Unk 0 0 0 0				US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	16	4	84	6	110	2	2	17	1	22	0	0	0	0	0	132
BI/Afr Am	4	1	1	0	6	2	1	0	0	3	0	0	0	0	0	9
Hisp/Lat	11	0	14	0	25	0	0	1	0	1	0	0	0	0	0	26
Haw/Pac Is	5	0	1	0	6	1	0	0	0	1	0	0	0	0	0	7
White	153	4	28	3	188	44	2	10	1	57	0	0	0	0	0	245
Unknown	3	0	0	2	5	1	0	0	1	2	0	0	0	0	0	7
TOTAL	192	9	128	11	340	50	5	28	3	86	0	0	0	0	0	426

Math Public Medium Group

Doctorate Granting Departments of Mathematics

			40	of	40	departn	nents res	ponding		(0	with no	degrees)			
				MEN					WOMEN					Neither			
			Citize	nship				Citize	nship				Citize	nship			
			US Perm Temp Unk 0 0 0 0						Non-US					Non-US			
						Total	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian		1	2	67	0	70	2	2	24	0	28	0	0	0	0	0	98
BI/Afr Am		3	1	3	0	7	4	0	1	0	5	0	0	0	0	0	12
Hisp/Lat		11	0	4	1	16	2	0	1	0	3	0	0	0	0	0	19
Haw/Pac Is		0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	2
White		114	2	12	0	128	35	2	9	0	46	0	0	0	0	0	174
Unknown		3	0	0	1	4	1	0	0	0	1	0	0	0	0	0	5
	TOTAL	132	5	86	2	225	45	4	36	0	85	0	0	0	0	0	310

Math Public Small Group

Doctorate Granting Departments of Mathematics

		68	of	68	departn		ponding		(with no	degrees)			
			MEN					WOMEN					Neither			
		Citize	nship				Citize	nship				Citize	nship			
		0 0 0						Non-US					Non-US			
	US	JS Perm Temp Unk 0 0 0 0				US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	5	5	50	0	60	1	1	24	0	26	0	0	0	0	0	86
Bl/Afr Am	3	1	2	0	6	2	0	0	0	2	0	0	0	0	0	8
Hisp/Lat	3	1	5	0	9	1	0	0	0	1	0	0	0	0	0	10
Haw/Pac Is	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White	71	3	12	0	86	37	1	9	0	47	0	0	0	0	0	133
Unknown	2	0	3	0	5	0	1	0	0	1	0	0	0	0	0	6
TOTAL	84	10	72	0	166	41	3	33	0	77	0	0	0	0	0	243

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Math Private Large Group

Doctorate Granting Departments of Mathematics

		24	of	24	departn	nents res	ponding		(0	with no	degrees)			
			MEN					WOMEN					Neither			
		Citize	nship				Citize	nship				Citize	nship			
	US Perm Temp Unl 0 0 0 0 11 2 53							Non-US					Non-US			
	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	11	2	53	2	68	4	1	20	0	25	0	0	0	0	0	93
Bl/Afr Am	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Hisp/Lat	5	0	6	0	11	1	1	0	0	2	0	0	0	0	0	13
Haw/Pac Is	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White	74	1	30	0	105	11	0	16	0	27	1	0	0	0	1	133
Unknown	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL	91	3	89	2	185	17	2	36	0	55	1	0	0	0	1	241

Math Private Small Group

Doctorate Granting Departments of Mathematics

		28	of	29	departn	nents res	sponding		(1	with no	degrees)			
			MEN					WOMEN					Neither			
		Citize	enship				Citize	nship				Citize	nship			
			Non-US					Non-US					Non-US			
	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	1	. 2	15	2	20	0	1	10	0	11	0	0	0	0	0	31
Bl/Afr Am	4	0	3	0	7	0	0	0	0	0	0	0	0	0	0	7
Hisp/Lat	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Haw/Pac Is	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White	31	. 0	3	0	34	13	3	2	1	19	1	0	0	0	1	54
Unknown	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	4
TOTA	AL 39	2	23	2	66	13	4	12	1	30	1	0	0	0	1	97

Applied Mathematics Group

Doctorate Granting Departments of Applied Mathematics

			30	of	30	departn	nents res	sponding		(2	with no	degrees)			
				MEN					WOMEN					Neither			
			Citize	nship				Citize	nship				Citize	nship			
				Non-US Perm Temp Unk 0 0 0					Non-US					Non-US			
		US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Asian		4	1	31	2	38	0	2	18	2	22	0	0	0	0	0	60
Bl/Afr Am		3	0	0	0	3	1	0	0	0	1	0	0	0	0	0	4
Hisp/Lat		3	0	1	0	4	6	0	1	0	7	0	0	0	0	0	11
Haw/Pac Is		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White		31	0	7	0	38	18	0	1	1	20	0	0	0	0	0	58
Unknown		4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
	TOTAL	46	1	39	2	88	25	2	20	3	50	0	0	0	0	0	138

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Statistics Group

Doctorate Granting Departments of Statistics

		49	of	59	departn	nents res	ponding		(4	with no	degrees)			
			MEN					WOMEN					Neither			
		Citize	nship				Citize	nship				Citize	nship			
	US Perm Temp Uni 1 0 0 4 9 78							Non-US					Non-US			
	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Asian	4	9	78	3	94	5	8	59	5	77	0	0	0	0	0	171
Bl/Afr Am	1	2	2	1	6	0	1	0	0	1	0	0	0	0	0	7
Hisp/Lat	1	1	3	0	5	0	0	3	0	3	0	0	0	0	0	8
Haw/Pac Is	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White	50	2	9	0	61	20	0	6	1	27	0	0	0	0	0	88
Unknown	6	2	4	0	12	1	0	2	0	3	0	0	0	0	0	15
TOTAL	63	16	96	4	179	26	9	70	6	111	0	0	0	0	0	290

