

To: Jess Benhabib, Dean of the Faculty of Arts and Science
FAS Committee on Policy and Planning

From: FAS Gender Equity committee: Kathleen Gerson (Chair), Shara Bailey, David Engel, Sydney Ludvigson, Carol Reiss, Florencia Torche, with David Vintinner and Rachel Krug (ex-officio from the FAS Office of Institutional Research)

Re: Arts and Science Faculty Equity Study, 2010

The FAS Gender Equity Committee is pleased to submit the results of the 2010 Faculty Equity Study. This report builds on and expands earlier reports by updating findings from earlier reports and by including new data on a variety of additional measures, including:

- A decade of trend data for tenured and tenure-eligible faculty, making it possible to chart changes over time in such important indicators as hiring, promotion, and salaries.
- Comparative data from the National Center for Education Statistics, making it possible to interpret NYU's situation relative to that of other academic institutions. Because this national data is limited to one year and does not differentiate between research universities and other academic institutions, it is not possible to develop a more fine-grained comparison of NYU's place among peer institutions. Despite these limitations, the inclusion of national data represents an effort to begin a comparative analysis that can be carried forward as more comparable data on trends among peer institutions become available.
- Data on contract faculty, a group that has been growing in size (from 37 in 2000 to 294 in 2010) and importance over the last decade. For the first time, the LSP faculty has been included.
- Data on named appointments, teaching awards, retention efforts, housing offers, and other factors that affect the quality of faculty life in the School of Arts and Science.

We invite the faculty to study the report's findings in detail. To aid this process, here is a summary of the report's most noteworthy findings, along with the committee's conclusions:

Pages 1 – 6: The first section presents an overview of the faculty, using descriptive statistics to chart trends among the tenured, tenure eligible, and contract faculty during the period between 2000 and 2010. Our most noteworthy findings include:

- There has been a notable change in the overall composition of the Arts and Science faculty, with a disproportionate growth in the size of the contract faculty relative to the growth the size of the tenured and tenure-eligible faculty (Figure 1).

- Among the tenured and tenure-eligible faculty, the last decade has seen a slight rise in the proportion of women (from 24.0% to 28.8%), although this percentage lags slightly behind the NCAS proportion for the nation as a whole. This same time period witnessed little change, and even a slight decline (from 8.2 to 7.8%) in the proportion of under-represented minorities (Figure 2).
- Looking more closely, there has been a rise in the proportion of tenured and tenure-eligible women faculty in both the humanities (33.2% to 40.2%) and social sciences (23.6% to 29.4%) (although this rise still lags behind the national proportion). Yet there has been a small drop in the proportion of women in the sciences (from 14.1% to 13.8%), which remains well below the national proportion (Figure 3).
- Among the contract faculty, the proportion of women has remained high (52%), but the proportion of under-represented minorities has grown from 5% to 12% (Figure 4).
- Looking more closely at differences among the contract faculty, the proportion of women in the humanities has dropped from more than 75% to 57%, but still remains high, while the proportion in the social sciences has risen (from none to 6 individuals) and in the sciences has remained flat since 2005 (7 individuals).

General Conclusion: Taken as whole, these findings offer a mixed picture. The rising proportion of tenured and tenure-eligible women among the humanities and social science faculty is good news, although the proportion in the sciences remains low and unchanged. Comparisons between tenure-track and contract faculty also suggest some cause for concern. Not only has the size of the contract faculty grown relative to the size of the tenured and tenure-eligible faculty, but women (and under-represented minorities) are more likely to be found among the contract faculty while continuing to lag behind national benchmarks among the tenure-eligible faculty.

Part I (pages 7 – 12): Current and starting ranks of the tenure-track and contract faculty:

- Among the tenured and tenure-eligible faculty, women and minorities remain under-represented, especially at the rank of full-professor, suggesting limited progress (Table 1).
- Similarly, women and minorities remain under-represented among the senior faculty who hold named chairs (Table 1).
- In terms of new hires for tenured and tenure-eligible faculty, little change has occurred among women, and there has been a slight drop among under-represented minorities (Table 2).
- Since information about short lists is incomplete and difficult to collect, it is not possible to draw definitive conclusions. While sciences are less likely than the social sciences and the humanities to hire a woman applicant, these relationships are not statistically significant (Table 3).

- Regarding the starting rank of new hires, there has been a decline in the proportion of women hired as a full professor and a substantial increase in the proportion hired at the assistant professor level (Table 4).
- Similarly, there is a notable gender disparity among new hires with a named chair, where women lag substantially behind men (Table 4).
- Among the contract faculty, women make up a declining proportion as the rank rises from Assistant to Associate to Full Clinical Professor (Table 5). In addition, more men and under-represented minority contract faculty were hired in the last 5 years (Table 6).

General Conclusion: Good signs can be found in the hiring of minorities, but the lack of movement in hiring women (and minorities) at the higher ranks of the tenured faculty raises concerns.

Part II (pages 13 – 25): Current and starting salaries of the tenure-track and contract faculty:

- Among the tenured and tenure-eligible faculty, the gap between women's and men's salaries increases as the rank rises, although this difference is not statistically significant after controlling for department and year of hire (Tables 8 and 9). (The scarcity of under-represented minorities at the named rank is also worth noting.)
- Looking more closely, as we have seen in the prior studies, salaries tend to rise as the proportion of men in a department rises (Figure 6). Differences in the salary structure among departments with higher and lower proportions of men vs. women thus contribute to an overall gender gap in earnings, especially at the higher ranks.
- For the contract faculty, gender differences in starting salaries are not statistically significant after controlling for rank, department, and year of hire. This is largely good news that needs to be monitored (Tables 19 and 20).

General Conclusion: Lowering the overall salary gender gap among tenured and tenure-eligible faculty, especially at the higher ranks, will require some combination of hiring more women in departments where they remain under-represented and raising the salary levels, especially for the senior faculty, in departments where women are over-represented.

Part III (pages 26 – 31): Career progression for tenured and tenure-eligible faculty:

- The rates for achieving tenure are quite similar for women and men, as are the rates for those who resign prior to being reviewed for tenure (Figures 11 and 12).
- Men, women, and under-represented minorities received early tenure at similar rates, and the overall survival rates until tenure are also similar (Tables 21 and 22).

General conclusion: This is good news all around.

Part IV (pages 31 – 40): General measures of support for tenure-track and contract faculty:

- Regarding internal research support, women faculty and under-represented minorities among tenure track faculty are more likely to receive internal funds (Table 23). This is also true for women contract faculty (Table 25).
- Administrative responsibilities (Chair, DUGS, or DGS) present an ambiguous picture. Among tenure-track faculty, women are more likely to hold an administrative position overall, but this relationship is no longer statistically significant when rank and department are taken into account (Tables 27 and 28).
- In general, course loads are distributed equally by gender among the tenure-eligible and tenured faculty, although men teach somewhat more students (Tables 30 and 31). Women receive somewhat higher student evaluation ratings (Table 32). They were no more likely to receive a Golden Dozen award in 2010.
- Contract faculty women taught more courses, but male non-tenured track faculty taught more students (Tables 33 and 34). Women contract faculty also tended to receive higher ratings in student evaluations than their male colleagues (Table 35).
- Among the tenure eligible and tenured faculty, neither gender nor minority status is related to receiving a counter-offer for those with outside offers (Table 36).

With respect to juried awards in 2010 and housing waiting lists as of 9/1/10, the percentage differences are large but not statistically significant. With such a small sample on both measures, it is difficult to draw definitive conclusions (Tables 37 and 38). Yet even if the numbers are too small to find a statistically significant relationship, the large discrepancy suggests that women are somewhat under-represented. These data need future consideration, when more than one year's information is available.

General Conclusion: Since we have just begun to collect systematic information on such measures as teaching responsibilities and awards, juried awards, and housing waiting lists, it is too soon to draw definitive conclusions. We will continue to collect these data so that more accurate assessments will be possible in the future. The information in this report does, however, point to some areas worth pursuing.

The findings of parity in research support and counter-offers, as well as the generally equal distribution of teaching loads is good news, although the potential gender gap in teaching awards is worth monitoring. The small gender differences for external award nominations and housing lists are also difficult to interpret given the one year data-set. In all of these areas, it is important to monitor the trends carefully.

For administrative positions, the findings are difficult to interpret. Taking on an administrative position involves a mix of rewards and costs, since it bestows authority but also requires time-consuming commitment that can interfere with a professor's ability to conduct research and mentor students. It is thus important to keep an eye on future trends and also to investigate the effects of administrative work on the morale and productivity of women and men at all faculty ranks.

Overall Conclusions

We would like to thank the Dean's Office for their full support and hard work in compiling the data for this report. We are happy to report much good news in this effort. We have expanded the scope of the report so that trends across a range of measure can be assessed going forward. As important, a range of measures show progress toward attaining equity for women and under-represented minorities. There are, nevertheless, some areas of concern that call out for attention and careful monitoring.

We are heartened to find few signs of bias on a number of measures for tenured and tenure-eligible faculty, including internal support for research, housing waiting lists, and faculty retention in the face of outside offers. Equity in nominating faculty for external awards remains unclear given the small size of this group.

Salaries still favor men when considered by themselves, but the discrepancy is not statistically significant when rank, department, and experience are taken into account. Although the average salary in a department remains related to the proportion of men in that department, it is good to see that this relationship has weakened. We hope to see this gap continuing to close moving forward.

Yet, amid this generally good news, there are a number of noteworthy concerns. Despite the growth in hiring and faculty development during the recent Partners' Initiative, our hope for substantial progress in the representation of women and minority tenure-track faculty has been only partially satisfied, especially in the higher ranks and among the Science faculty. Under the leadership of our deans, we hope we can look forward to an increasing proportion of women and minorities among the ranks of full and named faculty. Without progress in this area, the Arts and Sciences will continue to reflect the longstanding inherited over-representation of men and non-minorities in the faculty's senior ranks.

The rapid and dramatic growth in the proportion of contract faculty relative to tenure-track faculty is another area of concern, especially because women were more likely to be hired as contract faculty. We understand that this trend reflects a number of factors, including the GSAS

financial aid reforms that removed teaching as a requirement for doctoral fellowships, the practice of hiring high profile professionals for specific teaching niches outside the tenure stream, and the arrival of the Liberal Studies program into the Arts & Science division. We nevertheless see a number of pitfalls in this trend, not just for gender equity but also for the well-being of the general University community. A declining proportion of tenure-track faculty has the potential to undermine a number of important aspects of academic life, including continuity in teaching and mentoring, protections of intellectual freedom and salary equity, and effective faculty participation in University governance.

In closing, we look forward to discussing all of these issues with the Deans of Arts and Science and to working with them to tackle the challenges we face. Aware of the limitations that a purely statistical analysis can provide, we also look forward to investigating faculty perceptions by conducting a faculty “climate study” during the 2011-2012 academic year.



NEW YORK UNIVERSITY

**Arts and Science
Faculty Equity Study, 2010**

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Last revised: May 2011

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Arts and Science Faculty Equity Study, 2010

Overview of the Faculty Equity Study, 2010

This document is a continuation of a series of studies released by this office over the past decade (in 2002, 2005, and 2007), exploring equity issues among our full time faculty relating to both gender and race. The prior studies found a number of significant relationships between gender, race, and various aspects of the career paths experienced by our faculty. This update aims to explore these relationships more deeply and to continue to monitor other areas previously found to be equitable to confirm that no systemic bias has emerged.

Previous findings included significant correlations of both gender and minority status with rank in the tenure track. This appeared to be a persistent consequence of hiring and tenure patterns of the prior century. **Part I** of this study reviews this distribution and the impact of hiring practices in recent years on the under-representation of women and minorities in higher ranks.

Previous studies found that, when rank, experience, and department were taken into account, gender and minority status did not appear to be contributing factors to salary (or starting salary). On the other hand, mean departmental salaries appeared to be higher for tenure track units with a high proportion of men. **Part II** of this study repeats these prior analyses.

Analysis of career progression in the tenure track showed only one relationship: women who resigned tended to do so one year later than men. The percentage of tenure track hires who ultimately were granted tenure was not found to be related to gender or minority status, nor was a relationship in resignation rates or early tenure rates found to be significant. **Part III** of this study repeats prior analyses to confirm no negative systemic biases have emerged.

Various other tests have been performed on other aspects of faculty experience, to determine if they were affected by gender or minority status. Administrative responsibility assignments and the existence and level of internal research support all were found to have no recent relationship with gender or minority when rank, unit, and division were taken into account. **Part IV** of this study repeats inquiry into these three areas and adds three more: the distribution of internal juried awards, housing allocation decisions, and teaching assignments.

