

## Report on the 2008–2009 Doctoral Recipients

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, 2008, through June 30, 2009. The report includes an analysis of the fall 2009 employment plans of 2008–09 doctoral recipients and a demographic profile summarizing characteristics of citizenship status, gender, and racial/ethnic group as provided by the doctoral-granting departments beginning in late spring 2009. In addition, we present the starting salaries and other employment information from the new doctoral recipients that responded to the “Employment Experiences of New Doctoral Recipients” (EENDR) questionnaire.

A Preliminary Report on the 2008–2009 New Doctoral Recipients, published in the *Notices of the AMS*, February 2010, pages 250–58, presented survey results with information concerning 1,430 new doctoral recipients based on data received from departments as of September 1, 2009. Here we incorporate information on an additional 175 doctoral recipients from departments that responded too late to have the information included in the Preliminary Report. In addition, we update this information using data obtained from 755 new doctoral recipients who responded to the EENDR questionnaire, sent in early October 2009 to all new doctoral recipients.

The names and thesis titles of the 2008–2009 doctoral recipients reported on in the First Report were published in “Doctoral Degrees Conferred” (*Notices*, February 2010, pages 281–301). A supplemental listing of the 175 additional new doctoral recipients appears at the end of this report on pages 882–886.

Table 1 provides the number of departments responding to the 2009 Survey of New Doctoral Recipients. The total number of departments responding in time for inclusion in this report was 295, 43 more than were included in the 2009 Preliminary Report and 32 more than the total number responding for inclusion in the 2009 New Doctoral Recipients Report (formerly the Second Report). Groups I, II, III, and Va achieved a 100% response rate; the Data Committee thanks all departments for their efforts. No adjustments were made in this report for the three nonresponding departments. Definitions of the various groups surveyed in the Annual Survey can be found on page 882 of this report.

### Employment Status of 2008–2009 Doctoral Recipients

Table 2 shows the preliminary and final counts of doctoral recipients in the mathematical sciences

**Table 1: Number of Departments Responding to Doctorates Granted Survey**

<b>Group I (Pu)*</b>	25 of 25 including	0 with no degrees
<b>Group I (Pr)</b>	23 of 23 including	0 with no degrees
<b>Group II</b>	56 of 56 including	3 with no degrees
<b>Group III</b>	81 of 81 including	20 with no degrees
<b>Group IV</b>	89 of 92 including	7 with no degrees
Statistics	55 of 57 including	3 with no degrees
Biostatistics	34 of 35 including	4 with no degrees
<b>Group Va</b>	21 of 21 including	0 with no degrees

\* See “Definitions of the Groups” on page 882.

**Table 2: Doctoral Recipients: Preliminary and Final Counts**

Year	Preliminary	Final
1999-2000	1119	1127
2000-2001	1008	1065
2001-2002	948	960
2002-2003	1017	1037
2003-2004	1041	1081
2004-2005	1116	1222
2005-2006	1245	1311
2006-2007	1157	1333
2007-2008	1235	1378
2008-2009	1430	1605

**Table 3: Doctoral Recipients: Citizenship**

Year	U.S.	Non-U.S.	TOTAL
2004-2005	496	726	1222
2005-2006	552	759	1311
2006-2007	576	757	1333
2007-2008	622	756	1378
2008-2009	742	863	1605

awarded by U.S. institutions for the past ten years. This year the total number of new doctoral recipients is 1,605, up from the previous year by 227. This year's increase is in part the result of the higher response rate for the departments in Group IV. The Group IV departments that responded in 2009 but not in 2008 reported awarding 80 new doctorates. However, the 264 departments that responded to the survey in both years reported an increase of 145 in the number of new doctorates awarded. The reader should keep the increased response rate for Group IV in mind when interpreting changes between 2008 and 2009.

Table 3 shows trends in the number of new doctoral recipients for the past five years broken down by U.S. citizens and non-U.S. citizens. This year the number of new doctoral recipients who are U.S.

**Table 4: 2008–2009 Doctoral Recipients by Type of Degree-Granting Department**

	Department Group <sup>1</sup>					
	I (Pu)	I (Pr)	II	III	IV	Va
Number	346	225	312	185	434	103
Percent	22%	14%	19%	12%	27%	6%

<sup>1</sup> For definitions of groups see page 882.