Biostatistics Group

Doctorate Granting Departments of Biostatistics

		33	of	46	departn	nents res	ponding		(4	with no	degrees)			
			MEN					WOMEN					Neither			
		Citize	enship				Citize	nship				Citize	nship			
		0 0 0 10 5 38 0 2 1						Non-US					Non-US			
	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	US	Perm	Temp	Unk	Total	TOTAL
Am Ind/Alas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	10	5	38	5	58	9	5	31	6	51	0	0	0	0	0	109
Bl/Afr Am	0	2	1	1	4	1	0	0	0	1	0	0	0	0	0	5
Hisp/Lat	0	0	1	0	1	1	0	2	0	3	0	0	0	0	0	4
Haw/Pac Is	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White	27	2	1	0	30	23	0	3	1	27	0	0	0	0	0	57
Unknown	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL	37	9	42	6	94	34	5	36	7	82	0	0	0	0	0	176

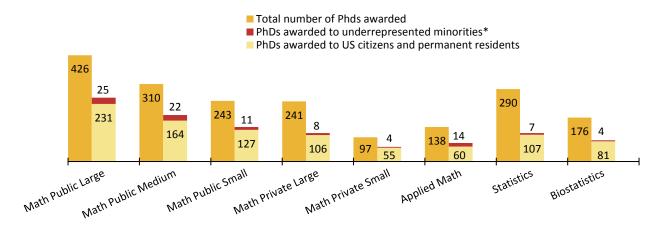
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Table D.5: Profile of PhDs Awarded to Underrepresented Minorities (URMs)* by Degree Granting Group and Citizenship, July 1, 2015 - June 30, 2016

	by Begree Gran		ented Minorities	iy 1, 2015 - Julie 50,	2010	URMs as % of PhDs awarded to
	Number of PhDs Awarded to US			Number of		US Citizens & Permanent
	Citizens & Permanent Residents	US	Permanent	PhDs awarded	As % of	Residents
		Citizens	Resident	to URMs	Total URMs	within Group
Math Public Large	256	23	2	25	26%	9.8%
Math Public Medium	186	21	1	22	23%	11.8%
Math Public Small	138	9	2	11	12%	8.0%
Math Private Large	114	7	1	8	8%	7.0%
Math Private Small	59	4	0	4	4%	6.8%
Applied Math	74	14	0	14	15%	18.9%
Statistics	114	3	4	7	7%	6.1%
Biostatistics	85	2	2	4	4%	4.7%
Total	1026	83	12	95	100%	

^{*} Underrepresented minorites include any person, who is a U.S. Citizen or Permanent Resident, who is Black or African American, Hispanic or Latino, American Indian, Alaska Native, Native Hawaiian or Other Pacfic Islander.

Figure D.6: 2015-2016 PhDs Awarded by Department Groupings, US Citizens and Perment Residents, and Underrepresented Minorities



^{*} Underrepresented minorites include any person, who is a US.Citizen or Permanent Resident, who is Black or African American, Hispanic or Latino, American Indian, Alaska Native, Native Hawaiian or Other Pacific Islander.

Table F.1: Number and Percentage of 2015–16 New Female PhDs Produced by and Hired by Doctoral-Granting Department Grouping

	Math Public	Math Public	Math Public	Math Private	Math Private				
	Large	Medium	Small	Large	Small	Applied Math	Statistics	Biostatistics	Total
Females Produced	86	85	77	55	30	50	111	82	576
Percentage ¹	20%	27%	32%	23%	31%	36%	38%	47%	30%
Female Hired	24	16	19	20	9	5	12	7	112
Percentage ²	21%	14%	17%	18%	8%	4%	11%	6%	19%
Percentge of Produced Hired ³	28%	19%	25%	36%	30%	10%	11%	9%	

¹ Females as a percentage of total produce.

² Females as a percentage of total female hires.

³Females hired as a percentage of females produce by department grouping.

Table F.2: Employment Status of 2015-16 Female New Doctoral Recipeints by Citizenship Status

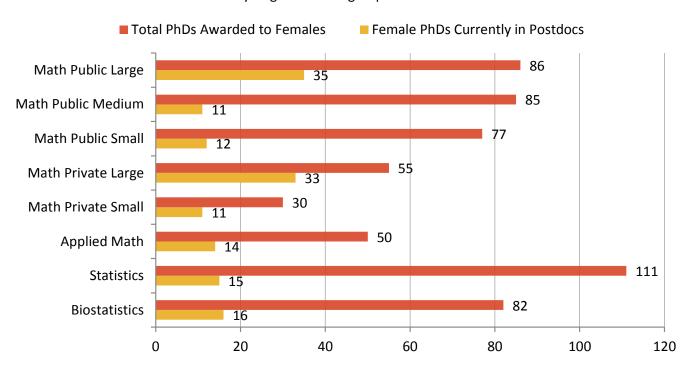
			Non-US Citizens		
Type of Employer	US Citizen	Permenant Visa	Temporary Visa	Unknown Visa	TOTAL
US Employer	219	24	195	17	455
US Academic	159	11	104	8	282
Math Public	40	1	41	4	86
Math Private	39	5	38	2	84
Applied Math	87	2	32	1	122
Statistics	27	0	24	1	52
Biostatistics	6	0	6	0	12
NonPhD	96	9	40	1	146
RI/NP	9	1	12	2	24
US Nonacad	60	13	91	9	173
NonUS Employer	8	2	30	1	41
NonUS Acad	8	1	28	1	38
NonUS Nonacad	0	1	2	0	3
Not Seeking	3	2	0	0	5
Seeking	8	4	17	0	29
Subtotal	238	32	242	18	530
Unk US	13	2	6	0	21
Unk NonUS	0	0	23	2	25
Total	251	34	271	20	576