Description of the data used in this study

To study the current state of our faculty, a cross-sectional dataset was constructed for all full time faculty who were on Arts & Science payroll for any part of Fiscal Year 2010. These data were subdivided into tenure and tenure eligible faculty (assistant professors, associate professors, full professors and named professors) and contract faculty (clinical faculty, language lecturers and master teachers). Although previous studies included

post-doctoral teaching fellows (assistant professor/faculty fellows and assistant professor/Courant instructors) these positions were excluded from the current study. As per previous studies, student instructors, visiting, and adjunct faculty are not included. Faculty who were hired at the rank of full professor but were considered not tenure eligible were included with clinical professors for the purposes of this study.

References to 2000 and 2005 data refer to the data sets and results for those fiscal years in the Arts & Science Faculty Equity Study from 2007.

To study hiring and career progression in the tenure track, a dataset of all tenure and tenure eligible faculty hires between 6/1/1998 and 5/31/2010 was assembled. These data were subdivided into two six year periods: those hired between 6/1/98 and 5/30/04 for whom the six year tenure cycle should have completed, and those hired between 6/1/04 and 5/31/10 for whom the cycle might have not completed. Faculty who were hired at the rank of assistant, associate, or full professor but were not tenure eligible were excluded from all new hire analyses.

Descriptive statistics of the 2010 tenured and tenure eligible cross-section

The tenured and tenure eligible faculty have continued to grow in number over the past decade, with the 2010 cohort numbering 674 individuals. Figure 1 shows this growth in comparison to Arts and Science total faculty, contract faculty, and Liberal Studies faculty. Note that the Liberal Studies faculty is included for the first time in this study.

Figure 1: Arts & Science Tenure Track and Contract Faculty Growth

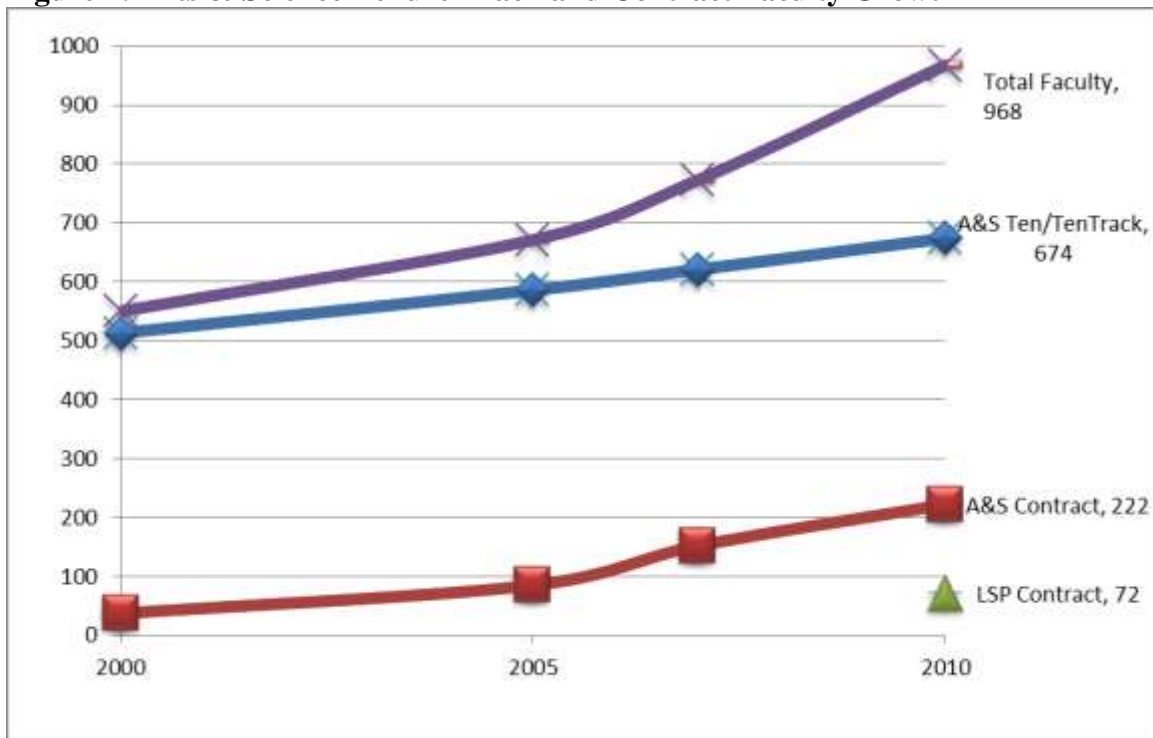
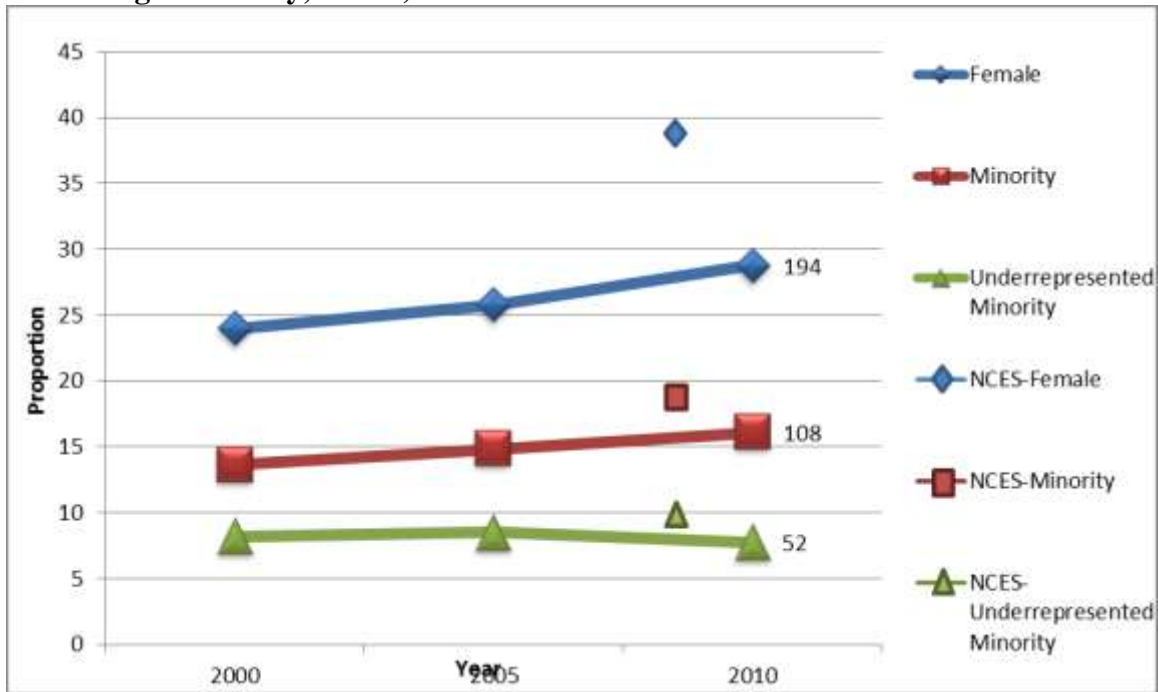


Figure 2 visually depicts the proportion of female, minority¹, and underrepresented minority² faculty over this period. The proportion of female faculty has increased at a steady rate from 24.0% to 28.8%. The proportion of minority faculty has also increased from 13.7% to 16.1%. The proportion of faculty in underrepresented minorities has declined slightly, starting at 8.2% and ending at 7.8% of total faculty. To place these proportions in context, the National Center for Education Statistics reports that 38.8% of all tenure and tenure track faculty at Title IV degree-granting institutions were female as of Fall 2009, 18.6% were minority, and 9.9% were underrepresented minorities³. (Title IV institutions include 2 and 4-year, private and public, universities and colleges.)

Figure 2: Proportion female, minority, underrepresented minority (tenured and tenure eligible faculty, n=674)



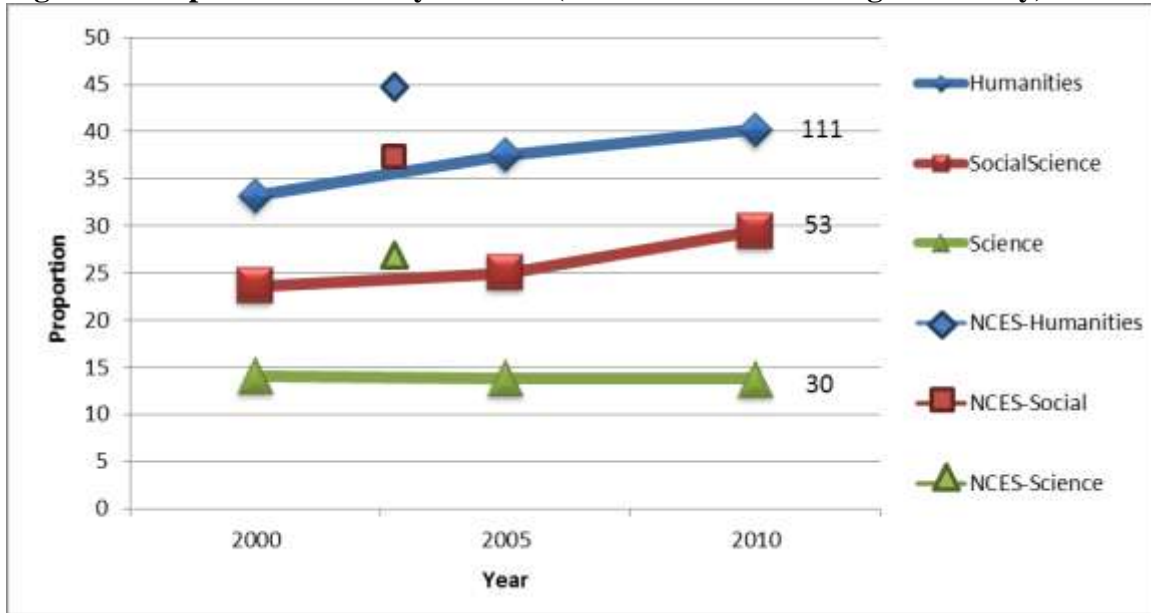
¹ Minority faculty include faculty who self identify at the time of hire as Asian/Pacific Islander, Black, or Hispanic, or partially Asian/Pacific Islander, Black, or Hispanic. Data is from Human Resources records.

² Underrepresented minority faculty include faculty who self identify at the time of hire as Black or Hispanic, or partially Black or Hispanic. Data is from Human Resources records.

³ Proportions calculated excluding non-resident aliens. See Knapp, Laure G, et.al. “Employees in Postsecondary Institutions, Fall 2009, and Salaries of Full-Time Instructional Staff, 2009-10” Department of Education: NCES 2011-150. p.12

Figure 3 visually depicts the proportion of female faculty by division over this same period. The proportions of female faculty in the humanities and social sciences have increased from 33.2% to 40.2% and 23.6% to 29.4% respectively. The proportion of female faculty in the sciences has been slowly dropping, from 14.1% to 13.8%. To place these proportions in context, the National Center for Education Statistics reports that the proportions of females across all full time faculty categories in Title IV institutions was in Fall 2003 at 44.4% of humanities faculty, 37.2% of social science, and 26.3% of science ⁴.

Figure 3: Proportion female by division (tenured and tenure eligible faculty)



Not measured in prior studies, the proportion of minority faculty by division for tenure and tenure eligible faculty is 17.1% in humanities, 18.5% in the social sciences, and 12.9% in the sciences. The proportion of underrepresented minority faculty by division is 10.2% in humanities, 10.6% in the social sciences, and 2.3% in the sciences. To place these proportions in context, the National Center for Education Statistics reports that the proportions of minorities across all full time faculty categories in Title IV institutions was in Fall 2003 at 17.7% of humanities faculty, 18.9% of social science, and 22.5% of science, and for underrepresented minorities, these dropped to 12.0%, 13.5%, and 7.9% ⁵.

⁴ SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 and 2004 National Study of Postsecondary Faculty (NSOPF:99;04). Table 256. (December 2008.)

⁵ SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 and 2004 National Study of Postsecondary Faculty (NSOPF:99;04). Table 256. (December 2008.)

Descriptive statistics of the 2010 contract faculty cross-section

The Arts & Science contract faculty has grown dramatically in number over the past decade, growing from 37 to 294 individuals. A significant portion of the growth is from the addition of the Liberal Studies Program to Arts & Science, which is staffed entirely with contract faculty and accounts for 72 faculty members in 2010. Figure 4 visually depicts the proportion of female, minority, and underrepresented minority faculty over this period. The proportion of female faculty has remained flat around 52%. The proportion of minority faculty, initially high, has dropped to 22% in 2010. The proportion of faculty in underrepresented minorities has been steadily growing from 5% to 12%. To place these proportions in context, the National Center for Education Statistics reports that, as of Fall 2009, 50.0% of all non tenure or tenure track faculty at Title IV degree-granting institutions were female, 18.9% were minority, and 11.2% were underrepresented minorities⁶.