**Table 5: Doctoral Recipients: U.S. Citizens—Percent Female and Percent Underrepresented Minorities**

Year	U.S.	% Female	% URM*
1999-2000	566	29%	5%
2000-2001	532	31%	7%
2001-2002	428	30%	6%
2002-2003	499	32%	6%
2003-2004	459	33%	7%
2004-2005	496	28%	7%
2005-2006	552	28%	8%
2006-2007	576	31%	6%
2007-2008	622	31%	9%
2008-2009	742	31%	6%

\* Percentage of underrepresented minorities calculated using Gender, Race/Ethnicity and Citizenship data gathered from granting departments.

citizens is 742, an increase of 120 (19%) over last year. The number of non-U.S. citizen new doctoral recipients increased by 107 to 863.

Table 5 shows the number of U.S. citizens, receiving degrees, the percentage of U.S. citizen females and the percentage of U.S. citizen underrepresented minorities for the years 1999–2009. Underrepresented minorities include any person reported as having origins in the categories American Indian or Alaska Native, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander.

Tables 6 and 7 each provide a cross-tabulation of the 1,605 new doctoral recipients in the mathematical sciences. These tables contain a wealth of information about these new doctoral recipients, some of which will be discussed in this report. Note that these tables give a breakdown by gender for type of employer, type of degree-granting department, and field of thesis. Additional information is available on the AMS website at [www.ams.org/employment/surveyreports.html](http://www.ams.org/employment/surveyreports.html). New doctoral recipients are grouped by field of thesis using the Mathematical Reviews 2010 Mathematics Subject Classification list. A complete list of these groups is available on

**Table 6: Fall 2009 Employment Status of 2008–2009 Doctoral Recipients by Type of Degree-Granting Department**

TYPE OF EMPLOYER	TYPE OF DOCTORAL DEGREE-GRANTING DEPARTMENT						TOTAL	Row Subtotals	
	Group I (Public)	Group I (Private)	Group II Math.	Group III Math.	Group IV Statistics	Group Va Applied Math.		Male	Female
Group I (Public) <sup>1</sup>	47	21	11	2	0	3	84	70	14
Group I (Private)	26	47	7	3	1	1	85	65	20
Group II	29	10	32	5	3	4	83	56	27
Group III	9	3	16	20	1	2	51	35	16
Group IV	0	0	3	1	61	1	66	40	26
Group Va	4	1	0	0	0	9	14	13	1
Master's	11	3	22	11	6	2	55	35	20
Bachelor's	38	18	64	32	18	6	176	99	77
Two-Year College	3	1	7	13	0	3	27	19	8
Other Academic Dept. <sup>2</sup>	21	10	22	19	75	19	166	101	65
Research Institute/ Other Nonprofit	13	5	8	2	24	2	54	31	23
Government	8	2	14	14	36	5	79	46	33
Business and Industry	36	19	28	17	107	19	226	150	76
Non-U.S. Academic	44	42	26	10	24	9	155	120	35
Non-U.S. Nonacademic	3	3	2	2	2	1	13	9	4
Not Seeking Employment	4	5	3	1	4	0	17	13	4
Still Seeking Employment	19	10	14	10	6	1	60	44	16
Unknown (U.S.)	16	8	21	10	36	8	99	64	35
Unknown (non-U.S.) <sup>3</sup>	15	17	12	13	30	8	95	63	32
<b>TOTAL</b>	<b>346</b>	<b>225</b>	<b>312</b>	<b>185</b>	<b>434</b>	<b>103</b>	<b>1605</b>	<b>1073</b>	<b>532</b>
<b>Column Subtotals</b>	Male	275	174	212	106	232	74	1073	
	Female	71	51	100	79	202	29	532	

<sup>1</sup> For definitions of groups see page 882.

<sup>2</sup> These are departments outside the mathematical sciences.

<sup>3</sup> Includes those whose status is reported as "unknown" or "still seeking employment".