Table F.3: Employment Status of 2015-2016 Female New Doctoral Recipients by Type of Degree-Granting Department

Type of Employer	Math Public Large	Math Public Medium	Math Public Small	Math Private Large	Math Private Small	Applied Math	Statistics	Biostatistics	Total
Math Public Large	15	2	1	5	1	0	0	0	24
Math Public Medium	4	5	3	4	0	0	0	0	16
Math Public Small	0	4	9	1	2	0	2	1	19
Math Private Large	6	0	0	11	1	0	2	0	20
Math Private Small	5	0	1	0	2	0	1	0	9
Applied Mathematics	0	1	0	0	0	4	0	0	5
Statistics	0	0	0	1	1	1	6	3	12
Biostatistics	0	0	0	0	0	0	2	5	7
Master's	2	5	9	0	0	1	3	0	20
Bachelor's	11	22	17	2	5	7	5	0	69
Two-Year Colleges	1	2	3	0	0	0	0	0	6
Other Academic Dept.	6	6	4	5	2	9	10	9	51
Research Institute/Other Notprofit	1	4	1	3	0	1	5	9	24
Government	2	6	3	0	0	1	3	8	23
Business and Industry	12	12	10	10	5	19	55	27	150
Non-US Academic	13	4	6	7	5	1	2	0	38
Non-US Nonacademic	1	0	0	0	0	0	1	1	3
Not Seeking Employment	0	1	0	1	0	0	1	2	5
Still Seeking Employment	4	6	6	1	3	3	5	1	29
Unknown (US)	0	2	3	2	1	2	5	6	21
Unknown (non-US)*	3	3	1	2	2	1	3	10	25
Total	86	85	77	55	30	50	111	82	576

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Figure F.3: 2015-2016 New Female PhDs in Postdocs by Degree-Granting Department



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Table E.1: Employment Status of 2015-2016 Doctoral Recipients in the Mathematical Sciences by Type of Degree-Granting Department

	Math Public	Math Public	Math Public	Math Private	Math Private	Applied						
Type of Employer	Large	Medium	Small	Large	Small	Math	Statistics	Biostatistics	Total	Female	Male	Neither
Math Public Large	58	22	5	28	3	3	0	0	119	24	94	1
Math Public Medium	17	25	7	8	3	2	1	0	63	16	47	0
Math Public Small	12	11	34	3	4	2	3	1	70	19	51	0
Math Private Large	28	5	0	41	1	2	3	0	80	20	60	0
Math Private Small	14	6	2	2	6	0	1	0	31	9	22	0
Applied Mathematics	5	3	0	2	1	11	0	0	22	5	17	0
Statistics	1	0	0	2	1	1	25	6	36	12	24	0
Biostatistics	0	0	0	0	0	0	10	22	32	7	25	0
Master's	10	14	19	2	2	2	4	0	53	20	33	0
Bachelor's	31	50	42	6	14	11	9	1	164	69	94	1
Two-Year Colleges	3	3	15	0	2	0	1	0	24	6	18	0
Other Academic Dept	18	16	12	13	5	17	26	24	131	51	80	0
Research Institute/												
Other Nonprofit	8	9	4	6	2	2	12	16	59	24	35	0
Government	10	13	7	4	5	11	10	10	70	23	47	0
Business and Industry	96	56	38	54	14	56	133	48	495	150	345	0
Non-US Academic	55	25	22	32	11	3	15	2	165	38	127	0
Non-US Nonacademic	9	1	2	7	1	3	4	1	28	3	25	0
Not Seeking Employment	2	5	1	1	0	0	1	3	13	5	8	0
Still Seeking Employment	21	21	15	7	10	5	9	3	91	29	62	0
Unknown (US)	12	16	8	9	4	6	12	15	82	21	61	0
Unknown (non-US)*	16	9	10	14	8	1	11	24	93	25	68	0
Total	426	310	243	241	97	138	290	176	1921	576	1343	2
Female	86	85	77	55	30	50	111	82	576			
Male	340	225	166	185	66	88	179	94	1343			

Neither

Table E.2: Employment Status of 2015-2016 Doctoral Recipients in the Mathematical Sciences by Type of Degree-Granting Department with Citizenship

