## **Section 3: Demographic Characteristics of the New Entrants**

Who are the new faculty and how do they compare to the senior faculty? Based on the NSOPF-93 faculty survey, the variables of age, gender, race/ethnicity, and citizenship status were examined.

### <u>Age</u>

The cohort of new entrants is, naturally, much younger than their more experienced counterparts (table 3.1). Almost one-half (44.9 percent) were between 35 and 44 compared to 21 percent of the senior faculty. They are not, however, a youthful lot. Their mean age was 42—about nine years younger than the senior faculty whose average age was 51.

## Gender

Women have made very substantial gains in obtaining faculty positions (table 3.2). While they constituted almost one-third (32.7 percent) of all faculty and 28.5 percent of the senior faculty, they constituted 41 percent of the new faculty. Indeed, so many women have entered the academic workforce during this relatively brief period that the new cohort of women now constituted 41.8 percent of all full-time female faculty. Remember, the new cohort of faculty (males and females) constituted 33.5 percent of all full-time faculty (table 2.1).

The increased presence of women in the new faculty cohort is apparent across nearly all institutional types. Even at research universities, where women have historically been least visible, they have increased their representation from about one-fifth of the senior cohort to about one-third of the new cohort. Indeed, close to one-half of all women faculty at research universities (47.9 percent) belonged to the new entry cohort.

Women's numerical presence has increased to the point where they have achieved parity with men in the new faculty cohort at liberal arts colleges and 2-year colleges.

When program area is considered, women showed an increased presence in the new cohort in all fields except business (where they continued to constitute about one-third of the faculty) and the health sciences (where they had already achieved approximate parity with men in the senior cohort). The largest proportionate increase was accounted for by three fields. In the fine arts, women, who constituted about one-quarter of the senior cohort, have achieved rough parity with men in the new cohort. In education the data showed that women, who constituted 45.8 of the senior cohort, have moved into a majority position in the new cohort (64.4 percent). In the humanities, women constituted about one-third (36.2 percent) of the senior cohort and about one-half (53.9 percent) of the new cohort. While these increases are in "traditionally" female fields, such traditionally male fields as engineering and the natural sciences showed an increased female presence among the new cohort.

Expressed in other terms, the number of new entry women was so sizable relative to the existing senior female faculty that they now constituted: 74 percent of all women faculty in engineering,

45 percent of all women faculty in the social sciences, 45 percent of all women faculty in the natural sciences, 42 percent of all women faculty in the fine arts, 40 percent of all women faculty in education, 38 percent of all women faculty in the humanities, and 36 percent of all women faculty in business.<sup>8</sup>

### Race/ethnicity

The new entrants were more diverse in terms of race and ethnicity than their predecessors (table 3.3). While 11.7 percent of the senior cohort faculty were minority (i.e., American Indian/Alaskan Native; Asian or Pacific Islander; black, non-Hispanic; and Hispanic), the proportion among the new entrants rose to 16.9 percent. Moreover, 42.2 percent of all current minority faculty were hired during the seven years beginning in 1986 ((172,319 x .169) / (514,976 x .134)). White, non-Hispanic faculty, at 83.1 percent, still comprised by far the largest share of new faculty hires, though their proportion was less than it was among the senior generation (88.3 percent). Although the categories reported here obscure differences within racial groupings, the only change occurred for Asian and Pacific Islander faculty who accounted for a 3.3 percent greater share among new hires—from 4.4 to 7.7 percent—than among the senior faculty. Indeed, the new-entry Asian/Pacific Islander faculty comprised almost one-half (45.6 percent) of the total newly hired minority faculty. The representation of blacks, American Indians/Alaskan Natives, and Hispanics remained unchanged for senior versus new faculty.

In considering gender as well as race/ethnicity, the representation of white faculty in the new cohort declined (and, conversely, the proportion of minority faculty increased) for both men and women. That increased minority presence was, however, highly circumscribed. Asian and Pacific Island men were the new generation's biggest gainers, nearly doubling from 4.8 percent among all senior men to 9.3 percent of the new-entry cohort of men. New entry Asian women also increased their share, albeit to a lesser extent. Among black faculty, women outnumber men in the new cohort. Overall, female minority faculty, who accounted for 31.2 percent of all minority faculty in the senior cohort, have recently fared better because minority women comprised 38.4 percent of all new-entry minority faculty. (Among non-Asian minority faculty, the proportion of women increased from 36.7 percent of senior minority faculty to 46.8 percent of the new entry minority faculty).

In sum, the new faculty cohort is more diverse than their predecessors. Meanwhile, the percentage of white women rose from about one-quarter of the entire senior cohort (24.9 percent) to about one-third (34.3 percent) of the new hires.

