# Report on the 2011-2012 NewDoctoral Recipients 

Richard Cleary, James W. Maxwell, and Colleen 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, 2011, through June 30, 2012. All information in the report was provided by the departments that awarded the degrees with additional information provided by the individual new doctoral recipients. The report includes an analysis of the fall 2012 employment plans of 2011-2012 doctoral recipients and a demographic profile summarizing characteristics of citizenship status, gender, and racial/ ethnic group. This report is based on a complete census of the 2011-2012 new doctorates and includes information about 2011-2012 doctoral recipients that were not included in the preliminary report in the March 2013 issue of Notices.

Detailed information, including tables which traditionally appeared in this report, is available on the AMS website at www. ams.org/annual-survey/survey-reports.

## Doctoral Degrees Awarded

1,798 Ph.D.'s were awarded by the 307 doctoral-granting departments. We are pleased to report that we had a $100 \%$ response rate for this survey and we thank the departments for their cooperation.

Biostatistics reported the largest increase in the number of doctoral recipients, up 57 over the total of 115 reported for 2010-2011.
$32 \%$ (570) of the new Ph.D.'s had a dissertation in statistics/ biostatistics, followed by applied mathematics (264) with $15 \%$ and algebra/number theory (227) with $13 \%$.

Comparing Ph.D.'s awarded this year to last year, the number of Ph.D.s awarded:

- Increased about 9\% from 1,653 to 1,798.
- Increased in all department groupings except for Math. Private Large, which awarded 7\% fewer.
- Remained flat for degrees in statistics.

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


Total Degrees Awarded: 1,798
*See page 884 for a description of the department groupings.

[^0]
## Doctoral Degrees Awarded

Figure A.2: New Ph.D.'s Awarded by Group


Comparing Ph.D.'s awarded this year with those awarded in 2001-2002:

- Ph.D.'s awarded have increased more than $87 \%$ over the last 10 years in all groups combined.
- Degrees awarded by Doctoral Mathematics combined and by Statistics \& Biostatistics combined have increased $78 \%$ and $117 \%$, respectively. Some of this latter increase may be attributed to the increase in response rate among the Statistics \& Biostatistics departments.


## Employment

The overall U.S. unemployment rate for the new doctoral recipients is $6.9 \%$, up from $4.3 \%$ last year. (Details on the calculations are on page 884.) The employment plans are known for 1,623 of the 1,798 new doctoral recipients. The number of new doctoral recipients employed in the U.S. is 1,300 , up $9 \%$ from last year's number of $1,191.68 \%$ of Ph.D.'s employed in Doctoral Math. departments are in postdoc positions, down from $71 \%$ last year. The number of new Ph.D.'s taking positions in Business \& Industry has increased to 340 this year compared to 235 last year, and all groups showed an increase in Business \& Industry.

Figure E.1: Employment Status


- $53 \%$ (685) of those who are employed in the U.S. are U.S. citizens, down slightly from 54\% last year.
- $\quad 78 \%$ (615) of non-U.S. citizens whose employment status is known are employed in the U.S., the remaining 151 nonU.S. citizens are either employed outside of the U.S. or are unemployed.
- $8 \%(115)$ of all new Ph.D.'s are working at the institution which granted their degree, the same percent as last year. These individuals constitute $13 \%$ of total U.S. academic employed.

Figure E.2: U.S. Employed by Type of Employer

*Includes all Math. Public, Math. Private, and Applied Math. departments. **Other Academic consists of departments outside the mathematical sciences including numerous medical related units.

- Total U.S. employed: 1,300
- U.S. academic hiring increased slightly to 894 and all hiring groups reported increases except Math. Public Small and Large, Math. Private Small, Master's, and 2-Year College.
- Goverment hiring decreased 19\% (from 81 to 66); all doctoral granting groups except Math. Public Small, Applied Math. and Biostatistics showed a decrease in the number of Ph.D.'s taking positions in this sector.


## Employment

Figure E.3: Employment in the U.S. by Type of Employer and Citizenship Total: 1,300


* Includes all Math. Public, Math. Private, and Applied Math., Master's, Bachelors, 2-Yr, Other academic and research institutes/nonprofit.
${ }^{* *}$ Includes all Math. Public, Math. Private, and Applied Math. departments.

Figure E.4: Ph.D.'s Employed in Postdocs by Degree-Granting Department Group


- Total known to be employed: 1,511
- $38 \%$ (573) of the new Ph.D.'s that are employed are reported to be in postdoc positions, down from 41\% last year.
- $56 \%$ of the new Ph.D.'s awarded by Math. Private Large departments are employed in postdocs, while only $22 \%$ of new Ph.D.'s awarded by Statistics departments are in postdocs.
- $46 \%$ of the new Ph.D.'s having U.S. academic employment are in postdocs; last year this percentage was $48 \%$.

Looking at U.S. citizens whose employment status is known:

- $86 \%$ (685) are employed in the U.S., of these:
- 32\% are employed in Ph.D.-granting departments
- $42 \%$ are employed in all other academic categories
- $26 \%$ are employed in government, business and industry

Figure E.5: New Ph.D.'s Employment by Type of Position and Type of Employer


- $22 \%$ of the new Ph.D.'s in postdoc positions, are employed outside the U.S., last year this percentage was $24 \%$.
- $68 \%$ of the new Ph.D.'s employed in Doctoral Math. departments are in postdoc positions, down from $71 \%$ last year. The analogous percent for Math. Private Large is $85 \%$.


## Employment

Figure E. 6 displays the U.S. unemployment rate for new doctorates; details on the calculations are on page 884 .

Figure E.6: Percentage of New Doctoral Recipents Unemployed 2003-2012*


- Unemployment among those whose employment status is known is $6.9 \%$, up from $4.3 \%$ for Fall 2011.
- Math. Private Small reported the highest unemployment rate at $13 \%$.
- Statistics reported the lowest unemployment at 3.5\%.
- $7.8 \%$ of U.S. citizens are unemployed, compared to $4.6 \%$ in Fall 2011.
- $6.0 \%$ of non-U.S. citizens are unemployed, compared to 3.9\% in Fall 2011.
*The difficult employment years of the 1990's are not shown here but are located on the AMS website at www.ams.org/annua1-survey/2012Survey-NewDoctorates-Report.

Figure E.7: Percentage of Employed New Ph.D.'s by Type of Employer


- U.S. academic hiring has dropped to 59\% (a five-year low), while U.S. nonacademic hiring has jumped to $27 \%$ (a five-year high).
- Detailed information on new Ph.D.'s employed in the U.S. by degree-granting department group is available on the AMS website at www. ams.org/annua1-survey/2012Survey-NewDoctorates-Report.