Figure 4: Proportion female, minority, underrepresented minority (contract faculty, n=294)

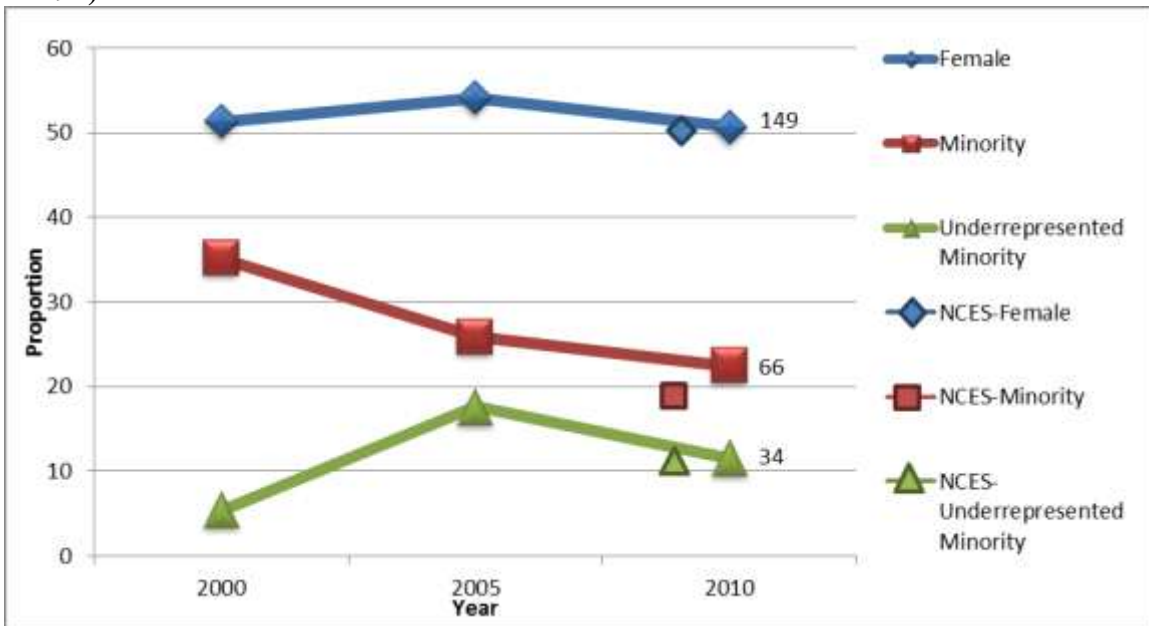
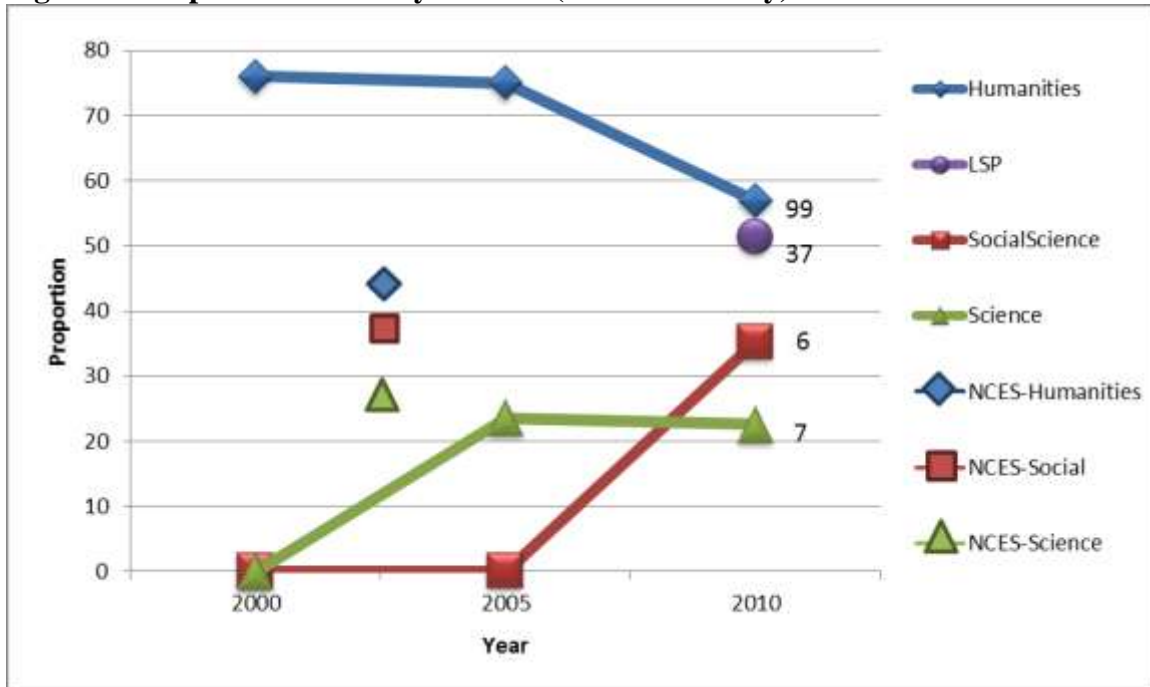


Figure 5 visually depicts the proportion of female contract faculty by division over this same period. The proportion of female faculty in the humanities, initially high, has dropped to 57%. In 2010, there were 51% female contract faculty in Liberal Studies. The Social Science contract faculty has grown from 5 male faculty in 2005 to 17 faculty

⁶ Proportions calculated excluding non-resident aliens. See Knapp, Laure G, et.al. “Employees in Postsecondary Institutions, Fall 2009, and Salaries of Full-Time Instructional Staff, 2009-10” Department of Education: NCES 2011-150. p.12

in 2010 (35% female). In Science, the proportion of female faculty has remained constant from 2005 to 2010 at 23%. To place these proportions in context, the National Center for Education Statistics reports that the proportions of females across all full time faculty categories in Title IV institutions was in Fall 2003 at 44.4% of humanities faculty, 37.2% of social science, and 26.3% of science⁷.

Figure 5: Proportion female by division (contract faculty)



Not measured in prior studies, the proportion of minority faculty by division is 24.0% in humanities, 29.4% in the social sciences, 19.4% in the sciences, and 18.1% in liberal studies. The proportion of underrepresented minority faculty by division is 10.9% in humanities, 17.6% in the social sciences, 9.6% in the sciences, and 12.5% in LSP. To place these proportions in context, the National Center for Education Statistics reports that the proportions of minorities across all full time faculty categories in Title IV institutions was in Fall 2003 at 17.7% of humanities faculty, 18.9% of social science, and 22.5% of science, and for underrepresented minorities, these dropped to 12.0%, 13.5%, and 7.9%⁸.

⁷ SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 and 2004 National Study of Postsecondary Faculty (NSOPF:99;04). Table 256. (December 2008.)

⁸ SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 and 2004 National Study of Postsecondary Faculty (NSOPF:99;04). Table 256. (December 2008.)

Part I: Gender and minority status versus current and starting rank

I.1. Description of tenured and tenure eligible faculty current rank distribution

Table 1 depicts the number and percentage of faculty at each rank, with the added detail of named professorships in 2010, a category not previously studied.

Table 1: Gender and minority status by rank (tenured and tenure eligible faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>2010 (N=674)</u>						
Assistant	69 (63%)	41 (37%)	26 (24%)	84 (76%)	6 (6%)	104 (94%)
Associate	107 (63%)	62 (37%)	42 (25%)	125 (75%)	20 (12%)	147 (88%)
Full+Named	304 (77%)	91 (23%)	40 (10%)	354 (90%)	26 (7%)	368 (93%)
Full	235 (77%)	70 (23%)	32 (11%)	272(89%)	22 (7%)	282 (93%)
Named	69 (77%)	21 (23%)	8 (10%)	82(90%)	4 (4%)	86 (96%)
<u>2005 (N=586)</u>						
Assistant	73 (73%)	27 (27%)	21 (21%)	79 (79%)	8 (8%)	92 (92%)
Associate	88 (62%)	53 (38%)	31 (22%)	110 (78%)	19 (13%)	122 (87%)
Full+Named	274 (79%)	71 (21%)	35 (10%)	310 (90%)	23 (7%)	322 (93%)
<u>2000 (N=513)</u>						
Assistant	47 (59%)	33 (41%)	22 (27%)	58 (73%)	9 (11%)	71 (89%)
Associate	80 (70%)	34 (30%)	17 (15%)	97 (85%)	12 (11%)	102 (89%)
Full+Named	263 (82%)	56 (18%)	31 (10%)	288 (90%)	21 (7%)	298 (93%)

Note: ethnicity data was missing for 3 faculty in the 2010 cross section.

I.2. Analysis of tenured and tenure eligible faculty current rank distribution

Tests against prior year cross sections have established that there are statistically significant relationships for gender, minority status, and underrepresented minority status with rank, and that all three categories are underrepresented at the full professor rank. These relationships persist in the 2010 cross section:

The null hypothesis that gender and rank are independent was rejected with the chi-square statistic ($\chi^2=15.38$, $p<0.01$). Gender and rank are associated, for instance, females are underrepresented in the professor rank (91 females are observed to be full or named professors compared to the 114 expected under independence). In 2000, gender and rank were also found to be statistically associated ($\chi^2=22.45$, $p<0.0001$).

The null hypothesis that minority status and rank are independent was rejected with the chi-square statistic ($\chi^2=25.21$, $p<0.0001$). Minority status and rank are associated, for instance, minority faculty are underrepresented in the professor rank (40 are observed to be full or named professors compared to the 63 expected under independence). In 2000, minority status and rank were also found to be associated ($\chi^2=17.36$, $p<0.001$).

The null hypothesis that underrepresented minority status and rank are independent was not rejected with the chi-square statistic ($\chi^2=6.47$, $p<0.09$). However, since $p<0.1$ these

results may show a trend towards significance, and the relationship should continue to be monitored in the future. This relationship was not significant in the 2000 analysis ($\chi^2=2.92$, $p=0.23$).

The study of processes that affect the persistence of these relationships – namely hiring and career progression – will be further examined in the following pages and in Part III.

I.3. Description of tenured and tenure eligible faculty hiring cohorts

Faculty who were hired at the rank of assistant, associate (with or without tenure), full, or named professor between academic year 1999 and academic year 2010 were selected (N=467) for the starting rank and starting salary analyses. Faculty who were hired at the rank of assistant, associate, full, or named professor but were not tenure eligible (N=15) were excluded from all new hire analyses.

Over the past twelve years, Arts and Science has hired 467 tenured or tenure eligible faculty members. Of these, 150 have been female and 317 have been male. 90 have been minorities and 364 have not been minorities. 39 have been underrepresented minorities while 415 have not been underrepresented minorities. Counts of new hires are presented in Table 2. Breaking down new hires into two six year cohorts, one from 1999 to 2004 and the other from 2005 to 2010 allows for a comparison of demographics over time. From 1999 to 2004, 31% of new hires were female, while from 2005 to 2010 33% were female. From 1999 to 2004, 20% of new hires were minorities, and this percentage stays constant in the 2005 to 2010 cohort. 10% of new hires were underrepresented minorities from 1999 to 2004, and 7% of new hires were underrepresented minorities from 2005 to 2010.

Table 2: New hires by gender and minority status (Tenured and tenure eligible faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
Total new hires 1999 to 2010 (N=467)	317 (68%)	150 (32%)	90 (20%)	364 (80%)	39 (9%)	415 (91%)
New hires 2005 to 2010 (N=240)	160 (67%)	80 (33%)	48 (20%)	192 (80%)	18 (7%)	222 (93%)
New hires 1999 to 2004 (N=227)	157 (69%)	70 (31%)	42 (20%)	172 (80%)	21 (10%)	193 (90%)

Note: Ethnicity data was missing for 13 new hires from the 1999 to 2004 cohort.

I.4. Analysis of candidate screening for new hires

There were 235 short lists available for open academic positions that led to a new hire from 1999 to 2010. 84 female new hires and 151 male new hires comprised these short lists. Notably, short lists were only available for 50% of new hires, and were not available for the Courant Institute of Mathematical Sciences.

3 (1%) of these positions had no reported female applicants while 1 of these positions had no male applicants. Females accounted for 50% or more of the applicants in 48 cases (20%), while in 187 cases the applicant pool was more than 50% male.

Of these 235 positions, 232 had more than 1 finalist recorded. For 36 positions (16%) there were no reported female finalists and for 18 positions (8%) there were no reported male finalists. Females accounted for 50% or more of the finalists in 77 cases (33%), while in 155 cases the finalist pool was more than 50% male.

A logistic regression model controlling for the division of the position shows that the proportion of female finalists impacts whether or not a female applicant is hired (Table 3).

Table 3: Logistic regression of female applicant hired from 330 short lists (Tenured and tenure eligible faculty)

	<u>Female applicant hired</u>
Intercept	-2.75 (.361)***
Proportion female finalists	0.05 (.01)***
<u>Division</u>	
Science vs. Social science	-0.35 (.29)
Humanities vs. Social science	0.24 (.23)

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

I.5. Analysis of tenured and tenure eligible faculty starting rank distribution

Starting rank is analyzed for association with gender, minority status, and underrepresented minority status for an overall picture of hiring in the last 12 years and also for an understanding of each hiring cohort.