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<sup>&</sup>lt;sup>8</sup> For purposes of this report, the following program areas have been aggregated into the category "Professional:" agriculture/home economics, business, communications, education, engineering, health sciences, law, and occupationally specific programs. The "Liberal arts and sciences" category includes the humanities, the social and natural sciences, and the fine arts.

### Citizenship Status and Nativity

The data in table 3.4 showed a rise in the percentage of faculty members who were not native-born U.S. citizens: one in six new entrants (16.9 percent) compared to only one in nine (11.5 percent) among the senior faculty. When institutional type is factored in, it can be seen that the largest influx of foreign-born faculty (including naturalized U.S. citizens and both permanent and temporary residents) has occurred at research universities—about one-quarter (26.6 percent) of new entrants at these institutions were not U.S. natives compared to 17.0 percent among the senior faculty—and, to a lesser extent, at the other doctorate-granting and public comprehensive institutions. Their numbers declined as one moves to institutions offering a baccalaureate or associate's degree so that at liberal arts colleges and at community colleges, there were no differences in the percentage of non-native born U.S. citizens between faculty in the new and senior cohorts.

When program area was taken into account, there was a consistent decline in U.S. citizenship among new cohort faculty across all program areas—except education, the fine arts, and the miscellaneous category "all other programs." One of the largest increases in non-native born faculty was, however, among the new cohort natural scientists: one in four (24.7 percent) new entry natural science faculty were not native-born versus one in seven (14.4 percent) senior natural science faculty. In considering country of origin, it is important to understand that naturalized U.S. citizens and permanent residents may have immigrated to the U.S. at an early age and/or have resided here for a long time—often attenuating the cultural diversity they bring to their respective colleges and universities. Nevertheless, the surge in diversity by place of birth is noteworthy.

#### Summary

The new generation of academic career entrants was readily distinguishable from the senior faculty cohort. First, they were more diverse demographically than previous generations, most dramatically in terms of the increase in the proportion of women (40.8 versus 28.5 percent) (table 3.2). Second, greater racial/ethnic diversification also was evident (16.9 versus 11.6 percent) (table 3.3). This is most notable in the increase of Asians/Pacific Islanders (from 4.4 percent to 7.7 percent); indeed, Asian/Pacific Island males accounted for 9.3 percent of all newly hired male faculty (table 3.3). Third, the proportion of non-native-born faculty has increased among the new entrants (16.9 versus 11.5 percent) (table 3.4). Fourth, in terms of their academic program areas, a considerably larger proportion of the new entrants versus senior faculty held appointments outside the traditional liberal arts (51.0 versus 44.9 percent, respectively) (table 2.2).

Two caveats are in order. First, while the pattern and direction of demographic change toward greater diversity were unmistakable, nonetheless the numerical representation of women and racial/ethnic minorities, even in the new academic generation, continues to be low, in absolute terms. Second, while the changes appeared dramatic in contrasting the new entrants with the large residual senior group, it may indeed be that change has been occurring much more gradually and that such steady growth would be revealed in a more refined cohort analysis of multiple subgroups of faculty varying in the lengths of their higher education careers.

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Table 3.1—Mean age and age distribution of full-time faculty, by faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority, gender, type and							Age (	%)				
control of institution, and program area	Number	Mean	<30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	>69
All faculty <sup>1</sup>	514,976	48.2	1.3	6.6	12.1	16.9	18.5	18.2	13.2	8.8	3.4	1.1
New faculty <sup>2</sup>	172,319	42.1	3.7	16.9	24.3	20.6	13.9	10.0	5.8	3.2	1.1	0.5
Senior faculty <sup>2</sup>	342,657	51.2	0.1	1.3	6.0	15.0	20.8	22.4	17.0	11.6	4.6	1.4
Gender												
New faculty												
Male	101,974	42.3	3.0	17.5	25.3	19.7	12.4	10.0	6.4	3.9	1.5	0.4
Female	70,345	41.8	4.7	16.1	22.8	22.0	16.0	10.0	4.9	2.3	0.6	0.7
Senior faculty												
Male	244,860	52.0	0.1	1.1	4.9	13.4	19.7	22.8	18.4	13.0	5.1	1.6
Female	97,797	49.3	0.3	1.9	8.7	19.0	23.5	21.4	13.3	7.9	3.2	0.9
Type and control												
New faculty												
All institutions	172,319	42.1	3.7	16.9	24.3	20.6	13.9	10.0	5.8	3.2	1.1	0.5
All research institutions	50,866	40.6	3.4	19.6	30.5	20.9	10.0	6.6	4.6	3.1	1.2	0.1
All other doctorate-granting institutions <sup>3</sup>	26,361	41.3	2.7	20.8	26.8	21.4	12.3	6.9	5.5	1.7	1.2	8.0
All comprehensive institutions	39,929	42.8	3.7	16.6	20.8	20.5	15.2	11.8	6.0	3.9	1.1	0.4
Private liberal arts institutions	12,662	41.3	4.8	17.4	26.9	20.0	14.8	6.8	5.5	1.9	1.6	0.3
Public 2-year institutions	33,283	43.6	4.5	11.9	17.9	20.3	18.8	15.2	6.9	3.5	0.5	0.5
All other institutions <sup>4</sup>	9,217	45.4	4.5	10.0	16.9	19.4	15.0	15.2	8.9	6.2	2.6	1.5
Senior faculty												
All institutions	342,657	51.2	0.1	1.3	6.0	15.0	20.8	22.4	17.0	11.6	4.6	1.4
All research institutions	90,727	51.8	0.0	1.1	5.9	16.0	19.9	19.6	16.9	13.1	5.6	1.8
All other doctorate-granting institutions <sup>3</sup>	49,845	51.2	0.1	2.2	5.6	16.1	20.0	22.0	15.5	11.8	4.7	2.2
All comprehensive institutions	91,490	51.4	0.3	0.9	5.8	13.0	20.8	24.2	17.7	11.8	4.5	1.0
Private liberal arts institutions	24,764	50.8	0.0	1.1	7.1	17.0	22.1	18.4	16.2	12.8	4.7	0.7
Public 2-year institutions	70,246	50.6	0.2	1.6	5.8	14.7	22.4	25.3	17.3	9.1	2.9	8.0
All other institutions <sup>4</sup>	15,586	51.1	0.0	1.8	7.5	14.7	18.6	22.2	17.9	9.9	5.8	1.6