## Demographics

Gender and citizenship was known for all 1,798 new Ph.D.'s reported for 2011-2012. The number of U.S. citizens is 863 ( $48 \%$ ) (down slightly from $49 \%$ last year). The number of females accounted for $28 \%$ of the U.S. citizen total (the same as last year). The number of non-U.S. citizens receiving a Ph.D. increased modestly to $52 \%$ from $51 \%$ last year; this is down 7 percentage points from the 10-year high of $59 \%$ reported in 2004-2005. 11\% (65) of the non-U.S. citizens employed in the U.S. have permanent visa status (up from $9 \%$ last year).

Figure D.1: Gender of Doctoral Recipients by Degree-Granting Grouping
$\square$ Male $\quad$ Female


- Females account for 31\% (554) of the 1,798 Ph.D.'s, down only marginally from last year's figure of $32 \%$.

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


- $50 \%$ of the males and $44 \%$ of the females are U.S. citizens.
- Females accounted for $28 \%$ of the U.S. citizens.
- Among the U.S. citizens: 7 are American Indian or Alaska Native, 62 are Asian, 28 are Black or African American, 33 are Hispanic or Latino, 5 are Native Hawaiian or Other Pacific Islander, 669 are White, and 59 are of unknown race/ ethnicity.

Figure D.2: Citizenship of Doctoral Recipients by Degree-Gtranting Grouping
$\square$ U.S. Citizens Non-U.S. Citizens


- All groups awarded more degrees to U.S. Citizens than Non-U.S. citizens except Math. Private Large, Statistics and Biostatitics which awarded $44 \%, 31 \%$ and $42 \%$ to U.S. citizens.

Figure D.4: Citizenship of New Ph.D.* Recipients, 2006-2012 ■U.S. Citizens NonU.S. Citizens

*The increase shown from 2007-2008 to 2008-2009 is due in part to the increase in the response rate for statistics and biostatistics departments.

Looking at the last six years we see that:

- U.S. citizen counts have been increasing steadily, reaching a high of 863 this year. This is a $50 \%$ increase from Fall 2006-2007.
- Non-U.S. citizen counts which had been hovering around 850, are showing more variability, increasing to 935 this year. While this is a $24 \%$ increase from Fall 2006-2007, it represents a $10 \%$ increase from last year.


## Female New Doctoral Recipients

After increasing to $32 \%$ last year, the number of female new doctoral recipients has decreased to $31 \%$ this year. Of the 894 new Ph.D.'s hired into academic positions $31 \%$ (279) were women, down from $33 \%$ last year. $25 \%$ of those hired into postdoc positions were women, with $42 \%$ of the women in postdocs being U.S. citizens, up from $41 \%$ last year. The U.S. unemployment rate for females is $7.4 \%$, compared to $6.7 \%$ for males and $7 \%$ overall.

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


* For definitions of groups see page 884 .
- $38 \%$ of those hired by Group B were women (up from $36 \%$ last year) and $29 \%$ of those hired by Group M were women (down from 33\% last year).
- $37 \%$ of those hired into Research Institutes/Other non-profit positions were women (down from $62 \%$ last year but in line with $35 \%$ two years ago).
- $36 \%$ of those hired into Government positions were women (down slightly from $37 \%$ last year).
- $60 \%$ of the women employed in all doctoral groups are in postdoc positions, compared to $66 \%$ of males employed in postdocs in these groups.

Figure F.2: Females as a Percentage of U.S. Citizen Doctoral Recipients


## Ph.D.'s Awarded by Statistics and Biostatistics Departments

This section contains information about new doctoral recipients in these departments ( 59 statistics and 36 biostatistics departments). Statistics and Biostatistics departments produced 485 new doctorates, of which all but 6 had dissertations in statistics/biostatistics. This is a $28 \%$ increase in the number reported for fall 2011 of 375. In addition, Math Public, Math Private and Applied Math departments combined had 91 Ph.D. recipients with dissertations in statistics. 35\% (171) of the new Ph.D.'s in Statistics and Biostatistics departments are U.S. citizens (while in the other groups combined $52 \%$ are U.S. citizens). The 90 departments responding last year and this year reported a total of 427 new doctoral recipients, an increase of $4 \%$ from last year. The unemployment among this group of new Ph.D.'s is $4.2 \%$ up from $3.8 \%$.

Figure S.1: Ph.D.'s Awarded by Statistics/Biostatistics Departments


- $27 \%$ of all Ph.D.'s awarded were in Statistics/Biostatistics.
- Females account for $38 \%$ of statistics and $49 \%$ of biostatistics Ph.D.'s awarded.

Figure S.2: Gender of Ph.D. Recipients from Statistics/Biostatistics Departments


- Females accounted for $42 \%$ of • the 485 Ph.D.'s in Statistics and Biostatistics, compared to all other groups combined, where $27 \%$ are female.

Figure S.3: Citizenship of Ph.D. Recipients from Statistics/Biostatistics Departments


38\% of Statistics/Biostatistics U.S. citizen Ph.D. recipients are females, while in all other groups combined $26 \%$ of the U.S. citizens are females.

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


- $4.2 \%$ of Statistics/Biostatistics Ph.D.'s are unemployed compared to $8.1 \%$ among all other groups. This is up from 3.8\% last year.
- Unemployment among new Ph.D.'s with dissertations in statistics/probability is 4.0\%, up from 3.6\%. Among all other dissertation groupings 7.0\% are unemployed.

Figure S.5: U.S.-Employed Ph.D. Recipients from Statistics/Biostatistics Departments by Type of Employer

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

## Total U.S. Employed: 390

- 37\% of Statistics/Biostatistics Ph.D.'s are employed in Business/Industry, compared to $22 \%$ in all other groups.
- $32 \%$ of those hired by statistics and biostatistics were females, compared to $24 \%$ in all other groups.


## Information from the Employment Experiences of New Doctorates (EENDR) Survey

This section contains additional information on employment gathered from a subset of the 2011-2012 new Ph.D.'s on the EENDR Survey. It expands on the details of employment which are not available through the departments.

The 1,644 new Ph.D.'s reported in our Preliminary Report were sent this survey; of those individuals 709 (43\%) responded. The employment status is known for 702 of these individuals, the U.S. unemployment among this group is $2.2 \%$. Of the 681 who reported being employed, $31 \%$ indicated they were actively looking for new employment.

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


* Includes research institutes and other non-profits.

Figure EE.2: EENDR Respondents

Reporting Temporary U.S. Employment by Sector


* Includes research institutes and other non-profits.

