

Gender (In)Equity in the Academy*

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Abstract

Researchers have shifted in recent years from explanations that posit overt discrimination as the causal mechanism reproducing gender inequity, to more subtle forms of favoritism and/or barriers to advancement. Working in the latter tradition, we focus on how sex bias operates in subtle ways, through nonconscious beliefs and attitudes that operate through workplace interactions, and through the operation of subjective policies and procedures designed for other purposes. We examine these issues with qualitative and quantitative data from an arts & sciences (A&S) unit of a public research university. We find encouraging signs of progress: women faculty at State U. are better represented in the tenured ranks, and their relative earnings have increased. Few women, however, have reached the best paid, most prestigious ranks, and few are in leadership positions. The within-rank gender gap in earnings has narrowed, but sex differences persist. In addition, research funds and other forms of discretionary funding and resources still favor men. Although overt discrimination has diminished, subtle inequities remain.

Gender (In)Equity in the Academy

INTRODUCTION

Issues of gender equity in the academy have re-emerged as front page news. In January, 2005, Harvard University's President Lawrence Summers addressed a Conference on Diversifying the Science and Engineering Workforce. His claims that "intrinsic" differences between men and women play an important role in creating sex differences in achievement in science reverberated across academe, and beyond.¹ The resulting furor brought back memories of news stories in March 1999 about the Massachusetts Institute of Technology's (MIT) admission that it had discriminated against its women faculty (Goldberg 1999). The MIT report documented extensive "discrimination" against senior women, who were by all reports stellar members of the university and gifted scientists in their larger professional communities.

Gender equity researchers have shifted in recent years from explanations that posit overt discrimination, to the more subtle forms of favoritism and/or barriers to women's advancement the MIT report described. Our research follows in this latter tradition. The questions we ask—about access to disciplines and faculty positions, career mobility, earnings equity, and access to resources—are the typical ones gender equity researchers address. We focus as well on less typical concerns: how sex bias operates in subtle ways, through nonconscious beliefs and attitudes that operate through workplace interactions, and through the use of subjective policies and procedures institutionalized in the academic workplace. We thus focus attention on the various mechanisms that continue to produce inequity in the academic workplace.² We examine these issues with quantitative and qualitative data from a large Arts & Sciences (A&S) unit of a public research university ("State U."). We first review recent literature on gender equity, focusing attention on both theoretical and empirical advances. We then turn to an analysis of our State U. data. Finally, we discuss the implications of our findings for gender equity research more generally.

Narrowing the Gender Gap

The controversies over Summers's remark and the MIT report represent a resurgence of interest in gender equity in the academy. As early as the 1950s, Harvard University Press published a report on sex discrimination in higher education, with its

¹ President Summers offered three hypotheses for women's lower achievement in science: (1) the "high-powered job hypothesis," (2) "differential aptitude at the high end," and (3) "different socialization and patterns of discrimination," in that order of importance.

² Although "inequity" and "inequality" are often used interchangeably, we prefer the former, following the usage of health researchers who use "inequity" to indicate "unjust inequalities" (Pan American Health Organization 1999:11).

study of Radcliffe graduates (Radcliffe Faculty Trustee Committee 1956). Instances of overt discrimination weren't hard to find. Reflecting the sex inequity in the larger workplace, women in academia consistently received lower ranks and salaries than comparable men. Sociologist Jessie Bernard (1963) also authored an in-depth investigation of discrimination against women in the academy (see also Zuckerman, Cole, and Bruer 1991; Sheridan 1998).

Perhaps the best documented inequity is the male-female earnings gap. Glazer-Raymo (1999) found evidence of a gender wage gap at every academic rank, institution, and discipline (see also Long 2001:Ch. 7). The earnings ratio is highest (and hence, the earnings gap smallest) in the initial academic ranks, and declines the higher the academic rank. Long (2001) found that the net sex gap in earnings has declined over time.³ Earnings differences reflect in part sex segregation within academia. Men predominate in the top paying fields of law, engineering, physics, and computer science, while women typically work in the lower paying fields of elementary education, visual and performing arts, and home economics. Women are also overrepresented at the lower ranks (among full-time instructors and assistant professors), while men are at the higher ranks (Bellas, Ritchey, and Parmer 2001; Long 2001; Long, Allison, and McGinnis 1993). Relative to men, women are also less likely to hold university leadership positions, such as president, vice-president, provost, and dean (Chamberlain 1988).⁴

Women also face “marriage” and “baby” penalties in academia: they are more likely than men with similar family characteristics to “leak out” of the academic pipeline, especially if they have children early in their career (Mason and Goulden 2004). According to a recent National Science Foundation (2004) report, the effect of sex on tenure-track placement and tenure disappears once family characteristics, and sex-family interactions are taken into account. Significant sex differences in promotion to full professor, however, persist, even after family characteristics (and interactions with sex) are controlled.⁵ Rather than attribute these family effects to sex differences in “choice,” Mason and Goulden lay the blame squarely on the rigid nature of academic institutions and the lock-step nature of academic careers (p. 88). Biological clocks collide head on with tenure clocks, especially in academic occupations that demand long hours on the job (Cole and Singer 1991; de Wet, Ashley, and Kegel 2002).

³ Long (2001) used the Survey of Doctorate Recipients (SDR) to examine sex differences in salaries for the years 1973 to 1995. Employing a set of controls (e.g., rank, field, professional age, sector), he reduced the sex gap in earnings to 15 percent in 1979, and to 10 percent in 1995 (p. 216).

⁴ Women undergraduates also tend to graduate from less prestigious universities, reflecting institutional differences in the location of engineering schools and the differential concentration of part-time students (Jacobs 1999).

⁵ The National Science Foundation (2004) used Survey of Doctorate Recipients (SDR) data for those reporting full-time work in academia and who were surveyed between 1981 and 1997. The data include only those earning science (including social science) and engineering doctorates in the U.S. The authors assess three measures of family characteristics: marital status (married vs. not), number of dependent children less than 6 years, and number of children between 6 and 18 years. The interaction model includes the interactions between these variables and sex.

It's also important to bear in mind the effects of demographic changes in higher education. Because women are now the majority (51 percent) of doctorates among U.S. citizens, more women should have the opportunity to enter faculty positions (Peter and Carroll 2005:iii; see also Jacobs 1996; Hoffer et al. 2003). Demographic inertia alone, however, ensures a substantial lag time before women will be equitably represented in the faculty ranks (Hargens and Long 2002).

The MIT Report and Beyond

The publication of MIT's report in 1999 reflected the shift of gender equity research to more subtle forms of discrimination (see also Hopkins 1999).⁶ Although the published MIT report was not detailed, what made its way into the public record is nonetheless an exceedingly frank discussion of the inequities women faculty confronted at MIT. The faculty gathered data on salary; space; named chairs, prizes, and awards; grant-based salaries; teaching assignments; departmental or university committee assignments; outside professional accomplishments/committees; and the representation of women at all levels of the university (undergraduates, grad students, postdocs, faculty). They talked both to senior and junior women, and to male department heads. The study's key finding is that, contrary to the more blatant discrimination of the past, "1990s discrimination" is more subtle, stemming from "unconscious ways of thinking that have been socialized into . . . men and women alike." There existed a "pattern of discrimination" that could not be explained by individual circumstances: unexplained inequities in salary, space, resources for research, teaching assignments, awards, and committee assignments. In the interviews, senior women described themselves as "invisible" and "marginalized." Junior faculty women at MIT reported that they felt well supported, but committee members found that senior women had once felt equally supported. The report concluded that invisibility and marginality are being replicated in succeeding generations.⁷

Under pressure from women faculty, other universities followed suit, setting up gender equity committees of their own (Wilson 1999; Zernike 2001).⁸ Princeton

⁶ There are actually several "MIT reports:" (1) a set of unpublished committee reports produced by the First and Second Committees on Women Faculty in the School of Sciences at MIT (1995-97, 1997-99); (2) a public summary of these reports designed to alert MIT's faculty about the Committees' conclusions (MIT 1999); and (3) followup reports in 2002 from the four other MIT schools: Humanities, Arts, and Sciences; Architecture and Planning; Engineering; and the Sloan School of Management (for an overview, and all five MIT reports, see Hopkins et al. 2002). There was also a brief 2002 update on the 1999 School of Science's report. For online access: <http://web.mit.edu/fnl/women/women.html> and <http://web.mit.edu/faculty/reports/overview.html>.

⁷ The 2002 followup reports found similar evidence of marginalization and inequity in the other MIT schools. Female faculty reported practices such as exclusion from group grants, noninvolvement on Ph.D. theses, lack of influence in important decision making, and undervaluing women as well as their fields of research.

⁸ The National Academy of Sciences Committee on Women in Science and Engineering reports a list of gender faculty studies at Research 1 institutions, by state: (http://www7.nationalacademies.org/cwse/gender_faculty_links.html).

University's gender equity report, for example, identified important "climate" issues: more women than men reported encountering unprofessional behavior on gender-related matters, less collegial departments, and problems with child care. Women were less satisfied than men with their jobs, and this sex gap in satisfaction was significantly greater among tenured faculty (Princeton University's Task Force on the Status of Women Faculty in the Natural Sciences and Engineering 2003). In response to President Summers's comments, Harvard too began a process of self reflection, producing a report, and pledging \$50 million to address gender equity issues (Fogg 2005).⁹ Foundations also began to take notice, allocating considerable funds to this issue.¹⁰

Subtle Mechanisms and the Production of Inequity

Much of the empirical evidence documenting subtle gender inequity in higher education is rooted in the "chilly climate" literature (Chilly Collective eds. 1995; Sandler 1986; 1991), which found "a host of subtle personal and social barriers which often operate below the level of awareness of both men and women" (p. 99).¹¹ Although empirical work on gender equity continues to grow apace, few researchers have linked this work to recent theoretical advances in the social sciences on subtle (or informal) mechanisms that perpetuate gender inequity.¹² To the extent possible with the data we have, we use these theoretical insights to examine our State U. findings on gender equity and we use our data to illustrate how these subtle mechanisms operate in practice.

Underlying much social science work on gender equity is the assumption that continuing gender (or race) inequity in academia reflects the outcome of conscious decision making of those in positions of authority to discriminate against women (or minorities). In her analysis of "ascriptive" inequality, or inequity based on ascriptive factors such as sex (or race), sociologist Barbara Reskin (2003) argues that our theories have typically focused on *unobservable*, and empirically *untestable*, motives of decision makers and peers. Indeed, conflict theories—long favored in sociology to explain the "whys" of ascriptive inequality—assume that "dominant groups use their monopoly over resources to maintain their privileges" (p. 2). As Reskin (2003) points out, however, gender inequity can also be reproduced by nonconscious cognitive processes that operate

⁹ The Harvard report and recommendations are available online: (<http://www.news.harvard.edu/gazette/daily/2005/05/women-faculty.pdf>). By February, 2006, President Summers had resigned, attributing his departure to persisting rancor with the Harvard faculty, including fallout from the women in science issue, among others (Wilson 2006).

¹⁰ The Ford Foundation provided resources for an MIT conference on gender equity (Wilson 1999), and a research/action grant to Rutgers University to examine the role of faculty as change agents for diversity. The National Science Foundation initiated institutional transformation awards, through its Advance program. State legislatures have also exerted pressure to ensure gender diversity [California State Auditor, Bureau of State Audits 2001 (<http://www.bsa.ca.gov/bsa/pdfs/2000-131.pdf>); see also West et al. 2005: (<http://universitywomen.stanford.edu/reports/unprecedented.pdf>)].

¹¹ More recent research has documented how the chilly climate can be especially severe for women of color (Turner 2002).

¹² And, it's not just academia: corporate America is also beginning to take note of the more subtle barriers to women's advancement (Morris 2005; Roth 2004; Burk 2005).

as much to favor “ingroups” as disfavor “outgroups” (Roth 2004 similarly investigates homophily preferences among Wall Street securities professionals).

We thus focus here on the “hows” of ascriptive inequality, or the specific mechanisms that produce sex differences in outcomes in higher education (Reskin 2000; 2003). Our quantitative and qualitative data allow us, in a preliminary way, to move beyond the motives of decision makers, to examine how ascriptive inequality is reproduced in the academic workplace, even as more overt forms of discrimination lessen. As Bielby (1991:185-86) points out, eliminating such barriers may be “more difficult than dismantling the exclusionary practices that have historically kept women from fully participating in science.”

Ascriptive inequality is reproduced in everyday *workplace interactions* that occur within a hierarchy of gender status beliefs that tend to advantage men and disadvantage women. Gender operates as a cultural “superschema” that shapes how we perceive others in our everyday interactions:¹³ “[s]ex categorization pumps gender into the interactionally mediated work process by cueing gender stereotypes, including status beliefs, and by biasing the choice of comparison others” (Ridgeway 1997:231; see also Ridgeway and Correll 2000). Such stereotypical beliefs can be exacerbated by generational differences: for example, academic elites who came of age at a time when few women worked might have very different evaluations of women’s competence than those whose mothers worked and whose sisters and women friends compete with them in the workplace.