Table 3.1—Mean age and age distribution of full-time faculty, by faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, gender, type and							Age (	%)				
control of institution, and program area	Number	Mean	<30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	>69
Program area <sup>5</sup>												
New faculty												
All program areas	166,045	42.2	3.6	16.9	24.2	20.7	13.9	10.0	5.9	3.3	1.1	0.5
Professions	59,966	42.6	2.4	17.1	21.0	23.7	13.7	10.7	6.0	4.1	1.0	0.3
Liberal arts and sciences	81,297	41.4	4.2	17.4	27.1	19.6	14.0	8.8	5.1	2.5	1.0	0.4
Fine arts	8,394	41.9	3.7	17.3	25.0	19.2	15.4	10.3	6.0	1.4	1.1	0.7
Humanities	21,504	42.2	4.3	13.5	24.4	19.6	18.8	11.2	5.5	1.8	0.7	0.1
Natural sciences	33,141	41.2	4.0	17.6	29.7	19.8	11.1	8.2	5.8	2.1	1.3	0.3
Social sciences	18,258	40.6	4.5	21.4	26.7	19.3	13.1	6.4	3.1	4.3	0.6	0.6
All other program areas	24,782	43.5	4.9	14.8	22.2	16.9	13.8	12.4	8.0	3.9	1.9	1.2
Senior faculty												
All program areas	337,096	51.2	0.1	1.3	6.0	15.0	20.7	22.4	17.1	11.5	4.5	1.4
Professions	105,416	50.9	0.2	1.7	6.9	16.0	21.7	19.5	15.9	12.2	4.7	1.3
Liberal arts and sciences	185,647	51.5	0.1	1.1	5.7	14.1	20.2	24.1	17.8	11.2	4.6	1.2
Fine arts	22,651	50.8	0.5	1.6	7.1	16.8	19.3	20.1	19.1	10.8	4.3	0.5
Humanities	53,275	52.4	0.1	0.6	4.2	11.1	20.3	25.5	18.7	13.2	4.8	1.5
Natural sciences	70,241	51.2	0.1	1.5	6.1	14.9	20.4	24.0	17.0	10.0	4.6	1.4
Social sciences	39,480	51.3	0.1	0.6	6.0	15.0	20.1	24.9	17.1	11.0	4.4	1.0
All other program areas	46,033	51.1	0.0	1.6	5.3	16.2	20.6	22.2	16.8	11.2	4.0	2.2

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

<sup>&</sup>lt;sup>3</sup> Includes medical schools.