Table 4: Starting rank by hiring cohort, by gender and minority status (Tenured and tenure eligible faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>2005 to 2010</u>						
<u>(N=240)</u>						
Assistant (N=120)	76 (63%)	44 (37%)	26 (22%)	94 (78%)	7 (6%)	113 (94%)
Associate without tenure (N=9)	4 (44%)	5 (56%)	4 (44%)	5 (56%)	2 (22%)	7 (78%)
Associate with tenure (N=46)	26 (57%)	20 (43%)	14 (30%)	32 (70%)	7 (15%)	39 (85%)
Full (N=49)	41 (84%)	8 (16%)	3 (6%)	46 (94%)	2 (4%)	47 (96%)
Named (N=16)	13 (81%)	3 (19%)	1 (6%)	15 (94%)	0 (0%)	16 (100%)
<u>1999 to 2004</u>						
<u>(N=227)</u>						
Assistant (N=114)	84 (74%)	30 (26%)	24 (22%)	87 (78%)	9 (8%)	102 (92%)
Associate without tenure (N=7)	5 (71%)	2 (29%)	1 (17%)	5 (83%)	1 (17%)	5 (83%)
Associate with tenure (N=33)	20 (61%)	13 (39%)	6 (21%)	23 (79%)	3 (10%)	26 (90%)
Full (N=72)	47 (65%)	25 (35%)	10 (15%)	57 (85%)	7 (10%)	60 (90%)
Named (N=1)	1 (100%)	0 (0%)	1 (100%)	0 (0%)	1 (100%)	0 (0%)

Starting rank was not associated with gender overall ($\chi^2=7.33$, $p=0.12$) or in the 1999 to 2004 cohort ($p=0.52$). However, starting rank was associated with gender in the 2005 to 2010 cohort ($p=0.01$), where female faculty were underrepresented in the professor rank (8 observed versus 16 expected under independence) and overrepresented in the associate professor with tenure rank (20 observed versus 15 expected under independence).

Overall, starting rank was significantly associated with minority status ($\chi^2=10.5$, $p=0.03$). Minorities were over-represented in the associate professor with tenure rank (20 observed versus 15 expected under independence) and underrepresented at the professor rank (13 observed versus 23 expected under independence). Starting rank was not associated with minority status in the 1999 to 2004 cohort ($p=0.33$), but was significantly associated with minority status in the 2005 to 2010 cohort ($p=0.004$).

Underrepresented minority status was not associated with starting rank overall ($p=0.19$) or in the 1999 to 2004 cohort ($p=0.16$). Starting rank began to show a trend towards association with underrepresented minority status in the 2005 to 2010 cohort ($p=0.06$).

I.6. Description of contract faculty rank distribution

Table 5 depicts the number and percentage of contract faculty by rank.

Table 5: Gender and minority status by rank (Contract faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>2010 (N=294)</u>	<u>(N=294)</u>		<u>(N=292)</u>		<u>(N=292)</u>	
Contract Total	145 (49%)	149 (51%)	66 (22%)	226 (78%)	34 (12%)	258 (88%)
Clin. Assistant	13 (46%)	15 (54%)	8 (29%)	20 (71%)	4 (14%)	24 (86%)
Clin. Associate	27 (67%)	13 (33%)	9 (23%)	31 (77%)	5 (13%)	35 (88%)
Clin. Professor	18 (78%)	5 (22%)	4 (18%)	18 (82%)	3 (14%)	19 (86%)
Lang. Lectr.	46 (41%)	66 (59%)	26 (23%)	85 (77%)	10 (9%)	101 (91%)
Sr. Lang. Lectr.	6 (32%)	13 (68%)	6 (32%)	13 (68%)	3 (16%)	16 (84%)
Master Teacher	35 (49%)	37 (51%)	13 (18%)	59 (82%)	9 (13%)	63 (88%)
<u>2005 (N=85)</u>						
Contract Total	39 (46%)	46 (54%)	22 (26%)	63 (74%)	8 (9%)	77 (91%)
<u>2000 (N=37)</u>						
Contract Total	18 (48%)	19 (52%)	13 (35%)	24 (65%)	2 (5%)	35 (95%)

Note: ethnicity data was missing for 2 contract faculty in the 2010 cross section.

I.7. Description of contract faculty hiring cohorts

Faculty who were hired at the rank of clinical assistant, clinical associate, clinical full professor, language lecturer, senior language lecturer, or master teacher between academic year 1999 and academic year 2010 were selected (N=346) for the starting rank and starting salary analyses. Over the past twelve years, Arts and Science has hired 346 contract faculty members. Of these, 176 have been female and 170 have been male. 79 have been minorities and 258 have not been minorities. 35 have been underrepresented minorities while 302 have not been underrepresented minorities.

Counts of new hires are presented in Table 6. Breaking down new hires into two six year cohorts, it can be seen that from 1999 to 2004, 46% of new hires were female, while from 2005 to 2010 51% were female. From 1999 to 2004, 25% of new hires were minorities, while from 2005 to 2010, 23% of new hires were minorities. 9% of new hires were underrepresented minorities from 1999 to 2004, and 11% of new hires were underrepresented minorities from 2005 to 2010.

Table 6: New hires by gender and minority status (Contract faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
Total new hires 1999 to 2010 (N=346)	170 (49%)	176 (51%)	79 (24%)	258 (77%)	35 (10%)	302 (90%)
New hires 2005 to 2010 (N=241)	122 (51%)	119 (49%)	55 (23%)	186 (77%)	26 (11%)	215 (89%)
New hires 1999 to 2004 (N=105)	48 (46%)	57 (54%)	24 (25%)	72 (75%)	9 (9%)	87 (91%)

Note: Ethnicity data was missing for 9 contract new hires from the 1999 to 2004 cohort.

I.8. Analysis of contract faculty starting rank distribution

Starting rank is analyzed for association with gender, minority status, and underrepresented minority status for an overall picture of hiring in the last 12 years and also for an understanding of each hiring cohort.

Table 7: Starting rank by hiring cohort, by gender and minority status (Contract faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>2005 to 2010</u>						
<u>(N=241)</u>						
Clin. Assistant (N=23)	13 (57%)	10 (43%)	3 (13%)	20 (87%)	1 (4%)	22 (96%)
Clin. Associate (N=25)	20 (80%)	5 (20%)	7 (28%)	18 (72%)	4 (16%)	21 (84%)
Clin. Professor (N=14)	10 (71%)	4 (29%)	2 (14%)	12 (86%)	2 (14%)	12 (86%)
Lang. Lectr. (N=152)	67 (44%)	85 (56%)	35 (23%)	117 (77%)	13 (9%)	139 (91%)
Sr. Lang. Lectr. (N=0)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Master Teacher (N=27)	12 (44%)	15 (56%)	8 (30%)	19 (70%)	6 (22%)	21 (78%)
<u>1999 to 2004</u>						
<u>(N=105)</u>						
Clin. Assistant (N=19)	15 (79%)	4 (21%)	2 (18%)	9 (82%)	0 (0%)	11 (100%)
Clin. Associate (N=7)	5 (71%)	2 (29%)	0 (0%)	7 (100%)	0 (0%)	7 (100%)
Clin. Professor (N=2)	1 (50%)	1 (50%)	0 (0%)	1 (100%)	0 (0%)	1 (100%)
Lang. Lectr. (N=36)	9 (25%)	27 (75%)	15 (42%)	21 (58%)	5 (14%)	31 (86%)
Sr. Lang. Lectr. (N=10)	4 (40%)	6 (60%)	3 (30%)	7 (70%)	1 (10%)	9 (90%)
Master Teacher (N=31)	14 (45%)	17 (55%)	4 (13%)	27 (87%)	3 (10%)	28 (90%)

Note: Ethnicity data was missing for 9 contract new hires from the 1999 to 2004 cohort.

Starting rank was associated with gender overall ($p < 0.01$) and in the 1999 to 2004 cohort ($p < 0.01$). In the 2005 to 2010 cohort ($\chi^2 = 14.18$, $p = 0.005$), female faculty were underrepresented in the clinical associate professor rank (5 observed versus 12 expected under independence) and overrepresented in the language lecturer rank (85 observed versus 75 expected under independence).

Overall, starting rank was not associated with minority status ($p = 0.41$). Starting rank was not associated with minority status in the 2005 to 2010 cohort ($p = 0.59$), but was associated with minority status in the 1999 to 2004 cohort ($p = 0.05$). Underrepresented minority status was not associated with starting rank overall ($p = 0.43$) or in the cohorts ($p = 0.15$, $p = 0.80$).

Part II: Gender and minority status versus current and starting salary

II.1. Description of tenured and tenure eligible faculty current salary distribution

Table 8 depicts average salary at each rank, with the added detail of named professorships in 2010, a category not previously studied.

Table 8: Mean salary by gender, minority status, and salary (Tenured and tenure eligible faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u> (N=670)	<u>Female</u> (N=670)	<u>Yes</u> (N=667)	<u>No</u> (N=667)	<u>Yes</u> (N=667)	<u>No</u> (N=667)
2010 (N=670)						
Assistant	86,859 (16,072)	82,620 (14,475)	83,739 (14891)	85,757 (15,824)	82,410 (10,381)	85,445 (15,832)
Associate	105,067 (26,603)	100,819 (15,998)	108,342 (23036)	101,862 (23,401)	113,409 (29,172)**	102,143 (22,296)**
Full	161,082 (52,996)*	151,760 (34,823)*	160,309 (0.2640)	158,368 (50,402)	167,020 (40,609)	157,907 (49,808)
Named	208,395 (49,317)*	188,453 (35,247)*	193,520 (0.1152)	204,740 (48,626)	†	†

Note: Salary data was missing for 4 tenure and tenure eligible faculty. †Categories with <=5 faculty are not reportable due to confidentiality concerns. ***p<.01 **p<.05 *p<.10

Two sample t-tests were run to compare the average salaries of male and female faculty within each rank. There is a trend towards significance upon comparing male and female full professor's salary (p=0.08) and named professor's salary (p=.09). There is a significant difference between under-represented minority and non-URM salaries at the associate professor rank (p=0.04).

II.2. Analysis of tenured and tenure eligible faculty current salary distribution

Prior studies have established that, when taken in isolation, gender appears to be a significant predictor of log salary. However, it was also found that after controlling for department, rank, and year of hire, gender is no longer a significant predictor of log salary. We repeated this regression to verify the continuation of this trend:

Table 9: Regression of log salary by gender, rank, department, and year of hire (Tenured and tenure eligible faculty)

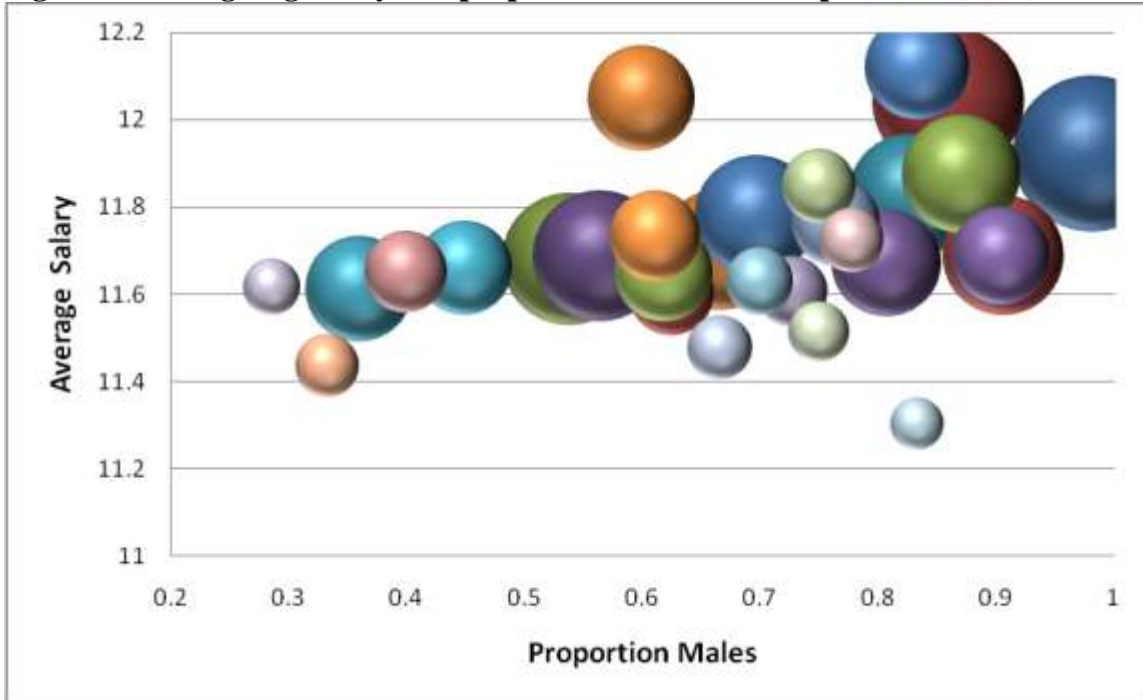
	<u>2010</u>	<u>2005</u>	<u>2000</u>
Intercept	11.84 (0.06)	11.69 (0.06)***	11.55 (0.06)***
Female	-0.01 (0.02)	-0.03 (0.02)	-0.02 (0.03)
<u>Rank</u>			
Assistant	-0.73 (0.03)***	-0.82 (0.03)***	-0.76 (0.03)***
Associate	-0.43 (0.02)***	-0.47 (0.02)***	-0.47 (0.02)***
Named	0.27 (0.03)***	N.S.	N.S.
Department	***	***	***
†			
Year of Hire	0.01 (0.00)***	0.01 (0.01)***	0.01 (0.00)***
R ²	0.73	0.68	0.70
N	663	586	513

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

†Due to the number of variables, only the overall significance of the variable department is shown.

