REPORT OF THE PROVOST'S COMMITTEE ON THE RECRUITMENT AND RETENTION OF WOMEN FACULTY

Stanford University

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Part I. Introduction

A. Overview

In the last 25 years, American colleges and universities, including Stanford, have increased the number and percentage of women on their faculties. For example, between 1974-75 and 1992-93, Stanford increased the percentage of women faculty by almost 9 percentage points (from 7 percent to almost 16 percent) and the percentage of tenured women faculty by 7 percentage points (from 4 percent to 11 percent). However, **43 percent of Stanford departments still have no tenured women***. Moreover, **during the last 5 years, in departments where there were new faculty hired, almost 40 percent hired no women.**

Relative to the twenty universities with which we usually compare ourselves, Stanford is seriously lagging with respect to recruitment and retention of women faculty. According to data compiled by the American Association of University Professors (AAUP) for 1992-93, when compared to the University of Chicago, Cal Tech, MIT, and universities in the Ivy League and the Pac Ten, Stanford's ranking with respect to the percentage of women faculty is **third from the bottom for all faculty and fifth from the bottom for full professors.**[1]

Only at two technical schools, Cal Tech and MIT, is the percentage of women faculty lower than ours.[2] Ironically, Stanford, which has been coeducational since its founding, has a lower representation of women on its faculty than do Yale, Princeton and Dartmouth, institutions that have had all male student bodies until recently.[3]

The low percentage of faculty women at Stanford provides us with an important warning signal. We need to change our policies and procedures and our recruitment and retention strategies.

In addition to the fact that we are missing out on a significant segment of the talent pool, the relatively low percentage of women faculty at Stanford has several other undesirable consequences. Because most women have had life experiences that are different from men's, faculty women often bring a diversity of ideas, viewpoints, and outside networks to the universities in which they work. Stanford is missing out on much of that diversity.

Moreover, by limiting the number of women on our faculty, we make life more difficult for those faculty women who are already here. Their exceedingly small numbers in some departments is isolating so that many feel that they do not easily fit into their

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* During the 1992-93 academic year the departments of economics and mathematics each hired one tenured woman.

department's social structure. Most feel overburdened with the tasks of being both role model and advisor for the large number of women students who seek them out and some find it tiresome to be asked constantly to represent "women's interests" on departmental and university committees. Because of the very small number of senior women faculty, junior women faculty lack role models important for their development.

To some extent, we have created a vicious circle. Because some departments at Stanford are known as places that have few faculty women, many women who have choices about where to work choose not to come to those departments at Stanford. To remedy our situation, to be able to hire the best talent we can in all fields, we will have to make Stanford a welcoming place for women faculty. Stanford can do better.

In our information-collection efforts this year, we have talked to men faculty as well as to women faculty and we have found that both groups face major problems at Stanford. However, we learned that many of the serious problems troubling faculty women at Stanford are gender specific. Also, many of the problems facing both women and men are more acute for women. In general, departments and Schools that are hospitable for women are also supportive for men. However, the reverse is not necessarily true.

This report examines some of the reasons why Stanford does poorly in the recruitment and retention of women faculty and makes recommendations for changing our situation. It is our expectation that if these recommendations are taken seriously by the President, Provost, Deans, department chairs and faculty members, Stanford can equal, and perhaps surpass, the performance of our sister institutions. This committee unanimously and strongly supports Stanford's commitment to this effort.

Our 16 recommendations for change are presented throughout the report and are also listed in their entirety in the conclusion. The recommendations will assist in the recruitment and retention of men faculty as well as women faculty. It is also noteworthy that several of these recommendations were made in the report of the University Committee on Minority Issues (UCMI).

Implementing these recommendations will require expenditure of additional time and effort by faculty and administrators. For some recommendations, implementation will also require expenditure of additional funds. We have carefully considered the costs of our recommendations. It is our view that incurring these costs is necessary and should be seen as part of the overall cost of recruitment and retention of an outstanding faculty.

Finally, we note that because of the short time period allocated for the Committee's work we have been unable to deal with issues of

particular concern to women who are part-time faculty and to women Lecturers, Senior Lecturers, Research Associates and Senior Research Associates. We recommend that a successor committee to ours be appointed to deal with the concerns of both men and women faculty in these groups.