**Table 7: Field of Thesis of 2008–09 New Doctoral Recipients by Type of Degree-Granting Department**

TYPE OF DOCTORAL DEGREE-GRANTING DEPARTMENT	FIELD OF THESIS												TOTAL	
	Algebra/ Number Theory	Real, Comp., Funct., & Harmonic Analysis	Geometry/ Topology	Discr. Math./ Combin./ Logic/ Comp. Sci.	Probability	Statistics/ Biostat.	Applied Math.	Numerical Analysis/ Approx- imations	Linear Nonlinear Optim./ Control	Differential, Integral, & Difference Equations	Math. Educ.	Other/ Unknown		
Group I (Public) <sup>1</sup>	82	30	51	44	25	11	35	24	2	39	1	2	346	
Group I (Private)	57	9	55	26	20	3	25	6	2	19	0	3	225	
Group II	63	32	24	36	19	17	43	33	9	32	1	3	312	
Group III	19	26	9	21	4	34	20	15	4	21	12	0	185	
Group IV	0	0	0	1	5	411	9	0	0	0	0	8	434	
Group Va	2	1	0	13	9	7	37	15	7	6	0	6	103	
<b>TOTAL</b>	<b>223</b>	<b>98</b>	<b>139</b>	<b>141</b>	<b>82</b>	<b>483</b>	<b>169</b>	<b>93</b>	<b>24</b>	<b>117</b>	<b>14</b>	<b>22</b>	<b>1605</b>	
<b>Column</b>	Male	169	71	103	104	60	262	111	74	21	82	5	11	1073
<b>Subtotals</b>	Female	54	27	36	37	22	221	58	19	3	35	9	11	532

<sup>1</sup> For definitions of groups see page 882.

**Table 8: Percentage of Employed New Doctoral Recipients by Type of Employer**

	Employed in U.S.		Employed outside. U.S.		NUMBER EMPLOYED
	Academic <sup>1</sup>	Nonacademic	Academic	Nonacademic	
Fall 2005	69%	17%	12%	2%	1018
Fall 2006	65%	22%	11%	2%	1099
Fall 2007	66%	22%	11%	1%	1151
Fall 2008	65%	23%	10%	2%	1166
Fall 2009	65%	23%	12%	1%	1334

<sup>1</sup> Includes research institutes and other non-profits.

the AMS website at [www.ams.org/employment/Thesis\\_groupings.pdf](http://www.ams.org/employment/Thesis_groupings.pdf).

The fall 2009 employment status of 1,411 of the 1,605 new doctoral recipients was known; the unemployment rate was 4.9%. Figure 1 presents the fall 1985 through fall 2009 trend in the unemployment rate of new doctoral recipients. The unemployment rates shown in Figure 1 differ from those given in previous Annual Survey reports. The rates shown are now based on only those individuals in the U.S. labor market. For further details, see the explanatory note on unemployment rates at the end of the report. The unemployment rates, calculated by type of doctoral degree-granting department using Table 6, vary from group to group, with a high of 7.2% for Group I Pu and a low of 1.3% for Group Va.

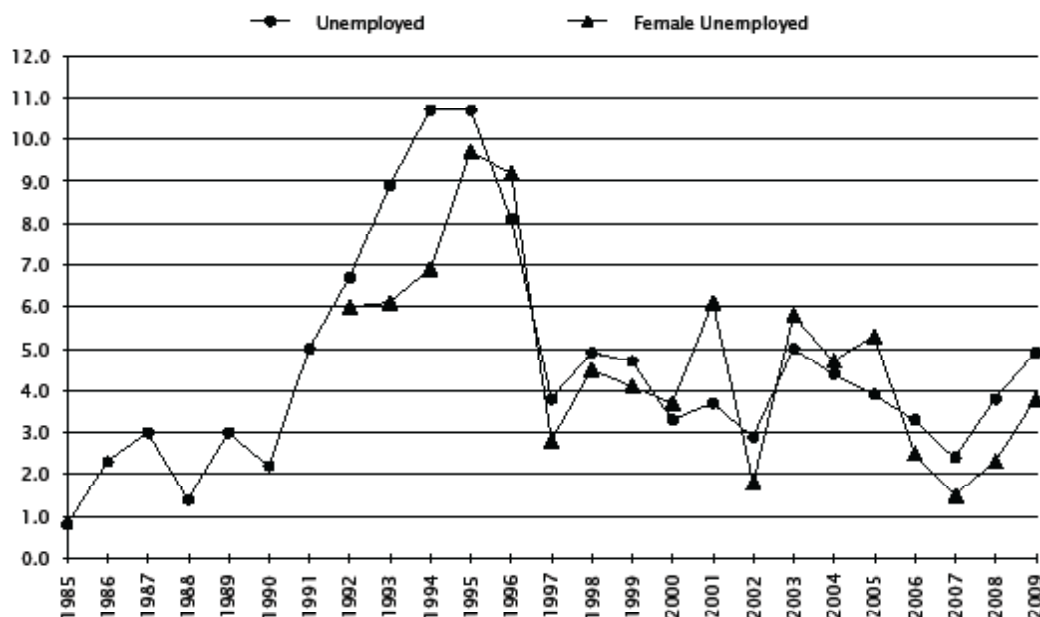
Of the 1,411 new doctoral recipients whose employment is known, 1,166 were employed in the U.S., 168 were employed outside the U.S., 60 were still seeking employment, and 17 were not seeking employment.