Gender stereotypes are particularly salient when they become institutionalized, consciously or unconsciously, in organizational policies and decision making (Roos and Reskin 1984). Organizational elites regularly map external asymmetrical categories (like male-female) to intra-organizational distinctions (e.g., jobs), thereby recreating socially-based stratification within organizations. Tilly (1998:11) argues that such mapping is often inadvertent: “[p]eople who create or sustain categorical inequality . . . rarely set out to manufacture inequality as such . . . (rather) they solve other organizational problems by establishing categorically unequal access to valued outcomes.”¹⁴ For example, if securing an outside offer is the mechanism whereby faculty members significantly boost their salaries, those less able to take advantage of this strategy (presumably women) lose out financially in the long run.

The key to reproducing inequality, for both Ridgeway and Tilly, is the interactional (or “relational”) nature of social relationships. In academia, personal interactions underlie much of our everyday work lives, making higher education an excellent laboratory for investigating how subtle mechanisms reproduce inequality. For example, we evaluate

¹³ Race and age are the two other cultural superschemas (Fiske 1992: 883).

¹⁴ More generally, Tilly (1998) argues that four “relational” mechanisms reproduce categorical inequality: (1) exploitation (elites extract resources from workers); (2) opportunity hoarding (elites and nonelites protect their access to resources); (3) emulation (linking external categories to internal differentiation); and (4) adaptation (institutionalizing distinctions with rules and procedures).

vitae; interview job candidates; negotiate salaries; engage in research with colleagues; teach our students; assess scholarship, teaching, and service for promotion and merit increases; attend faculty and other committee meetings; and meet with academic administrators. As this list indicates, much of what academics do involves the application of *subjective* judgments of those with whom we interact. Our academic judgment of the quality of a colleague's work is inherently ambiguous, depending in part on our subfield, methods, theoretical approach, academic age, and even, in some cases, personalistic criteria. It is precisely in such ambiguous interactions, that evaluators tend to fall back on gender schema. To the extent that culturally-based gender beliefs infuse our work interactions, or are automatically reproduced (and institutionalized) within work interactions, women can lose more than men.¹⁵

Social psychologists have made much headway in recent years identifying the kinds of nonconscious¹⁶ attitudes and beliefs that help to reproduce ascriptive inequality in academia. Foremost among these are “implicit attitudes or stereotypes” that impact our evaluations of people's behavior, competence, and/or performance. Building on the demonstrated weak link between attitudes and behavior (e.g., Greenwald 1990), social psychologists have developed and fielded response latency methods to measure the kind of discriminatory social behavior that operates at a nonconscious level.¹⁷ Designed to quantify implicit attitudes, the Implicit Association Test (IAT) measures “actions or judgments . . . under the control of automatically activated evaluations, without the performer's awareness of that causation” (Greenwald, McGhee, and Schwartz 1998:1464; see also Greenwald and Banaji 1995). For our purposes, such “indirect” methods are particularly important in demonstrating how attitudes and stereotypes about gender (and race) can operate in nonconscious (as opposed to “self-reportable,” conscious) ways to reproduce ascriptive inequality.¹⁸

¹⁵ Data and space limitations preclude our focusing on race differences, although a similar argument could be made for racial minorities vs. whites. Indeed, there is a rich, developing literature examining the subtle workplace inequities people of color face. As more overt manifestations of racism have abated, “symbolic (or new or modern) racism” remains. Researchers describe “primitive, largely unconscious and automatic negative affects” and “implicit or automatic prejudice” (Sears and Henry 2003). Moreover, mechanisms that reproduce racial inequities: “(1) are increasingly covert, (2) are embedded in normal operations of institutions, (3) avoid direct racial terminology, and (4) are invisible to most Whites” (Bonilla-Silva 1997:476; see also Bonilla-Silva 2003). A “color-blind racism” has replaced the more overt “Jim Crow” forms of prejudice.

¹⁶ We use “nonconscious,” rather than “unconscious,” in keeping with the preference of social psychologists.

¹⁷ “Response latency methods” refer to evaluations of actions over which we have little personal control. Evaluations are estimated from the “reaction time tasks that measure people's attitudes or beliefs indirectly (i.e., without asking people how they feel or think). . . . attention is focused not on the attitude object, but on performing an objective task, and attitudes are then inferred from systematic variations in task performance” (Rudman 2004:79). Such methods demonstrate the nonconscious association we typically make, for example, of men with science and women with liberal arts.

¹⁸ Sample Implicit Association Tests (IAT) are available online to test implicit attitudes, about race, age, gender and science, and gender and careers, among others: www.implicit.harvard.edu.

The empirical evidence for such implicit attitudes or stereotypes is large, and growing. Reviewing empirical findings, Greenwald and Banaji (1995:9-17) describes Thorndike’s “halo effect” (e.g., physical attractiveness increases the likelihood of holding prestigious jobs, or institutional prestige enhances the acceptance of journal articles); “implicit race stereotyping” (e.g., stronger association between the word pair “white-smart” vs. “black-smart”); and “implicit gender stereotyping” (e.g., essays with male names were judged as superior to those with female names). Rudman and Kilianski (2000:1325) found that *implicit* gender attitudes toward female authority figures are similarly negative for women and men, even though women’s *explicit* attitudes toward female authorities are more egalitarian than men’s. Similarly, Rudman and Glick (2001) found that those who implicitly view women as “nicer” than men (e.g., women are more communal, and men are more agentic) are more likely to judge female applicants as “unskilled and unlikeable” (p. 758). Such findings underscore how implicit beliefs—among both women and men—can hinder women’s recruitment to, acceptance in, and mobility into academic positions, especially positions of power and authority.

Although implicit beliefs operate in nonconscious ways, they are not impervious to change. We can indeed “unlearn our automatic biases” (Rudman, Ashmore, and Gary 2001). With respect to the effect of implicit attitudes on work-related judgments (e.g., admission decisions, personnel evaluations), research shows that increased distraction or time pressure increases the reliance on ethnic and gender stereotyping; thus, presumably greater focus and reduced time pressure should reduce the implicit tendency to stereotype (Greenwald and Banaji 1995:18). Also useful are findings (p. 19) that suggest strategies to blind the decision maker to potentially biasing information and to raise awareness among decision makers about possible sources of bias. Similarly, Rudman, Ashmore, and Gary (2001) found that, compared with a control group, enrollment in diversity education reduced both implicit and explicit anti-black prejudice of college students.¹⁹

With respect to higher education, these nonconscious attitudes and stereotypes operate as “gender schemas.” Schemas can work in similar ways for women and men and function either positively, negatively, or neutrally (Valian 1998:103-04). In the arc of one’s academic career, disadvantages (or advantages) cumulate over time to reproduce significant sex differences in achievement over the life course. Cole and Singer (1991) describe this accumulation of disadvantages (or advantages) as “negative (or positive) kicks” that in turn produce “reactions.” To the extent that women in science experience a larger number of negative kicks (e.g., less prestigious postdoc position, grant rejection, birth of child), the gender success gap will widen. In dealing with all those everyday inequities, we are often told to “not make a mountain out of a molehill,” an admonition

¹⁹ In his recent bestseller *Blink*, Malcolm Gladwell (2005) popularizes how nonconscious cognitive processes reproduce inequality. Several of his examples demonstrate how our “adaptive unconscious” reproduces occupational sex segregation. One of Gladwell’s more compelling examples refers to how sex bias affects recruitment to philharmonic orchestras, and how “blinding” has successfully reduced such bias (Gladwell 2005: 245-51).

that fails to recognize that “mountains *are* molehills, piled one on top of the other” (Valian 1998:4-5).

Accumulating advantages (or disadvantages) can also multiply other sex differences, whatever their source. For example, economists have pointed out that men are more likely than women to negotiate starting salaries: taking such differences into account entirely eliminates the sex difference in starting salaries (Babcock and Laschever 2003; see also Niederle and Vesterlund 2005). The power of cumulative advantage (or disadvantage) yields “an enormous ‘return on investment’ for a one-time negotiation” (p. 5).²⁰ Recognizing how sex differences in outcomes get reproduced within workplaces, and how they reflect the cultural context in which we all live and work, is the first step toward devising institutional mechanisms that can halt the reproduction of ascriptive inequalities.²¹

In this paper, we thus assess gender equity and, to the extent possible, illustrate how specific mechanisms reproduce inequity in the academy. As the more overt discrimination faced by earlier generations of women faculty has declined, what remains are more subtle forms of favoritism (or disfavor) that can cumulate to sizable advantages (or disadvantages) over the course of an academic career. We demonstrate how our empirical findings of inequity are consistent with the operation of these more subtle mechanisms in gender equity outcomes. And, we use our qualitative data to both illustrate informal mechanisms of ascriptive inequality and to demonstrate how such mechanisms are institutionalized in academic policies and decision making. We examine how these mechanisms operate in four distinct interactional arenas in academia: access to disciplines and faculty positions, mobility throughout one’s career (e.g., rank, leadership), earnings, and opportunities for discretionary monies. We are limited in our ability to say much about race inequity in higher education; there are too few faculty of color to calculate reliable data.²² Nonetheless, we discuss race differences where possible, given the data we have available.

Data

We examine these issues with data from a large Arts & Sciences (A&S) unit of a public research university (“State U.”). What makes our analyses unique is our full access to decadal data and staff. During AY 1999-2000, we had complete access to the A&S Dean’s personnel data base, which contains demographic history, personnel history, reasons for leaving the university, administrative history, merit increases, rank, degree

²⁰ Babcock and Laschever (2003:5) estimate that, even with identical raises in later years, a \$5,000 difference in initial negotiated salary translates into extra male earnings of about \$360,000 over the course of a 38-year career (and over \$500,000 if the male earned three percent interest on the yearly salary difference).

²¹ Ridgeway and Correll (2000:115-16), for example, describe how equalizing male-female salaries can eventually help to reduce sex differences in perceived competence.

²² This is in spite of the fact that State U. is among the best of AAU universities in the percentage of its faculty that is African American (internal data available from State U.’s Office of Institutional Research).

years, leave history, current salary, and so forth.²³ In Spring 2004, we collected more recent data from the personnel data base to measure change over time for critical variables, such as rank, promotion dates, leadership roles, earnings, and discretionary monies. We fashioned these data into a SAS data base of all A&S faculty since the unit's founding in the early 1980's. We used these data to evaluate gender equity outcomes. Unless otherwise specified, we conducted analyses for faculty in residence during two academic years (AY 1999-2000 and AY 2003-2004).²⁴ We collected data on National Research Council (NRC) comparability statistics from the university's Office of Affirmative Action, and had full access to paper and/or electronic spreadsheets for promotion and tenured hiring decisions; data on internal research, startup, and summer funds; and historical information on academic leadership positions (deans, chairs, center directors). Where possible, we added these variables to our faculty data base.

We supplemented the quantitative data with interviews with senior women faculty (and a few senior men), as well as open-ended survey responses to a web-based survey sent to all women A&S faculty. In Spring 2000, we conducted 20 interviews, separately sampling within three stratified groups of A&S faculty: (1) "senior professor" women, (2) female full professors with 10+ years in rank, and (3) "senior professor" men. At State U., "senior professor" is a separate rank higher than full professor.²⁵ Unless otherwise specified, we used "senior professor" to refer to all professors at ranks above the initial full professor rank.²⁶ In Spring 2001 we fielded an anonymous web-based survey to all 190 tenured and tenure-track women faculty in residence in A&S in AY 1999-2000. After one month and one followup attempt, we received 81 responses (43 percent of those contacted).²⁷ These data provide insight into how subtle sex bias operates in practice to produce the unequal outcomes we observe.

²³ Although included in the data base, Ph.D. institution was not coded at sufficient detail to be of much use. Unfortunately, we also have no salary history prior to AY 1999-2000.

²⁴ Specifically, we counted a faculty member in residence during AY 1999-2000 if she or he received a salary in Spring 2000. Similarly, we counted a faculty member in residence during AY 2003-2004 if she or he received a salary in Spring 2004.

²⁵ Some "senior professors" also have special professorial titles (e.g., named chairs, or "distinguished" titles). All "special professors" are also "senior professors," but not vice versa.

²⁶ We excluded faculty currently in dean or higher administrative positions from the target population for interviews. Our original interview target samples were: 10 senior professor women, 5 senior professor men, and 5 women full professors in rank at least 10 years. We contacted 14 senior professor women, and 11 agreed to participate in the interview; similarly, we contacted 6 women full professors, with 5 agreeing to participate (9 of the women interviewed were in the humanities, 2 in the social/behavioral sciences, and 5 in the sciences). Of the 4 women not interviewed, 2 were away from campus (but would otherwise have participated), and 2 declined to participate. Senior professor men were less likely to agree to be interviewed: we contacted 20 to yield a sample of 4 (2 from the humanities, 1 from the social/behavioral sciences, and 1 from the sciences). While we feel relatively confident about the generalizability of the female samples, we are not similarly confident about the male sample. In this paper, we include quotes from the women interviewees only.

²⁷ Of the 81 women who responded to the survey, 27 percent were assistant professors/lecturers, 28 percent associate professors, 33 percent professors, and 11 percent senior professors. These percentages correspond fairly well to the actual percentage distribution of 190 A&S faculty women in these ranks during AY 1999-2000 (30, 32, 30, and 8 percent, respectively). With respect to discipline group, 54 percent of the

ASSESSING GENDER EQUITY AT STATE U.