	Math Public	Math Public	Math Public	Math Private	Math Private	Applied					Non-US
Type of Employer	Large	Medium	Small	Large	Small	Math	Statistics	Biostatistics	Total	US Citizen	Citizen
Math Public Large	58	22	5	28	3	3	0	0	119	58	61
Math Public Medium	17	25	7	8	3	2	1	0	63	38	25
Math Public Small	12	11	34	3	4	2	3	1	70	44	26
Math Private Large	28	5	0	41	1	2	3	0	80	37	43
Math Private Small	14	6	2	2	6	0	1	0	31	20	11
Applied Mathematics	5	3	0	2	1	11	0	0	22	14	8
Statistics	1	0	0	2	1	1	25	6	36	15	21
Biostatistics	0	0	0	0	0	0	10	22	32	14	18
Master's	10	14	19	2	2	2	4	0	53	24	29
Bachelor's	31	50	42	6	14	11	9	1	164	134	30
Two-Year Colleges	3	3	15	0	2	0	1	0	24	15	9
Other Academic Dept.	18	16	12	13	5	17	26	24	131	70	61
Research Institute/Other											
Nonprofit	8	9	4	6	2	2	12	16	59	27	32
Government	10	13	7	4	5	11	10	10	70	62	8
Busisness and Industry	96	56	38	54	14	56	133	48	495	185	310
Non-US Academic	55	25	22	32	11	3	15	2	165	54	111
Non-US Nonacademic	9	1	2	7	1	3	4	1	28	4	24
Not Seeking Employment	2	5	1	1	0	0	1	3	13	8	5
Still Seeking Employment	21	21	15	7	10	5	9	3	91	52	39
Unknown (US)	12	16	8	9	4	6	12	15	82	60	22
Unknown (non-US)*	16	9	10	14	8	1	11	24	93	2	91
Total	426	310	243	241	97	138	290	176	1921	937	984
US Citizen	242	177	125	109	53	71	89	71	937		
Non-US Citizen	184	133	118	132	44	67	201	105	984		

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Table E.3: Employment Status of 2015-2016 New Doctoral Recipeints by Citizenship Status

Type of Employer	US Citizen		Non-US Citizens		TOTAL
Type of Employer	03 Citizen	Permenant Visa	Temporary Visa	Unknown Visa	TOTAL
US Employer	757	66	588	38	1449
US Academic	510	36	322	16	884
Math Public	140	4	101	7	252
Math Private	57	0	54	0	111
Applied Mathematics	14	0	7	1	22
Statistics	15	1	19	1	36
Biostatistics	14	1	15	2	32
NonPhD	243	23	103	3	372
RI/NP	27	7	23	2	59
US Nonacademic	247	30	266	22	565
NonUS Employer	58	8	121	6	193
NonUS Academic	54	7	99	5	165
NonUS Nonacademic	4	1	22	1	28
Not Seeking	8	2	3	0	13
Seeking	52	8	31	0	91
Subtotal	875	84	743	44	1746
Unknown US	60	5	17	0	82
Unknown NonUS	2	0	86	5	93
Total	937	89	846	49	1921

Table E.4: Employment Status of 2015-2016 Doctoral Recipients by Field of Thesis

Type of Employer	Algebra/ Number Theory	Real, Comp., Funct., & Harmonic Analysis	Geometry/ Topology	Discr. Math./ Combin. /Logic/ Comp. Sci.	Probability	Statistics	Biostatistics	Applied Math.	Numerical Analysis/ Approxi- mations	Linear Nonlinear Optim./ Control	Differential, Integral, & Difference Equations	Math. Educ.	Other/ Unknown	Total
Math Public Large	27	12	18	6	4	3	0	16	11	1	20	0	1	119
Math Public Medium	11	8	11	5	2	4	0	11	1	0	9	0	1	63
Math Public Small	17	10	5	5	1	9	1	5	3	0	6	7	1	70
Math Private Large	16	3	20	10	8	2	0	7	3	0	11	0	0	80
Math Private Small	6	4	3	3	0	1	0	4	3	0	6	0	1	31
Applied Mathematics	1	0	0	2	1	0	0	6	6	0	5	0	1	22
Statistics	0	0	0	0	3	27	6	0	0	0	0	0	0	36
Biostatistics	0	0	0	0	0	10	22	0	0	0	0	0	0	32
Master's	10	4	3	4	2	11	0	3	3	3	3	7	0	53
Bachelor's	38	17	18	21	1	13	1	20	6	1	17	10	1	164
Two-Year Colleges	7	0	3	4	0	2	0	1	2	0	2	2	1	24
Other Academic Dept.	10	1	10	7	1	33	24	29	7	1	4	2	2	131
Research Institute/														
Other Nonprofit	5	0	3	2	1	13	16	12	1	2	3	1	0	59
Government	3	5	2	4	0	15	10	14	10	2	5	0	0	70
Busisness and Industry		10	29	28	17	177	50	76	30	10	23	0	4	495
Non-US Academic	44	18	25	15	6	17	2	9	9	2	17	0	1	165
Non-US Nonacademic	1	1	5	1	1	4	1	4	5	0	5	0	0	28
Not Seeking Employment	3	0	0	2	2	1	3	0	1	0	1	0	0	13
Still Seeking Employment		5	8	6	8	18	3	12	5	2	7	1	0	91
Unknown (US)	14	3	9	3	2	20	15	9	4	0	3	0	0	82
Unknown (non-US)*	9	6	8	6	3	17	24	10	4	1	5	0	0	93
Total	279	107	180	134	63	397	178	248	114	25	152	30	14	1921
Female	70	22	33	30	8	158	82	78	28	10	32	20	5	576
Male	209	85	146	104	55	239	96	170	86	15	119	10	9	1343
Neither	0	0	1	0	0	0	0	0	0	0	1	0	0	2

Table E.5: 2015–2016 New PhDs Employed in the US by Type of Degree-Granting Department