II.3. Analysis of tenured and tenure eligible faculty average departmental salary

Figure 6: Average log salary and proportion males in the department (2010)



Notes: The size of the bubble is proportional to the size of the department. Departments with ≤ 5 tenure track faculty are excluded from this graph.

A linear regression model on aggregate data grouped by department was constructed to test the relationship between departmental average log salary and departmental gender composition (Table 10). The 2000, 2005, and 2010 reduced models show a positive correlation between average department salary and proportion males. In 2010, however, this association appears to be due to the proportion of assistant and associate professors in the department, as in the full model, gender is no longer a significant factor. These data can only be interpreted at the departmental level. To contextualize this association, median salary by discipline from the 2010 National Faculty Salary Survey (NFSS) has a 0.44 correlation with the proportion of male faculty in the discipline reported by the NCES in 2004. Additionally, “New Assistant Professor” starting salary from the same NFSS survey has a .44 correlation with the proportion of 2009 male PhDs graduates in the field reported by the Council of Graduate Schools.

Table 10: Linear regression on average departmental salary (Tenured and tenure eligible faculty)

	2010		2005		2000	
	<u>Reduced</u> <u>model</u>	<u>Full</u> <u>model</u>	<u>Reduced</u> <u>model</u>	<u>Full</u> <u>model</u>	<u>Reduced</u> <u>model</u>	<u>Full</u> <u>model</u>
Intercept	11.46 (0.082)	11.80 (0.127)***	11.27 (0.121)***	11.51 (0.126)***	11.09 (0.094)***	11.37 (0.071)***
Proportion Males	0.402 (0.115)**	0.11 (0.125)	0.38 (0.169)**	0.41 (0.152)**	0.34 (0.131)**	0.30 (.083)**
<u>Rank</u>						
Proportion Assistant		-0.55 (0.246)*		-0.76 (0.232)**		-0.82 (0.141)***
Proportion Associate		-0.33 (0.139)**		-0.52 (0.154)**		-0.48 (0.119)**
Proportion Named		0.23 (0.108)**				
Year of Hire		0.001 (0.005)		0.02 (0.006)**		0.01 (0.004)**
R ²	0.26	0.63	0.15	0.60	0.15	0.71
N	36	36	29	29	33	33

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

II.4. Description of tenured and tenure eligible faculty starting salary distribution

Table 11 displays mean starting salaries by rank and gender. Within each rank, male and female salaries were tested with a two sample t-test. In the 1999 to 2004 cohort, there appears to be a trend towards a significant difference between male and female faculty in the assistant professor rank. Other than this, no two means were found to be significantly different from each other. Similar analyses found no difference in mean starting salary within rank by minority status or underrepresented minority status.

Table 11: Mean starting salary by gender, minority status, and underrepresented minority status (Tenured and tenure eligible faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>2005 to 2010</u>						
<u>(N=240)</u>						
Assistant (N=119)	81,965 (15,899)	77,120 (15,109)	78,785 (14,775)	80,562 (16,034)	75,629 (10,091)	80,458 (15,998)
Associate without tenure (N=9)	†	†	†	†	†	†
Associate with tenure (N=44)	111,056 (19,902)	102,444 (13,295)	104,838 (12,519)	108,791 (19,922)	101,675 (14,773)	108,641 (18,334)
Full (N=48)	171,609 (39,183)	161,185 (34,962)	†	†	†	†
Named (N=16)	†	†	†	†	†	†
<u>1999 to 2004</u>						
<u>(N=227)</u>						
Assistant (N=113)	65,601 (13,068)*	59,238 (18,651)*	60,854 (9,491)	64,648 (16,202)	60,138 (9,052)	64,186 (15,500)
Associate without tenure (N=6)	†	†	†	†	†	†
Associate with tenure (N=33)	90,166 (19,704)	84,962 (26,256)	100,333 (32,880)	85,283 (19,032)	†	†
Full (N=72)	140,727 (44,708)	129,628 (27,152)	130,929 (38,045)	139,293 (41,044)	123,184 (42,054)	139,778 (40,259)
Named (N=1)	†	†	†	†	†	†

†Categories with <=5 faculty are not reportable due to confidentiality concerns. Significant differences between salaries within rank are noted ***p<.01 **p<.05 *p<.10.

II.5. Analysis of tenured and tenure eligible faculty starting salary distribution

A linear regression model on log starting salary was constructed to test the relationship between log starting salary and gender for new hires (Table 12). After controlling for starting rank, department, and year of hire, gender is no longer a significant predictor of log starting salary. Instead, rank, department, and year of hire appear to explain the majority of the variance in log salary. In this analysis, 6 faculty members were missing starting salary information due to incomplete faculty records. Therefore N=460 in the starting salary analysis.

Table 12: Linear regression of log starting salary (Tenured and tenure eligible faculty)

	<u>Full model</u>
Intercept	11.63 (0.16)***
Female	0.01 (0.02)
<u>Starting Rank</u>	
Assistant	-0.76 (0.02)***
Associate without tenure	-0.57 (0.05)***
Associate with tenure	-0.41 (0.02)***
Named Professor	0.09 (0.05)
Department†	***
Year of hire	0.04 (0.002)***
R ²	0.86
N	460

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

†Due to the number of dummy variables, only the overall significance of the variable department is shown.

Starting rank, department, and year of hire are significant predictors of log starting salary. For instance, assistant professors start, on average, at .76 units less log salary than full professors; associate professors without tenure start, on average, at .57 units less log salary compared to full professors; associate professors with tenure start, on average, at .41 units less log salary compared to full professors, holding all else constant. Additionally, for every one unit increase in year of hire, log starting salary increases by .04 units, on average, holding gender, rank, and department constant.

II.6. Description of contract faculty salary distribution

Table 13 displays mean salaries by rank and gender for contract faculty. Within each rank, male and female salaries were tested with a two sample t-test. There is a trend towards significance between minority and non-minority language lecturers ($p=0.06$) and a significant difference between master teacher minority and non-minority salary ($p=0.009$) and also master teacher URM and non-URM average salary ($p=0.004$).

Table 13: Mean salary by gender, minority status, and underrepresented minority status (Contract faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>2010 (N=294)</u>	<u>(N=294)</u>		<u>(N=292)</u>		<u>(N=292)</u>	
Clin. Assistant	67,123 (8,155)	64,684 (11,764)	63,718 (9,028)	68,058 (8,848)	†††	†††
Clin. Associate	83,388 (16,922)	80,294 (11,582)	75,234 (11,726)	84,458 (15,754)	†††	†††
Clin. Professor	114,890 (56,415)	97,009 (51,886)	†††	†††	†††	†††
Lang. Lectr.	46,324 (24,09)	46,851 (3,199)	45,755 (3,065)*	46,959 (2,779)*	44,214 (2,842)	46,921 (2,780)
Sr. Lang. Lectr.	57,715 (13,265)	55,795 (5654)	53,631 (3,982)	57,680 (9,712)	†††	†††
Master Teacher	66,680 (19,783)	61,082 (8,619)	58,369 (4,533)***	65,000 (16,521)***	57,947 (2,935)***	64,64 (16,126)***

†Categories with ≤ 5 faculty are not reportable due to confidentiality concerns.

II.7. Analysis of contract faculty current salary distribution

Prior studies have established that, when taken in isolation, gender appears to be a significant predictor of log salary. However, it was also found that after controlling for department, rank, and year of hire, gender is no longer a significant predictor of log salary. We repeated this regression to verify the continuation of this trend. In 2010, it appears that there is a small significant relationship between gender and log salary after controlling for rank, department, and year of hire. Females earn, on average .04 units less log salary than male contract faculty.

Table 14: Regression of log salary by gender, rank, department, and year of hire (Contract faculty)

	<u>2010</u>	<u>2005</u>	<u>2000</u>
Intercept	10.83 (0.15)***	10.45 (0.06)***	10.65 (0.32)***
Female	-0.04 (0.02)**	0.00 (0.03)	-0.00 (0.08)
Contract		0.18 (0.05)	-0.01 (0.25)
Clin. Assistant	0.27 (0.05)***		
Clin. Associate	0.37 (0.05)***		
Clin. Professor	0.62 (0.06)***		
Lang. Lectr.	-0.09 (0.04)**		
Master Teacher	0.26 (0.15)*		
Department†	***	***	N.S.
Year of hire	-0.01 (0.00)***	-0.02 (0.00)***	-0.04 (0.12)***
R ²	.81	.77	.69
N	293	124	46

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

†Due to the number of variables, only the overall significance of the variable department is shown.

To further examine the significant difference in Liberal Studies faculty mean salary by minority status, a regression model was constructed on the 2010 cross section of Liberal Studies faculty. After controlling for area and year of hire, minority status is no longer a significant predictor of log salary (Table 15). Similarly, under-represented minority status is no longer a significant predictor of log salary after controlling for area and year of hire (Table 16).

Table 15: Regression of log salary by minority, rank, year of hire (Liberal Studies)

	Full
Intercept	11.00 (0.02)***
Minority	0.03 (0.03)
Area:	
Cultural Foundations	0.04 (0.03)
Economics	-0.03 (0.09)
Global Cultures	- 0.04 (0.04)
Science	0.03 (0.03)
Social Foundations	0.05 (0.03)
Year of hire	-0.016 (0.001)***
R ²	.75
N	71

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

Table 16: Regression of log salary by under-represented minority, rank, year of hire (Liberal Studies)

	Full
Intercept	11.00 (0.02)***
Minority	0.02 (0.03)
Area:	
Cultural Foundations	0.04 (0.03)
Economics	-0.03 (0.09)
Global Cultures	- 0.03 (0.04)
Science	0.03 (0.03)
Social Foundations	0.04 (0.03)
Year of hire	-0.016 (0.001)***
R ²	.75
N	71

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

Additionally, to further examine the trend in mean salary difference for language lecturers, a regression model was constructed on the 2010 cross section of faculty at this rank (Table 17). After controlling for department and year of hire, minority status is no longer trending towards significance as a predictor of log salary.

Table 17: Regression of log salary by minority, rank, year of hire (Language Lecturers)

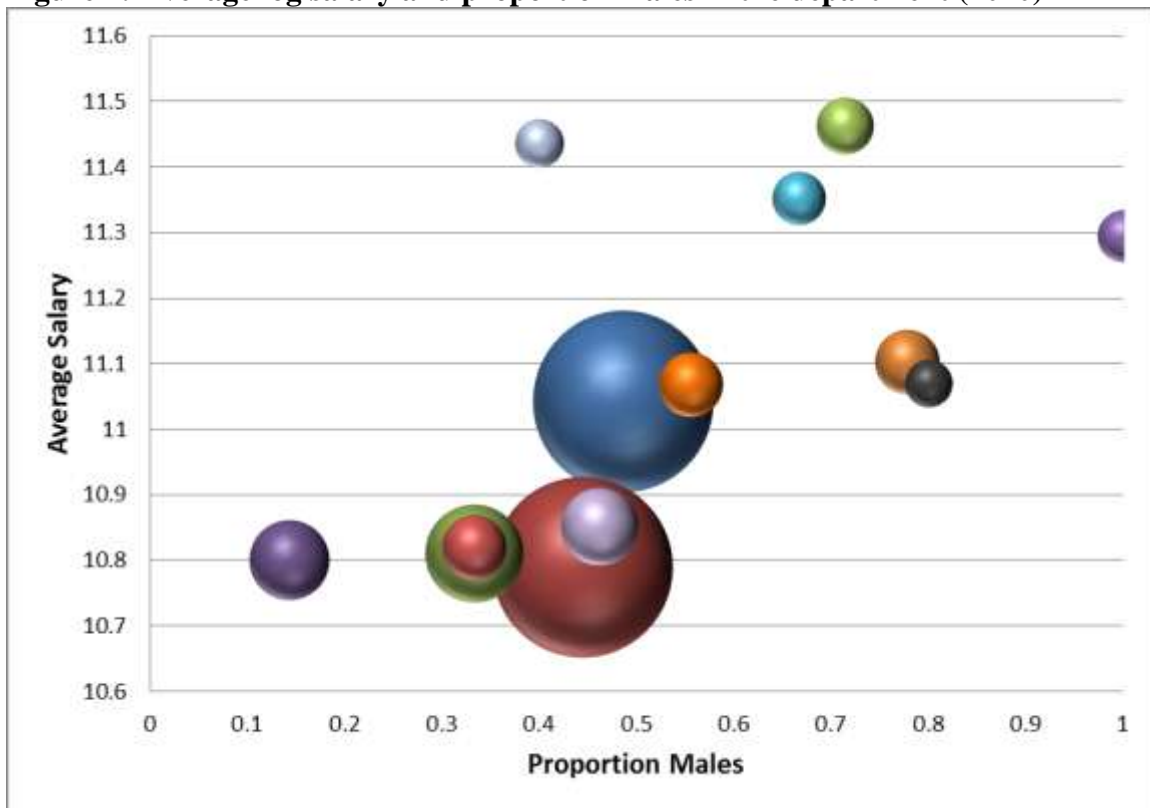
	Full
Intercept	10.69 (0.02)***
Minority	-0.02 (0.02)
Department†	***
Year of hire	-0.001 (0.001)
R ²	.41
N	111

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

†Due to the number of variables, only the overall significance of the variable department is shown.