Table 8 presents the trend in the percentage of employed new doctoral recipients by type of employer for the last five years. Academic employment includes those employed by research institutes and other nonprofits. Among new

doctoral recipients who are employed in the U.S., the percentage taking nonacademic employment varied significantly by field of thesis. For those whose field of thesis is in the first three columns in Table 7, the percentage is 12% (the same as last year), while the percentage for those with theses in probability or statistics is the highest at 40% (down from 45% last year).

Table 9 shows that the fall 2009 number of doctoral recipients taking positions in the United States in business/industry and government is 305. This number reflects an increase of 13% over last year. Group IV showed the largest increase up 31% from last year from 109 to 143. Table 10 shows that the number of new doctoral recipients taking U.S. academic positions increased 105 (14%) from last year after remaining flat in 2008. Doctoral hires into U.S. academic positions increased in all groups except Groups Va which remained constant at 14. The biggest percentage increase is in Group IV (53%).

Table 11 gives information about the production of female new doctoral recipients in the doctoral-granting departments and the hiring of females by all department groups. From Table 11 we see that the percentage of females hired ranges from a high of 42% in Group M&B, followed

Figure 1: Percentage of New Doctoral Recipients Unemployed<sup>1</sup>

<sup>1</sup> As reported in the respective Annual Survey Second Reports.

Table 9: New Doctoral Recipients Employed in the U.S.

	Degree-Granting Department Group <sup>1</sup>												TOTAL	
	I (Pu)		I (Pr)		II		III		IV		Va			
	Academic <sup>2</sup>	Business/Industry & Government	Academic	Business/Industry & Government	Academic	Business/Industry & Government	Academic	Business/Industry & Government	Academic	Business/Industry & Government	Academic	Business/Industry & Government	Academic	Business/Industry & Government
Fall 2005	152	21	104	17	152	23	97	18	149	79	45	18	699	176
Fall 2006	171	41	109	21	128	32	93	15	155	104	59	30	715	243
Fall 2007	191	50	91	12	181	20	95	27	151	123	47	24	756	256
Fall 2008	180	44	97	24	192	40	92	24	145	109	50	29	756	270
Fall 2009	201	44	119	21	192	42	108	31	189	143	52	24	861	305

<sup>1</sup> For definitions of groups see page 882.

<sup>2</sup> Includes research institutes and other non-profits.

by Group IV at 39%, which also produced the highest percentage of women (47%), to 7% in Group Va.

#### Demographic Information about 2008-2009 Doctoral Recipients

Tables 12, 13, and 14 show the gender, race/ethnicity and citizenship of the 1,605 new doctoral recipients and the fact that 1,166 new doctoral recipients found jobs in the U.S. this year. This is 83% of the 1,411 new doctoral recipients whose employment status was known and 93% of the 1,257 known to have jobs in fall 2009. Last year these percentages were 84% and 88%, respectively.

Gender, race/ethnicity and citizenship are known for all of the 1,605 new doctoral

recipients. The final count of new doctoral recipients who are U.S. citizens is 742 (46%) (up from 45% last year). Additional information on gender, race/ethnicity, and citizenship are available on the Web at [www.ams.org/employment/annual-survey.html](http://www.ams.org/employment/annual-survey.html).

Of the 742 U.S. citizen new doctoral recipients reported for 2008-2009, 227 are female and 515 are male. Females accounted for 31% of the U.S. citizen total (the same as last year). The number of female U.S. citizens has increased by 36 from last year's count of 191, and the number of male U.S. citizens increased by 84 from last year's count of 431.