Type of Employer	Math. Public Large	Math. Public Medium	Math. Public Small	Math. Private Large	Math. Private Small	Applied Math.	Statistics	Biostatistics	Total
All Doctoral Mathematics*	134	72	48	84	18	20	8	1	385
Statistics & Biostatistics	1	0	0	2	1	1	35	28	68
Master's, Bachelor's, and									
2-Year Colleges	44	67	76	8	18	13	14	1	241
Other Academic and									
Research Institutes	26	25	16	19	7	19	38	40	190
Government	10	13	7	4	5	11	10	10	70
Business and Industry	96	56	38	54	14	56	133	48	495
Total	311	233	185	171	63	120	238	128	1449

^{*} Includes Doctoral Mathematics: Public Large, Public Medium, Public Small, Private Large, Private Small, and Applied Math.

Table E.6: Summary of New PhDs Employed in the US by Type of Employer and Citizenship

	US Employer	Cit ize	enship	Total
	03 Employer	US	Non-US	Total
Academic		510	374	884
	All Doctoral Mathematics*	211	174	385
	Statistics & Biostatistics	29	39	68
	Masters, Bachelors, & 2-Year	173	68	241
	Other Academic & Research Instititues	97	93	190
	Government, Business & Industry	247	318	565
	Total	757	692	1449

^{*} Includes Doctoral Mathematics: Public Large, Public Medium, Public Small, Private Large, Private Small, and Applied Math.

Table E.7: Percentage of Employed New PhDs by Type of Employer

	Employ	ed in US	Employed C	Outside the US	
	US Academic*	US Nonacademic	Non-US Academic	Non-US Nonacademic	Total
Fall 2012	59%	27%	12%	2%	1511
Fall 2013	56%	29%	13%	2%	1572
Fall 2014	56%	30%	12%	2%	1643
Fall 2015	52%	35%	11%	1%	1649
Fall 2016	54%	34%	10%	2%	1642
	884	565	165	28	

^{*} Includes other academic departments and research institutes/other nonprofits.

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Figure E.8: New PhDs Employed in US Academic and US Business/Industry & Government by Degree-Granting Department Group, 2012-2016

	Math P	ublic Large	Math Pub	olic Medium	Math P	ublic Small	Math Pr	ivate Large	Math Pr	ivate Small	Appli	ed Math	Sta	tistics	Biost	atistics	T	OTAL
Year	Academic	Business/ Industry & Government																
Fall 2012	201	67	153	57	107	29	103	34	42	5	66	27	132	116	90	52	894	387
Fall 2013	206	78	165	56	126	37	107	39	37	12	55	27	113	141	69	47	878	437
Fall 2014	198	70	187	60	108	39	120	40	58	14	69	27	122	158	64	45	926	453
Fall 2015	209	105	167	70	101	31	111	51	38	15	53	56	117	168	68	84	864	580
Fall 2016	205	106	164	69	140	45	113	58	44	19	53	67	95	143	70	58	884	565

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Table E.9: Academic Positions in the US Filled by New PhDs by Type of Hiring Department, Fall 2012 to Fall 2016

Year						Master's and		Total
	Math Public	Math Private	Applied Math	Statistics	Biostatistics	Bachelor's	Other	
Fall 2012	208	110	20	51	39	218	248	894
Fall 2013	247	97	16	45	35	208	230	878
Fall 2014	237	108	17	48	24	227	265	926
Fall 2015	233	88	28	47	36	210	222	864
Fall 2016	252	111	22	36	32	217	214	884

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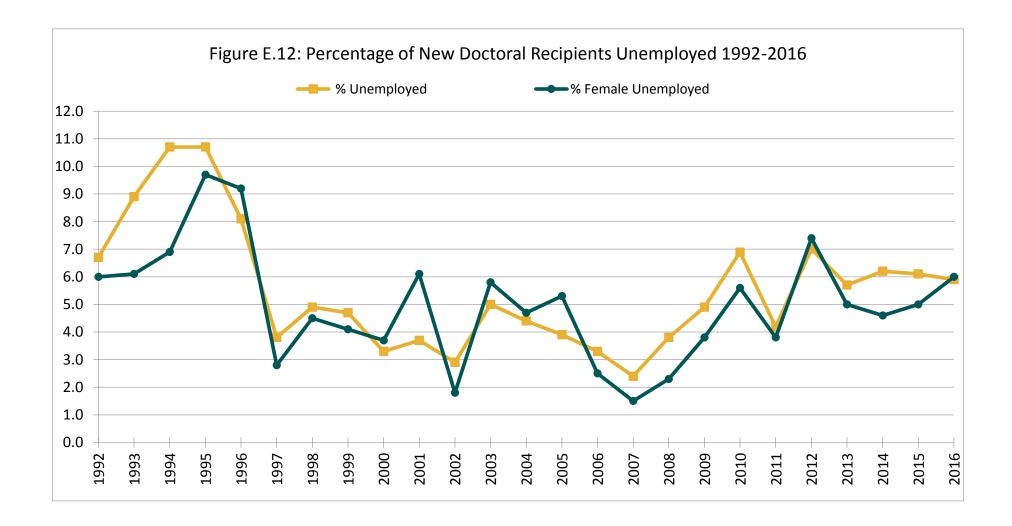
Table E.10: Number of New PhDs Taking US Academic Positions by Type of Degree-Granting Department, Fall 2012 to Fall 2016