Overall Perceptions of Inequality

To frame our findings it is helpful at the outset to understand the variety in our respondents' general perceptions of their experiences at State U. For example, when asked to "rate" their department (the local unit in which most academic interactions occur) on gender issues, some women expressed strong support:

I would rate my department's track record on gender issues as "excellent". Although [my discipline] was one department in which there has not been a female chair, there are few women in the department and the men who have been chair have been very good. I wouldn't touch the job. It's not a sign of discrimination; it's that nobody has had the time, desirability to take the job. I do not think it has affected the hiring or treatment of women. I have not experienced gender discrimination or maybe I have such thick skin. Anything I wanted to do, I did. This is a very good department; everyone is treated more or less in the same way. You talk to women in another department, they might see it differently. (senior professor, sciences)

Another respondent reported similar experiences:

I would rate my [State U.] department's track record on gender issues as "exemplary." I am quite certain that there is not a scintilla of gender discrimination in the department. Now [my discipline has lots of women], but that alone does not guarantee gender equality. At places like [two Ivy League universities], you could count the number of tenured women on one hand. The gender discrimination is vile at those places. I am a known quantity, that is I have a [high rank] and my scholarly reputation is secure so this may insulate me a bit [from gender discrimination]. . . .This is the way things are and I am very grateful to [State U.] and I am grateful and loyal to [it]." (senior professor, humanities/social sciences)

Such glowing responses, however, were in the minority. Like the MIT women before them, many of State U.'s women described instances of discrimination:

[State U.] is very poor on gender issues. What is raised in the MIT report is that senior women have small discriminations against them that lead to patterns of discrimination. . . . I read the MIT report and thought that it was everything that I experienced. I am an expert . . . and I wanted university support and recognition. . . . I feel marginalized all the time. While I am very well respected outside of the university in my area of expertise, inside the university I am marginalized. . . . I don't get recognition and [I received some monetary resources] after five years of battles. I had to fight hard for it. . . . I am very visible in the university when they want to tout accomplishments, but I am invisible when it comes to having an impact and being in the inner loop. I've never been able to have a meeting with someone in higher administration. When I talk to comparable men they are in daily contact with those people. (senior professor, sciences)

Faculty in other ranks also spoke to these feelings of marginality:

On a number of levels women face personal and professional isolation. First, there are very few women hired and these women tend not to have family commitments. [Men in my division] had wives working in the

respondents were in the humanities, 31 percent in the social & behavioral sciences, and 15 percent in the sciences. The comparable percentages for A&S faculty women in AY 1999-2000 were 52, 28, and 19 percent, respectively. Chi-square calculations for faculty rank and disciplinary group showed no significant differences between the survey sample and the A&S population of women.

laboratory for them. These women were highly trained PhD level scientists who chose to forego an independent job to help their spouse get over the tenure hump. In contrast, I felt completely isolated trying to juggle a tenure-track job, . . . young children, and a spouse who also had a very high pressure job outside of academia. (assistant professor, sciences)

This diversity in responses demonstrates the need for both a qualitative and quantitative picture of gender equity at State U. Our data permit us to create a demographic composite of State U.'s A&S unit and to flesh out this composite with evaluations of women's perceptions of their experiences. We organize the remainder of the paper around several research issues that address our broader goals. First, we examine women's access to faculty positions, comparing this to NRC-based recruitment pools. Second, we provide data on sex differences in academic success, specifically rank, promotion, and leadership opportunities. Third, we examine sex differences in academic and full-year earnings, and explore whether women and men differ in the amount of merit and discretionary monies they receive. Throughout, we supplement our quantitative data with our informants' more qualitative assessments. Our data enable us to dig deeper than most studies of gender equity, and hence to examine the more subtle mechanisms of inequality operating in higher education.

Access to Faculty Positions

During our base year of 1999-2000, A&S had 743 faculty, 26 percent of whom were women (see Table 1).²⁸ This percentage places State U. near the top of comparable (AAU) research universities in women's faculty representation. As in many universities, male and female faculty were located in significantly different disciplines: the majority of the A&S women faculty were in the humanities (52 percent), with a smaller percentage in the social & behavioral sciences (28 percent), and even smaller percentages in the sciences (7 and 13 percent, respectively, in the life and mathematical & physical sciences). The largest group of male faculty were in the mathematical & physical sciences (39 percent), followed by the humanities (28 percent), social & behavioral sciences (25 percent), and the life sciences (9 percent). Taking the disciplinary group as base, women were most fully represented in the humanities (39 percent), followed by social & behavioral sciences (28 percent). As is true across academia, few A&S scientists were women (about one-fifth of the life scientists and one-tenth of the mathematical/physical scientists).

[Table 1 about here]

Although the broad picture remained essentially the same four years later, there was some movement toward equity: the overall representation of women inched up, from 25.6 percent in AY 1999-2000, to 28.4 percent in AY 2003-2004, a function of both the decreasing number of male, and increasing number of female, faculty. The data on percent female show that women increased their representation in each disciplinary group, but especially in the humanities (39.3 to 44.8 percent) and the social & behavioral sciences (28.3 to 32.0 percent).

²⁸ A&S faculty represented 46 percent of the campus's faculty, and the university itself is the major unit of a multi-campus state system. The campus has no law or medical school; the remaining faculties are substantially smaller undergraduate or professional schools (e.g., engineering, education).

We also investigated race differences, by sex and discipline group (data not provided in tabular form). Overall, as Table 1 documents, the number of men in A&S declined between AY 1999-2000 and AY 2003-2004 (from 553 to 528), while the number of women increased (from 190 to 209). The decline in men occurred in all race groups, except Asian, while the pattern for women was quite different, with increases across all race groups except Hispanics.²⁹ There were significant race differences in distribution across discipline groups, for both years. Two points are worth noting. First, whites predominate in each discipline group, from a low of 80 percent (the life sciences) to 87 percent (social & behavioral sciences) in AY 2003-2004. Second, using each race group as the base of the percentages, approximately one-third of whites were in humanities, one-third in the mathematical & physical sciences, with the remainder in the other two discipline groups. In contrast, 50 percent of the 20 Hispanics, and 53 percent of the 30 blacks, were in the Humanities (the second most common discipline group for blacks was social & behavioral sciences; for Hispanics, it was mathematical & physical sciences).

Table 2 breaks down the disciplinary groups into their component A&S departments in AY 2003-2004. Using data from State U.'s Office of Affirmative Action (March, 2001), the table also provides NRC comparison data for the number and percent female of doctorates awarded in 1998 and the number and percent female of cumulative doctorates awarded between 1981 and 1998.³⁰ Clear segregation by sex exists across A&S departments. Women constitute at least half (≥ 50 percent female) in five humanities departments (art history; French; Germanic, Russian and East European; Spanish & Portuguese; and women's and gender studies) and one social & behavioral science department (Africana studies). Eight (primarily science) departments have fewer than 15 percent female (philosophy, religion, geography, computer science, geological sciences, mathematics, physics & astronomy, and statistics). But simple majorities or minorities are not necessarily the best measure of under-representation. We calculated a more realistic estimate by taking into account the availability of women in the relevant recruitment pools. We have two estimates, calculated from NRC data: the percent female among 1998 doctorates (best used to estimate the pool for assistant professors) and the percent female among the cumulative doctorates awarded between 1981 and 1998 (best used for more senior ranks). We compare the A&S departmental percent female against this latter estimate. To allow for error in our estimates, we use the somewhat arbitrary criterion of 60 percent to indicate "under-representation of women" (when the departmental percent

²⁹ There were no significant sex differences in distribution across the race groups in either year. With some minor variation, this general pattern of declines in the number of men and increases in the number of women in A&S was similar for faculty across State U. The only male race groups to increase during this same period for State U. as a whole were "Asian" and "Foreign" (the foreign distinction was not available in the A&S data set). The only female race group to decline in the larger university was "African American" (internal data from State U.'s Office of Institutional Research).

³⁰ The Office of Affirmative Action compiles its data from the National Research Council's (NRC) Office of Scientific Engineering Personnel and the Doctorate Records File. Comparisons with A&S departments are somewhat arbitrary in some cases (see notes to Table 2 for details).

female is less than 60 percent of the percent female in the cumulative doctorate pool).³¹ According to this criterion, women were significantly under-represented in 11 of the 33 A&S departments: classics, philosophy, religion, geography, psychology, genetics, molecular biology and biochemistry, computer science, geological sciences, mathematics, and statistics.

[Table 2 about here]

Our respondents suggested that this underrepresentation is based in departmental decision making:

There are women in many departments, but there are still departments that I know are underrepresented in terms of women. They claim that there aren't enough women out there to choose from. In some cases they might be right, but in some cases I don't think that it is true. So in some departments there still can be some gender discrimination. (professor, humanities/social sciences)

An assistant professor noted that her department has a poor record on equity in sex and race composition:

I would like to see more women and people of color in my department. Right now we have 1.25 women (i.e., two half lines and one quarter line) in my department, and one-quarter line person of color. It would be very helpful to our female and non-Anglo-Saxon graduate students to have more role models. (assistant professor, humanities/social sciences)

An associate professor suggested that not only do some departments have very low numbers of women, but gender parity in academic departments is an elusive goal:

There are many major departments which seem to make no efforts at equity at all: some of our most distinguished . . . have abysmal records and no one has seemed to suggest that a major department could take some leadership on equity issues. (associate professor, humanities/social sciences)

Indeed a female professor in the sciences suggested that this is a result, in part, of departments that do not put a priority on hiring women:

In hiring, no one pays attention to getting a woman. . . . Everyone says it is hard to hire women, but [there was] a panel at the national meetings of all [disciplinary] societies and the title was 'How to increase the number of tenured women in [the field]' . . . no one from my department went. The room was standing room only. There is no real commitment to women. Furthermore they say that if you want women why don't you go out and recruit them. It shouldn't be the job of the women to hire women, that really bugs me. (senior professor, sciences)

Academic Careers: Rank, Promotion Rates, and Leadership

³¹ We thank Noemie Koller for suggesting this criterion. These numbers, however, need to be interpreted with great caution. First, because this criterion is highly sensitive to sample size, the loss of one or two women can mean that small departments easily flip to under-representation. Second, demographic inertia can delay women's representation in the academy, even in the absence of any discrimination (Hargens and Long 2002).

Rank segregation by sex is a common finding in the gender equity literature on academia, and State U.'s A&S unit is no exception. Table 3 documents significant sex differences in rank in both academic years. The largest representations of women in AY 1999-2000 occurred in the instructor/lecturer and assistant professor ranks, where women were 33 and 42 percent of faculty, respectively. At the other end of the prestige hierarchy, nearly a quarter of full professors were women but only 8 and 18, respectively of senior and special professors. Over one-quarter (27.6 percent= $25.1+2.5$) of men at State U. were in the senior/special professor ranks, compared with only 7.9 ($=6.3+1.6$) percent of women. Thus, only 12 A&S women were senior professors, and 3 were special professors. Within four short years, women's representation at the top ranks had notably increased: 29 women were senior, and 4 were special, professors. Women's representation also modestly increased among assistant and associate professors. Even with these gains, less than one fifth of the senior and special professor ranks were women.

[Table 3 about here]

There is significant rank segregation by race as well (data not presented in tabular form): by AY 2003-2004, 13 percent of whites were instructors or assistant professors vs. 20, 30, and 34 percent of blacks, Hispanics, and Asians, respectively. At the other end of the rank continuum, 60 percent of whites were at least full professors vs. 27, 35, and 35 percent, respectively, of blacks, Hispanics, and Asians. Of the 162 senior professors, only 1 was black, 4 were Hispanics, and 9 were Asians; all special professors were white.³²

Table 4 provides important insight into why few women are in the senior/special professor ranks (17.9 percent female in AY 2003-2004). These data make clear that well over half (57.6 percent) of the senior/special professors in AY 2003-2004 were mathematical/physical scientists. Thus the numbers in the senior/special professor ranks are most plentiful precisely in the discipline group where women are least represented (12.4 percent of women were in this discipline group in AY 2003-2004; see Table 1). Moreover, the breakdown of the rank in which senior/special professors were hired is illuminating: fully 51.5 percent of the current female senior/special professors were hired as assistant professors (who thus rose through the ranks), compared with 41.1 percent of their male counterparts. State U. did major departmental building in the 1980's, and top administrators accomplished that by recruiting especially full and senior professor men.³³ The greater representation of women in the top ranks in 2003-2004 is attributable both to their continued promotion through the ranks and the Deans Office's targeted hiring of senior women in response to earlier data.

[Table 4 about here]

Moving into higher ranks, of course, requires that faculty be promoted. Table 5 presents data on the number and percentage of successful promotions from 1997 to 2004.

³² With some minor variation, this same basic pattern was similar for State U.'s faculty as a whole. In the larger university however, both whites, and secondarily African Americans, were overrepresented among full professors (internal data available from State U.'s Office of Institutional Research).

³³ These numbers represent a significant improvement over the comparable ones for AY 1999-2000 (data not shown in tabular form): women were 8.8 percent of all senior/special professors, and fully two-thirds of them were hired as assistant professors. Nearly two-thirds of the men were hired into tenured positions, and nearly half at a full or higher rank.