Table 14 shows that U.S. citizens accounted for 51% of those employed in

**Table 10: New Doctoral Recipients Employed in U.S. Academic Positions**

	Hiring Department Group <sup>1</sup>					TOTAL
	I-III	IV	Va	M&B	Other <sup>2</sup>	
Fall 2005	249	53	12	212	173	<b>699</b>
Fall 2006	263	73	14	198	167	<b>715</b>
Fall 2007	286	44	15	229	182	<b>756</b>
Fall 2008	294	43	14	220	185	<b>756</b>
Fall 2009	303	66	14	231	247	<b>861</b>

<sup>1</sup> For definitions of groups see page 882.

<sup>2</sup> Includes two-year colleges, other academic departments, and research institutes/other nonprofits.

**Table 11: Females as a Percentage of 2008-2009 New Doctoral Recipients**

	Department Group <sup>1</sup>							TOTAL
	I (Pu)	I(Pr)	II	III	IV	Va	M&B	
% Female Produced	21%	23%	32%	43%	47%	28%	-	<b>33%</b>
Hired	17%	24%	33%	31%	39%	7%	42%	<b>33%</b>

<sup>1</sup> For definitions of groups see page 882.

**Table 12: Employment Status of 2008-09 New Doctoral Recipients by Citizenship Status**

TYPE OF EMPLOYER	CITIZENSHIP				TOTAL
	U.S. CITIZENS	NON-U.S. CITIZENS			
		Permanent Visa	Temporary Visa	Unknown Visa	
U.S. Employer	594	78	475	19	1166
U.S. Academic	474	54	323	10	861
Groups I, II, III, and Va	158	17	141	1	317
Group IV	24	6	34	2	66
Non-Ph.D. Department	271	24	122	7	424
Research Institute/Other Nonprofit	21	7	26	0	54
U.S. Nonacademic	120	24	152	9	305
Non-U.S. Employer	40	4	120	4	168
Non-U.S. Academic	39	4	108	4	155
Non-U.S. Nonacademic	1	0	12	0	13
Not Seeking Employment	9	0	8	0	17
Still Seeking Employment	30	8	22	0	60
SUBTOTAL	673	90	625	23	1411
Unknown (U.S.)	66	6	27	0	99
Unknown (non-U.S.)*	3	1	74	17	95
<b>TOTAL</b>	<b>742</b>	<b>97</b>	<b>726</b>	<b>40</b>	<b>1605</b>

\*Includes those who left the U.S. and whose employment status is reported as "unknown" or "still seeking employment".

**Table 13: Gender, Race/Ethnicity, and Citizenship of 2008-09 New Doctoral Recipients**

RACIAL/ETHNIC GROUP	MALE					FEMALE					TOTAL
	U.S. CITIZENS	NON-U.S. CITIZENS			Total Male	U.S. CITIZENS	NON-U.S. CITIZENS			Total Female	
		Permanent Visa	Temporary Visa	Unknown Visa			Permanent Visa	Temporary Visa	Unknown Visa		
American Indian or Alaska Native	1	0	1	0	2	4	0	0	0	4	<b>6</b>
Asian	30	14	291	16	351	16	34	185	8	243	<b>594</b>
Black or African American	9	4	11	1	25	12	1	2	0	15	<b>40</b>
Hispanic or Latino	11	5	34	1	51	9	1	10	0	20	<b>71</b>
Native Hawaiian or Other Pacific Islander	0	0	0	0	0	1	0	0	0	1	<b>1</b>
White	454	25	140	2	621	179	12	46	3	240	<b>861</b>
Unknown	10	0	6	7	23	6	1	0	2	9	<b>32</b>
<b>TOTAL</b>	<b>515</b>	<b>48</b>	<b>483</b>	<b>27</b>	<b>1073</b>	<b>227</b>	<b>49</b>	<b>243</b>	<b>13</b>	<b>532</b>	<b>1605</b>

**Table 14: 2008-09 New Doctoral Recipients Having Employment in the U.S. by Type of Employer and Citizenship**

U.S. EMPLOYER	CITIZENSHIP		
	U.S.	Non-U.S.	TOTAL
Academic	474	387	861
Groups I-Va	182	201	383
M, B, & 2-Year	187	71	258
Other Acad. & Research Inst.	105	115	220
Government, Business & Industry	120	185	305
<b>TOTAL</b>	<b>594</b>	<b>572</b>	<b>1166</b>

the U.S. (up from 50 % last year). Groups I through Va hired 48% U.S. citizens, while groups M, B, and all other academic departments hired 61% U.S. citizens (last year these percentages were 49% and 59%, respectively). U.S. citizens represented 39% of those hired into nonacademic positions (up from 37% last year). Among all the 1,166 new doctoral recipients employed in the U.S., 26%

paragraphs some of these differences are discussed in detail.