Of the 328 temporarily employed:

- $28 \%$ are women.
- $33 \%$ were unable to find a suitable permanent position (up from 27\% last year).
- $73 \%$ are employed in postdocs and $45 \%$ of these reported they could not find a suitable permanent position.

Of the 261 permanently employed:

- $35 \%$ are women.
- $67 \%$ of those reporting academic employment hold tenured/ tenure-track positions.

Figure EE.3. EENDR Respondents Employed Outside the U.S. by Sector
Business \& Industry 8 (9\%)


Of the 92 employed outside the U.S.:

- $27 \%$ are women.
- $28 \%$ are U.S. Citizens.
- $68 \%$ are employed in postdocs.

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

|  |  |  |  |  | Temporary |  | Temporary Postdocs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Perm <br> Total | \% | Temp <br> Total | \% | Perm <br> Not Avail | \% of Temp Total | Total | \% of Temp Total | Perm <br> Not Avail | \% of Temp Postdocs | \#(\%) <br> Unknown |
| Fall 2008 | 245 | 49\% | 222 | 45\% | 74 | 33\% | 172 | 77\% | 47 | 27\% | 29(6\%) |
| Fall 2009 | 318 | 49\% | 326 | 51\% | 146 | 45\% | 234 | 72\% | 68 | 29\% | 0 |
| Fall 2010 | 320 | 48\% | 341 | 52\% | 140 | 41\% | 246 | 72\% | 68 | 28\% | 0 |
| Fall 2011 | 251 | 44\% | 319 | 56\% | 133 | 42\% | 225 | 71\% | 87 | 39\% | 0 |
| Fall 2012 | 261 | 44\% | 328 | 56\% | 127 | 39\% | 242 | 74\% | 108 | 45\% | 0 |

Comparing the employment status of EENDR respondents employed in the U.S. over the last five years we see that:

- Permanent positions have leveled off at $44 \%$ this year. This is down 5 percentage points from the high reported in 2008 \& 2009 and down in number by 59 (18\%) from the high of 320 in 2010.
- Temporary positions remained unchanged at $56 \%$ this year, maintaining a five-year high.
- $39 \%$ of those holding temporary positions were unable to find suitable permanent positions, up 6 percentage points from 2008 and down 6 percentage points from the high in 2009.
- $45 \%$ of those holding postdoc positions were unable to find suitable permanent positions, a five-year high.

Information from the Employment Experiences of New Doctorates (EENDR) Survey

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

| Year | Permanent |  |  | Temporary |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Acad | Govn | B/I | Acad | Govn | B/I |
| Fall 2008 | $63 \%$ | $6 \%$ | $31 \%$ | $95 \%$ | $4 \%$ | $1 \%$ |
| Fall 2009 | $64 \%$ | $6 \%$ | $29 \%$ | $91 \%$ | $5 \%$ | $4 \%$ |
| Fall 2010 | $64 \%$ | $8 \%$ | $28 \%$ | $93 \%$ | $5 \%$ | $2 \%$ |
| Fall 2011 | $61 \%$ | $8 \%$ | $31 \%$ | $94 \%$ | $5 \%$ | $1 \%$ |
| Fall 2012 | $61 \%$ | $8 \%$ | $32 \%$ | $92 \%$ | $5 \%$ | $2 \%$ |

Looking at at Table EE. 2 we see that

- Permanent academic employment has leveled off at $61 \%$, while temporary employment in this sector has decreased to $92 \%$.
- Permanent government employment has leveled off at $8 \%$.
- Business/Industry permanent employment has increased to 32\% (a five-year high), while temporary positions increased to $2 \%$.


## Starting Salaries of the 2011-2012 Doctoral Recipients

The starting salary figures were compiled from information gathered on the EENDR questionnaires sent to 1,644 individuals using addresses provided by the departments granting the degrees; 709 individuals responded between late October and April. Responses with insufficient data or from individuals who indicated they had part-time or non-U.S. 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.

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

| Ph.D.      <br> Year Min $\mathrm{Q}_{1}$ Median $\mathrm{Q}_{3}$ Max <br> Total (203 male/78 female)      <br> 2012 M 28.0 48.0 52.0 58.1 105.0 <br> 2012 F 21.0 47.0 51.0 56.0 78.0 <br> One year r less experience $(189$ male/70 female)    <br> 2012 M 28.0 47.0 50.8 57.0 78.0 <br> 2012 F 21.0 47.0 50.0 55.0 60.0 |
| :--- | :--- | :--- | :--- | :--- | :--- |



* Includes postdoctoral salaries.

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

| Ph.D. <br> Year | Min | $\mathrm{Q}_{1}$ | Median | $\mathrm{Q}_{3}$ | Max |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Total (88 male/24 | female) |  |  |  |  |
| 2012 M | 49.5 | 50.0 | 55.1 | 60.0 | 76.4 |
| 2012 F | 27.0 | 43.0 | 47.0 | 53.0 | 67.0 |
| One year or less | experience | $(86$ male | female) |  |  |
| 2012 M | 36.0 | 50.0 | 52.6 | 60.0 | 74.4 |
| 2012 F | 40.0 | 47.0 | 50.0 | 54.5 | 67.0 |



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

## Starting Salaries of the 2011-2012 Doctoral Recipients

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

| Ph.D. Year | Min | $\mathrm{Q}_{1}$ | Median | $\mathrm{Q}_{3}$ | Max |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total (23 male/14 female) |  |  |  |  |  |
| 2012 M | 60.0 | 71.5 | 82.0 | 89.6 | 130.0* |
| 2012 F | 44.0 | 68.3 | 81.2 | 91.5 | 116.0 |
| One year or less experience (16 male/12 female) |  |  |  |  |  |
| 2012 M | 65.6 | 70.1 | 81.5 | 84.3 | 97.3 |
| 2012 F | 44.0 | 66.5 | 81.2 | 90.5 | 95.0 |



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

| Ph.D. |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :--- |
| Year | Min | $\mathrm{Q}_{1}$ | Median | $\mathrm{Q}_{3}$ | Max |
| Total (55 male/25 female) |  |  |  |  |  |
| 2012 M | 58.5 | 85.0 | 100.0 | 120.0 | 145.0 |
| 2012 F | 52.5 | 68.5 | 83.1 | 94.8 | 105.0 |
| One year or less | experience | $(46$ male/24 female) |  |  |  |
| 2012 M | 63.0 | 85.0 | 99.5 | 120.0 | 200.0 |
| 2012 F | 52.5 | 70.0 | 92.0 | 106.0 | 140.0 |


*Figures in red represent corrections from published report.