B. Summary of Research Methodology

The Committee on the Recruitment and Retention of Women Faculty was appointed by Provost Gerald Lieberman in October, 1992.[4] In order to fulfill its charge, to make recommendations to the Provost to improve the recruitment and retention of women faculty at Stanford University, the Committee has sought to understand the factors that affect the decisions of women faculty to come to Stanford, and the factors that keep them here or hasten their departure.

The Committee has not acted as a grievance board, nor have we set out to "find problems." We did not, for example, issue an open invitation to the Stanford community to share their concerns. Rather, for the past eight months the committee has been engaged in several kinds of information gathering activities.

First, we looked at Stanford-wide data. Specifically, we obtained the number and percentage of women faculty by School and department and reviewed Stanford faculty salary information by gender.

Second, in order to compare Stanford with comparable institutions we reviewed AAUP data on the number and percentage of women faculty at institutions comparable to Stanford.

Third, we undertook data collection which would allow us to hear the experiences of faculty members. Specifically, we met with focus groups of a stratified random sample of junior faculty and young senior faculty; reviewed questionnaires returned by faculty members unable to attend their scheduled focus group; and conducted telephone interviews with a sample of faculty women, and a matched sample of men, who left Stanford in the past five years (post-exit interviews).[5] Speaking directly with the faculty gave the committee vivid insight into the issues facing both women and men faculty at Stanford, as well as those that disproportionately affect women faculty.

Fourth, we spoke with some decision makers. Specifically, we talked with department chairs in selected departments about their recruitment and retention procedures and with chairs of recent faculty search committees about their recruitment procedures.[6]

Finally, in order to make recommendations about the use of the Faculty Affirmative Action Fund (FAAF) and the Faculty Incentive Fund (FIF) for women we gathered information on the use of the FAAF for women in past years and reviewed the minutes of our predecessor committee.

Part II. The Absence of a Culture of Support

For some junior faculty at Stanford, life is markedly stressful, both in terms of their work and with regard to their family and financial situations.[7] They find little support from senior colleagues, nor do they perceive much support coming from the university as an institution. In our focus groups and post-exit interviews junior faculty told us that their experience here has not been collegial. Rather, they have felt themselves to be "on trial." And for many that trial has felt brutal.

Some women reported a particularly difficult time. Not only do they have all of the problems cited by men, but many also reported problems directly and indirectly related to gender discrimination, sexual harassment and/or the responsibility of being the primary child rearer.

A. The Tenure and Promotion Process

The tenure and promotion process has critical effects on Stanford's ability to recruit and retain faculty. Other things being equal, some faculty going through a process that provides little or no mentoring, little or no information and little or no emotional support, are more likely to leave before they come up for tenure. Potential faculty who have choices about where to work may decide not to come here if they know that the Stanford process is particularly unsupportive.

Not all faculty members reported difficulties. In some Schools and departments the situation for junior faculty, including women, is quite good. In other cases, although the overall department or School was not supportive of junior faculty, respondents had a single senior colleague or department chair who provided them with feedback on their work, mentored them and generally encouraged their efforts. Nevertheless, the overall picture that emerged from our data gathering was disturbing.

1. Mentoring and Emotional Support

Junior faculty who are brought to Stanford are some of the brightest people in the country. They have completed doctoral work at some of the most prestigious institutions and we have hired them because they show great promise. Nevertheless, they are still scholars-in-the-making. They need continued intellectual investments by senior faculty. Our interviews convinced us that while some departments and Schools do provide adequate mentoring, far too many junior faculty on this campus do not get the mentoring they want or need.

Women have particular difficulties getting mentoring because some men in their field do not think them intellectually worthwhile and other men fear involvement with a junior woman lest they become sexually attracted or accused of sexual harassment. Also, many junior men faculty are not mentored.

A number of the faculty, especially women faculty, with whom we spoke were clearly pained by the absence of emotional support. Some women felt that they received support from other women and that the male culture of academia and the male values that predominate would begin to change as more women came into it. One woman thought that women have different priorities than men and that, for example, giving and obtaining support for spending time with families would be more respected when there were more women faculty.

2. The Review Process

Not only are many junior faculty inadequately assisted intellectually and emotionally during the years prior to their tenure review, but once that review begins, they are given inadequate information about it and feel they have nowhere to turn to relieve their anxieties. In addition, the lack of information is often accompanied by a general insensitivity on the part of some senior faculty, department chairs, and Deans about the level of anxiety that junior faculty have once the tenure review begins.

Junior faculty members need more information about the review process and more sensitivity on the part of senior colleagues involved in the review.