Looking first at the total A&S faculty over the full eight-year period, men were slightly more likely than women to be promoted: 86.7 percent vs. 84.3 (a 2.4 percent sex difference; see p. 2 of table).³⁴ The sex gap grew slightly over time, from 2.2 percent in 1997-2000, to 3.4 percent in 2001-2004. These findings varied somewhat by discipline group. Within the humanities, 87.7 percent of the men vs. 84.7 percent of the women were successfully promoted (a 3.0 percent sex difference), while the comparable percentages for the social/behavioral sciences were 89.5 vs. 80.6 percent (an 8.9 percent sex difference). The sex gap doubled over time for those in the humanities (2.2 to 4.7 percent), and tripled for those in the social/behavioral sciences (3.9 to 11.7 percent), suggesting increasing sex inequity in promotions.³⁵ The promotion numbers by rank (the first panel of the table) shows that in the humanities, the lower female percentages were primarily attributable to women's relatively lesser probability of being promoted to associate professor in the latter years, while in the social & behavioral sciences, women had trouble at both the associate and full professor ranks. A good sign of progress by time 2 in the humanities is that 11 women went up for senior professor and all but one were successful (this is in comparison to 3 of 3 at time 1). The numbers of women in the two science groups are too small to allow for reliable comparisons (there were only 7 women in the life sciences, and 11 in the math/physical sciences up for promotion in the 1997-2004 period). Nonetheless, there is some reason for optimism: while no female life scientists were promoted in the earlier period, 5 of 6 were promoted in the latter period. Similarly, while 3 (of 3) women in the math/physical sciences were promoted in 1997-2000, 8 (of 8) were in 2001-2004, and all five up for senior professor were successful.

[Table 5 about here]

Our respondents were especially likely to perceive inequity in promotions, especially to the upper two full professor ranks:

One of the most important hurdles for women faculty is promotion to [professor and senior professor]. In terms of the [professor] promotion, a number of us have been subtly undermined by our colleagues so that we are more reluctant than we might be to go up for promotion. In addition, the promotion rates to [senior professor] appear to be blatantly inequitable. (associate professor, humanities/social sciences)

One way that women perceived subtle discrimination is through the encouragement of early promotion for men but not women:

Men are encouraged to seek promotions and to seek them early (e.g., to full professor) by other men; women generally are not. Men are assumed to be academic stars. Similarly situated women must prove they are deserving. In short, women have to do twice as much to be judged half as good. Women of color are particularly devalued in the promotion process. (professor, humanities/social sciences)

Another woman reported a similar personal experience:

[Male colleagues close to my professional age] came up a year early for tenure. I was discouraged from doing so (perhaps not in so many words, but told that generally the admin was not supporting early tenure so

³⁴ These are likely inflated estimates of success in promotion, for both women and men: those leaving prior to their tenure year are not included in the base n. We currently have no data on any possible sex difference in early resignation.

³⁵ Small numbers, however, necessitate caution in over-interpreting these trends.

I shouldn't consider it), although my book was published early and my publication record comparable.
(associate professor, humanities/social sciences)

Not only are men encouraged to come up early for promotion, many women perceived that as women they have to exceed the performance of their male counterparts to receive promotions:

I have my doubts about the jump to [senior] professor. For example, several men have been promoted to [senior professor] largely on the basis of department administration. This has never happened for a woman in our department. Every [senior] woman in our department has a solid international position, funding, and more publications than anyone else. In my years at [State U.] this is progress. There was a time when we had a chair who wrote in the department newsletter that the promotion of women would lead to a decline in the department's national position. That is several decades ago, but shows that senior women have had a battle to get where they are. (professor, humanities/social sciences)

Indeed, the higher the rank, the more gender inequity our respondents perceived:

[State U.] hired a lot of women in the 1970's before other places were doing so...But we haven't kept up the pace at the top levels. We promote men proportionally more than women and there are more men at the top levels of the university. (senior professor, humanities/social sciences)

One associate professor told us that she perceived this as a university-wide problem, in which the university is losing high-level women:

I know there are other departments where women seem to be treated more fairly than my own (at least I hope so). But I've seen so many senior women come and go at this University and I've seen excellent junior scholars, particularly women of color, get turned down for tenure, that it seems this inequity is university-wide. It is clear that there has been no clear mandate "from the top" to get and keep great women faculty! This is really a shame because I think undergraduate students as well as graduate students really need these role models. (associate professor, humanities/social sciences)

Similar to other forms of discrimination at State U., one respondent described the subtle discrimination she perceived in how women and men are evaluated:

Focusing on RATES misses the main problem. The biggest problem is with the language and tone of the evaluation and the messages that are conveyed. We just had a reappointment decision in our department where a guy, three years out of grad school, was heralded as an emerging "star" in his field. They said they were worried that he might leave despite the fact that no one has expressed an interest in him. They talked about how well connected he was, but those connections proved to be two members of his dissertation committee and an undergraduate mentor. In contrast, two women who recently came up for reappointment and then tenure and objectively had much more impressive records were talked about in much less enthusiastic ways. One has just been offered the sun and the moon by another major research institution and is likely to leave because she feels so undervalued here. (professor, humanities/social sciences)

In addition to the "star" label, subtle discrimination also takes the form of devaluing the intellectual work that some women do:

I have experienced gender discrimination. My first time I went for tenure I was rejected, even though I had the Dean's and the department's support. One of the reasons why I was denied tenure was [my subject

matter]. . . . It was such a blow to the department that they reviewed it again the next year and I got tenure. But that's an example of the blindness . . . women's [scholarship] was just getting into the mainstream. . . . They are totally unaware. (senior professor, humanities/social sciences)

This is particularly salient for women whose substantive research area is on gender:

I consistently receive the impression that women and particularly women who work on gender will have to perform more, and publish more to get the same treatment in terms of promotions etc. I see this in dept. discussions of what is necessary to get tenure to become full professor, or [senior professor]. . . .The logic I see at work is that feminist scholarship being produced by women is less worthy and so women have to produce much more than male or nonfeminist colleagues in order to make up for this. . . . It also appears that objective criteria are thrown out when they favor women/feminist individuals and male contenders are given a leg up on questionable or debatable "quality of mind" arguments. This is very demoralizing for a young faculty member as the message is that as a feminist woman you have to work twice as hard just to get equitable promotion decisions and even then you will not be valued. . . .the structural inequities that shape evaluations of scholarship, hiring practices and promotion processes have been deeply demoralizing. (assistant professor, humanities/social sciences)

The consequences of women's discriminatory experiences contribute to a climate where women believe they are not equal members of the faculty:

This is very demoralizing for a young faculty member as the message is that as a feminist woman you have to work twice as hard just to get equitable promotion decisions and even then you will not be valued. So while there is a great deal I have enjoyed at [State U.] and there are many male and female colleagues who are wonderful and supportive, the structural inequities that shape evaluations of scholarship, hiring practices and promotion processes have been deeply demoralizing. (assistant professor, humanities/social sciences)

Moreover, discriminatory experiences during the tenure and promotions process helps to isolate women, and sour their view of the university:

. . .[because of this] I owe this university and department nothing. I owe my students something. . . . I no longer believe in the university and the academic system. . . . I don't believe in the system and won't be party to it. . . . It doesn't matter if I publish 10 books, it's all irrelevant to my salary and promotions. (professor, humanities/social sciences)

And they were not particularly sanguine about the university's attempts to address the problem:

To be given a message by the administration that apparent discrimination against women at the higher ranks will be "cured" by recruiting quality women from the outside is a real insult to those of us already here. This is a PR move, not a sincere effort to look at the continuing process of what is going on here. . . . Why doesn't the university get with it and reward the considerable talent that it has on hand? A proposal to recruit quality senior women from the outside is a kind of tokenism which does not address the systemic problem of discrimination against women at all ranks (in terms of promotion and therefore salary and research funds). (professor, sciences)

Another important indicator of academic success is movement into leadership positions, where women have often been scarce. At State U., women have made progress, approximately commensurate in some discipline groups with their representation in the tenured ranks (typically a precondition for movement into leadership positions). Although

visible, women are certainly not plentiful. Table 6 summarizes women's representation among various decanal and departmental leadership positions at two time points. At the decanal level, two of seven A&S deans were women in Fall 1999, 1 of 7 in Fall 2004. In Fall 1999, one-fifth of the departmental chairs, one-third of the graduate directors, and over one-fourth of the undergraduate directors were women. The situation remained basically the same in 2004/2005, except for a decline in women's representation among undergraduate directors, coupled with slight increases as chair and graduate directors .

[Table 6 about here]

Women's representation in leadership positions was driven primarily by their presence in humanities departments (Table 1 shows that well over half of all A&S women were located in the humanities). Although women were 39 percent of A&S's humanities faculty in AY 1999-2000 (and 35 percent of tenured humanities faculty),³⁶ they were 35 percent of the humanities chairs, and indeed over-represented as graduate and undergraduate directors (representing 58 and 46 percent of those positions, respectively). In AY 2003-2004, they were underrepresented among chairs and undergraduate directors, and overrepresented as graduate directors, given their 42 percent representation among tenured faculty in the humanities.

Women were underrepresented in leadership positions in other discipline groups. In the social & behavioral sciences in Fall 1999, they were 28 percent of the faculty (and 21 percent of the tenured faculty), but 12 percent of the chairs and 0 and 17 percent of the graduate and undergraduate directors, respectively. They remained underrepresented in 2004-2005, except as chairs (4 of 8 of the social and behavioral sciences chairs were female). Not surprisingly, the numbers of women in leadership positions in the sciences were particularly low: in AY 1999-2000 women represented 12 percent of the faculty in the sciences (and 12 percent of the tenured faculty), but none of the chairs. Two women scientists were graduate directors (of nine departments), and one (of eight) was an undergraduate director. In 2004-2005, there were even fewer women scientists in leadership positions.

We also gathered data on the history of departmental leadership, calculating the number and percentage of female chairs for each A&S department between Fall 1980 and Spring 2004 (data not provided in tabular form). The results are instructive. During that 24-year period, one-fifth of A&S's 191 department chairs were women, and this was driven by the large representation of humanities chairs (32 percent female). During the same period, 18 percent of social and behavioral science chairs were women, one in the physical & mathematical sciences, and none in the life sciences. The list of departments that by AY 2003-04 had never had a woman chair is long: 6 of the 19 humanities departments, 3 of the 8 social & behavioral sciences departments, 6 of 7 mathematical & physical sciences, and 5 of 5 of the life sciences.³⁷

³⁶ This and following numbers re tenured faculty were calculated from data not presented in tabular form.

³⁷ There have been five life science departments over this time period; consolidation and re-organization reduced this to three by AY 1999-2000.

Our respondents were clearly aware of women's underrepresentation in leadership positions:

In my department it is explicitly acknowledged by the senior female faculty that a female chair would have great difficulty within and outside the department in doing her job due to the perception that a woman head is a mark of inferiority. A woman who assumes a leadership role must be far superior to male colleagues to assume similar roles. We have to jump higher to get to same place. (professor, humanities/social sciences)

There are too few women in departmental officer positions—[the university's] departments need more women chairs, more women graduate directors. There are almost no women in higher-level positions in Central [Administration]. [The university] more generally needs women in top administrator positions and in deans' offices. One is struck repeatedly at how male those social spaces still are. And it does make a difference. (professor, humanities/social sciences)

Indeed one respondent remarked that her department would probably never have women in leadership positions:

There has never been a female Chairman. Of course, this is by election. I think we might have a female Vice-President of the U.S. before we have a female as Chair of this Department)! (professor, humanities/social sciences)

An assistant professor agreed:

I cannot remember a time in the past 6 years when a major committee in the department was chaired by a woman. Nor is there even the slightest discussion of appointing a female dept chair. This seems unlikely given the way in which I have seen my senior women colleagues systematically excluded from decisionmaking networks which are informal, excluded from access to information and in the past excluded from major committees. An inner circle made up of a selected group of male faculty determines decisions and these decisions are then rehearsed in formal committees. (assistant professor, humanities/social sciences)

Several women in our study pointed to an "inner circle" of men who assumed formal and informal leadership roles:

Judging from events [that] happened in the past five years in the department, one cannot help but come to the conclusion that it is the WASPMs [White Anglo-Saxon Protestant Men] that dominate and govern. Women and minorities may serve in committees, but their voices are not heard and their suggestions never followed through. There is no strong intellectual leadership in the department, and it is demoralizing. (professor, sciences)

I am aware of a number of effective "men-only" regular gatherings in my dept. (regular lunches, poker games, etc.) in which a lot of decision-making appears to go on. (assistant professor, humanities/social sciences)

Finally, in addition to access to leadership at the departmental and university level, women were less than one-fifth of center directors reporting to the A&S Dean in AY 1999-2000, increasing to one-third by AY 2003-2004 (Table 6). As was true for many universities across the country, the number of university-based centers at State U. exploded beginning in the 1980's, when like-minded faculty developed interdisciplinary centers to further their scholarly interests and provide support structures for grant solicitation and

administration.³⁸ This is a conservative measure of women's representation as center directors at State U., because a number of other larger, and better funded, centers report directly to higher level administrators.