## 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, 2011-June 30, 2012, is designated as 2012. 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 2005 through 2012. Values plotted for 2005 through 2012 are converted to 2012 dollars using the implicit price deflator prepared annually by the Bureau of Economic Analysis, U.S. 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). The interquartile range (IQR) is defined as Q3-Q1. Think of constructing invisible fences 1.5 IQR below Q1 and 1.5 IQR above Q3. Whiskers are drawn from Q3 to the largest observation that falls below the upper invisible fence and from Q1 to the smallest observation that falls above the lower invisible fence. Think of constructing two more invisible fences, each falling 1.5 IQR above or below the existing invisible fences. Any observation that falls between the fences on each end of the boxplots is called an outlier and is plotted as o in the boxplots. Any observation that falls outside of both fences either above or below the box in the boxplot is called an extreme outlier and is marked as * in the boxplot.

## Remarks on U.S. Unemployment Rate Calculations

In the unemployment calculations provided in this report the individuals employed outside the U.S. 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 U.S. labor market experienced by the new doctoral recipients. This change tends to increase the rate of unemployment over that reported in prior years.

In a further small change from prior years, 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 new method. One can view a comparison of the unemployment rates using the traditional method and the new method by visiting the AMS website at www. ams . org/annua1-survey/surveyreports.htm1.

## Departmental Groupings and Response Rates

Starting with reports on the 2012 AMS-ASA-IMS-MAASIAM 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 Ph.D.'s awarded between 2000 and 2010, based on their reports to the Annual Survey during this period. Furthermore, doctorate-granting
departments which self-classify their Ph.D. 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 http://www. ams. org/notices/201209/rtx120901262p.pdf.

## Group Descriptions

Math. Public Large consists of departments with the highest annual rate of production of Ph.D.'s, ranging between 7.0 and 24.2 per year.
Math. Public Medium consists of departments with an annual rate of production of Ph.D.'s, ranging between 3.9 and 6.9 per year.

Math. Public Small consists of departments with an annual rate of production of Ph.D.'s of 3.8 or less per year.
Math. Private Large consists of departments with an annual rate of production of Ph.D.'s, ranging between 3.9 and 19.8 per year.

Math. Private Small consists of departments with an annual rate of production of Ph.D.'s 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.
Group M contains U.S. departments granting a master's degree as the highest graduate degree.
Group B contains U.S. departments granting a baccalaureate degree only.

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

Survey Response Rates by New Groupings
Doctorates Granted Departmental Response Rates*

| 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 | 64 of 64 including | 10 with no degrees |
| Math. Private Large | 24 of 24 including | 0 with no degrees |
| Math. Private Small | 28 of 28 including | 5 with no degrees |
| Applied Math. | 30 of 30 including | 3 with no degrees |
| Statistics | 59 of 59 including | 5 with no degrees |
| Biostatistics | 36 of 36 including | 8 with no degrees |
| Total | 307 of 307 including | 31 with no degrees |

## Annual Survey

of the Mathematical Sciences AMS • ASA • IMS • MAA • SIAM

American Mathematical Society. Providence, RI 02940-6248 Email: ams-survey@ams.org •Tel: 800-321-4267 Web: www.ams.org/annual-survey

Supplemental Table(s) for the Report on New Doctoral Recipients

Section on Doctoral Degrees Awarded

Supplemental Table A.1: Field of Thesis of 2011-2012 Doctoral Recipients by Degree-Granting Department

| Granting | Algebra/ Number Theory | Real, Comp., <br>  <br> Harmonic <br> Analysis | Geometry/ Topology | Discr. Math./ Combin. /Logic/ Comp. Sci. | Probability | Statistics/ <br> Biostatistics | Applied Math. | Numerical Analysis/ Approximations | Linear Nonlinear Optim./ Control | Differential, Integral, \& Difference Equations | Math. <br> Educ. | Other/ Unknown | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Math Public Large | 73 | 34 | 67 | 50 | 23 | 10 | 61 | 13 | 6 | 43 | 1 | 6 | 387 |
| Math Public Medium | 53 | 24 | 18 | 26 | 22 | 23 | 61 | 25 | 13 | 23 | 3 | 2 | 293 |
| Math Public Small | 34 | 16 | 17 | 13 | 13 | 28 | 44 | 11 | 4 | 17 | 7 | 2 | 206 |
| Math Private Large | 50 | 8 | 56 | 23 | 13 | 6 | 23 | 3 | 1 | 17 | 0 | 4 | 204 |
| Math Private Small | 15 | 7 | 9 | 6 | 2 | 0 | 11 | 3 | 0 | 7 | 1 | 1 | 62 |
| Applied Mathematics | 2 | 2 | 3 | 7 | 4 | 24 | 63 | 14 | 9 | 14 | 0 | 19 | 161 |
| Statistics | 0 | 0 | 1 | 0 | 2 | 307 | 1 | 0 | 1 | 0 | 0 | 1 | 313 |
| Biostatistics | 0 | 0 | 0 | 0 | 0 | 172 | 0 | 0 | 0 | 0 | 0 | 0 | 172 |
| Total | 227 | 91 | 171 | 125 | 79 | 570 | 264 | 69 | 34 | 121 | 12 | 35 | 1798 |
| Female | 49 | 14 | 36 | 35 | 12 | 243 | 94 | 12 | 8 | 32 | 7 | 12 | 554 |
| Male | 178 | 77 | 135 | 90 | 67 | 327 | 170 | 57 | 26 | 89 | 5 | 23 | 1244 |

# Annual Survey 

of the Mathematical Sciences
AMS • ASA • IMS • MAA • SIAM

## Supplemental Table(s) for the Report on New Doctoral Recipients

Section on Employment

Supplemental Table E.1: Employment Status of 2011-2012 Doctoral Recipients in the Mathematical Sciences by Type of Degree-Granting Department