3. *Information About Salary Setting*

A number of junior faculty with whom we spoke did not know how their salaries were set nor whether their salaries were fair relative to others. There was no general understanding of how the criteria for salaries are applied, nor of the roles played by teaching, scholarship, and University service.

B. Moving from Trial by Fire to Support

The tenure and promotion process is stressful under the best of circumstances, particularly at prestigious research universities. Yet we have found that some departments at Stanford manage to support their junior faculty throughout the process. Biological sciences is one such department. And other departments, such as physics, are consciously moving towards a more supportive environment.

Biological sciences has reaped considerable rewards from their policy of supporting junior faculty. In the last two decades, every person (male and female) to whom they have extended an assistant professor offer has accepted. Moreover, every junior faculty who has come here during that period has been promoted to tenure. Junior faculty in the department work exceedingly hard; the standards are high. But so is the success rate, in no small part due to the support that junior faculty receive from senior colleagues. A supportive culture does not have to compromise quality: in a 1993 ranking of science departments nationwide, *U.S. News and World Report* ranked Stanford biological sciences number one.

Not every department that moves to a policy of supporting junior faculty rather than putting them through a trial by fire is likely to have the same success that biological sciences has had. In particular, biological sciences has more information about potential junior faculty than most departments have because most young biologists complete a postdoctoral fellowship before applying for a faculty position. However, we think that in moving closer to a culture of support and away from a culture of trial by fire or of exploitation, departments will improve the life of junior faculty, enhance the sense of intellectual community in their department, and improve their ability to recruit and retain faculty (senior as well as junior).

At a minimum, a policy of supporting junior faculty requires the five following components: First, junior faculty have to be chosen carefully. Even when a department decides to take a "risk" on a junior person, that person must be seen as having a good chance of promotion if mentored consistently and conscientiously.

Second, junior faculty need to be given frequent help with their research: developing a research agenda, securing funding, writing up research, finding outlets for publication, and being invited to meetings and conferences. Third, junior faculty need to be given assistance, if they need it, in becoming effective teachers and need to be given reduced teaching loads. For example, junior faculty should not be expected to teach an overload of large service courses because tenured faculty don't wish to teach them. Nor should junior faculty be expected to carry particularly heavy undergraduate advising loads to relieve senior faculty of undergraduate advising. The informal advising that women faculty are disproportionately asked to give, both to other women and to some men, should be taken into account when assigning other duties and allocating rewards.

Fourth, the criteria for university service need to be reduced for junior faculty. Junior faculty should not be expected to serve on committees to the extent expected for senior faculty. Fifth, junior faculty need to be given appropriate credit for directing doctoral dissertations, even if their names do not appear as the primary advisor.

Recommendations #1-4

A paramount recommendation of this Committee is that Stanford develop and maintain a culture of mutual respect, care, trust and support among faculty members. Thoughtless, inconsiderate, or even hostile, interactions are at the heart of many of the problems for Stanford faculty, and such interactions negatively affect Stanford's recruitment and retention of women faculty.

While it is impossible to legislate a change in culture, there are several actions that can be taken by the Provost, Deans, department chairs, and individual faculty that will begin to create a change in culture. Several departments and Schools at Stanford have already taken steps to create a culture of faculty support that will benefit both women and men faculty. These departments and Schools can serve as models for others.

1. **The Provost should hold department chairs and Deans responsible for initiating and maintaining a climate of trust and support in their department or School. This will require on-going training of department chairs and Deans. The Provost's office should prepare a Handbook for Deans and department chairs, which should be available on line and be revised on an on-going basis. In addition, the Provost's office should provide an annual orientation seminar for new Deans and department chairs.**

2. **A culture of support requires that faculty receive information on a timely basis. It is the responsibility of Deans and department chairs to communicate clearly and regularly with all faculty members in their School or department, and in particular with newly hired and junior faculty.**

   A. Department chairs or Deans should explain the process of salary-setting (and bonus-setting for clinical faculty in the Medical School) in that department or School to every newly hired faculty member.

   B. Department chairs or Deans should explain to every faculty member the process by which his or her annual raise has been determined.

   C. Department chairs or Deans should provide information to every faculty member about availability of funds for summer salary, research seed money and travel money for conferences. Such information should be published regularly and application procedures made clear.

   D. Department chairs or Deans should recognize that reviews are stressful for faculty and should provide timely feedback and positive support to faculty during reviews. They should ensure that faculty at all stages of the tenure and promotion review process are given full information about the review process and its progress.