Earnings Equity: Base Salaries

We were able to calculate a number of earnings variables from the personnel data base. Because salaries are a function of factors other than base salaries, we also examined a number of other earnings-related variables. Basic salary data depends entirely on the faculty member's official title. In most cases, the title is for the academic year, carrying a 9-month salary (e.g., "Associate Professor-AY"). If the faculty member's title contained a calendar year distinction (e.g., "Senior Professor-CY"), the data base provided the calendar year salary (approximately 15 percent over the base AY salary). For the most part, CY faculty are in administrative positions (e.g., chair, dean, center director). Whether or not the salary is AY or CY, we refer to this salary as the faculty member's "base salary." From separate budget spreadsheets, we also estimated summer salary dollars paid through the main A&S Deans office (we call this "discretionary salary"),³⁹ and merit increases and internal research funds.

Table 7 presents data on base earnings, and earnings ratios, by discipline group, rank, and sex. Overall, A&S women faculty earned approximately 84 percent of men's salaries in AY 1999-000, a figure that increased to 85 percent in AY 2003-004. Some of this sex gap in earnings is attributable to sex segregation by discipline. Accordingly, controlling for discipline group typically increases the earnings ratios. At time 1 the earnings ratios were highest in the two science discipline groups (92 percent in the life sciences, and 96 percent in the math/physical sciences), and substantially lower in the humanities (85 percent) and the social & behavioral sciences (81 percent). By AY 2003-2004, women's relative earnings had increased in the humanities (90 percent) and social & behavioral sciences (85 percent), but slipped to 89 percent in both the life and math/physical sciences.

[Table 7 about here]

Because women also concentrate in the lower ranks in academe, the earnings picture for women improves further if one controls for rank. Among humanities faculty, all the within-rank earnings ratios hovered around 100 percent in AY 1999-2000, although these relative earnings declined somewhat in the latter period, to as low as 94 percent for associate professors. In the math/physical sciences, the few women in faculty positions tended to do somewhat better than their male counterparts within rank, although this slight advantage evaporated by AY 2003-2004. There are so few men and (especially) women in the life sciences that the earnings ratios should be viewed with caution: nonetheless, the

³⁸ At state universities, and State U. in particular, this was driven in part by a substantial reduction in the amount of state money available for operating and research expenditures.

³⁹ Only those non-grant funds budgeted through the central A&S Deans Office are included. Any other funds—from external grants, other external groups, or other university sources—are not included in this full-year salary estimate. Note that even CY faculty can receive additional summer money.

data suggest that life science women did not do as well in salaries in comparison with their male colleagues, and their relative earnings declined even further within the ranks by the latter period. Finally, for the social & behavioral sciences, women in some ranks did relatively well (assistant professors and professors), but in others did less well (associate and especially senior/special professors). Their relative advantage in the assistant and professor ranks disappeared by AY 2003-2004, but the relative earnings of the senior professors improved dramatically.

One could argue that it is questionable to control for rank in studies of gender equity in earnings, because this assumes that male and female faculty of similar ability are equally likely to be promoted. Table 5 suggests that female faculty were less likely to be promoted within A&S from 1997 to 2004, and one might assume that sex differences in promotion were even larger in previous decades. Even equal promotion rates for those who put themselves forward for promotion does not ensure equity. Indeed, as noted earlier, our qualitative data indicate that some A&S women perceive gender differences in the promotion process (e.g., they expressed concern that department chairs often bring men up earlier for promotion, or require higher publication standards for women faculty).

Our respondents clearly perceived salary inequities:

In terms of hiring, until last year I don't think a single woman received a beginning salary equal to that offered to male candidates and hires appointed in the same year. (professor, humanities/social sciences)

Respondents reported that the way to increase one's salary is to leverage outside offers, itself a gendered process:

The only way to get salary increases or university professorships seems to be to have outside job offers. But that involves several factors which act disproportionately against women. First of all, it assumes that one is willing to move; women typically have more of a problem with members of their family tied to one spot than men do (though this can also act against men who have wives with careers that effectively pin them to one spot). Secondly, it assumes that either one would happily go somewhere else, or that one would act duplicitously in dealing with other institutions. (senior professor, sciences)

One associate professor reported how she used this strategy, to good advantage:

The biggest gender-related factor that has made my work life less than satisfactory is the lack of recognition for my work (though I suspect men may report feeling this in equal measure), and the systematically lower salary that women in my department receive. I had one of the lowest salaries among assistant professors in my department despite having multiple offers when I took this job. My salary was raised (above parity) only after I got another outside offer 3 years after coming here. (associate professor, humanities/social sciences)

However, she was in the minority; others reported less success:

All my male colleagues at the same level of seniority or lower who have been shortlisted at other universities have received an out of cycle raise . . . Although I have been shortlisted several times at prestigious universities, my department chairs . . . did not inform the administration of my being short listed nor request an out of cycle raise for me. Somehow, it seems, being placed on a shortlist was considered very prestigious

for my male colleagues. But it ended up being considered negatively for me. My salary has consequently stayed lower than that of men faculty of comparable ranking and increased at a slower pace although my publication results are clearly comparable. . . . This is the most direct evidence and the most hurtful one I have ever received that my work was not considered of comparable value to the one of others in my department. (associate professor, humanities/social sciences)

Earnings Equity: Discretionary Salaries and Supplemental Funds

Our access to the decanal data and staff allows us to take the earnings analysis beyond simple rank and disciplinary group differences, to supplemental funds awarded to faculty. Because faculty salaries are typically based on a 9-month period, many faculty earn additional summer money. From budget spreadsheets, we calculated the amount of summer salary earned, dividing up the summer monies into “discretionary” vs. grant funding. We focus here on discretionary funds because these are more likely than grant funds to be subject to subtle sex bias.⁴⁰

Table 8 presents data on discretionary summer salaries for 1998 to 2004. Looking first at the total A&S faculty, men were notably more likely than women to receive discretionary summer monies: in each year from 1998 to 2004 the percentage of men earning discretionary summer salaries was larger than the comparable percentages for women. For example, in the summer of 2000, 12 percent of the men received discretionary salary compared with 10 percent of their female counterparts. The percentage sex difference ranged from 2.6 percent in 2000 to 6.1 percent in 2004, the last year for which we have data. For the most part, sex differences persist once we control for discipline group: with the exception of social & behavioral scientists for the summers of 2000 through 2003, men’s percentages bested women’s in each sex comparison.⁴¹ We did some additional analyses of these discretionary earnings to investigate the possibility that men received more of this summer funding because of additional service work. To the contrary, men received summer funds as salary enhancement, while women were more likely to perform service work.⁴²

⁴⁰ Discretionary summer money refers to salary received in June, July, or August from state funding, internal grants, departmental funds, or the central administration. We do not here report data on external grants, nor any funds administered by non-A&S units. Grants are less subject to gender bias, and their availability varies dramatically by discipline and funding agency. Humanities faculty have access to few grants, medical researchers to many. Theorists don’t need much grant money, survey researchers need much more. Some funding agencies (e.g., NIH) will fund summer salaries more frequently than others (NSF). And, of course, grant funding depends to a substantial degree on faculty taking the initiative to apply for funding for themselves and/or for their staff/labs, and such initiative depends in part on what is normative for their field or subfield.

⁴¹ We also controlled for rank to test for the possibility that rank segregation by sex would eliminate men’s summer salary advantage. Even with this control, men’s percentages bested women’s in two-thirds of the 84 possible sex comparisons (=3 disciplines by 4 ranks by 7 years). Because of small numbers, we combined the two science disciplines, and collapsed the two highest ranks.

⁴² We asked A&S deans to code each summer funding recipient for 1998 to 2000 to estimate whether they received discretionary monies for (1) supplementing their base salary (e.g., guaranteed summer money in response to an outside offer, or as a fixed-period recruitment inducement), or (2) service work done over and

[Table 8 about here]

Table 9 estimates “full-year” salary for A&S faculty for both time periods. “Full-year” earnings includes “base salary” plus “discretionary salary” (see table notes for details). The full-year estimates include all monies earned in AY 1999-2000 (e.g., from July 1, 1999 through June 30, 2000), and similarly all equivalent monies earned for AY 2003-2004. These data suggest that the male advantage with respect to discretionary summer salary translates into modest declines in the gender earnings ratio (and, hence, an increase in the sex gap in earnings). Comparing Tables 7 and 9, for those in AY 1999-2000 the earnings ratio was 83.8 percent for academic year salaries vs. 83.5 percent for full-year salaries. The comparable percentages for those in the AY 2003-2004 were 85.3 vs. 84.4 percent. These same modest declines in the earnings ratios occurred within each discipline group (except the life sciences at time 1), and in most (but not all) ranks within years. In sum, women earn less than men in part because they earn less discretionary summer salaries.

[Table 9 about here]

Finally, we turn in Table 10 to several additional ways that faculty salaries are augmented: merit awards and/or supplementary research accounts. We examine sex differences in two kinds of merit awards: (1) increases generated through a negotiated union-sponsored merit program, and (2) salary from out-of-cycle increases (the former are paid through state funding, while the latter come from A&S Deans funds). We also examine sex differences in access to term or ongoing research accounts.⁴³

Table 10 indicates that the union-sponsored merit awards have become normative for A&S faculty: most have received at least one merit increase during their tenure at State U. Looking at the averages for the four discipline groups in AY 1999-2000, the percentages range from a low of 73.5 (for men in the life sciences), to a high of 91.7 percent (for women in the math/physical sciences). The AY 2003-2004 data show that over time the percentages of faculty receiving merit has increased.⁴⁴ The percentages range from a low of 80.8 percent among math/physical science women to 100 percent for life science women. Sex differences do exist, but they are small and do not always favor men: at time 1, men in the humanities and social & behavioral have the advantage, while just the opposite is true in the sciences. At time 2, men are advantaged in the humanities and math/physical sciences, and women in the social & behavioral and life sciences. Small numbers of women in the sciences makes within-rank comparisons questionable; within

above one’s regular workload (e.g., teaching an additional course; work for an honors program; service as center director).

⁴³ These are distinct from “startup funds,” which are awarded to most incoming faculty for three to six years, depending on rank. Although policies shift as deans change, newly recruited assistant professors typically receive such funds for their probationary period. Newly recruited tenured faculty typically receive three years of research funding. A&S also awards additional funds as needed for computers, specialized equipment, setting up labs, and so forth. Since startup funds are fairly universal, we focus here on research accounts, which can be either term (research funds for a specified set of years), or ongoing (renewable yearly) accounts.

⁴⁴ These increased percentages are attributable in part to the faculty members’ increased opportunity for receiving such awards (four additional years).

humanities and social & behavioral sciences, however, the advantage goes to women. Once we control for discipline and rank, women in the humanities and social & behavioral sciences are more likely than men to receive merit increases (8 of 12 sex comparisons over the two years favor women).

[Table 10 about here]

The out-of-cycle merit awards, however, favor men. These awards occur rarely, and are often provided in response to outside offers. Out-of-cycles at time 1 in the humanities and social/behavioral sciences favor men, and the sciences favor women, although by time 2 only women in the math/physical sciences do better than their male counterparts. The largest sex gap is among humanities faculty, where 16 percent of the men received an out-of-cycle merit award, compared with 7 percent of the women [and this sex gap favoring men gets even bigger by time 2 (20.4 vs. 10.8 percent)]. Even controlling for discipline and rank, men are advantaged for out-of-cycles (there are too few women scientists to make reliable sex comparisons, but for the humanities and social & behavioral sciences, 8 of the 12 sex comparisons over the two years favor men).

Table 10 includes data on the percentage of faculty receiving internal research accounts during the years specified. Across the entire A&S faculty women are more likely than men to receive research accounts (35.3 vs. 25.9 at time 1, and 38.8 vs. 30.7 at time 2). This female advantage is attributable to women's greater representation in the humanities and men's in the sciences (see Table 1), and because the availability of research accounts varies notably by discipline. Because they rely primarily on external funding, few scientists receive decanal research funds, but the opposite is true for faculty in the humanities. For example, 62 percent of the male, and 53.2 percent of the female, humanities faculty at time 2 had research accounts at some point during the 2001 to 2004 period; the comparable figures for the two science groups were 7 to 13 percent. Controlling for discipline shows that with one exception (the life sciences at time 1), more men than women have research accounts. Controlling further for rank reveals a female advantage at the assistant professor level, and a substantial male advantage in the tenured ranks (among the humanities and social & behavioral scientists, seven of the sex comparisons favor men, five favor women). Among those who received internal research accounts, men's funding typically exceeds women's for the four-year, time 2 period (not provided in tabular form). Across A&S as a whole, women averaged approximately 81 percent of men's research award. This male advantage holds in the sciences (35 percent) and the social & behavioral sciences (75 percent), although women have the advantage in the humanities (113 percent).⁴⁵

Our interviews demonstrated the perceived inequity of discretionary dollars. As one senior woman told us:

⁴⁵ The 35 percent figure is based on fewer than five women in the sciences, and hence is highly unreliable. We ran additional controls for rank within discipline group, but the small numbers make the estimates unreliable. Nonetheless, there is some suggestion that the male advantage reflects in part rank segregation by sex.