| Type of Employer | Math. <br> Public <br> Large | Math. <br> Public <br> Medium | Math. <br> Public <br> Small | Math. <br> Private Large | Math. <br> Private <br> Small | Applied <br> Math. | Statistics | Biostatistics | Total | Female | Male |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Math. Public Large | 51 | 10 | 4 | 22 | 5 | 3 | 0 | 1 | 96 | 20 | 76 |
| Math. Public Medium | 13 | 29 | 4 | 5 | 7 | 3 | 4 | 0 | 65 | 15 | 50 |
| Math. Public Small | 5 | 3 | 28 | 2 | 2 | 3 | 4 | 0 | 47 | 10 | 37 |
| Math. Private Large | 32 | 9 | 0 | 38 | 1 | 3 | 1 | 0 | 84 | 21 | 63 |
| Math. Private Small | 10 | 5 | 0 | 2 | 6 | 2 | 1 | 0 | 26 | 10 | 16 |
| Applied Mathematics | 2 | 2 | 1 | 0 | 2 | 11 | 2 | 0 | 20 | 4 | 16 |
| Statistics | 0 | 2 | 0 | 2 | 0 | 0 | 44 | 3 | 51 | 14 | 37 |
| Biostatistics | 0 | 0 | 1 | 1 | 0 | 1 | 14 | 22 | 39 | 15 | 24 |
| Master's | 8 | 15 | 11 | 4 | 5 | 0 | 7 | 1 | 51 | 15 | 36 |
| Bachelor's | 45 | 47 | 33 | 10 | 9 | 9 | 12 | 2 | 167 | 63 | 104 |
| Two-Year Colleges | 4 | 6 | 11 | 0 | 1 | 1 | 0 | 0 | 23 | 7 | 16 |
| Other Academic Dept. | 19 | 19 | 9 | 8 | 3 | 25 | 32 | 47 | 162 | 62 | 100 |
| Notprofit | 12 | 6 | 5 | 9 | 1 | 5 | 11 | 14 | 63 | 23 | 40 |
| Government | 10 | 11 | 6 | 4 | 1 | 12 | 11 | 11 | 66 | 24 | 42 |
| Busisness and Industry | 57 | 46 | 23 | 30 | 4 | 34 | 105 | 41 | 340 | 112 | 228 |
| Non-U.S. Academic | 61 | 34 | 20 | 40 | 5 | 3 | 19 | 4 | 186 | 44 | 142 |
| Non-U.S. Nonacademic | 1 | 2 | 2 | 2 | 0 | 3 | 12 | 3 | 25 | 11 | 14 |
| Not Seeking Employment | 6 | 5 | 0 | 0 | 0 | 0 | 3 | 1 | 15 | 6 | 9 |
| Still Seeking Employment | 18 | 18 | 16 | 6 | 7 | 15 | 9 | 8 | 97 | 33 | 64 |
| Unknown (U.S.) | 17 | 17 | 25 | 5 | 2 | 21 | 15 | 5 | 107 | 30 | 77 |
| Unknown (non-U.S.)* | 16 | 7 | 7 | 14 | 1 | 7 | 7 | 9 | 68 | 15 | 53 |
| Total | 387 | 293 | 206 | 204 | 62 | 161 | 313 | 172 | 1798 | 554 | 1244 |
| Female | 83 | 88 | 62 | 47 | 15 | 56 | 118 | 85 | 554 |  |  |
| Male | 304 | 205 | 144 | 157 | 47 | 105 | 195 | 87 | 1244 |  |  |

# Annual Survey 

of the Mathematical Sciences
AMS • ASA • IMS • MAA • SIAM

## Supplemental Table(s) for the Report on New Doctoral Recipients

Section on Employment

Supplemental Table E.2: Employment Status of 2011-2012 Doctoral Recipients in the Mathematical Sciences by Type of Degree-Granting Department with Citizenship

| Type of Employer | Math. <br> Public <br> Large | Math. <br> Public <br> Medium | Math. <br> Public <br> Small | Math. <br> Private <br> Large | Math. Private Small | Applied Math. | Statistics | Biostatistics | Total | U.S. Citizen | Non-U.S. <br> Citizen |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Math. Public Large | 51 | 10 | 4 | 22 | 5 | 3 | 0 | 1 | 96 | 52 | 44 |
| Math. Public Medium | 13 | 29 | 4 | 5 | 7 | 3 | 4 | 0 | 65 | 36 | 29 |
| Math. Public Small | 5 | 3 | 28 | 2 | 2 | 3 | 4 | 0 | 47 | 24 | 23 |
| Math. Private Large | 32 | 9 | 0 | 38 | 1 | 3 | 1 | 0 | 84 | 41 | 43 |
| Math. Private Small | 10 | 5 | 0 | 2 | 6 | 2 | 1 | 0 | 26 | 15 | 11 |
| Applied Mathematics | 2 | 2 | 1 | 0 | 2 | 11 | 2 | 0 | 20 | 10 | 10 |
| Statistics | 0 | 2 | 0 | 2 | 0 | 0 | 44 | 3 | 51 | 24 | 27 |
| Biostatistics | 0 | 0 | 1 | 1 | 0 | 1 | 14 | 22 | 39 | 19 | 20 |
| Master's | 8 | 15 | 11 | 4 | 5 | 0 | 7 | 1 | 51 | 34 | 17 |
| Bachelor's | 45 | 47 | 33 | 10 | 9 | 9 | 12 | 2 | 167 | 133 | 34 |
| Two-Year Colleges | 4 | 6 | 11 | 0 | 1 | 1 | 0 | 0 | 23 | 15 | 8 |
| Other Academic Dept. | 19 | 19 | 9 | 8 | 3 | 25 | 32 | 47 | 162 | 76 | 86 |
| Notprofit | 12 | 6 | 5 | 9 | 1 | 5 | 11 | 14 | 63 | 30 | 33 |
| Government | 10 | 11 | 6 | 4 | 1 | 12 | 11 | 11 | 66 | 43 | 23 |
| Busisness and Industry | 57 | 46 | 23 | 30 | 4 | 34 | 105 | 41 | 340 | 133 | 207 |
| Non-U.S. Academic | 61 | 34 | 20 | 40 | 5 | 3 | 19 | 4 | 186 | 44 | 142 |
| Non-U.S. Nonacademic | 1 | 2 | 2 | 2 | 0 | 3 | 12 | 3 | 25 | 3 | 22 |
| Not Seeking Employment | 6 | 5 | 0 | 0 | 0 | 0 | 3 | 1 | 15 | 10 | 5 |
| Still Seeking Employment | 18 | 18 | 16 | 6 | 7 | 15 | 9 | 8 | 97 | 58 | 39 |
| Unknown (U.S.) | 17 | 17 | 25 | 5 | 2 | 21 | 15 | 5 | 107 | 62 | 45 |
| Unknown (non-U.S.)* | 16 | 7 | 7 | 14 | 1 | 7 | 7 | 9 | 68 | 1 | 67 |
| Total | 387 | 293 | 206 | 204 | 62 | 161 | 313 | 172 | 1798 | 863 | 935 |
| U.S. Citizen | 213 | 152 | 110 | 89 | 44 | 84 | 98 | 73 | 863 |  |  |
| Non-U.S. Citizen | 174 | 141 | 96 | 115 | 18 | 77 | 215 | 99 | 935 |  |  |