<sup>&</sup>lt;sup>4</sup> Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

<sup>&</sup>lt;sup>5</sup> The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

Table 3.2—Percentage distribution of full-time faculty, by faculty seniority, gender, type and control of institution, and program area: Fall 1992

							New females
Type and control of institution	All facu	lty <sup>1</sup>	New facu	ulty <sup>2</sup>	Senior fac	ulty <sup>2</sup>	as percent of
and program area	Male	Female	Male	Female	Male	Female	all females
Type and control All institutions	67.4	32.7	59.2	40.8	71.5	28.5	41.8
All research institutions Public Private All other doctorate-granting institutions <sup>3</sup>	75.4 77.0 70.0 72.3	24.6 23.0 30.0 27.7	67.2 67.8 65.5 67.1	32.8 32.2 34.5 33.0	80.0 81.8 73.1 75.0	20.0 18.2 26.9 25.0	47.9 48.0 47.5 41.1
Public Private All comprehensive institutions	72.3 70.5 75.9 66.2	27.7 29.5 24.2 33.8	62.1 76.0 56.3	37.9 24.0 43.7	75.0 74.7 75.7 70.5	25.0 25.3 24.3 29.5	43.2 36.0 39.3
Public Private Private Private liberal arts institutions Public 2-year institutions	66.7 65.1 61.0 55.8	33.4 34.9 39.0 44.2	56.9 55.0 49.3 46.8	43.1 45.0 50.7 53.2	70.8 69.8 66.9 60.1	29.2 30.2 33.1 39.9	38.6 40.9 43.9 38.7
All other institutions <sup>4</sup>	70.3	29.7	63.1	36.9	74.5	25.5	46.1
Program Area All program areas	67.4	32.7	59.0	41.0	71.5	28.5	41.4
Professions Business Education Engineering Health sciences Liberal arts and sciences Fine arts Humanities Natural sciences Social sciences All other program areas	59.9 69.7 48.2 94.0 47.3 70.8 67.0 58.8 79.5 72.9 71.8	40.1 30.3 51.8 6.0 52.7 29.2 33.0 41.3 20.5 27.1 28.2	56.0 67.4 35.6 88.0 47.7 60.2 49.0 46.1 71.4 61.6 62.6	44.0 32.7 64.4 12.0 52.3 39.8 51.0 53.9 28.7 38.4 37.4	62.1 70.8 54.2 97.5 47.0 75.5 73.6 63.9 83.3 78.1 76.8	37.9 29.2 45.8 2.5 53.0 24.6 26.4 36.2 16.7 21.9 23.3	39.8 36.3 40.0 74.0 39.4 41.5 41.7 37.6 44.8 44.9 46.4

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

<sup>&</sup>lt;sup>3</sup> Includes medical schools.

<sup>&</sup>lt;sup>4</sup> Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 3.3—Racial/ethnic distribution of full-time faculty, by faculty seniority and gender: Fall 1992

		Race/Ethnicity								
Faculty seniority	_	American Indian/	Asian or	Black		White				
and gender	Number	Alaskan Native	Pacific Islander	Not Hispanic	Hispanic	Not Hispanic				
All faculty <sup>1</sup>	514,976	0.5	5.5	4.9	2.5	86.6				
New faculty <sup>2</sup>	172,319	0.5	7.7	5.7	3.1	83.1				
Senior faculty <sup>2</sup>	342,657	0.4	4.4	4.6	2.3	88.3				
Gender										
New faculty										
Male	101,974	0.5	9.3	4.6	3.1	82.4				
Female	70,345	0.5	5.3	7.2	3.0	84.1				
Senior faculty										
Male	244,860	0.5	4.8	3.6	2.4	88.8				
Female	97,797	0.4	3.4	7.0	2.0	87.3				

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 3.4—Percentage distribution of full-time faculty, by citizenship status, faculty seniority, and type and control of institution: Fall 1992

Faculty seniority			Citizenship status						
and type and	_	Native	Naturalized	Permanent	Temporary				
control of institution	Number	U.S. citizen	U.S. citizen	resident	resident				
All faculty <sup>1</sup>	514,976	86.7	6.7	5.4	1.2				
New faculty <sup>2</sup>	172,319	83.1	5.3	8.8	2.8				
Senior faculty <sup>2</sup>	342,657	88.5	7.4	3.7	0.4				
Type and control									
New faculty									
All institutions	172,319	83.1	5.3	8.8	2.8				
All research institutions	50,867	73.4	6.1	14.6	6.0				
Public	37,085	76.3	6.6	12.8	4.3				
Private	13,782	65.5	4.6	19.2	10.7				
All other doctorate-granting institutions <sup>3</sup>	26,361	80.7	6.8	9.3	3.1				
Public	17,028	81.1	6.0	9.9	3.0				
Private	9,333	80.0	8.5	8.2	3.3				
All comprehensive institutions	39,929	86.3	4.5	7.7	1.6				
Public	28,017	84.8	5.3	8.2	1.7				
Private	11,912	89.6	2.6	6.5	1.3				
Private liberal arts institutions	12,662	89.5	4.0	5.6	0.9				
Public 2-year institutions	33,283	92.9	3.9	3.2	0.1				
All other institutions <sup>4</sup>	9,217	86.2	6.7	5.3	1.8				
Senior faculty									
All institutions	342,657	88.5	7.4	3.7	0.4				
All research institutions	90,727	83.0	10.5	5.9	0.6				
Public	71,224	84.3	10.0	5.1	0.6				
Private	19,502	78.3	12.4	8.8	0.5				
All other doctorate-granting institutions <sup>3</sup>	49,845	86.4	8.6	4.8	0.3				
Public	33,553	86.7	8.3	4.8	0.3				
Private	16,293	85.7	9.1	4.9	0.3				
All comprehensive institutions	91,490	90.2	6.4	3.0	0.4				
Public	65,860	90.2	6.1	3.2	0.5				
Private	25,630	90.1	7.2	2.6	0.2				
Private liberal arts institutions	24,764	91.4	5.8	2.8	0.1				
Public 2-year institutions	70,246	94.2	4.7	1.1	0.1				
All other institutions <sup>4</sup>	15,586	86.7	6.9	5.4	1.0				