II.3B. Analysis of contract faculty average departmental salary

Figure 7: Average log salary and proportion males in the department (2010)



Notes: The size of the bubble is proportional to the size of the department. Departments with ≤ 5 contract faculty are not shown in this graph.

A linear regression model on aggregate data grouped by department was constructed to test the relationship between departmental average log salary and departmental gender composition for contract faculty (Table 18). The reduced regression models show no significant relationship between the proportion of males in a department and the average departmental salary.

Table 18: Linear regression on average departmental salary (Contract faculty)

	<u>2010</u>	<u>2005</u>	<u>2000</u>
	<u>Reduced model</u>	<u>Reduced model</u>	<u>Reduced model</u>
Intercept	11.05 (0.102)***	10.78 (0.06)***	10.67 (0.06)***
Proportion Males	0.25 (0.150)	0.091 (0.09)	0.05 (0.09)
R ²	0.07	.035	.01
N	37	30	19

Note: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

II.8. Description of contract faculty starting salary distribution

Table 19 displays mean starting salaries by rank and gender. Within each rank, male and female salaries were tested with a two sample t-test. In the 2005 to 2010 hiring cohort, Language Lecturers were found to have significantly different mean starting salaries by gender.

Table 19: Mean starting salary by gender, minority status, and underrepresented minority status (Contract faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>2005 to 2010</u> (N=293)						
Clin. Assistant (N=22)	63,389 (15,547)	63,700 (12,658)	†	†	†	†
Clin. Associate (N=25)	†	†	75,643 (11,933)	77,261 (17,919)	†	†
Clin. Professor (N=14)	†	†	†	†	†	†
Lang. Lectr. (N=152)	44,728 (3,451)**	43,377 (4,441)**	43,823 (4,770)	44,005 (3,875)	42,518 (2,794)	44,100 (4,168)
Sr. Lang. Lectr. (N=0)	†	†	†	†	†	†
Master Teacher (N=27)	54,710 (2,486)	53,840 (3,241)	54,716 (2,961)	54,021 (2,944)	55,158 (3,255)	53,961 (2,832)
<u>1999 to 2004</u> (N=74)						
Clin. Assistant (N=19)	†	†	†	†	†	†
Clin. Associate (N=7)	†	†	†	†	†	†
Clin. Professor (N=2)	†	†	†	†	†	†
Lang. Lectr. (N=36)	41,906 (2,734)	40,573 (3,017)	39,846 (2,828)*	41,664 (2,894)*	†	†
Sr. Lang. Lectr. (N=10)	†	†	†	†	†	†
Master Teacher (N=31)	62,816 (23,543)	54,902 (6,783)	†	†	†	†

Note: Ethnicity data was missing for 9 contract new hires from the 1999 to 2004 cohort. †Categories with <=5 faculty are not reportable due to confidentiality concerns. Means are compared with a two sample t-test ***p<.01 **p<.05 *p<.10

II.9. Analysis of contract faculty starting salary distribution

A linear regression model on log starting salary was constructed to test the relationship between log starting salary and gender for new hires (Table 20). After controlling for starting rank, department, and year of hire, gender is no longer a significant predictor of log starting salary.

Table 20: Linear regression of log starting salary (Contract faculty)

	1999-2010	
	<u>Reduced model</u>	<u>Full model</u>
Intercept	10.87 (0.02)***	10.49 (0.16)***
Female	-0.11 (0.03)***	-0.02 (0.01)
<u>Starting Rank</u>		
Clin. Assistant		0.24 (0.06)***
Clin. Associate		0.61 (0.07)***
Clin. Professor		0.95 (0.10)***
Lang. Lectr		-0.18 (0.05)***
Master Teacher		0.45 (0.16)***
Department†		†††
Year of hire		0.02 (0.003)***
R ²	0.05	0.79
N	327	327

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

†Due to the number of dummy variables, only the overall significance of the variable department is shown.

Part III: Tenured and tenure eligible career progression

III.1. Description of the data on tenure eligible new hires

Two cohorts of tenure-eligible new hires were constructed for the tenure decisions and tenure process analysis. The 1999-2004 new hire cohort consisted of 114 tenure eligible faculty. The 2005-2010 new hire cohort consisted of 129 tenure-eligible faculty. These two cohorts were also combined for some tenure decisions and tenure process analyses to represent all tenure-eligible new hires from the past 12 years (N=243).

III.2. Descriptive statistics of tenure results of tenure-eligible new hires

Figure 8 visually depicts the 2010 tenure status of all individuals who were hired as tenure-eligible faculty in the last twelve years. Figure 9 shows the 2010 status of all individuals who were hired as tenure-eligible faculty between 1999 and 2004. Figure 10 shows the 2010 status of faculty who were hired as tenure-eligible between 2005 and 2010.

Figure 8: 2010 Status of tenure eligible new hires (1999 to 2010)

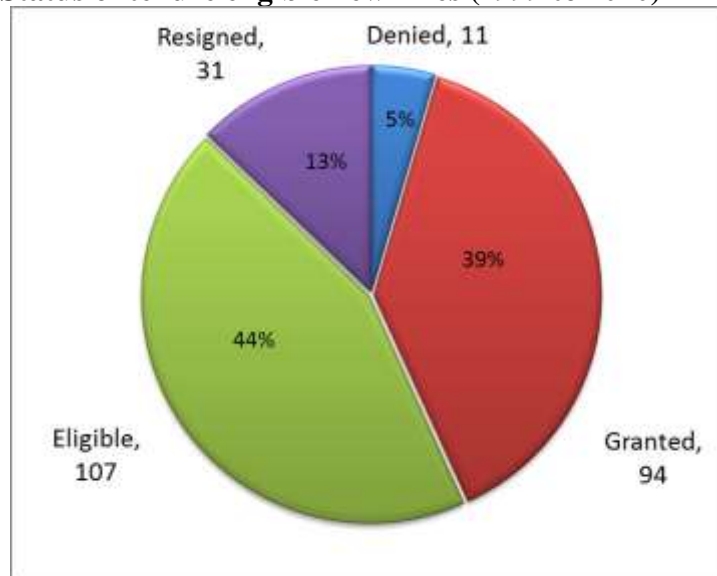


Figure 9: 2010 Status of tenure eligible new hires (1999 to 2004)

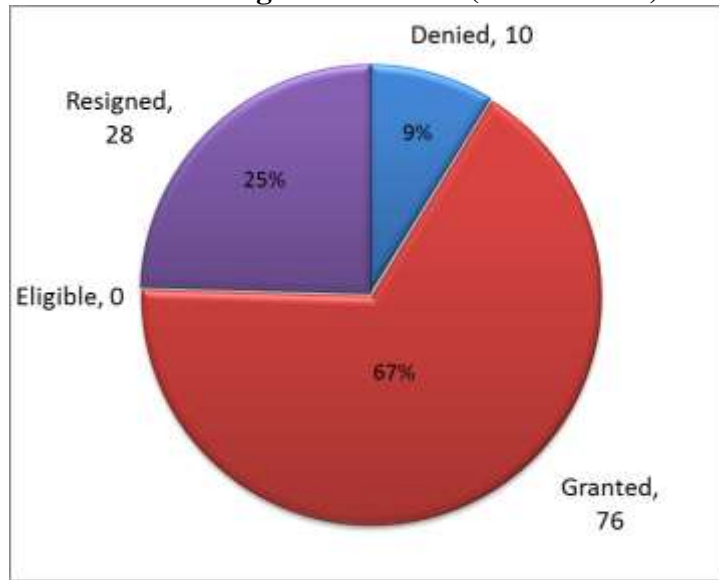
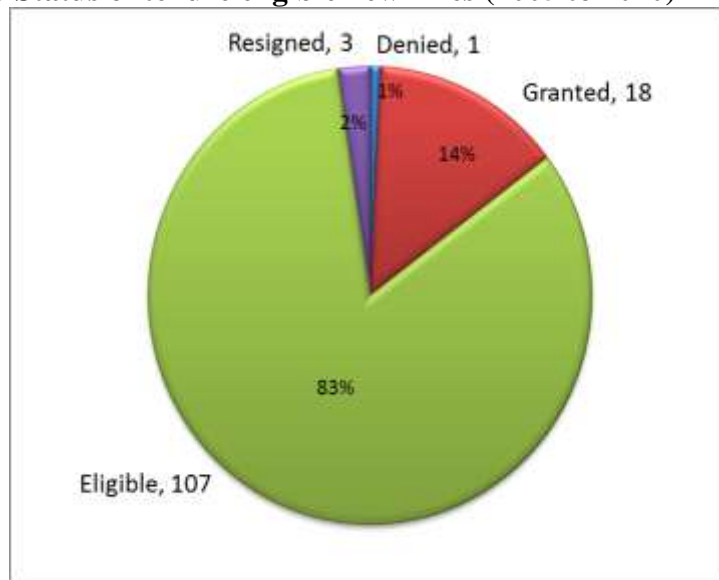


Figure 10: 2010 Status of tenure eligible new hires (2005 to 2010)



Out of the 114 tenure-eligible hires from 1999 to 2004, all individuals have been denied tenure, granted tenure, or have resigned as of 2010. This cohort has complete information regarding outcomes of the tenure process. Males and females in this cohort have very similar outcomes regarding tenure decisions. For example, 66% of males and 68% of females who were hired in this cohort have achieved tenure as of 2010. The similar distribution of outcomes for male and female tenure-track faculty in this cohort are visually depicted in figures 11 and 12:

Figure 11: 2010 Status of female tenure eligible new hires (1999 to 2004)

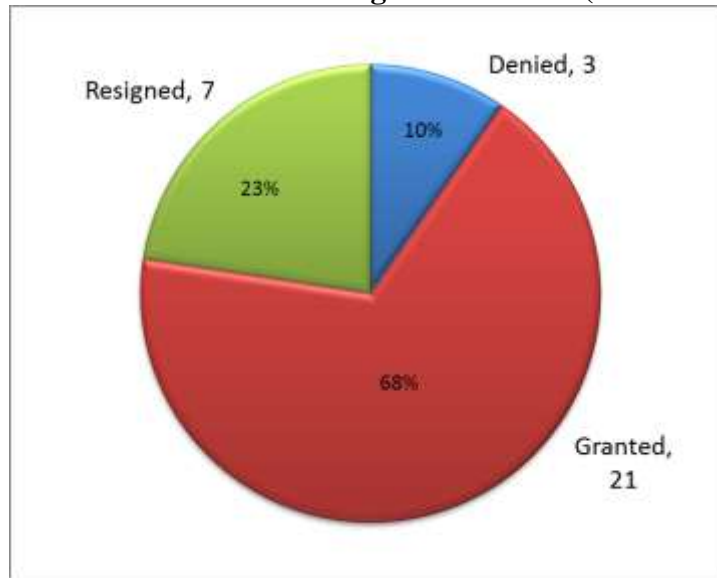
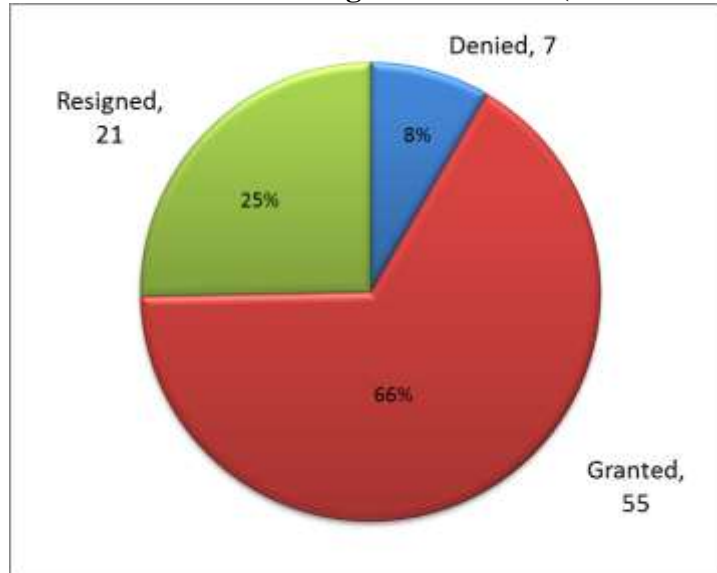


Figure 12: 2010 Status of male tenure eligible new hires (1999 to 2004)



III.3. Analysis of resignation rates for tenure-eligible faculty

Of the 243 tenure-eligible hires from 1999 to 2010, 31 resigned before their tenure review. 11 of these had a record indicating that they left because of a negative or potentially negative review (3 female and 8 male faculty). The bivariate association between resigning for a negative reason and gender, minority status, and underrepresented minority status (respectively) were tested with Fisher's exact tests. Gender ($p=0.85$), minority status ($p=0.99$), and underrepresented minority status ($p=0.99$) were not associated with resigning for a negative reason in the overall data.