. . . early in my career when summer money became available to faculty members the chair said that special consideration would be made for allocating the money to people starting a new project other than their Ph.D. dissertation research. Well I was starting a new project [in my field], so I applied. A young male professor also applied, but his application was to continue his Ph.D. research, so I thought I had a leg up on him. Well he got the money and I didn't. When I went to the chair to complain, the chair said 'well he has a family to support and you don't.'" (professor, humanities/social sciences)

Some argued that the gender difference in discretionary salaries emerges from a culture in academia that empowers men, while marginalizing women. As one female assistant professor told us:

. . . many women have internalized social and cultural views that women are second-class citizens and hence not entitled--either to ask for more or to make use of what they're given. I'd bet that if you were to study how much of their research budgets men and women use or how much additional funding men and women ask for from their deans or departments, you would find a large discrepancy; in general, men seem to have far stronger senses of entitlement. (assistant professor, humanities/social sciences)

Our respondents underscored the male advantage in generating resources for research:

[Another] big problem is return of indirect costs. Off grants, the indirect costs go to the chairman and then that money gets distributed and often women don't have access. I have [many \$] a year in grants, that generates a lot of overhead. I don't see much of that money. The university doesn't give me any money for my labs, but lots of guys get money. (senior professor, sciences)

I feel we have poor support from the university in terms of research resources. . . . I have received cost-sharing for an award and I only received it because I threatened to leave. I've brought in [many dollars], [been] continuously funded . . . The university was supportive when I was younger, but I think it's this rise, you get well advanced in the professorial ranks and some people continue and are used for leadership positions and some are not. There are women who are very advanced and there might be a committee in the university dealing with their expertise and they are lucky if they even get on the committee, let alone chair it. . . . [University administrators have] a very sports minded mentality and that excludes women. Rewards are given out such as 'come with me to the football game and we can talk'. (senior professor, sciences)

Another professor told us:

After complaining several times to various department Chairs about the fact that I received NO research support, unlike almost every other senior professor in my department, I was given [several thousand dollars]. There is another senior woman who has NO research support. Both of us are research active and well published.... Apparently, the public relations policy rewards men and women who get outside offers, but not those who are research active and who pull in large amounts of grant money. I am deeply resentful of this. (professor, humanities/social sciences)

DISCUSSION

The title of a recent book on gender differences in academic careers well describes recent trends toward gender equity in academia: *From Scarcity to Visibility* (Long 2001). Women in most of State U.'s A&S departments are clearly visible and successful in significant ways. Even in the four short years we examined, women's representation in A&S faculty positions modestly increased (in part because the number of women increased, and the number of men declined). Their visibility increased in each disciplinary

group, but especially in the humanities and the social & behavioral sciences. The increases for women occurred in all race groups except Hispanics, while the declines for men occurred for all race groups except Asians.

In addition, rank segregation lessened between AY 1999-2000 and AY 2003-2004: women's representation increased in most ranks and, notably, their numbers in the senior/special professors more than doubled. Our data also suggest that women made important inroads into departmental leadership positions, especially in the humanities, where over half of A&S women faculty work. The earnings ratio in many of the discipline-rank groups approached 100 percent (and at time 1 the earnings ratios in the sciences exceeded 100 percent). Union-negotiated merit awards were normative: most faculty received them at some point during their career, and the small sex differences that existed did not always advantage men.

Findings from State U. are especially useful, however, in demonstrating the persistence of inequity, even as more overt forms of discrimination have abated. Using both quantitative and qualitative indicators from the A&S study, we examine how these more subtle mechanisms of gender inequity operate in one particular academic setting, a large arts and sciences unit in a major public research university. Our data are consistent with the operation of gender inequities institutionalized into the history, practices, policies, and decision making of academic departments, peers, and administrators. Such inequities don't necessarily require a conscious motive to discriminate, thus making them harder to eradicate. Indeed, they often simply reflect traditional ways of doing business, historical legacies, and/or the mapping of nonconscious attitudes, prejudices, and stereotyping about men and women onto organizational interactions and decision making. We outline how these mechanisms of inequity operate in practice.

First, underrepresentation of women persists in disciplines viewed as atypical for their sex (most notably, the sciences). To the extent these differences are the consequence of subtle sex bias in recruitment or promotion as opposed to sex differences in "choice," inequality in outcomes will be reproduced. Certainly, increased numbers of women receiving graduate degrees in sex-atypical disciplines during those years in which current A&S faculty were earning their degrees (see Table 2) makes "choice" a less compelling explanation for the sex differences we observe today. Such data suggest that there is more than simply "leakage in the pipeline:" one-third of A&S departments had a percentage female less than 60 percent of the national percentage of doctorates produced in their respective fields approximately two decades earlier. As at MIT, women were particularly scarce in scientific fields: even in AY 2003-2004, less than one-quarter of A&S life scientists, and approximately 10 percent of math/physical scientists, were women. Without concerted attention and leadership at the top the status quo will simply continue (e.g., Hopkins, 2006).

Second, stark sex differences remain in career success, specifically with respect to rank, promotion, and leadership. Even in AY 2003-2004, women were notably more likely

to be in the junior, and men in the senior, ranks. Few women are at the very top: less than one-fifth of the most senior faculty were women. This under-representation of women at the senior ranks is at least in part a combination of two important historical legacies at State U.: (1) most A&S senior professors are in those fields where women are least well represented (math/physical sciences), and (2) many of these male senior professors were hired as tenured faculty during the 1980s, when the state and the university joined forces to upgrade the university's research infrastructure and faculty. Most women now in the senior ranks, in contrast, were hired as assistant professors (and typically in the humanities), and they rose through the ranks. We know from other research that these kinds of historical legacies exacerbate gender inequity.⁴⁶ And, such legacies clearly aggravate any overt gender bias remaining in the system.

As noted, there is reason for optimism with respect to the recent promotion of women into the senior professor ranks: 11 women in the humanities went up for senior professor between 2001 to 2004 and all but one was successful, and in the sciences 6 of 7 were successful (this is in comparison to 3 in the humanities and none in the sciences in the 1997 to 2000 period). Some of this success reflects a concerted effort by the A&S Deans Office to recruit additional senior women. The combination of increased recruitment, and promotion from within, more than doubled the numbers of women at the senior professor ranks. There are troubling signs, however, regarding promotions in the nonscience discipline groups. Overall, male faculty were slightly more likely than women to be promoted during the 1997 to 2004 period. Additionally, the time1-time 2 comparison suggests that the sex gap in promotion might be getting bigger, not smaller: the gap doubled among humanities faculty and tripled among social/behavioral scientists. In addition to promotion, women in the humanities successfully moved into leadership positions, but this was less true for women in the social & behavioral sciences, and nearly nonexistent for female scientists. Up to AY 2003-2004, only one woman had chaired any of the A&S science departments since record keeping began (in the early 1980s). White (2005) describes these forms of inequity as "stubbornly durable blockages," which inevitably slow down career advancement.

Third, sex differences in base earnings persist. While the few women scientists did fairly well in comparison with their rank-equivalent male counterparts at time 1, their earnings advantage vanished by time 2: women life scientists and math/physical scientists earned 89 percent of their male counterparts. While time 1 earnings ratios for the humanities and social/behavioral scientists were relatively lower (85.2 and 80.8 percent, respectively), their relative earnings increased to 90.4 and 85.3 percent, respectively, by time 2. Men are more likely than women to earn discretionary summer salaries (typically for salary enhancement as opposed to payment for services rendered), and these supplemental earnings (modestly) boosted men's salaries, reducing the earnings ratio in over two-thirds (11 of the 16) of the time-2, discipline-rank comparisons. Our data also

⁴⁶ West et al. (2005) describe how important these historical moments of institution building can be, locking gender biases in hiring in place for decades. They urge added attention to gender equity as the University of California system gears up for a major program of faculty hiring.

show that men typically have the advantage with respect to out-of-cycle merit increases and research accounts (and their research accounts are typically worth more). Such policies on the face of it are not designed for discriminatory purposes; they are good, reasonable policies intended to reward excellent faculty (e.g., to lure them to the university, or to keep them when they receive outside offers). Their existence doesn't require a motive to discriminate. Nonetheless, how these policies operate in practice can allow for nonconscious prejudice and stereotypes to creep into the decision making process. Clearly, such programs on average advantage male faculty.

Our respondents' qualitative responses help us to flesh out how subtle sex bias operates through the myriad types of interactions in which academics regularly engage. They described in vivid detail the inequities they confront in their day-to-day faculty lives, the inequalities that might begin as "molehills" but grow into "mountains" (Valian 1998:4-5). Very much like their MIT counterparts, they articulated feelings of invisibility and marginalization that grew worse as they moved into the tenure ranks. They described the lack of departmental or university attention or support for recruiting women; their relative scarcity in science (and some nonscience) departments; their exclusion from important departmental and university committees, departmental grants, and research teams; their lack of adequate access to leadership opportunities or resources for their research. They perceived subtle (and sometimes overt) gender biases in how departmental chairs, faculties, and deans managed the promotion process; set salaries; negotiated salary and research support; and allocated supplementary funds. Those we interviewed, especially those engaged in gender research, also argued that sex bias restricted or delayed their promotion prospects. Many of our respondents made quite clear that they feel well respected and valued in their larger professions, but undervalued in their own departments and the larger university.

Our data thus provide evidence for the existence of subtle inequities that can arise in part from nonconscious attitudes and beliefs, or organizationally based policies and procedures. These forms of inequity are perhaps more difficult to eradicate, requiring determined leadership from chairs, deans, and other university administrators. Decanal leadership at State U. did account in part for the movement toward gender equity between the two years for which we had data. The (male) A&S executive dean took steps to recruit senior women; a few years later, the (female) A&S executive dean initiated an A&S committee on faculty diversity, charged with recommending "realistic goals and strategies to address the underrepresentation of women and faculty of color in many [A&S] departments."⁴⁷ That committee presented its final report in March, 2004, just after we completed data collection. It included a number of specific recommendations that focused on increasing awareness, updating information, identifying best practices, enhancing retention, generating new resources, and using accountability mechanisms to greater advantage. An informal A&S diversity analysis (conducted in September, 2005 by the A&S Dean's Office) summarized the first year's success: of 34 new faculty, 16 were

⁴⁷ "Report of the Committee on Increasing Faculty Diversity" (internal A&S report presented to the A&S Executive Dean, March 31, 2004).

women, 16 were members of underrepresented ethnic groups, and 4 of the 13 new science faculty were women.

Such success shows unequivocally what a difference leadership on diversity issues can make, a point Nancy Hopkins (2006) underscores from her experience at MIT. Hopkins also notes that, without constant vigilance, diversity gains can also rapidly evaporate.⁴⁸ To the extent that nonconscious gender biases get mapped onto organizational interactions and decision making, or historical legacies or policies continue to reproduce gender inequity, unconventional strategies are called for. As Ridgeway and Correll (2000) point out, we need to modify the existing “gender system” through an interactive process of social interventions that will slowly re-shape our personal interactions, and hence how we perceive and evaluate others. They recommend renewed commitment to affirmative action, policies that equalize the distribution of resources, transparency re pay and reward practices, accountability for gender equity outcomes, and family friendly workplace policies (Ridgeway and Correll 2000:114-119).

It’s still quite newsworthy when universities redress gender inequity. Witness the media attention to MIT’s admission of discrimination against its most accomplished senior women faculty. The big news was that MIT’s administrators “got it,” and took steps to rectify the inequities that existed. It was also big news when Princeton hired its first ever woman President in 2001, and even bigger news when she later appointed women to other top slots (including several top deans and the Provost; Arenson 2002). Perhaps the true measure of success in tomorrow’s universities will be when the appointment of women to top positions won’t occasion this kind of media attention, because it’ll just be business as usual.

⁴⁸ Hopkins (2006) describes the fragility of progress toward gender equity. To solidify gains, she emphasizes the need for continued leadership and accountability from the highest levels of university administration.

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Table 1. PERCENTAGE IN DISCIPLINARY GROUPS, BY SEX, FOR TENURED AND TENURE-TRACK FACULTY, ARTS & SCIENCES FACULTY, AY 1999-2000 AND AY 2003-2004

<u>Disciplinary Group</u>	<u>Men</u>	<u>Women</u>	<u>% Female</u>	<u>N</u>
<u>Panel A: Total A&S Faculty, AY 1999-2000^a</u>			<u>25.6</u>	<u>743</u>
Humanities	27.7	52.1 *	39.3	252
Social & Behavioral Sciences	24.8	28.4	28.3	191
Life Sciences	8.9	6.8	21.0	62
Mathematical & Physical Sciences	38.7	12.6	10.1	238
Total	100.1	99.9		
N	(553)	(190)		
<u>Panel B: Total A&S Faculty, AY 2003-2004^b</u>			<u>28.4</u>	<u>737</u>
Humanities	26.0	53.1 *	44.8	248
Social & Behavioral Sciences	23.3	27.8	32.0	181
Life Sciences	8.7	6.7	23.3	60
Mathematical & Physical Sciences	42.0	12.4	10.5	248
Total	100.0	100.0		
N	(528)	(209)		

^aIncludes all A&S faculty with a current (AY 1999-2000) salary.

^bIncludes all A&S faculty with a current (AY 2003-2004) salary.