Supplemental Table(s) for the Report on New Doctoral Recipients

Section on Employment

Supplemental Table E.3: Employment Status of 2011-12 New Doctoral Recipeints
by Citizenship Status

| Type of Employer | U.S. Citizen | Non-U.S. Citizens |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Permenant Visa | Temporary Visa | Unknown Visa |  |
| U.S. Employer | 685 | 65 | 540 | 10 | 1300 |
| U.S. Academic | 509 | 44 | 336 | 5 | 894 |
| Math. Public | 52 | 3 | 40 | 1 | 96 |
| Math. Private | 36 | 0 | 29 | 0 | 65 |
| Applied Mathematics | 24 | 2 | 21 | 0 | 47 |
| Statistics | 41 | 2 | 39 | 2 | 84 |
| Biostatistics | 15 | 1 | 10 | 0 | 26 |
| NonPhD | 258 | 27 | 117 | 1 | 403 |
| RI/NP | 30 | 4 | 29 | 0 | 63 |
| US Nonacademic | 176 | 21 | 204 | 5 | 406 |
| NonUS Employer | 47 | 5 | 158 | 1 | 211 |
| NonUS Academic | 44 | 5 | 136 | 1 | 186 |
| NonUS Nonacademic | 3 | 0 | 22 | 0 | 25 |
| Not Seeking | 10 | 2 | 3 | 0 | 15 |
| Seeking | 58 | 1 | 37 | 1 | 97 |
| Subtotal | 800 | 73 | 738 | 12 | 1623 |
| Unknown US | 62 | 6 | 37 | 2 | 107 |
| Unknown NonUS | 1 | 1 | 63 | 3 | 68 |
| Total | 863 | 80 | 838 | 17 | 1798 |

Annual Survey
of the Mathematical Sciences
AMS • ASA • IMS • MAA • SIAM

Supplemental Table(s) for the Report on New Doctoral Recipients

Section on Employment

Supplemental Table E.4: Employment Status of 2011-2012 Doctoral Recipients by Field of Thesis

| Type of Employer | Algebra/ <br> Number <br> Theory | Real, Comp., Funct., \& Harmonic Analysis | Geometry/ Topology | Discr. Math./ Combin. /Logic/ Comp. Sci. | Probability | Statistics/ Biostatistics | Applied Math. | Numerical <br> Analysis/ <br> Approxi- <br> mations | Linear Nonlinear Optim./ Control | Differential, Integral, \& Difference Equations | Math. Educ. | Other/ Unknown | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Math. Public Large | 25 | 7 | 16 | 9 | 8 | 2 | 12 | 5 | 0 | 10 | 0 | 2 | 96 |
| Math. Public Medium | 15 | 6 | 7 | 2 | 4 | 4 | 10 | 9 | 0 | 8 | 0 | 0 | 65 |
| Math. Public Small | 4 | 3 | 3 | 7 | 3 | 7 | 7 | 1 | 2 | 8 | 2 | 0 | 47 |
| Math. Private Large | 20 | 3 | 24 | 6 | 5 | 3 | 5 | 1 | 1 | 14 | 0 | 2 | 84 |
| Math. Private Small | 4 | 3 | 6 | 4 | 0 | 1 | 2 | 1 | 0 | 5 | 0 | 0 | 26 |
| Applied Mathematics | 0 | 0 | 0 | 1 | 0 | 2 | 10 | 3 | 0 | 4 | 0 | 0 | 20 |
| Statistics | 0 | 0 | 0 | 0 | 2 | 48 | 0 | 0 | 0 | 1 | 0 | 0 | 51 |
| Biostatistics | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 1 | 39 |
| Master's | 7 | 7 | 3 | 9 | 2 | 10 | 5 | 2 | 1 | 3 | 2 | 0 | 51 |
| Bachelor's | 38 | 16 | 23 | 23 | 1 | 23 | 20 | 5 | 2 | 11 | 4 | 1 | 167 |
| Two-Year Colleges | 7 | 1 | 2 | 0 | 0 | 1 | 5 | 3 | 0 | 2 | 2 | 0 | 23 |
| Other Academic Dept. | 5 | 2 | 3 | 8 | 4 | 91 | 32 | 4 | 3 | 2 | 2 | 6 | 162 |
| Research Institute/Other Notprofit | 5 | 1 | 2 | 2 | 3 | 31 | 11 | 2 | 1 | 5 | 0 | 0 | 63 |
| Government | 3 | 2 | 2 | 8 | 2 | 26 | 11 | 7 | 2 | 2 | 0 | 1 | 66 |
| Busisness and Industry | 16 | 11 | 21 | 5 | 26 | 167 | 53 | 7 | 10 | 16 | 0 | 8 | 340 |
| Non-U.S. Academic | 32 | 13 | 30 | 18 | 8 | 25 | 24 | 10 | 8 | 17 | 0 | 1 | 186 |
| Non-U.S. Nonacademic | 1 | 0 | 1 | 0 | 1 | 17 | 3 | 0 | 0 | 1 | 0 | 1 | 25 |
| Not Seeking Employment | 1 | 0 | 3 | 3 | 0 | 4 | 2 | 1 | 0 | 1 | 0 | 0 | 15 |
| Still Seeking Employment | 16 | 6 | 11 | 9 | 5 | 19 | 24 | 3 | 2 | 1 | 0 | 1 | 97 |
| Unknown (U.S.) | 14 | 8 | 9 | 7 | 2 | 32 | 19 | 5 | 0 | 4 | 0 | 7 | 107 |
| Unknown (non-U.S.)* | 14 | 2 | 5 | 4 | 3 | 19 | 9 | 0 | 2 | 6 | 0 | 4 | 68 |
| Total | 227 | 91 | 171 | 125 | 79 | 570 | 264 | 69 | 34 | 121 | 12 | 35 | 1798 |
| Female | 49 | 14 | 36 | 35 | 12 | 243 | 94 | 12 | 8 | 32 | 7 | 12 | 554 |
| Male | 178 | 77 | 135 | 90 | 67 | 327 | 170 | 57 | 26 | 89 | 5 | 23 | 1244 |

## Supplemental Table(s) for the Report on New Doctoral Recipients

## Section on Employment

Supplemental Table E.5: 2011-12 New Ph.D.s Employed in the U.S.
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* | 113 | 58 | 37 | 69 | 23 | 25 | 12 | 1 | 338 |
| Statistics \& Biostatistics | 0 | 2 | 1 | 3 | 0 | 1 | 58 | 25 | 90 |
| Master's, Bachelor's, and 2-Year Colleges | 57 | 68 | 55 | 14 | 15 | 10 | 19 | 3 | 241 |
| Other Academic and Research Institutes | 31 | 25 | 14 | 17 | 4 | 30 | 43 | 61 | 225 |
| Government | 10 | 11 | 6 | 4 | 1 | 12 | 11 | 11 | 66 |
| Business and Industry | 57 | 46 | 23 | 30 | 4 | 34 | 105 | 41 | 340 |
| Total | 268 | 210 | 136 | 137 | 47 | 112 | 248 | 142 | 1300 |