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty those who had more than 7 years in a full-time faculty position.

<sup>&</sup>lt;sup>3</sup> Includes medical schools.

<sup>&</sup>lt;sup>4</sup> Includes public liberal arts, private 2-year, and other specialized institutions except medical schools. NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 3.5—Percentage distribution of full-time faculty, by citizenship status, faculty seniority, and program area: Fall 1992

		Citizenship Status						
Faculty seniority	_	Native	Naturalized	Permanent	Temporary			
and program area	Number	U.S. citizen	U.S. citizen	resident	resident			
All faculty <sup>1</sup>	514,976	86.7	6.7	5.4	1.2			
New faculty <sup>2</sup>	172,319	83.1	5.3	8.8	2.8			
Senior faculty <sup>2</sup>	342,657	88.5	7.4	3.7	0.4			
Program area <sup>3</sup>								
New faculty								
All program areas	166,045	83.8	5.1	8.7	2.4			
Professions	59,966	84.0	5.6	7.8	2.6			
Business	13,293	85.8	4.0	9.2	1.0			
Education	11,326	96.8	1.8	1.4	0.1			
Engineering	9,278	64.4	13.4	19.9	2.3			
Health sciences	26,069	84.6	5.4	5.5	4.6			
Liberal arts and sciences	81,297	81.5	5.4	10.6	2.5			
Fine arts	8,394	88.6	5.9	4.8	8.0			
Humanities	21,504	84.5	5.0	8.0	2.5			
Natural sciences	33,141	75.3	6.3	14.6	3.8			
Social sciences	18,258	85.9	3.8	9.3	1.1			
All other program areas	24,782	90.8	3.0	4.6	1.7			
Senior faculty								
All program areas	337,096	88.5	7.4	3.7	0.4			
Professions	105,416	88.1	8.1	3.5	0.3			
Business	26,149	92.0	4.8	2.9	0.2			
Education	23,826	94.9	3.6	1.5	0.1			
Engineering	15,838	67.1	22.7	9.2	1.0			
Health sciences	39,604	89.8	7.2	2.9	0.1			
Liberal arts and sciences	185,647	87.7	7.7	4.1	0.5			
Fine arts	22,651	94.9	3.0	1.9	0.2			
Humanities	53,275	87.2	9.0	3.3	0.5			
Natural sciences	70,241	85.6	9.1	4.7	0.6			
Social sciences	39,480	87.7	6.2	5.5	0.5			
All other program areas	46,033	93.0	4.4	2.5	0.1			

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

<sup>&</sup>lt;sup>3</sup> The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

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## **Section 4: Educational Background and Work History of the New Entrants**

To what extent, and in what ways, is the demographic diversification of new career entrants reflected in their emerging careers? And how do the careers of these newcomers compare with those of the senior faculty? Based on NSOPF-93, the following array of variables was examined: the level of highest degree; age at receipt of their highest degree and at appointment to the position they held in the Fall of 1992; and the nature of their employment previous to the current job (employment sector and functional responsibility).

# Level of Highest Degree

New faculty were more likely to report the master's or baccalaureate as their highest degree compared to the senior cohort who more often reported the doctorate as their highest degree (table 4.1). When institutional type of the new hires' current affiliation is considered, master's degree holders were less likely to be represented on the faculties of research universities and other doctorate granting universities. Also, in terms of program area, more new faculty in the natural sciences and the social sciences (about 75 percent) than in the humanities (55 percent) held doctorates or professional degrees, possibly reflecting, for example, large numbers of nondoctorate faculty specialists hired to teach writing. However, a cautionary note is in order: a number of faculty members whose highest degrees were shown as master's or bachelor's presumably were pursuing a higher degree at this relatively early stage of their careers; accordingly, the degree distributions for the new and senior cohorts are not strictly comparable. Even so, it is noteworthy that at this stage the new cohort of women faculty were about as likely to hold a master's degree as their highest degree (44.2 percent) as a doctorate or professional degree (48.4 percent). This contrasted to the highest degrees held by new-cohort men: 71.0 percent held doctorates or professional degrees and only 22.4 percent had only a master's degree. To some extent this surely reflects the larger number of women hired at 2-year institutions and in fields for which the doctorate is less crucial. And, presumably, many of these women were currently pursuing doctorates. Nevertheless, the contrast between new-cohort women and men in this regard was striking.