*Sex difference significant .001

Source: A&S Dean's Office

Table 2. Doctorates Earned in the U.S. 1998, and in 1981 to 1998, by Field, and Percent Female in A&S Departments (AY 2003-2004)

<u>A&S Dept. [NRC field, if different]^d</u>	Doctorates, 1998^a		Cumulative Doctorates^b 1981-1998		A&S Departments, AY 2003-2004^c	
	<u>Total</u>	<u>% Female</u>	<u>Total</u>	<u>% Female</u>	<u>Total</u>	<u>% Female</u>
<u>Humanities</u>	<u>4419</u>	<u>49.6</u>	<u>62049</u>	<u>47.3</u>	<u>248</u>	<u>44.8</u>
American Studies	93	51.6	1376	55.4	5	40.0
Art History	179	77.7	2441	71.3	14	78.6
Asian Languages and Culture ^e	24	41.7	353	47.3	11	45.4
Classics	67	46.3	931	40.6	5	20.0
English [Amer. Lit., English, & Engl. Lit.]	945	58.1	13510	57.6	58	48.3
French	110	64.5	1834	70.8	15	53.3
Germanic, Russian, and East European Languages ^f	127	59.9	1750	58.0	7	57.1
History [6 subfields added]	835	40.7	10916	36.0	54	44.4
Italian	18	61.1	297	62.0	5	40.0
Jewish Studies [Hebrew]	6	50.0	146	26.0	4	na
Linguistics	135	64.4	2133	59.6	10	40.0
Philosophy	311	29.9	4053	25.7	27	14.8
Religion	281	27.8	3491	23.7	9	11.1
Spanish & Portuguese [Spanish]	151	59.6	2445	62.7	16	50.0
Women's and Gender Studies	na	na	na	na	8	87.5
<u>Social & Behavioral Sciences^g</u>	<u>5421</u>	<u>58.1</u>	<u>89694</u>	<u>50.1</u>	<u>181</u>	<u>32.0</u>
Africana Studies	na	na	na	na	8	50.0
Anthropology	327	56.9	5366	54.2	20	45.0
Economics	470	30.2	8599	24.2	30	16.7
Geography	114	31.6	1634	28.6	7	14.3
Political Science [Pol Sc. & Gov't]	530	40.2	6509	30.5	30	30.0
Psychology	3137	67.6	52962	57.4	50	28.0
Puerto Rican & Hisp Carib Studies	na	na	na	na	2	na
Sociology	415	59.3	7041	51.7	31	48.4

<u>Life Sciences</u>	<u>5869</u>	<u>49.0</u>	<u>90425</u>	<u>41.0</u>	<u>60</u>	<u>23.3</u>
Cell Biology & Neuroscience [added 2 subfields]	555	46.8	5719	42.5	26	26.9
Genetics ^h	416	46.6	6729	43.5	17	23.5
Molecular Biology and Biochemistry [added 2 subfields]	1039	44.7	15844	38.6	17	17.6
<u>Mathematical & Physical Sciences</u>	<u>4062</u>	<u>26.2</u>	<u>65898</u>	<u>20.4</u>	<u>248</u>	<u>10.5</u>
Chemistry	1413	31.8	25495	24.8	41	24.4
Computer Science	528	21.6	6585	19.0	38	2.6
Exercise Science ⁱ	102	44.1	441	41.3	2	na
Geological Sciences [Geology]	113	28.3	1916	22.5	16	12.5
Mathematics	639	30.0	9084	22.5	70	8.6
Physics & Astronomy	925	14.4	15173	11.3	62	9.7
Statistics [Mathematical Statistics]	119	29.4	1749	25.7	19	5.3
<u>Total (all NRC fields)</u>	<u>29948</u>	<u>47.1</u>	<u>483291</u>	<u>41.9</u>	na	na
<u>Total (all NRC humanities, social and behavioral sciences, life sciences, and math and physical sciences)^j</u>	<u>19771</u>	<u>46.9</u>	<u>308066</u>	<u>40.5</u>	<u>737</u>	<u>28.4</u>

^aTotal number of doctorates (and percent female) conferred in the U.S. in 1998, by field of study (NRC data).

^bTotal number of doctorates (and percent female) conferred in the U.S. from 1981 to 1998, by field of study (NRC data).

^cNumbers in departments for tenured and tenure-track faculty, Arts & Sciences, AY 2003-2004. Percent female is calculated only for departments with 5 or more faculty.

^dIncludes NRC fields without A&S department equivalents.

^eAs of 2003-2004, Asian Languages and Culture included Chinese, Japanese, and Korean. NRC data includes sum of Chinese and Japanese degrees (and average percent female). Korean not available.

^fAs of 2000, Germanic, Russian and East European Languages included German, Russian, Hungarian, and Slavic. NRC data includes sum of German, Russian, and Slavic degrees (and average percent female). Hungarian not available.

^gThree State U. Criminal Justice program faculty without departments are included in the Social & Behavioral Science total, but not within individual departments.

^hListing for 1998 NRC data is "Microbiology" and "Human & Animal Genetics"; listing for 1981-1998 is "Microbiology", "Human & Animal Genetics", and "Genetics".

ⁱListing for 1998 NRC data is "Exercise Physiology"; listing for 1981-1998 is "Exercise Science/Kinesiology".

^jTotals for A&S Departments refers to AY 2003-2004. Total for NRC columns includes NRC fields without A&S department equivalents.

Source: A&S data: A&S Dean's office; NRC data: data made available from the university's Office of Affirmative Action (March, 2001).

These data are from the National Research Council, Office of Scientific Engineering Personnel and the Doctorate Records File. The Affirmative Action office deleted "aliens on temporary visas" and "degree recipients of unspecified race or citizenship status."

**Table 3. PERCENTAGE FEMALE IN TENURED OR TENURE-TRACK ACADEMIC RANKS,
ARTS & SCIENCES FACULTY, AY 1999-2000 AND AY 2003-2004**

<u>Rank</u>	<u>Men</u>	<u>Women</u>	<u>% Female</u>	<u>N</u>
<u>Panel A: Total A&S Faculty AY 1999-2000^a</u>			<u>25.6</u>	<u>743</u>
Instructors/Lecturers	0.4	0.5 *	33.3	3
Assistant Professors	13.6	29.0	42.3	130
Associate Professors	23.0	32.1	32.4	188
Professors	35.4	30.5	22.8	254
Sr. Professors	25.1	6.3	8.0	151
Special Professors	2.5	1.6	17.6	17
Total	100.0	100.0		
N	(553)	(190)		
<u>Panel B: Total A&S Faculty AY 2003-2004^b</u>			<u>28.4</u>	<u>737</u>
Instructors/Lecturers	0.2	0.0 *	0.0	1
Assistant Professors	11.9	23.4	43.8	112
Associate Professors	25.2	36.8	36.7	210
Professors	34.1	23.9	21.7	230
Sr. Professors	25.2	13.9	17.9	162
Special Professors	3.4	1.9	18.2	22
Total	100.0	99.9		
N	(528)	(209)		

^aIncludes all A&S faculty with a current (AY 1999-2000) salary.

^bIncludes all A&S faculty with a current (AY 2003-2004) salary.

*Sex difference significant .001

Source: A&S Dean's Office

Table 4. Rank When Hired, Senior Professor Faculty, AY 2003-2004

<u>Disciplinary Group/Sex</u>	Rank when hired					<u>Total</u>	
	<u>Asst. Prof.^a</u>	<u>Assoc. Prof.</u>	<u>Prof.</u>	<u>Senior Prof.</u>	<u>Special Profs.</u>		
<u>Numbers</u>							
<u>Totals</u>	<u>79</u>	<u>26</u>	<u>24</u>	<u>49</u>	<u>6</u>	<u>184</u>	
Humanities	16	6	9	11	3	45	
Men	9	4	6	7	2	28	
Women	7	2	3	4	1	17	
Social & Behavioral Sciences	9	5	8	6	0	28	
Men	7	4	7	4	0	22	
Women	2	1	1	2	0	6	
Life Sciences	2	0	0	3	0	5	
Men	0	0	0	3	0	3	
Women	2	0	0	0	0	2	
Mathematical & Physical Sciences	52	15	7	29	3	106	
Men	46	14	7	28	3	98	
Women	6	1	0	1	0	8	
<u>Percentages</u>						<u>Total %</u>	<u>Base N</u>
<u>Totals</u>	<u>42.9</u>	<u>14.1</u>	<u>13.0</u>	<u>26.6</u>	<u>3.3</u>	<u>99.9</u>	<u>184</u>
Discipline (as % of total)							
Humanities (24.5%)	35.6	13.3	20.0	24.4	6.7	100.0	45
Social & Behavioral Sciences (15.2%)	32.1	17.9	28.6	21.4	0.0	100.0	28
Life Sciences (2.7%)	40.0	0.0	0.0	60.0	0.0	100.0	5
Mathematical & Physical Sciences (57.6%)	49.1	14.2	6.6	27.4	2.8	100.1	106
Sex (as % of total)							
Men (82.1%)	41.1	14.6	13.2	27.8	3.3	100.0	151
Women (17.9%)	51.5	12.1	12.1	21.2	3.0	99.9	33

^aIncludes Assistant Professors and Lecturers.

Source: A&S Dean's Office

Table 5. BOARD OF GOVERNORS PROMOTION DECISIONS, ARTS & SCIENCES FACULTY, BY SEX, RANK, AND DISCIPLINE GROUP, AY 1997-2000 AND AY 2001-2004

<u>Discipline Group/Rank</u>	# Successfully Promoted (base N)^a					
	<u>1997-2000</u>		<u>2001-2004</u>		<u>1997-2004</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
<u>Total A&S Faculty</u>	<u>64 (79)</u>	<u>26 (33)</u>	<u>118 (131)</u>	<u>65 (75)</u>	<u>182 (210)</u>	<u>91 (108)</u>
<u>Humanities</u>	20 (25)	14 (18)	37 (40)	36 (41)	57 (65)	50 (59)
Associate Professor	7 (11)	6 (10)	18 (18)	18 (22)	25 (29)	24 (32)
Professor	5 (5)	5 (5)	9 (11)	8 (8)	14 (16)	13 (13)
Sr. Professor	8 (9)	3 (3)	10 (11)	10 (11)	18 (20)	13 (14)
<u>Social & Behavioral Sciences</u>	12 (14)	9 (11)	22 (24)	16 (20)	34 (38)	25 (31)
Associate Professor	5 (5)	7 (9)	9 (9)	13 (14)	14 (14)	20 (23)
Professor	4 (6)	2 (2)	12 (13)	3 (6)	16 (19)	5 (8)
Sr. Professor	3 (3)	0 (0)	1 (2)	0 (0)	4 (5)	0 (0)
<u>Life Sciences</u>	8 (10)	0 (1)	10 (10)	5 (6)	18 (20)	5 (7)
Associate Professor	3 (5)	0 (1)	5 (5)	2 (2)	8 (10)	2 (3)
Professor	5 (5)	0 (0)	4 (4)	2 (2)	9 (9)	2 (2)
Sr. Professor	0 (0)	0 (0)	1 (1)	1 (2)	1 (1)	1 (2)
<u>Math & Physical Sciences</u>	24 (30)	3 (3)	49 (57)	8 (8)	73 (87)	11 (11)
Associate Professor	8 (9)	1 (1)	17 (18)	2 (2)	25 (27)	3 (3)
Professor	6 (9)	2 (2)	20 (23)	1 (1)	26 (32)	3 (3)
Sr. Professor	10 (12)	0 (0)	12 (16)	5 (5)	22 (28)	5 (5)

% Promotion Success Rate^b

<u>Discipline Group</u>	<u>1997-2000</u>		<u>2001-2004</u>		<u>1997-2004</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
<u>Total A&S Faculty</u>	<u>81.0</u>	<u>78.8</u>	<u>90.1</u>	<u>86.7</u>	<u>86.7</u>	<u>84.3</u>
Humanities	80.0	77.8	92.5	87.8	87.7	84.7
Social & Behavioral Sciences	85.7	81.8	91.7	80.0	89.5	80.6
Life Sciences	80.0	0.0	100.0	83.3	90.0	71.4
Math & Physical Sciences	80.0	100.0	86.0	100.0	83.9	100.0

^aAcademic year indicates promotion cycle.

^bSee above for base N.

Source: A&S Dean's Office

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Table 6. ARTS & SCIENCES FACULTY ACADEMIC LEADERSHIP, Fall 1999 and 2004/2005

	<u>Fall, 1999</u> % Female	N	<u>2004/2005</u> % Female	N (as of)
A&S Deans^a	28.6	7	14.3	7 (Fall, 2004)
Department Chairs^b	20.0	35	23.5	34 (Fall, 2004)
Humanities	35.3	17	25.0	16
Social & Behavioral Sciences	12.5	8	50.0	8
Life Sciences	0.0	3	0.0	3
Math & Physical Sciences	0.0	7	0.0	7
Graduate Directors	33.3	27	34.5	29 (Spring, 2005)
Humanities	58.3	12	66.7	12
Social & Behavioral Sciences	0.0	6	16.7	6
Life Sciences	0.0	3	0.0	4
Math & Physical Sciences	33.3	6	14.3	7
Undergraduate Directors^c	28.0	25	16.0	25 (Spring, 2005)
Humanities	45.5	11	27.3	11
Social & Behavioral Sciences	16.7	6	0.0	6
Life Sciences	0.0	3	33.3	3
Math & Physical Sciences	20.0	5	0.0	5
Center Directors^d	16.7	18	33.3	18 (Fall, 2004)

^a Includes A&S Dean, Vice Dean and Associate Deans.