[^1]
## Annual Survey

## Supplemental Table(s) for the Report on New Doctoral Recipients

Section on Employment

Supplemental Table E.6: 2011-12 New Ph.D.s Having
Employment in the U.S. by Type of Employer and Citizenship

| U.S. Employer | Citizenship |  | Total |
| :---: | :---: | :---: | :---: |
|  | U.S. | Non-U.S. |  |
| Academic | 509 | 385 | 894 |
| All Doctoral Mathematics* | 178 | 160 |  |
| Statistics \& Biostatistics | 43 | 47 |  |
| Masters, Bachelors, \& 2-Year | 182 | 59 |  |
| Other Academic \& Research Instititues | 106 | 119 |  |
| Government, Business \& Industry | 176 | 230 | 406 |
| Total | 685 | 615 | 1300 |

* Includes Doc. Mathematics: Public Large, Public Medium, Public Small, Private Large, Private Small, and Applied Math.

Annual Survey
of the Mathematical Sciences
AMS • ASA • IMS • MAA • SIAM
American Mathematical Society • Providence, RI 02940-6248
Email: ams-survey@ams.org •Tel: 800-321-4267 Web: www.ams.org/annual-survey

## Supplemental Table(s) for the Report on New Doctoral Recipients Section on Employment

Supplemental Table E.7: Percentage of Employed New Ph.D.'s by Type of Employer

|  | Employed in U.S. |  | Employed Outside the U.S. |  |
| :--- | :---: | :---: | :---: | :---: |
|  | U.S. Academic* | U.S. Noncademic | Non-U.S. Academic |  |
| Fall 2008 | $65 \%$ | $23 \%$ | $10 \%$ |  |
| Fall 2009 | $65 \%$ | $23 \%$ | $12 \%$ |  |
| Fall 2010 | $65 \%$ | $23 \%$ | $12 \%$ |  |
| Fall 2011 | $62 \%$ | $22 \%$ | $14 \%$ |  |
| Fall 2012 | $59 \%$ | $27 \%$ | $12 \%$ |  |

* Includes other academic departments and research institutes/other nonprofits.

Annual Survey

Supplemental Table(s) for the Report on New Doctoral Recipients

Section on Demographics

Supplemental Table D.1: Gender and Citizen of 2011-2012 Doctoral Recipients, by Type of Degree-Granting Department

|  | Math. Public Large |  | Math. <br> Public Medium |  | Math. <br> Public Small |  | Math. Private Large |  | Math. Private Small |  | Applied Math. |  | Statistics |  | Biostatistics |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Citizen | Mal | Fem | Mal | Fem | Mal | Fem | Mal | Fem | Mal | Fem | Mal | Fem | Mal | Fem | Mal | Fem | Mal | Fem |
| U.S. | 165 | 48 | 110 | 42 | 81 | 29 | 69 | 20 | 33 | 11 | 57 | 27 | 69 | 29 | 37 | 36 | 621 | 242 |
| Non-U.S. | 139 | 35 | 95 | 46 | 63 | 33 | 88 | 27 | 14 | 4 | 48 | 29 | 126 | 89 | 50 | 49 | 623 | 312 |
| Total | 304 | 83 | 205 | 88 | 144 | 62 | 157 | 47 | 47 | 15 | 105 | 56 | 195 | 118 | 87 | 85 | 1244 | 554 |

Supplemental Table(s) for the Report on New Doctoral Recipients

Section on Demographics

Supplemental Table D.2: Gender, Race/Ethnicity \& Citizenship of 2011-2012 New Doctoral Recipients, July 1, 2011 - June 30, 2012

|  | All Groups Combined |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 307 | MEN |  |  |  | WOMEN |  |  |  |  | TOTAL |
|  | Citizenship |  |  |  | Total | Citizenship |  |  |  | Total |  |
|  |  |  | Non-US |  |  | US | Non-US |  |  |  |  |
|  | US | Perm | Temp | Unk |  |  | Perm | Temp | Unk |  |  |
| Am Ind/Alas | 5 | 0 | 2 | 0 | 7 | 2 | 0 | 0 | 0 | 2 | 9 |
| Asian | 39 | 21 | 408 | 9 | 477 | 23 | 19 | 217 | 4 | 263 | 740 |
| BI/Afr Am | 16 | 3 | 10 | 0 | 29 | 12 | 1 | 3 | 0 | 16 | 45 |
| Hisp/Lat | 22 | 7 | 32 | 1 | 62 | 11 | 3 | 7 | 0 | 21 | 83 |
| Haw/Pac Is | 3 | 0 | 0 | 0 | 3 | 2 | 0 | 3 | 0 | 5 | 8 |
| White | 492 | 17 | 107 | 3 | 619 | 177 | 8 | 43 | 0 | 228 | 847 |
| Unknown | 44 | 1 | 2 | 0 | 47 | 15 | 2 | 2 | 0 | 19 | 66 |
| TOTAL | 621 | 49 | 561 | 13 | 1244 | 242 | 33 | 275 | 4 | 554 | 1798 |

All Math Public Groups Combined
Doctorate Granting Departments of Mathematics

|  | 130 | of | 130 | departments responding |  |  |  | ( 10 |  | with no degrees) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MEN |  |  |  |  | WOMEN |  |  |  |  | TOTAL |
|  | Citizenship |  |  |  | Total | US | Citizenship |  |  | Total |  |
|  |  | Non-US |  |  |  |  |  | Non-US |  |  |  |
|  | US | Perm | Temp | Unk |  |  | Perm | Temp | Unk |  |  |
| Am Ind/Alas | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 3 |
| Asian | 16 | 5 | 202 | 0 | 223 | 9 | 1 | 79 | 0 | 89 | 312 |
| BI/Afr Am | 5 | 1 | 2 | 0 | 8 | 4 | 1 | 1 | 0 | 6 | 14 |
| Hisp/Lat | 12 | 3 | 17 | 0 | 32 | 5 | 1 | 4 | 0 | 10 | 42 |
| Haw/Pac Is | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 290 | 7 | 57 | 0 | 354 | 92 | 4 | 21 | 0 | 117 | 471 |
| Unknown | 31 | 1 | 2 | 0 | 34 | 8 | 1 | 1 | 0 | 10 | 44 |
| TOTAL | 356 | 17 | 280 | 0 | 653 | 119 | 8 | 106 | 0 | 233 | 886 |