# Age at Award of Highest Degree and at Appointment to Current Position

Contrary to what might be predicted based on evidence of the increasing length of graduate study in some fields (Bowen and Rudenstine, 1992), the data in table 4.2 showed that new career entrants were receiving their highest degrees (master's or doctorates/professional degrees) at almost precisely the same age as their senior colleagues—the early thirties. However, while new entrants were receiving their highest degrees in their early thirties, they were being hired into their current positions at a later age than senior faculty had been (38-39 versus 35-36 years old, respectively). Or consider another way of viewing these data: senior faculty members on average were hired into their current position about four years after completing their highest

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<sup>&</sup>lt;sup>9</sup> The term "highest" degree is employed rather than "terminal" degree. For a number of faculty members, their current highest degree is not "terminal," in that, for example, some who hold master's degrees are at work on, and will eventually earn, doctoral degrees.

degree while for the new generation the interval was about six and one-half to seven years after completing their highest degree.

This development raises a number of questions: Have new entrants, after earning their highest degrees, simply bounced around among a number of short-term academic positions prior to assuming their current position? Were they more likely than their senior colleagues to have held term appointments that were not renewed or to have been denied tenure? Have they simply taken much longer to find a full-time academic position in a difficult job market? These questions lead us to look more closely into the previous work history of new career entrants, especially their employment experiences following receipt of their highest degree in order to understand better the transition from graduate study to a full-time faculty appointment in the contemporary academy.

# Work (Previous Employment) History

New career entrants were less likely to have had previous employment experience in postsecondary institutions than senior faculty (table 4.3), and they were more likely than senior faculty to have worked in an employment sector outside postsecondary education. This is reflected in the larger percentages of new hires relative to senior faculty who had worked previously in for-profit businesses, hospitals and the federal government.

Viewed by function rather than sector (table 4.4), new entrants have had a greater diversity of previous work responsibilities than senior faculty. Compared to their predecessors, smaller proportions of new entrants than senior faculty reported previous teaching experience, while larger proportions of the new entrants than senior faculty reported previous experience in research, clinical services, and technical activities.

How is this differential pattern of previous work experience to be interpreted? To what extent does it represent intentionally temporary employment undertaken while completing graduate study or actual post graduate degree forays into the non-academic job market? To address these questions, the dates reported under previous employment history were used to identify those previous positions that were first assumed after the date of receipt of the highest degree and before the current position. Tables 4.5 and 4.6 display the patterns of post highest degree and pre current position employment reported by new and senior faculty. While most of these post-highest degree/pre-current position employment experiences for senior faculty were teaching positions (about three-quarters of the senior faculty had such experience), only about one-quarter of the new entrants holding doctoral degrees had previous full-time teaching positions (24.4 percent) and only about one-half of those holding master's degrees (56.8 percent) had previous full-time teaching positions. Moreover, new faculty held a wider variety of non-teaching positions before assuming their current position, especially in research and clinical services.

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<sup>&</sup>lt;sup>10</sup> Because of the way the question was worded, we do not know for certain that this is true. The question asked for the three most recent and significant main jobs held during the past 15 years. The extent to which individuals held positions outside of postsecondary institutions more than 15 years ago is not known. See question 19 of the 1993 NSOPF *Faculty Questionnaire* for the exact wording of the question.

Table 4.1—Percentage distribution of full-time faculty, by highest degree level, faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority,	Highest degree level					
gender, type and control	_	Professional		Bachelor's		
of institution, and program area	Number	or doctoral	Master's	or less		
All faculty <sup>1</sup>	514,976	66.3	28.9	4.8		
New faculty <sup>2</sup>	172,319	61.7	31.3	7.0		
Senior faculty <sup>2</sup>	342,657	68.6	27.7	3.8		
Gender						
New faculty						
Male	101,974	71.0	22.4	6.6		
Females	70,345	48.4	44.2	7.5		
Senior faculty						
Male	244,860	75.0	21.6	3.4		
Female	97,797	52.5	43.1	4.5		
Type and control						
New faculty	470.040	a. =	0.4.0			
All institutions	172,319	61.7	31.3	7.0		
All research universities	50,867	85.0	12.5	2.5		
All other doctorate-granting institutions <sup>3</sup>	26,361	81.1	16.6	2.3		
All comprehensive institutions	39,929	63.2	34.3	2.4		
Private liberal arts institutions	12,662	58.2	38.8	2.9		
Public 2-year institutions	33,283	15.1	60.9	24.1		
All other institutions <sup>4</sup>	9,217	43.1	47.6	9.3		
Senior faculty						
All institutions	342,657	68.5	27.7	3.8		
All research universities	90,727	90.4	8.7	0.9		
All other doctorate-granting institutions <sup>3</sup>	49,845	85.9	13.4	0.7		
All comprehensive institutions	91,490	76.7	22.5	0.8		
Private liberal arts institutions	24,764	66.3	31.4	2.3		
Public 2-year institutions	70,246	20.7	66.0	13.4		
All other institutions <sup>4</sup>						
All other institutions	15,586	55.4	38.1	6.5		