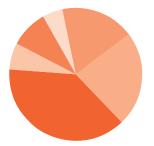
Year	Math Public	Math Public	Math Public	Math Private	Math Private				Total
rear	Large	Medium	Small	Large	Small	Applied Math	Statistics	Biostatistics	IOtal
Fall 2012	201	153	107	103	42	66	132	90	894
Fall 2013	206	165	126	107	37	55	113	69	878
Fall 2014	198	187	108	120	58	69	122	64	926
Fall 2015	209	167	101	111	38	53	117	68	864
Fall 2016	205	164	140	113	44	53	95	70	884

Table E.11: Number of New PhDs Taking Positions in Business and Industry in the US by Type of Degree-Granting Department, Fall 2012 to Fall 2016

	Year	Math Public	Math Public	Math Public	Math Private	Math Private				Total
l		Large	Medium	Small	Large	Small	Applied Math	Statistics	Biostatistics	7000
ſ	Fall 2012	57	46	23	30	4	34	105	41	340
	Fall 2013	57	47	29	31	10	37	128	42	381
l	Fall 2014	54	48	33	37	12	44	145	36	409
	Fall 2015	90	57	21	50	12	47	150	65	492
ı	Fall 2016	96	56	38	54	14	56	133	48	495

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1995-2016 Starting Salaries of New Doctoral Recipients

Remarks on Starting Salaries

Key to Tables and Graphs. Salaries are those reported for the fall immediately following the survey cycle. Years listed denote the survey cycle in which the doctorate was received—for example, survey cycle July 1, 2015–June 30, 2016 is designated as 2016. Salaries reported as 9–10 months exclude stipends for summer grants or summer teaching or the equivalent. M and F are male and female, respectively. Male and female figures are not provided when the number of salaries available for analysis in a particular category was five or fewer. All categories of "Teaching/Teaching and Research" and "Research Only" contain those recipients employed at academic institutions only.

Graphs. The graphs show standard boxplots summarizing salary distribution information for the years 2009 through 2016. Values plotted for 2009 through 2015 are converted to 2016 dollars using the implicit price deflator prepared annually by the Bureau of Economic Analysis, US Department of Commerce. These categories are based on work activities reported in EENDR. Salaries of postdoctorates are shown separately. They are also

included in other academic categories with matching work activities.

For each boxplot the box shows the first quartile (Q1), the median (M), and the third quartile (Q3). Upper whiskers extend from Q_3 to the largest data value below $Q_3+1.5IQR$, and lower whiskers from Q_1 down to the smallest data value above $Q_1-1.5IQR$. Data points falling between $Q_3+1.5IQR$ and Q_3+3IQR or $Q_1-1.5IQR$ and Q_3-3IQR are designated as <u>outliers</u> and plotted as circles (•). Data outside the range Q_1-3IQR to Q_3+3IQR are designated as <u>extreme</u> outliers and plotted as stars (*).

Starting salary information starts on page 2.

Academic Teaching/Teaching and Research 9-10-Month Starting Salaries* (in thousands of dollars)

		,	usands o	. aona			
Ph.D.						Repo Media	rted
Year	Min	Q_1	Median	Q_3	Max	201	
1995	22.0	23.0	35.0	38.2	64.0	53.	
1998*	14.0	34.0	37.0	41.0	70.0	54	
2000	25.0	38.0	41.5	45.0	65.0	58	
2005	28.0	43.0	46.5	50.6	100.2	58	
2008	31.0	46.0	51.0	56.9	85.0	59	
2009	32.0	46.9	51.5	58.0	100.0	59	.5
2010	29.0	45.0	51.5	58.0	157.0	58	.7
2011	28.8	45.0	50.0	57.0	197.0	55	.8
2012	21.0	47.0	51.5	58.0	105.0	56	.5
2013	20.0	48.0	53.2	60.0	156.2	57.	.4
2014	25.0	48.0	54.0	60.0	160.0	57.	.3
2015	24.0	50.0	55.0	62.0	110.0	57.	.7
2016	30.0	50.0	55.0	62.1	99.0	55	.0
2012 M	28.0	48.0	52.0	58.1	105.0		
2012 F	21.0	47.0	51.0	56.0	78.0		
2013 M	20.0	47.9	53.0	60.0	156.2		
2013 F	30.0	50.0	54.9	61.9	105.0		
2014 M	36.0	48.0	53.0	60.0	160.0		
2014 F	25.0	50.0	54.8	60.0	85.0		
2015 M	24.0	50.0	54.0	60.0	101.0		
2015 F	32.0	50.0	57.0	65.5	110.0		
			/1 neither)	03.3	110.0		
2016 M	30.0	50.0	55.5	63.0	99.0		
2016 M	35.0	50.0	55.0	60.5	82.0		
2016 N		w to repo		00.5	02.0		
			e (130 male	/84 fam	ala/1 nai	ther)	
2016 M	30.0	50.0	55.0	63.0	99.0	tiici)	
2016 F	35.0	50.0	55.0	60.0	77.0		
2016 N		w to repo		00.0	77.0		
2010 N	too iei	w to repo	r c				
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Salary (in thousands of 2016 dollars)	* 0 000		* * * * * * * * * * * * * * * * * * * *	* * * 0 @ @ — — — —	*	* • • • • • • • • • • • • • • • • • • •	

^{*} Postdoctoral salaries are included from 1998 forward.