As of 2010, for the tenure-eligible new hires (1999 to 2010) that resigned before review, female faculty resigned, on average, at 4.33 years while male faculty resigned on average at 3.68 years. These means are not significantly different, ($t=0.63$ $p=0.53$).

Of the 114 tenure-eligible hires from 1999 to 2004, 28 resigned before their tenure review. 10 of these had a record indicating that they left because of a negative or potentially negative review while 18 left for other reasons. Fisher's exact tests for this cohort reveal that gender ($p=0.31$), minority status ($p=0.38$), and underrepresented minority status ($p=0.99$) were not associated with resigning for a negative reason.

For the tenure-eligible hires in the 1999 to 2004 cohort that resigned before review, female faculty resigned, on average, at 5.00 years while male faculty resigned on average at 3.80 years. These means are not significantly different ($t=1.05$ $p=0.30$).

Resignation statistics cannot be calculated for the 2005-2010 new-hire cohort, due to the small number of resignations to date ($N=3$).

III.4. Analysis of early tenure decisions

Of the 243 tenure-eligible new hires from 1999 to 2010, 94 have been granted tenure as of 2010. Of these, 24 have been granted early tenure. Table 21 shows counts of early tenure by hiring cohort and gender. Overall, the decision to grant early tenure as opposed to regular tenure was not associated with gender ($p=0.44$), minority status ($p=0.99$), or underrepresented minority status ($p=0.18$).

Table 21: Early tenure decisions by gender (Tenured and tenure eligible faculty)

Year of hire	Tenure eligible new hires	Tenure eligible new hires females	Tenure eligible new hires males	Early tenure by 2010	Early tenure females	Early tenure males
1999 to 2010	243	80	163	24	5	19
2005 to 2010	129	49	80	5	0	5
1999 to 2004	114	31	83	19	5	14

In the 1999 to 2004 cohort, 76 faculty have been granted tenure as of 2010 and of these, 19 received early tenure. The decision to grant early tenure as opposed to regular tenure

was not associated with gender (p=0.99), minority status (p=0.99), or underrepresented minority status (p=0.59).

In the 2005 to 2010 cohort, 18 faculty have been granted tenure as of 2010 and of these, 5 received early tenure. The decision to grant early tenure as opposed to regular tenure was not associated with gender (p=0.11), minority status (p=0.49), or underrepresented minority status (p=0.28).

III.5. Analysis of survival until tenure decisions

Table 22 shows counts of faculty who have received tenure by 2010. To date, faculty that were tenure-eligible upon hire have taken anywhere from 1 to 7 years to achieve tenure, with 6.0 years as the median time until tenure. The median time to tenure for male and female faculty, as well as for minority and non-minority faculty members who have attained tenure to date is 6.0 years. The median time to tenure for underrepresented minority faculty is 4.5 years, and 6.0 years for non URM faculty.

Table 22: Survival until tenure by gender (Tenured and tenure eligible faculty)

Year of hire	Tenure eligible new hires	Tenure eligible new hires females	Tenure eligible new hires males	Tenure by 2010	Tenure females	Tenure males
1999 to 2010	243	80	163	94	27	67
2005 to 2010	129	49	80	18	6	12
1999 to 2004	114	31	83	76	21	55

The survival distributions of male and female, minority and non-minority, and underrepresented minority and other faculty were compared using the log-rank test, to test the null hypothesis that there is no difference between survival strata. Observations were censored if they had not been reviewed by academic year 2010.

Overall, from 1999 to 2010, 27 female faculty members have attained tenure to date and 53 female faculty members were censored. 67 male faculty members have attained tenure to date and 96 male faculty members were censored. The log-rank test shows no difference in the survival strata for male and female faculty ($\chi^2=0.09$, p=0.76).

Overall, from 1999 to 2010, 18 minority faculty members have attained tenure to date, while 36 were censored. 75 non-minority faculty members have attained tenure to date, while 110 were censored. The log-rank test shows no difference in the survival strata for minority and non-minority faculty ($\chi^2=0.40$, p=0.53).

Overall, from 1999 to 2010, 6 underrepresented minority faculty members have attained tenure to date, while 12 were censored. 87 non URM faculty members have attained tenure to date, while 134 were censored. The log-rank test shows no difference in the survival strata for underrepresented minority and non- underrepresented minority faculty ($\chi^2=0.45$, p=0.50).

Similar survival analyses were conducted for the 1999 to 2004 and 2005 to 2010 new hire cohorts. However, in both cohorts, gender, minority status, and underrepresented minority status were not significantly associated with survival until tenure. Results of the log-rank test for the 1999 to 2004 cohort include: $\chi^2=0.05$, $p=0.82$ for gender survival distributions, $\chi^2=0.02$, $p=0.89$, for minority status survival distributions, and $\chi^2=0.53$, $p=0.47$, for underrepresented minority status survival distributions. Results of the log-rank test for the 2005 to 2010 cohort include: $\chi^2=0.02$, $p=0.88$ for gender survival distributions, $\chi^2=1.14$, $p=0.29$, for minority status survival distributions, and $\chi^2=0.17$, $p=0.68$, for underrepresented minority status survival distributions.

III.6. Analysis of the tenure results of tenure-eligible new hires who were reviewed

Out of the 243 tenure-eligible hires from 1999 to 2010, 105 individuals (43%) have been reviewed for tenure as of academic year 2010. 90% were granted tenure and 10% were denied tenure. The decision of whether or not to deny or grant tenure was not associated with gender ($p=0.99$), minority status ($p=0.69$), or underrepresented minority status ($p=0.20$).

Of the 114 tenure-eligible hires from 1999 to 2004, 86 individuals were reviewed for tenure. 88% were granted tenure and 12% were denied tenure. The two-tailed Fisher's exact test shows that the decision of whether or not to deny or grant tenure is not associated with gender ($p=0.99$), minority status ($p=0.68$), or underrepresented minority status ($p=0.19$) for this cohort of hires.

Of the 129 tenure-eligible hires from 2005-2010, 19 have been reviewed for tenure as of academic year 2010 with a 95% success rate. To date, the two-tailed Fisher's exact test shows that the decision of whether or not to deny or grant tenure has not been associated with gender ($p=0.99$), minority status ($p=0.89$), or underrepresented minority status ($p=0.95$).

Part IV: Gender and minority status versus support and assigned roles

IV.1. Cross-sectional (2010, 2005, 2000) internal research analysis (Tenured and tenure eligible faculty)

The proportion of tenure and tenure eligible faculty receiving internal research support is shown in Table 23, and analysis of the amount of support in Table 24. Support is defined as a transfer into an internal fund managed by or for the faculty member.

Table 23: Received internal research support by gender and minority status (Tenured and tenure eligible faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
2010	256 (53%)	149 (77%)	71 (66%)	332 (59%)	42 (81%)	361 (58%)
2005	213 (49%)	107 (70%)	57 (65%)	263 (52%)	38 (76%)	282 (52%)
2000	143 (37%)	72 (59%)	36 (51%)	179 (40%)	27 (64%)	188 (40%)

Table 24: Linear regression on log internal research support (Tenured and tenure eligible faculty)

	<u>2010</u>		<u>2005</u>		<u>2000</u>	
	<u>Reduced model</u>	<u>Full model</u>	<u>Reduced model</u>	<u>Full model</u>	<u>Reduced model</u>	<u>Full model</u>
Intercept	8.83 (0.06)***	9.18 (0.15)***	8.59 (0.05)***	8.64 (0.16)***	8.48 (0.06)***	8.62 (0.21)***
Female	0.13 (0.07)	-0.01 (0.06)	-0.05 (0.08)	0.00 (0.06)	-0.32 (0.10)***	0.06 (0.09)
<u>Rank</u>						
Assistant		-0.72 (0.09)***		-0.99 (0.09)***		-0.87 (0.13)***
Associate		-0.32 (0.07)***		-0.49 (0.08)		-0.61 (0.13)***
Named		0.73 (0.09)***				
Department†		***		***		*
Year of hire		0.02 (0.00)***		0.03 (0.00)***		0.02 (0.01)***
R ²	.009	0.49	0.001	0.45	0.05	0.42
N	405	405	320	320	215	215

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

†Due the number of dummy variables, only the overall significance of the variable department is shown.

Gender is not a significant predictor of the amount of log internal research support in the reduced or full model in 2010, 2005, and 2000.

IV.2. Cross-sectional (2010, 2005, 2000) internal research analysis (Contract faculty)

The proportion of tenure and tenure eligible faculty receiving internal research support is shown in Table 25, and analysis of the amount of support in Table 26. Support is defined as a transfer into an internal fund managed by or for the faculty member.

Table 25: Received internal research support by gender and minority status (Contract faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
2010	112 (77%)	129 (87%)	56 (84%)	184 (81%)	28 (82%)	212 (82%)
2005	29 (47%)	46 (74%)	20 (69%)	55 (58%)	7 (77%)	68 (59%)
2000	5 (22%)	4 (17%)	3 (20%)	6 (19%)	1 (50%)	8 (18%)

In 2010, 87% of female contract faculty and 77% of male contract faculty receive research support. Gender is in fact associated with whether or not a contract faculty member receives support, with female faculty having nearly twice the odds of receiving support ($\chi^2=4.33$, $p=0.04$). However, this relationship is no longer significant upon controlling for division ($\chi^2=0.00$ $p=0.98$). Neither minority nor underrepresented minority status is associated with receiving research support ($\chi^2=0.41$ $p=0.52$, $\chi^2=0.00$ $p=0.98$).

Table 26: Linear regression on log internal research support (Contract faculty)

	2010		2005	
	Reduced model	Full model	Reduced model	Full model
Intercept	7.26 (0.044)***	7.68 (0.37)***	7.11 (0.072)***	7.06 (0.079)***
Female	-0.14 (0.07)**	-0.03 (0.05)	-0.02 (0.092)	0.00 (0.060)
Department†		***		***
Year of hire		-0.016 (0.004)***		-0.045 (0.007)***
R ²	0.02	0.55	0.003	0.76
N	241	241	75	75

Notes: Standard errors are in parentheses. *** $p<.01$ ** $p<.05$ * $p<.10$

†Due to the number of dummy variables, only the overall significance of the variable department is shown.

In addition to the categorical analysis, a subgroup analysis limited to faculty who received internal research support was conducted to test whether or not gender was a predictor of the logarithm of the amount of internal research support. In 2010 and 2005 gender is not a significant predictor of the amount of log internal research support in the full model. Since only 9 contract faculty received research support in 2000, a statistical model was not fit to the data from that year.

IV.3. Cross-sectional (2010, 2005, 2000) administrative responsibility analysis

Counts of tenured and tenure eligible faculty who have an administrative responsibility are displayed in table 27. Administrative responsibility was defined as being a dean or provost, a director of graduate or undergraduate studies, a department chair, or another officer of administration.

Table 27: Administrative responsibility by gender and minority status (Tenured and tenure eligible faculty)

	Gender		Minority		Underrepresented Minority	
	Male	Female	Yes	No	Yes	No
2010	84 (18%)	49 (25%)	18 (17%)	115 (20%)	12 (23%)	121 (20%)
2005	97 (22%)	40 (26%)	21 (24%)	116 (23%)	14 (28%)	123 (23%)
2000	98 (25%)	39 (31%)	13 (19%)	124 (28%)	12 (28%)	125 (27%)

The null hypothesis that gender and administrative responsibility are independent was tested with the chi-square statistic (2010: $\chi^2=5.19$, $p=0.02$ 2005: $\chi^2=1.09$, $p=0.29$ 2000:

$\chi^2=2.06$, $p=0.15$). Gender and having an administrative role are associated in 2010, and are further examined in the logistic regression model that follows.