Table 4.1—Percentage distribution of full-time faculty, by highest degree level, faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority,		Highes	st degree leve	
gender, type and control		Professional		Bachelor's
of institution, and program area	Number	or doctoral	Master's	or less
Program area <sup>5</sup>				_
New faculty				
All program areas	166,045	62.0	31.2	6.8
Professions	59,966	60.3	31.9	7.8
Liberal arts and sciences	81,297	66.1	30.7	3.3
Fine arts	8,394	34.2	58.8	7.1
Humanities	21,504	55.4	42.0	2.5
Natural sciences	33,141	76.1	19.7	4.2
Social sciences	18,258	74.7	24.3	1.0
All other program areas	24,782	52.6	31.5	15.9
Senior faculty				
All program areas	337,096	68.7	27.6	3.7
Professions	105,416	65.6	30.1	4.2
Liberal arts and sciences	185,647	72.4	26.0	1.6
Fine arts	22,651	41.4	54.1	4.4
Humanities	53,275	72.6	26.6	0.7
Natural sciences	70,241	75.8	22.4	1.9
Social sciences	39,480	83.7	15.6	0.8
All other program areas	46,033	60.9	28.6	10.5

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

<sup>&</sup>lt;sup>3</sup> Includes medical schools.

<sup>&</sup>lt;sup>4</sup> Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

<sup>&</sup>lt;sup>5</sup> The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

Table 4.2—Average age of full-time faculty<sup>1</sup> at award of highest degree and at appointment to current position, by faculty seniority and highest degree level: Fall 1992

	Age	when granted		Age	e when hired		
Faculty seniority	Highest degree			in current position			
and highest degree	Mean	Median	Mode	Mean	Median	Mode	
New faculty <sup>2</sup>	32	29	30	39	37	37	
Doctorate	32	30	31	39	36	37	
Master's	32	29	29	39	38	39	
Senior faculty <sup>2</sup>	32	30	30	36	34	34	
Doctorate	32	30	30	36	34	35	
Master's	31	29	29	35	33	34	

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

Table 4.3—Percentage of full-time faculty with previous employment, by faculty seniority and previous employment sector: Fall 1992

Previous employment	All facult	y <sup>1</sup>	New fac	culty <sup>2</sup>	Senior fa	culty <sup>2</sup>	
sector	Number	Percent	Number	Percent	Number	Percent	
All faculty	514,976	66.8	172,319	78.8	342,657	60.8	
	Faculty with previous employment						
All sectors	343,995	100.0	135,716	100.0	208,279	100.0	
4-year college/university	209,379	60.9	66,425	48.9	142,955	68.6	
2-year college	43,738	12.7	12,736	9.4	31,002	14.9	
Elementary/secondary	46,367	13.5	18,596	13.7	27,771	13.3	
Consulting	26,786	7.8	12,178	9.0	14,608	7.0	
Hospital	41,021	11.9	21,094	15.5	19,927	9.6	
Foundation or other nonprofit	22,660	6.6	11,457	8.4	11,203	5.4	
For-profit business	62,536	18.2	32,583	24.0	29,953	14.4	
Federal government	38,101	11.1	18,659	13.8	19,442	9.3	
Other	15,502	4.5	7,719	5.7	7,783	3.7	

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

NOTE: Percents shown for a specific sector represent the percentage of faculty with previous employment in a full-time position during the past 15 years who had previous employment in that specific sector. Details will not add to total because faculty could have been previously employed in multiple sectors.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

Table 4.4—Percentage of full-time faculty with previous employment, by faculty seniority and primary responsibility in previous employment: Fall 1992