Academic Postdoctorates Only* 9-10-Month Starting Salaries (in thousands of dollars)

			(in tho	usano	ds of	fdolla	rs)		
Ph.I		Min	Q_1	Medi	an	Q_3	Max	Repor Media 2016	n in
200		30.0	38.5	42.		45.0	55.0	59.	
200		31.0	45.0	46.		50.0	61.5	57.	
200	06	20.0	44.1	48.		50.0	67.0	58.	5
200	07	25.0	45.0	48.	3	55.0	65.0	57.	3
200	80	31.0	45.0	50.		55.0	68.0	58.	
200		36.0	47.9	51.		57.1	68.0	59.	
201		29.0	48.0	51.		56.5	72.0	58.	
201		30.0	48.0	52.		59.0	142.0	58.	
201		27.0	49.9	52.		58.0	76.4	57.	
201		30.0	48.0	53. 53.		60.0	76.0	57.	
201		30.0	48.9			60.0	85.0	57.	
201		33.6 30.0	51.3 50.0	57. 55.		63.4 62.0	84.0 81.0	59. 55.	
	2 M	49.5	50.0	<u></u>		60.0	76.4		U
201	2 F	27.0	43.0	47.	0	53.0	67.0		
	3 M 3 F	30.0 30.0	48.0 49.3	53. 52.		60.0 59.3	76.0 70.0		
	4 M	40.0	50.0	55.	0	60.0	76.0		
	4 F	30.0	46.0	51.		55.0	85.0		
1	5 M	33.6	50.0	57.		60.3	84.0		
201		40.0	54.0	61.		69.6	80.0		
1		male/25	-			61.2	01.0		
l	6 M	30.0	49.3	55.		61.3	81.0		
1	6 F	45.0	53.5	55.	0	62.6	78.0		
	6 N	none t or less e	o report	-o (EO n	aala /2	22 famal	o/O noith	205)	
1	6 M	30.0	49.2	.e (59 fi .55.		60.5	81.0	iei)	
1	6 F	45.0	54.3	59.		62.8	78.0		
1	6 N		o report	39.	U	02.0	76.0		
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	0	2009	2010	2011	2012	2013	2014	2015	2016
		2000	2010	2011	2012	2010	2017	2010	2010

A postdoctoral appointment is a temporary position primarily intended to provide an opportunity to extend graduate training or to further research experience.

Academic Teaching/Teaching and Research 11-12-Month Starting Salaries* (in thousands of dollars)

Reported

Ph.D. Median in Q_3 Q_1 Min Median Max 2016\$ Year 1995 30.0 35.4 41.0 47.8 60.0 62.9 27.5 40.5 48.0 57.5 70.0 70.3 1998 2000 30.0 40.0 48.5 60.0 117.0 68.4 2005 27.0 45.0 50.0 61.5 90.2 62.8 140.0 2008 40.0 50.0 56.0 75.3 65.2 2009 35.0 49.9 60.0 68.0 177.2 69.3 2010 38.0 50.0 57.0 80.0 120.0 65.0 2011 35.0 51.4 55.0 65.5 183.0 61.4 2012 65.0 120.0 65.8 30.0 50.0 60.0 2013 25.0 51.3 60.0 67.5 105.0 64.7 2014 39.0 48.0 54.0 65.0 87.0 57.3 2015 42.0 53.3 58.0 66.3 150.0 60.8 2016 43.7 53.8 58.1 77.0 150.0 58.1 30.0 68.0 2012 M 50.0 60.0 120.0 2012 F 62.0 39.0 50.8 60.0 82.0 25.0 2013 M 54.5 60.0 68.0 105.0 2013 F 39.2 50.3 55.0 65.8 105.0 2014 M 30.0 52.0 60.0 65.5 166.0 2014 F 50.0 55.0 65.0 80.0 100.0 2015 M 42.0 52.3 150.0 56.5 64.3 80.0 2015 F 42.1 55.0 60.0 106.7 Total (25 male/15 female/1 neither) 2016 M 48.0 55.0 60.0 80.7 150.0 2016 F 43.7 47.5 55.0 71.5 140.0 2016 N too few to report One year or less experience (25 male/14 female/1 neither) 2016 M 48.0 55.0 58.7 73.5 106.0 2016 F 43.7 50.0 55.0 73.3 140.0 2016 N too few to report 220 200-180 160 Salary (in thousands of 2016 dollars) 140-120 0 8 0 8 100 80 60 40-0 q 20 0 2009 2013 2014 2015 2016 2010 2011 2012 Postdoctoral salaries are included from 1998 forward.

Academic Research Only 11-12-Month Starting Salaries (in thousands of dollars)