Table 15 contains information about new doctoral recipients in Group IV as well as those with dissertations in statistics/biostatistics and probability in other groups. In addition, the last two rows of Table 15 give a split of the 2008-09 results between the 57 statistics departments and the 35 biostatistics and biometrics departments in Group IV. This year 565 new doctorates had a dissertation in statistics/biostatistics (483) or probability (82), a 30% increase from last year's number. Those with dissertations in statistics/biostatistics and probability accounted for 35% of new doctorates in 2008-09. Quite a bit of the year-to-year variation in these numbers is due to the changes made in the departments included in Group IV over the ten years and to the response rate variation in this group.

Group IV is producing a larger percentage of

**Table 15: New Doctoral Recipients with Dissertations in Statistics/Biostatistics and Probability**

Year	Group IV Depts Surveyed	Group IV Depts Responding (percent)	New Doctoral Recipients in Group IV only				New Doctoral Recipients in Statistics/Biostatistics and Probability, Group IV and Other Groups				New Doctoral Recipients Hired by Group IV	
			Total	Female (percent)	Jobs in Bus & Ind	Percentage Unemployed	Total	Group IV	Other Groups	Percentage Unemployed	Male	Female
1999-00	86	74 (86%)	290	112 (39%)	83	2.6%	353	281	72	2.8%	23	28
2000-01	86	70 (81%)	272	112 (41%)	75	4.7%	338	258	80	1.0%	32	12
2001-02	86	72 (84%)	224	94 (42%)	65	3.9%	291	222	69	3.0%	29	16
2002-03	86	75 (87%)	241	100 (41%)	46	2.3%	304	236	68	3.6%	20	19
2003-04	87	78 (90%)	265	107 (40%)	50	3.2%	346	262	84	3.9%	48	18
2004-05	88	67 (76%)	301	133 (44%)	67	2.6%	395	295	100	2.9%	30	23
2005-06	87	73 (84%)	327	154 (47%)	92	1.1%	442	314	128	1.4%	42	31
2006-07	88	70 (80%)	357	175 (49%)	115	2.1%	456	335	121	3.0%	24	20
2007-08	89	65 (73%)	317	166 (52%)	90	1.2%	434	311	123	3.2%	24	19
2008-09	92	89 (97%)	434	202 (47%)	107	1.8%	565	416*	149**	3.1%	40	26
Statistics	57	55 (96%)	296	124 (42%)	89	3.1%					25	15
Biostatistics	35	34 (97%)	138	78 (57%)	11	1.0%					15	11

\*Of 416, there were 411 in statistics/biostatistics and 5 in probability. For complete details, see Table 7.

\*\* Of 149, there were 72 in statistics/biostatistics and 77 in probability. For complete details, see Table 7.

took nonacademic employment (government or business and industry) the same as last year.

#### **2008-09 New Doctoral Recipients with Dissertations in Statistics/Biostatistics and Probability**

Group IV has 92 departments for 2008-09, 11 more than the next largest doctoral group. It contains 31% of all doctoral departments surveyed, and the 89 Group IV departments responding to the Annual Survey reported 434 new doctoral recipients, 27% of all new doctoral recipients in 2008-09. Because of its size, the data from Group IV have a large effect on the results when all doctoral groups are combined. Furthermore, Group IV results are often quite different from those for Groups I (Pu), I (Pr), II, III, and Va. In the following

female doctorates than the other doctoral groups. Females accounted for 47% of the new doctoral recipients in Group IV, while 28% are female in the other doctoral groups.

Group IV is producing a smaller percentage of U.S. citizen new doctorates than the other doctoral groups. In Group IV, 35% of the new doctoral recipients are U.S. citizens, while in other groups 51% are U.S. citizens.

Group IV doctorates are more likely to take jobs in business and industry than those in other doctoral groups. Of the 332 new doctoral recipients from Group IV who found employment in the U.S., 107 (32%) took jobs in business or industry. From the other groups, 894 new doctoral recipients found employment in the U.S., of which 119 (13%) took jobs in business or industry.