^b Includes Acting Chairs.

^c Includes only Undergraduate Directors who are not also Chairs.

^d Includes only Center directors who report to the A&S Dean

Source: A&S Dean's Office, Graduate School

Table 7. ACADEMIC YEAR EARNINGS, EARNINGS RATIOS, BY DISCIPLINE GROUP, RANK, AND SEX, AY 1999-2000 AND AY 2001-2004a

<u>Discipline Group/Rank</u>	<u>AY 1999-2000</u>			<u>AY 2003-2004</u>		
	<u>Mean Earnings</u>	<u>Mean Earnings</u>	<u>Earnings Ratio (W/M)</u>	<u>Mean Earnings</u>	<u>Mean Earnings</u>	<u>Earnings Ratio (W/M)</u>
	<u>Women</u>	<u>Men</u>		<u>Women</u>	<u>Men</u>	
<u>Total A&S Faculty</u>	<u>\$76,934</u>	<u>\$91,771</u>	<u>83.8%</u>	<u>\$87,407</u>	<u>\$102,485</u>	<u>85.3%</u>
<u>Humanities</u>	<u>\$75,641</u>	<u>\$88,763</u>	<u>85.2%</u>	<u>\$86,743</u>	<u>\$95,958</u>	<u>90.4%</u>
Assistant Professors	\$52,325	\$52,408	99.8%	\$57,403	\$58,743	97.7%
Associate Professors	\$68,785	\$69,603	98.8%	\$74,414	\$79,054	94.1%
Professor	\$93,284	\$92,697	101%	\$101,077	\$105,170	96.1%
Sr. Professor/Special Profs.	\$126,077	\$125,012	101%	\$136,445	\$136,892	99.7%
<u>Social & Behavioral Sciences</u>	<u>\$71,517</u>	<u>\$88,476</u>	<u>80.8%</u>	<u>\$84,638</u>	<u>\$99,233</u>	<u>85.3%</u>
Assistant Professors	\$57,778	\$56,644	102%	\$64,996	\$65,750	98.9%
Associate Professors	\$70,720	\$76,080	93.0%	\$78,263	\$81,900	95.6%
Professor	\$94,440	\$92,391	102%	\$100,228	\$103,487	96.9%
Sr. Professor/Special Profs.	[\$104,142]	\$120,517	86.4%	\$135,688	\$134,851	101%
<u>Life Sciences</u>	<u>\$79,454</u>	<u>\$86,466</u>	<u>91.9%</u>	<u>\$84,903</u>	<u>\$95,068</u>	<u>89.3%</u>
Assistant Professors	[\$50,596]	\$54,402	93.0%	[\$61,421]	\$67,388	91.1%
Associate Professors	[\$70,232]	\$78,330	89.7%	\$71,339	\$86,261	82.7%
Professor	\$97,050	\$95,748	101%	[\$100,066]	\$106,474	94.0%
Sr. Professor/Special Profs.	^b	\$128,411	^b	[\$123,711]	[\$163,379]	75.7%
<u>Mathematical & Physical Sciences</u>	<u>\$93,095</u>	<u>\$97,247</u>	<u>95.7%</u>	<u>\$97,772</u>	<u>\$109,851</u>	<u>89.0%</u>
Assistant Professors	[\$63,248]	\$61,690	103%	\$59,840	\$72,206	82.9%
Associate Professors	[\$77,347]	\$75,389	103%	[\$81,346]	\$81,020	100%
Professor	\$92,288	\$91,796	101%	\$99,258	\$101,218	98.1%
Sr. Professor/Special Profs.	\$124,837	\$122,538	102%	\$132,947	\$134,822	98.6%

^aIncludes all A&S faculty with a current (AY 1999-2000 or AY 2003-2004) salary. The few "Instructors" are included in discipline averages, but not separately within disciplinary groups.

^bData withheld due to small n. Brackets ([]'s) used for values based on fewer than 5 faculty.

Source: A&S Dean's Office

Table 8. PERCENTAGE RECEIVING DISCRETIONARY SUMMER SALARIES, BY YEAR, DISCIPLINE GROUP, AND SEX, AY 1999-2000 OR AY 2003-2004^a

	<u>Discretionary Summer Salaries^b</u>						
	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Total A&S Faculty	8.9	10.8	11.4	10.3	10.4	12.8	13.4
Male	9.9	11.8	12.1	11.2	11.6	13.8	15.2
Female	5.8	7.9	9.5	8.1	7.7	10.0	9.1
Humanities	12.3	13.1	9.1	7.3	7.7	9.7	10.5
Male	14.4	15.0	10.5	8.8	9.5	12.4	13.1
Female	9.1	10.1	7.1	5.4	5.4	6.3	7.2
Social & Behavioral Sciences	8.4	9.4	10.5	9.9	11.6	13.8	11.0
Male	11.0	11.0	9.5	8.1	9.8	13.0	12.2
Female	1.8	5.6	13.0	13.8	15.5	15.5	8.6
Life, Math. & Physical Sciences	6.3	9.7	14.0	13.0	12.0	14.6	17.2
Male	6.8	10.3	14.4	13.8	13.4	14.9	17.5
Female	2.7	5.4	10.8	7.5	2.5	12.5	15.0

^aData on 1998 through 2000 available for A&S faculty in residence AY 1999-2000; data on 2001 through 2004 available for A&S faculty in residence AY 2003-2004.

^b"Discretionary summer salary" refers to salary received in June, July, or August of indicated year (state funding, internal grants, department, and central administration).

Source: A&S Dean's Office

Table 9. FULL-YEAR SALARY, BY DISCIPLINE GROUP, RANK, AND SEX, AY 1999-2000 AND AY 2003-2004^a

<u>Discipline Group/Rank</u>	<u>AY 1999-2000</u>			<u>AY 2003-2004</u>		
	<u>Women</u>	<u>Men</u>	<u>Ratio W/M</u>	<u>Women</u>	<u>Men</u>	<u>W/M</u>
<u>Total A&S Faculty</u>	<u>\$77,831</u>	<u>\$93,196</u>	<u>83.5%</u>	<u>\$88,322</u>	<u>\$104,691</u>	<u>84.4%</u>
<u>Humanities</u>	<u>\$76,845</u>	<u>\$90,636</u>	<u>84.8%</u>	<u>\$87,487</u>	<u>\$97,782</u>	<u>89.5%</u>
Assistant Professors	\$52,325	\$53,625	97.6%	\$57,700	\$58,885	98.0%
Associate Professors	\$69,150	\$70,163	98.6%	\$74,954	\$80,889	92.7%
Professors	\$96,373	\$93,694	102.9%	\$102,596	\$106,097	96.7%
Sr. Professor/Special Profs.	\$127,410	\$130,024	98.0%	\$137,034	\$141,334	97.0%
<u>Social & Beh. Sciences</u>	<u>\$72,072</u>	<u>\$89,572</u>	<u>80.5%</u>	<u>\$86,110</u>	<u>\$101,240</u>	<u>85.1%</u>
Assistant Professors	\$58,573	\$57,221	102.4%	\$66,458	\$68,815	96.6%
Associate Professors	\$70,720	\$76,457	92.5%	\$79,541	\$83,266	95.5%
Professors	\$95,575	\$93,341	102.4%	\$101,410	\$105,024	96.6%
Sr. Professor/Special Profs.	[\$104,142]	\$123,225	84.5%	\$138,584	\$138,508	100.1%
<u>Life Sciences</u>	<u>\$79,454</u>	<u>\$86,466</u>	<u>91.9%</u>	<u>\$84,903</u>	<u>\$95,839</u>	<u>88.6%</u>
Assistant Professors	[\$50,596]	\$54,402	93.0%	[\$61,421]	\$69,098	88.9%
Associate Professors	[\$70,232]	\$78,330	89.7%	\$71,339	\$86,261	82.7%
Professors	\$97,050	\$95,748	101.4%	[\$100,066]	\$107,655	93.0%
Sr. Professor/Special Profs.	^b	\$128,411	^b	[\$123,711]	[\$163,379]	75.7%
<u>Math. & Physical Sciences</u>	<u>\$93,974</u>	<u>\$98,888</u>	<u>95.0%</u>	<u>\$98,664</u>	<u>\$112,702</u>	<u>87.5%</u>
Assistant Professors	[\$68,524]	\$65,848	104.1%	\$62,748	\$76,756	81.7%
Associate Professors	[\$77,347]	\$76,550	101.0%	[\$81,346]	\$83,024	98.0%
Professors	\$92,288	\$91,992	100.3%	\$99,878	\$102,899	97.1%
Sr. Professor/Special Profs.	\$124,837	\$124,812	100.0%	\$133,046	\$138,415	96.1%

^aIncludes all A&S faculty with a current (AY 1999-2000 or AY 2003-2004) salary. "Instructors" are included in discipline averages, but not separately within discipline groups.

Full-year salary includes base salary (academic year salary, including those whose titles carry 12-mos. salaries; e.g., chair, dean) plus discretionary salary (dean-provided summer salary earned from July 1st through the following June 30th; e.g., July 1, 2003-June 30, 2004).

^bData withheld due to small n. Brackets ([]s) used for values based on fewer than 5 faculty.

Source: A&S Dean's Office

Table 10. PERCENTAGE RECEIVING MERIT, OUT OF CYCLE MERIT, OR RESEARCH ACCOUNT, BY DISCIPLINARY GROUP, RANK, AND SEX, AY 1999-2000 AND AY 2003-2004^f

<u>Discipline Group</u>	AY 1999-2000 Percentage Receiving						AY 2003-2004 Percentage Receiving					
	Merit ^b		Out of Cycle ^c		Research Acct ^d		Merit ^b		Out of Cycle ^c		Research Acct ^e	
	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>
<u>Total A&S Faculty</u>	<u>83.7</u>	<u>84.1</u>	<u>6.8</u>	<u>9.2</u>	<u>35.3</u>	<u>25.9</u>	<u>91.9</u>	<u>90.9</u>	<u>11.0</u>	<u>14.0</u>	<u>38.8</u>	<u>30.7</u>
<u>Humanities</u>	86.9	88.9	7.1	15.7	48.5	50.3	91.9	92.7	10.8	20.4	53.2	62.0
Assistant Professor	69.2	55.0	0.0	5.0	53.8	25.0	77.8	71.4	3.7	4.8	22.2	19.0
Associate Professor	97.1	90.2	11.8	4.9	41.2	41.5	97.4	95.6	10.5	20.0	68.4	73.3
Full professor ^f	92.1	96.7	7.9	23.1	52.6	60.4	95.7	97.2	15.2	25.4	58.7	67.6
<u>Social & Beh. Sciences</u>	75.9	82.5	5.6	9.5	27.8	31.4	94.8	91.1	10.3	13.8	32.8	35.0
Assistant Professor	63.6	52.6	4.5	0.0	40.9	26.3	92.3	83.3	7.7	0.0	15.4	8.3
Associate Professor	78.9	91.9	5.3	16.2	15.8	21.6	96.7	84.8	16.7	12.1	43.3	27.3
Full professor ^f	92.3	85.0	7.7	8.8	23.1	36.2	93.3	96.1	0.0	16.9	26.7	42.9
<u>Life Sciences</u>	76.9	73.5	7.7	2.0	15.4	6.1	100.0	84.8	14.3	15.2	7.1	13.0
Assistant Professor	[33.3]	88.9	[0.0]	0.0	[0.0]	0.0	[100.0]	66.7	[33.3]	33.3	[0]	0
Associate Professor	[75.0]	68.8	[0.0]	6.2	[25.0]	6.2	100.0	76.5	0.0	11.8	0	17.6
Full professor ^f	100.0	70.8	16.7	0.0	16.7	8.3	100.0	100.0	16.7	10.0	16.7	15.0
<u>Math. & Physical Sciences</u>	91.7	84.1	8.3	6.1	8.3	9.3	80.8	91.0	11.5	9.9	7.7	12.6
Assistant Professor	[100.0]	48.1	[0.0]	0.0	[0.0]	0.0	33.3	76.2	0.0	0.0	0	0
Associate Professor	[100.0]	84.8	[25.0]	3.0	[0.0]	6.1	[100.0]	89.5	[25.0]	10.5	[0]	2.6
Full professor ^f	87.5	90.3	6.2	7.8	12.5	11.7	93.8	93.3	12.5	11.0	12.5	16.6

^aIncludes all faculty with current (AY 1999-2000 or AY 2003-3004) salary. Instructors are included in disciplinary averages, but not separately within disciplinary groups.

^b"% Receiving Merit" = percentage ever receiving merit increase while faculty member.

^c% Receiving Out of Cycle Merit = percentage ever receiving out of cycle merit increase while faculty member.

^d% Receiving Research Account = ever receiving research account during 1998-2000 period.

^e% Receiving Research Account = ever receiving research account during 2001-2004 period.

^fIncludes all full, senior, and special professors. Note: Brackets ([]'s) used for values based on fewer than 5 faculty.

Source: A&S Dean's Office