Previous								
employment	All fac	ulty <sup>1</sup>	New fa	culty <sup>2</sup>	Senior fa	Senior faculty <sup>2</sup>		
responsibility	Number	Number Percent		Percent	Number	Percent		
All faculty	514,976	66.8	172,319	78.8	342,657	60.8		
		Fa	culty with pro	evious empl	loyment			
All responsibilities	343,995	100.0	135,716	100.0	208,279	100.0		
Teaching	211,338	61.4	54,128	39.9	157,211	75.5		
Research	73,419	21.3	37,303	27.5	36,116	17.3		
Technical activities	41,731	12.1	19,796	14.6	21,934	10.5		
Clinical services	37,363	10.9	20,138	14.8	17,225	8.3		
Public service	11,640	3.4	6,257	4.6	5,383	2.6		
Administration	61,106	17.8	26,114	19.2	34,992	16.8		
Other	50,710	14.7	24,811	18.3	25,899	12.4		

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Percents shown for a specific responsibility represent the percentage of faculty with previous employment in a full-time position during the past 15 years who had previous employment with that specific responsibility. Details will not add to total because faculty could have had multiple employments with different primary responsibilities.

Table 4.5—Percentage of full-time faculty who have held a job other than their current one since receiving their highest degree, by faculty seniority, highest degree level, and primary responsibility of previous employment: Fall 1992

Degree level and						
previous employment	All facu	ulty <sup>1</sup>	New fa	culty <sup>2</sup>	Senior fa	culty <sup>2</sup>
responsibility	Number	Percent	Number	Percent	Number	Percent
All faculty	514,976	24.2	172,319	33.8	342,657	19.4
Highest degree <sup>3</sup>						
Doctorate <sup>4</sup>	339,359	23.4	105,490	32.2	233,868	19.5
Master's	148,058	24.3	53,518	34.6	94,541	18.5
	Faculty	with previous	employment s	since receiving	their highest de	gree
Doctorate <sup>4</sup>	79,550	100.0	33,940	100.0	45,609	100.0
Teaching	44,413	55.8	8,266	24.4	36,147	79.3
Research	31,648	39.8	17,181	50.6	14,467	31.7
Technical services	4,539	5.7	2,074	6.1	2,465	5.4
Clinical services	9,558	12.0	5,968	17.6	3,590	7.9
Public service	2,369	3.0	1,272	3.8	1,097	2.4
Administration	14,825	18.6	6,852	20.2	7,973	17.5
Other	8,222	10.3	3,760	11.1	4,462	9.8
Master's	36,014	100.0	18,545	100.0	17,469	100.0
Teaching	25,225	70.0	10,527	56.8	14,698	84.1
Research	1,786	5.0	989	5.3	797	4.6
Technical services	5,221	14.5	3,112	16.8	2,109	12.1
Clinical services	4,498	12.5	2,555	13.8	1,942	11.1
Public service	1,490	4.1	916	4.9	574	3.3
Administration	9,491	26.4	5,490	29.6	4,002	22.9
Other	6,695	18.6	4,211	22.7	2,484	14.2

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

NOTE: Details will not add to total because faculty could have had multiple employments with different primary responsibilities.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

<sup>&</sup>lt;sup>3</sup> Numbers for highest degree will not add to all faculty because individuals with less than a master's degree are not included.

<sup>&</sup>lt;sup>4</sup> Included in this category are faculty with a doctorate or a first-professional degree.

Table 4.6—Percentage of full-time faculty who have held a job other than their current one since receiving their highest degree, by faculty seniority, highest degree level, and previous employment sector: Fall 1992

Degree level						
and previous	All faculty <sup>1</sup>		New faculty <sup>2</sup>		Senior faculty <sup>2</sup>	
employment						
sector	Number	Percent	Number	Percent	Number	Percent
All faculty	514,976	24.2	172,319	33.8	342,657	19.4
Highest degree <sup>3</sup>						
Doctorate <sup>4</sup>	339,359	23.4	105,490	32.2	233,868	19.5
Master's	148,058	24.3	53,518	34.6	94,541	18.5
Doctorate <sup>4</sup>	Faculty with 79,550	n previous ei 100.0	mployment si 33,940	nce receiving 100.0	their highest 45,609	degree
Within academe Outside academe	73,125 40,353	91.9 50.7	28,679 21,566	84.5 63.5	44,446 18,787	97.4 41.2
Master's	36,014	100.0	18,545	100.0	17,469	100.0
Within academe Outside academe	30,462 25,897	84.6 71.9	14,117 14,541	76.1 78.4	16,345 11,356	93.6 65.0

<sup>&</sup>lt;sup>1</sup> Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

NOTE: Details will not add to total because faculty could have had previous employment in more than one sector.

<sup>&</sup>lt;sup>2</sup> New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

<sup>&</sup>lt;sup>3</sup> Numbers for highest degree will not add to all faculty because individuals with less than a master's degree are not included.

<sup>&</sup>lt;sup>4</sup> Included in this category are faculty with a doctorate or a first-professional degree.

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