**Table 16: Number (and Percentage) of Annual EENDR Respondents Employed in the U.S. by Job Status**

	Employed in U.S.					Unknown
	Permanent Total	Temporary Total	Temporary			
			Permanent not available	Postdoctoral		
				Total	Permanent not available	
Fall 2005	291(56%)	232(44%)	92(40%)	172(74%)	55(32%)	--
Fall 2006	289(51%)	274(49%)	98(36%)	209(76%)	57(27%)	--
Fall 2007	259(53%)	227(47%)	88(39%)	172(76%)	57(33%)	--
Fall 2008	245(42%)	222(48%)	74(33%)	172(77%)	47(27%)	--
Fall 2009	318(49%)	326(51%)	146(45%)	234(72%)	68(29%)	--

**Table 17: Percentage of Annual EENDR Respondents Employed in the U.S. by Employment Sector within Job Status**

	Employed in U.S.					
	Permanent			Temporary		
	Academic <sup>1</sup>	Government	Business/Industry	Academic	Government	Business/Industry
Fall 2005	68%	5%	27%	96%	4%	0%
Fall 2006	66%	4%	30%	93%	5%	2%
Fall 2007	68%	3%	29%	93%	4%	3%
Fall 2008	63%	6%	31%	95%	4%	1%
Fall 2009	64%	6%	29%	91%	5%	4%

<sup>1</sup> Includes research institutes and other non-profits.

Group IV doctorates have a lower unemployment rate than the other doctoral groups. The employment status for 368 Group IV new doctoral recipients is known, and 6 (1.8%) are unemployed. For the other groups, the employment status of 1,171 is known, and 54 (6.1%) are unemployed. Group IV is hiring a bigger percentage of females than the other doctoral groups. Twenty-six of 66 (39%) new doctoral recipients hired by Group IV departments were female, up from last year's 38%. The other doctoral groups reported that 78 of 318 (25%) new doctoral recipients hired were female, up from last year's 23%.

The number of new doctoral recipients with these in statistics/biostatistics and probability (565) is substantially larger than any other field, with algebra and number theory next with 223.

#### New Information from the EENDR Survey

The 1,430 new doctoral recipients reported in the First Report were sent the "Employment Experiences of New Doctoral Recipients" (EENDR) survey in October 2009, and 755 (53%) responded. The response rates varied slightly among the various subgroups of new doctoral recipients

defined by their employment status as reported by departments. Among those who were employed the highest response rate, 59%, was from those employed in the U.S. academic, while the lowest, 50%, was from those in non-U.S. academic.

The EENDR gathered details on employment experiences not available through departments. The remainder of this section presents additional information available on this subset of the 2008–2009 doctoral recipients.

Table 16 gives the numbers and percentages of EENDR respondents taking permanent and temporary positions in the U.S. for fall 2005 through fall 2009.

This year we see that among the 644 employed in the U.S., 318 reported obtaining a permanent position and 326 a temporary position. The percentage of individuals taking permanent positions has increased to 49% from 42%, and the percentage of those taking temporary positions has increased to 51% from 48%. Of the 326 in temporary positions, 146 (45%) reported taking temporary employment because a suitable permanent position was not available, up from 33% in 2008. Most respondents classified their temporary position as postdoctoral (72%). Of the 234 respondents taking postdoctoral positions, 68 (29%) reported that a suitable permanent position was not available, up from 27% in 2008.

Table 17 shows the employment trends of permanent and temporary positions broken down by employment sector for the last five years. Among the 318 who reported obtaining a permanent position in the U.S. in fall 2009, 64% were employed in academia (including 4% in research institutes and other nonprofits), 6% in government, and 29% in business or industry. Women held 39% of the permanent positions, up from 37% in 2008.

Among the 326 individuals with temporary employment in the U.S. this year, 91% were employed in academia (including 6% in research institutes and other nonprofits), 5% in government, and 4% in business or industry.

Figure 2 gives the age distribution of the 755 new doctoral recipients who responded to this question. The median age of new doctoral recipients was 30 years, while the mean age was 31 years. The first and third quartiles were 28 and 33 years, respectively. This distribution is consistent with those of the recent past.

Figure 2: Age Distribution of 2008–2009 EENDR Respondents