		(in tho	usands	of dolla	rs)		
Ph.D.						Report Mediar	ı in
Year	Min	Q_1	Median	Q_3	Max	2016	\$
2000	30.0	36.5	40.0	52.9	100.0	56.4	
2005	35.0	40.0	47.5	57.0	86.0	59.7	
2006	30.0	45.0	50.0	60.0	84.0	60.9	
2007	34.0	41.5	48.0	54.0	100.3	57.0	
2008	30.5	45.0	50.0	57.7	100.0	58.2	
2009	25.0	41.0	50.0	60.0	110.0	57.8	
2010	30.0	44.0	51.5	61.5	105.5	58.7	
2011	35.0	45.0	55.0	60.0	110.0	61.4	
2012	28.0	46.0	55.0	60.6	112.2	60.3	
2013	35.0	45.0	54.0	61.0	96.0	58.3	
2014	39.0	48.0	55.0	65.0	103.0	58.3	
2015	30.0	48.5	58.5	65.0	105.0	61.4	
2016	42.0	50.0	60.0	63.7	94.0	60.0)
2012 M	30.0	46.5	54.5	60.0	87.0		
2012 F	28.0	46.5	55.0	80.0	112.2		
2013 M	35.0	45.0	52.8	60.3	95.0		
2013 F	41.0	45.0	55.0	65.0	96.0		
2014 M	39.0	48.0	54.0	65.0	103.0		
2014 F	42.0	48.0	55.0	61.6	87.0		
2015 M	30.0	49.0	60.0	68.0	100.0		
2015 F	43.0	49.0	55.0	62.5	105.0		
Total (42	,	,	,				
2016 M	43.0	52.6	60.0	63.2	92.5		
2016 F	42.0	45.3	51.3	79.8	94.0		
2016 N		o report	(40	. (12.6	1 (0 1:1	,	
		-		le/13 fema		ner)	
2016 M	43.0	51.9	60.0	61.8	92.5		
2016 F	42.0	46.0	51.3	63.3	78.0		
2016 N	none t	o report					
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0⊥	2009	2010	2011 2	012 2013	2014	2015	2016

Government 11-12 Month Starting Salaries (in thousands of dollars)

			(iii tii)	ousanas	oi uoiia	15)		
D. 5							Repo	orted
Ph.E		Min	0	Median	0	Max		an in
Yea			Q ₁ 44.0	49.4	Q₃ 50.7	65.0	201	
199 200		37.0 44.0	54.0	49.4 60.0	64.0	83.0		.8 .7
200		48.0	61.0	75.2	84.8	97.2		.5
200		40.0	67.8	80.0	96.1	114.0		'.5
200		48.0	50.0	69.0	80.0	104.0		.9
200		48.0	75.0	81.5	90.0	124.0		.9
200		40.0	69.6	82.5	90.3	117.0		.3
201		42.0	69.0	80.0	89.5	124.5		.2
201		50.0	64.0	70.0	96.9	115.7		3.2
201		44.0	70.1	82.0	90.0	130.0		0.9
201		46.0	75.1	87.0	102.5	154.0		.9
201		47.0	70.0	82.5	97.5	150.0		'.5
201		47.0	77.5	93.5	107.5	130.0	98	
201		57.0	76.0	89.0	107.0	130.0		0.0
2012		60.0	71.5	82.0	89.6	130.0		
2012		44.0	68.3	81.2	91.5	116.0		
2013		25.0	54.5	60.0	68.0	105.0		
2013		39.2	50.3	55.0	65.8	105.0		
2014		60.0	75.0	88.2	99.0	150.0		
2014		47.0	58.0	70.0	84.9	105.0		
201!		47.0	80.8	94.3	110.0	116.0		
201	5 F		61.7		93.8	130.0		
				/0 neither)				
2016		57.0	74.8	85.7	93.3	130.0)	
2016	6 F	68.5	86.8	98.2	101.1	112.0)	
2016		none	to report					
One	vear	or less	experien	ce (20 male	/9 female	/0 neithe	er)	
2016		77.0	74.5	85.4	97.0	130.0		
2016	6 F	68.5	81.0	98.0	98.2	112.0		
2016	5 N	none	to report					
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20		2009	2010	2011 2012	2013	2014	2015	2016

Business and Industry 11-12 Month Starting Salaries (in thousands of dollars)

			(in tho	usanas	of dolla	irs)		
Ph.D.				!			Repo Media	ເກ in
Yea		Min	Q ₁	Mediar	,	Max	201	
199		28.8	48.0	56.8	69.0	125.0	87.	
200		20.0	64.0	72.0	80.0	150.0	101.	
200		51.0	75.5	87.0	97.8	200.0	109.	
200		34.0	80.0	90.0	100.0	155.0	109.	
200		40.0	78.0	90.0	100.0	250.0	106.	
200		51.8	78.0	90.0	100.0	170.0	104.	
200		42.0	74.6	90.0	100.0	235.0	104.	
201	0	28.0	75.0	90.0	100.0	155.0	102.	.6
201		50.0	85.0	94.3	102.3	190.0	105.	.3
201	2	52.5	76.5	95.0	120.0	200.0	104.	
201		30.0	85.0	100.0	110.0	280.0	107.	
201	4	50.0	83.0	100.0	115.0	300.0	106.	.0
201		60.0	92.5	110.0	125.0	170.0	115.	
201		36.0	88.3	110.0	125.0	175.0	110.	.0
201		58.5	85.0	100.0	120.0	145.0		
201		52.5	68.5	81.3	94.8	105.0		
201		35.0	45.0	52.8	60.3	95.0		
201		41.0	45.0	55.0	65.0	96.0		
	4 M	56.0	86.2	100.0	120.0	300.0		
201	4 F	50.0	80.0	91.0	101.0	140.0		
201		60.0	94.8	111.0	125.0	160.0		
201		60.0	87.5	106.0	120.0	170.0		
			'49 femal					
201		36.0	86.8	110.0				
201		65.0	89.5	107.0	125.0	160.0		
201	6 N	none	to report					
One	year	or less	experien	ce (76 ma	ale/39 fema	le/0 neith	ier)	
201	6 M	45.0	84.2	106.5	125.0	175.0		
201	6 F	70.0	91.5	105.4	125.0	143.0		
201	6 N	none t	o report					
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