All Math Private Groups Combined
Doctorate Granting Departments of Mathematics

|  | 52 | of | 52 | departments responding |  |  |  | 1 | 5 | with no degrees) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MEN |  |  |  |  | WOMEN |  |  |  |  | TOTAL |
|  | Citizenship |  |  |  | Total | US | Citizenship |  |  | Total |  |
|  | US | Non-US |  |  |  |  |  | Non-US |  |  |  |
|  |  | Perm | Temp | Unk |  |  | Perm | Temp | Unk |  |  |
| Am Ind/Alas | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| Asian | 5 | 0 | 52 | 3 | 60 | 3 | 0 | 13 | 1 | 17 | 77 |
| Bl/Afr Am | 5 | 0 | 2 | 0 | 7 | 1 | 0 | 0 | 0 | 1 | 8 |
| Hisp/Lat | 0 | 1 | 10 | 0 | 11 | 2 | 0 | 0 | 0 | 2 | 13 |
| Haw/Pac Is | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 4 | 4 |
| White | 79 | 3 | 30 | 1 | 113 | 22 | 1 | 12 | 0 | 35 | 148 |
| Unknown | 10 | 0 | 0 | 0 | 10 | 2 | 0 | 1 | 0 | 3 | 13 |
| TOTAL | 102 | 4 | 94 | 4 | 204 | 31 | 1 | 29 | 1 | 62 | 266 |

## Supplemental Table(s) for the Report on New Doctoral Recipients

|  | Math Public Large Group |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctorate Granting Departments of Mathematics |  |  |  |  |  |  |  |  |  |  |
|  | MEN |  |  |  |  | WOMEN |  |  |  |  | TOTAL |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Citizenship |  |  |  | Total | US | Citizenship |  |  | Total |  |
|  | US | Non-US |  |  |  |  | Non-US |  |  |  |  |
|  |  | Perm | Temp | Unk |  |  | Perm | Temp | Unk |  |  |
| Am Ind/Alas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 12 | 2 | 93 | 0 | 107 | 4 | 0 | 22 | 0 | 26 | 133 |
| BI/Afr Am | 3 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 3 | 6 |
| Hisp/Lat | 7 | 2 | 9 | 0 | 18 | 2 | 0 | 1 | 0 | 3 | 21 |
| Haw/Pac Is | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 143 | 2 | 30 | 0 | 175 | 37 | 1 | 9 | 0 | 47 | 222 |
| Unknown | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 1 | 0 | 4 | 5 |
| TOTAL | 165 | 6 | 133 | 0 | 304 | 48 | 2 | 33 | 0 | 83 | 387 |
|  |  |  | Mat | Public | Medium | oup |  |  |  |  |  |
|  |  | Docto | ate Gran | ing Dep | artment | f Math | matics |  |  |  |  |
|  | 40 | of | 40 | departm | nts res | ding |  | 1 | 0 | with no | rees) |
|  |  |  | MEN |  |  |  |  | WOMEN |  |  |  |
|  |  | Citize | ship |  |  |  | Citize | enship |  |  |  |
|  |  |  | Non-US |  |  |  |  | Non-US |  |  |  |
|  | 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 |
| Asian | 3 | 3 | 59 | 0 | 65 | 3 | 1 | 33 | 0 | 37 | 102 |
| BI/Afr Am | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Hisp/Lat | 3 | 0 | 7 | 0 | 10 | 2 | 0 | 1 | 0 | 3 | 13 |
| Haw/Pac Is | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 82 | 4 | 19 | 0 | 105 | 33 | 3 | 7 | 0 | 43 | 148 |
| Unknown | 22 | 1 | 1 | 0 | 24 | 4 | 0 | 0 | 0 | 4 | 28 |
| TOTAL | 110 | 9 | 87 | 0 | 206 | 42 | 4 | 41 | 0 | 87 | 293 |

Math Public Small Group
Doctorate Granting Departments of Mathematics


## Supplemental Table(s) for the Report on New Doctoral Recipients



Applied Mathematics Group
Doctorate Granting Departments of Applied Mathematics


Annual Survey
of the Mathematical Sciences
AMS • ASA • IMS • MAA • SIAM

## Supplemental Table(s) for the Report on New Doctoral Recipients



## Supplemental Table(s) for the Report on New Doctoral Recipients

## Section on Demographics

Supplemental Table D.3: U.S. Citizen Doctoral Recipients, Fall 2002 to Fall 2012

| Year | Total Doctorates <br> Granted by U.S. <br> Institutions | Total U.S. Citizen <br> Doctoral Total | $\%$ |
| :---: | :---: | :---: | :---: |
| $2002-03$ | 1037 | 499 | $48 \%$ |
| $2003-04$ | 1081 | 459 | $42 \%$ |
| $2004-05$ | 1222 | 496 | $41 \%$ |
| $2005-06$ | 1311 | 552 | $42 \%$ |
| $2006-07$ | 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 | $48 \%$ |

Supplemental Table D.4: Gender of U.S. Citizen Doctoral Recipients, Fall 2002 to Fall 2012

| Year | Total U.S. Citizen <br> Doctoral <br> Recipients | Male | Female | \% Female |
| :---: | :---: | :---: | :---: | :---: |
| $2002-03$ | 499 | 341 | 158 | $32 \%$ |
| $2003-04$ | 459 | 308 | 151 | $33 \%$ |
| $2004-05$ | 496 | 355 | 141 | $28 \%$ |
| $2005-06$ | 552 | 399 | 153 | $28 \%$ |
| $2006-07$ | 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 | $28 \%$ |

Supplemental Table(s) for the Report on New Doctoral Recipients

Section on Females

Supplemental Table F.1: Females as a Percentage of 2011-12 New Ph.D.s Produced by and Hired by Doctoral-Granting Department

|  | Math. Public <br> Large | Math. Public <br> Medium | Math. Public <br> Small | Math. Private <br> Large | Math. Private <br> Small | Applied Math. | Statistics | Biostatistics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Produced | $21 \%$ | $30 \%$ | $30 \%$ | $23 \%$ | $24 \%$ | $35 \%$ | $38 \%$ | $49 \%$ |
| Hired | $21 \%$ | $23 \%$ | $21 \%$ | $25 \%$ | $38 \%$ | $20 \%$ | $27 \%$ | $38 \%$ |


[^0]:    Richard Cleary is a professor in the Division of Mathematics and Sciences at Babson College. James W. Maxwell is AMS associate executive director for special projects. Colleen A. Rose is AMS survey analyst.

[^1]:    Includes Doc. Mathematics: Public Large, Public Medium, Public Small, Private Large, Private Small, and Applied Math.