The null hypothesis that minority status and administrative responsibility are independent was tested with the chi-square statistic (2010: $\chi^2=0.82$, $p=0.27$). Similarly, under-represented minority status was examined (2010: $\chi^2=0.82$, $p=0.27$). In both cases, the null hypothesis cannot be rejected; minority status and having an administrative role are independent.

The association between gender and having an administrative role is further explored with a logistic regression model.

Table 28: Logistic regression on administrative position (Tenured and tenure eligible faculty)

	2010	
	Reduced model	Full model
Intercept	-1.55 (0.12)***	7.68 (0.37)***
Female	0.46 (0.02)**	0.30 (0.22)
<u>Rank</u>		
Assistant Professor		-1.26 (0.32)***
Associate Professor		0.82 (0.18)***
Named Professor		0.43 (0.22)*
<u>Division</u>		
Humanities		0.34 (0.14)**
Science		-0.39 (0.16)**
R ²	0.007	0.07
N	673	673

Notes: Standard errors are in parentheses. *** $p<.01$ ** $p<.05$ * $p<.10$

†Due to the number of dummy variables, only the overall significance of the variable department is shown.

In the reduced model, females have 1.59 (95% CI: 1.07 to 2.34) times the chance of holding an administrative position. In the full model, gender is not a significant predictor of holding an administrative position.

Counts of contract faculty with administrative responsibilities are displayed in Table 29. The null hypothesis that gender and administrative responsibility are independent was tested with the chi-square statistic; gender and having an administrative role are independent in all three cross sections (2010: $\chi^2=0.006$, $p=0.93$).

Table 29: Administrative responsibility by gender and minority status (Contract faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
2010	14 (10%)	14 (9%)	11 (17%)	17 (8%)	4 (12%)	24 (9%)
2005	3 (5%)	8 (12%)	4 (14%)	7 (7%)	0 (0%)	11 (9%)
2000	2 (8%)	2 (9%)	1 (7%)	3 (10%)	0 (0%)	4 (9%)

The null hypothesis that minority status and administrative responsibility are independent was tested (2010: $\chi^2=4.93$, $p=0.03$). Minorities are over-represented in administrative roles with 11 minorities having these roles compared to the 6 expected under independence. However, underrepresented minority status and administrative responsibility are independent (Fisher's exact test 2010: $p=0.78$).

IV.4. Cross-sectional (2010) course analysis (Tenured and tenure eligible faculty)

Table 30 shows that there are no significant differences in the number of courses taught for male and female faculty, and that there are also no differences in the number of courses taught when faculty are grouped by minority status. There is a significant difference in the average number of students taught by gender, with male faculty teaching about 81 students per academic year on average, and female faculty teaching 60 students per year on average. This relationship is further explored in a linear regression model on log number of students (Table 31). There is no significant difference in the number of students taught by minority status.

Table 30: 2010 mean course assignments and course enrollments by gender, minority status, and salary (Tenured and tenure eligible faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u>	<u>Female</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
	<u>(N=397)</u>	<u>(N=163)</u>	<u>(N=93)</u>	<u>(N=494)</u>	<u>(N=45)</u>	<u>(N=512)</u>
Number of Courses	2.41 (1.14)	2.49 (1.20)	2.51 (1.18)	2.42 (1.15)	2.65 (1.22)	2.42 (1.15)
Number of Students	80.95 (70.04)***	60.00 (51.44)***	67.25 (57.57)	76.48 (104.6)	62.42 (48.17)	76.04 (67.22)

Note: Standard deviations are in parentheses. Significant differences in means are indicated by: *** $p<.01$ ** $p<.05$ * $p<.10$

Table 31: Regression on log number of students (Tenured and tenure eligible faculty)

	<u>2010</u>	
	<u>Reduced model</u>	<u>Full model</u>
Intercept	3.87 (0.05)***	3.78 (0.08)***
Female	-0.16 (0.09)*	-0.14 (0.09)
Year of Hire		-0.01 (0.004)***
<u>Rank</u>		
Assistant Professor		0.24 (0.14)*
Associate Professor		0.24 (0.11)**
Named Professor		-0.57 (0.14)***
R ²	0.005	0.07
N	554	554

Notes: Standard errors are in parentheses. *** $p<.01$ ** $p<.05$ * $p<.10$

Table 32 shows that, on average, female instructors receive a slightly higher rating on the course evaluation question “How would you rate the instructor overall?” Female tenure and tenure eligible faculty receive, on average, a 0.2 higher rating on a 5 point scale.

Table 32: 2010 mean instructor rating by gender, minority status, and salary (Tenured and tenure eligible faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u> (N=301)	<u>Female</u> (N=126)	<u>Yes</u> (N=71)	<u>No</u> (N=354)	<u>Yes</u> (N=35)	<u>No</u> (N=390)
Instructor Rating	4.32 (0.47)***	4.51 (0.37)***	4.30 (0.47)	4.38 (0.45)	4.28 (0.48)	4.38 (0.45)

Note: Standard deviations are in parentheses. Significant differences in means are indicated by: ***p<.01 **p<.05 *p<.10

8 of the 12 faculty who received the Golden Dozen award in 2010 were tenured or tenure eligible. Of these 8 faculty, 4 were male, and 4 were female. 1 was a minority and 0 were underrepresented minorities. 4 awardees were associate professors and 4 were full professors.

Fisher’s exact tests show that there is no association between gender and receiving a Golden Dozen award (p=0.24), minority status and receiving an award (p=0.99), and URM status and receiving an award (p=0.99).

IV.5. Cross-sectional (2010) course analysis (Contract faculty)

Table 33 shows that females, on average, have slightly more course assignments than their male contract faculty counterparts. This relationship is explored further in the regression that follows. Female contract faculty teach significantly fewer students, on average, in the 2010 academic year, however, when the log of students is taken and these means are compared, there is no difference indicating that a few courses with large enrollments may be biasing these means. There are no significant differences in the number of courses or number of students taught when faculty are grouped by minority status.

Table 33: 2010 mean course assignments and course enrollments by gender, minority status, and salary (Contract faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u> (N=135)	<u>Female</u> (N=140)	<u>Yes</u> (N=62)	<u>No</u> (N=212)	<u>Yes</u> (N=32)	<u>No</u> (N=242)
Number of Courses	4.03 (1.62)**	4.41 (1.50)**	4.33 (1.67)	4.19 (1.54)	4.22 (1.52)	4.23 (1.58)
Number of Students	128.40 (189.6)***	82.98 (67.18)***	97.16 (135.4)	107.8 (145.4)	109.50 (176.40)	104.90 (138.50)

Note: Standard deviations are in parentheses. Significant differences in means are indicated by: ***p<.01 **p<.05 *p<.10

Table 34: Regression on number of courses taught (Contract faculty)

	2010	
	<u>Reduced model</u>	<u>Full model</u>
Intercept	4.03 (0.13)***	4.96 (0.35)***
Female	0.37 (0.19)*	0.20 (0.18)
<u>Rank</u>		
Clin. Assistant		-1.36 (0.45)***
Clin. Associate		-0.99 (0.42)**
Clin. Professor		-2.08 (0.46)***
Lang. Lectr.		-1.08 (0.36)***
Master Teacher		-0.02 (0.37)
R ²	0.01	0.17
N	275	275

Notes: Standard errors are in parentheses. ***p<.01 **p<.05 *p<.10

Table 35 shows that, on average, underrepresented minority instructors receive a slightly lower rating on the course evaluation question “How would you rate the instructor overall?” Underrepresented minority contract faculty receive, on average, a 0.25 lower rating on a 5 point scale.

Table 35: 2010 mean instructor rating by gender, minority status, and salary (Contract faculty)

	<u>Gender</u>		<u>Minority</u>		<u>Underrepresented Minority</u>	
	<u>Male</u> (N=96)	<u>Female</u> (N=99)	<u>Yes</u> (N=47)	<u>No</u> (N=147)	<u>Yes</u> (N=24)	<u>No</u> (N=170)
Instructor Rating	4.51 (0.42)	4.55 (0.37)	4.45 (0.45)	4.56 (0.38)	4.31 (0.49)**	4.56 (0.37)**

Note: Standard deviations are in parentheses. Significant differences in means are indicated by: ***p<.01 **p<.05 *p<.10

4 of the 12 faculty who received the Golden Dozen award in 2010 were contract faculty. Of these 4 faculty, 3 were male, and 1 was female. No minority and no underrepresented minorities received this award in 2010. 2 awardees were clinical associate professors and 2 were language lecturers.

Fisher’s exact tests show that there is no association between gender and receiving a Golden Dozen award (p=0.36), minority status and receiving an award (p=0.58), and URM status and receiving an award (p=0.99).

IV.6. Cross-sectional (2010) analysis of Retention

16 faculty received outside offers in the 2010 academic year. Table 36 displays counts of these outside offers, if a counter offer was issued, and whether or not the counter offer was successful at retaining the faculty member. In cases where formal counter offers were not issued, emails were exchanged.

Table 36: Retention: Offers & Counter Offers

	Outside Offer	Counter Offer Issued	Counter Offer Accepted
<u>Gender</u>			
Female	6	4	3
Male	10	7	5
<u>Minority</u>			
Yes	7	6	4
No	9	5	4
<u>URM</u>			
Yes	0	0	0
No	16	11	8
<u>Rank</u>			
Assistant Professor	4	2	1
Associate Professor	7	6	4
Professor	3	1	1
Named Professor	2	2	2
<u>Departments with retentions</u>			
Anthropology	2	2	0
Chemistry	1	1	1
Classics	1	0	0
East Asian Studies	1	0	0
Economics	3	1	0
English	4	3	3
Music	1	1	1
Politics	1	1	1
Psychology	1	1	1
Sociology	1	1	1

Fisher's exact tests show that there is no association between gender and receiving a counter offer ($p=0.41$), and no association between minority status and receiving a counter offer ($p=0.20$).

IV.7. Cross-sectional (2010) analysis of Juried Awards

Table 37 displays counts of nominations for 11 external awards in the 2010 academic year. Awards included topic specific awards, early career awards, and major national research awards.⁹ Faculty who were nominated for more than one award are counted multiple times. If there were multiple nominees for an award, then all nominees are included in these counts.

Table 37: Award Nominations

	Count	Percent
<u>Gender</u>		
Female	3	18%
Male	17	82%
<u>Minority</u>		
Yes	2	12%
No	17	88%
<u>Rank</u>		
Assistant Professor	9	45%
Associate Professor	1	5%
Professor	5	25%
Named Professor	1	5%
Master Teacher	1	5%
Emeritus	3	15%
<u>Departments with nominations</u>		
Anthropology	1	
Art History	1	
Biology	4	
Chemistry	1	
Classics	1	
Computer Science	2	
History	1	
Liberal Studies	1	
Neural Science	3	
Psychology	1	
Physics	1	
Sociology	3	

18% of nominations were female, and 12% were minority. 0% were underrepresented minority. 45% of nominations were of faculty at the assistant professor rank, and 25% were of faculty at the professor rank. Faculty that were nominated for these awards came from a variety of departments.

Fisher's exact tests show that there is no association between gender and receiving a nomination ($p=0.21$), minority status and receiving a nomination ($p=0.23$), and URM status and receiving a nomination ($p=0.21$).

⁹ The 11 external awards include: The Dana Foundation Program in the Neuroimmunology of Brain Infections and Cancers, Ellison Medical Foundation, Andrew Mellon New Directions Fellowship, James S. McDonnell Foundation, Searle Scholars Program, Pew Scholars Program in the Biomedical Science, National Science Foundation Major Research Instrumentation Award, Mellon Foundation Emeritus Fellowship Program, National Science Foundation Integrative Graduate Education and Research Traineeship (IGERT), Packard Fellowship for Science & Engineering, and the National Endowment for the Humanities

IV.8. 2011 Housing Waiting List (Tenure and Tenure Eligible Faculty)

Table 38 displays counts of faculty remaining on the waiting list for housing in October of 2010. 22% of faculty on the waiting list were female, 15% were under-represented minority, 52% were associate professors, 35% were assistant professors, and 13% were full professors. The Economics, English, Physics, and Psychology departments all had more than one faculty member placed on the waiting list and there were 23 total faculty on the list.

Table 38: Housing Waiting List

	Count	Percent
<u>Gender</u>		
Female	5	22%
Male	18	78%
<u>Under Represented Minority</u>		
Yes	3	15%
No	17	85%
<u>Rank</u>		
Assistant Professor	8	35%
Associate Professor	12	52%
Professor	3	13%
<u>Departments with >1 member waiting</u>		
Economics	3	
English	4	
Physics	3	
Psychology	2	

Fisher's exact tests show that there is no association between gender and being on the housing waiting list ($p=0.64$), minority status and being on the housing waiting list ($p=0.99$), and URM status and being on the housing waiting list ($p=0.22$).