3. **The Provost must ensure that Deans and department chairs develop formal and informal systems for providing intellectual and emotional support to faculty, especially junior faculty, on a regular basis. Junior faculty should be treated as colleagues, not as people who have to prove themselves in order to be colleagues.**

   Some of the mentoring systems that are set up may cross School and departmental lines; for example, the Provost might discuss ways to set up mentoring systems for junior faculty women with the Women's Faculty Caucus.

4. **A culture of support will require that advising and committee obligations be distributed in an equitable fashion.**

   A. Department chairs or Deans should monitor faculty advising loads and committee responsibilities to ensure that women do not shoulder a disproportionate share of these duties.

   B. Junior faculty should have a lighter service load than other faculty.

   C. The informal advising that women faculty are disproportionately asked to give, both to other women and to some men, should be taken into account when assigning other duties and allocating rewards.

C. *Sexual Harassment*

Our committee did not set out to systematically investigate sexual harassment of women faculty. However, we heard a number of accounts which led us to conclude that sexual harassment problems, where they occur, are not confined to any one part of the University, and are highly detrimental to the academic atmosphere. Sexual harassment not only interferes with women's careers and subjects them to a great deal of emotional pain, it also reduces the desirability of Stanford to current and potential women faculty and students. This Fall, President Casper issued a new sexual harassment policy, which includes provisions for ongoing education and training for faculty and others, as well as procedures for dealing with particular instances of harassment.

Recommendation #5

Sexual harassment has no place in a university. Deans and department chairs should institute on-going programs in their Schools and departments designed to educate and sensitize faculty members about sexual harassment

Part III. Number and Percentage of Women Faculty at Stanford

A. Data Availability

To improve the recruitment and retention of women faculty at Stanford requires first of all a commitment to collecting and making available relevant data in a timely fashion. The community as a whole needs to know, on a yearly basis, where we are and how much we are (or are not) improving.

Recommendation #6

Stanford lags behind comparable institutions in the percentage of women on its faculty. To assist in tracking progress on the number and percentage of women faculty, the Provost's Office should annually report to the Faculty Senate the number and percentage of faculty women, by department and School, by rank, tenure status and faculty line, and on the percentage changes in these numbers over the past five years. The Provost should ensure that his or her office maintains the relevant data for such a report.

B. The Data for the University as a Whole

In 1967-68, there were 49 women faculty at Stanford, comprising 5 percent of the total faculty.[8] In 1974-75, the first year for which Stanford has official faculty statistics by gender, there were 75 women faculty, representing 7 percent of all faculty and 27 tenured women, comprising 4 percent of all tenured faculty.

In 1992-93, there are 214 women members of the academic council faculty, representing 15.8 percent of the entire academic council faculty. Of these, 94.5 women are tenured, representing 11.0 percent of all tenured faculty. (See Table I.) Of the 271 endowed chairs in the University, women hold 16 (6 percent of the total).

The first year in which the AAUP collected data on women faculty for all colleges and universities was 1977. Table II gives the AAUP data for the percentage of women of all faculty and the percentage of women of full professors for 1993 at Stanford, the University of Chicago, Cal Tech, MIT, and the Universities in the Ivy League and

the PacTen. Table III gives these data for 1977,1983 and 1988. These data exclude faculty who are not employed full time and also exclude faculty in preclinical and clinical medicine.

In 1977, Stanford ranked sixth from the bottom with respect to women as a percentage of all faculty. By 1983, we had dropped to third from the bottom and we have remained in that position over the last ten years. (The numbers on which the percentages in Tables II and III are based are in Appendix Table B-1.)

With respect to full professors, Stanford ranked seventh from the bottom in 1977. By 1983 we had dropped to second from the bottom. In 1988 we were also second from the bottom. In 1993, we were fifth from the bottom.

C. The Data By School and Department

As may be seen in Tables IV, V and VI, the distribution of women faculty across Schools and departments is very uneven, ranging from no women in 11 departments to more than 40 percent women in two departments. (The absolute numbers of women and men faculty in departments are given in Appendix Table A-l.) As Table V indicates, in about one-third of all departments, the percentage of all women faculty ranges from zero to less than 9.9 percent, hi another one-third of departments women are between 10 percent and 19.9 percent of all faculty. Finally, in about one-third of departments the percentage of women faculty ranges between 20 and 39.9 percent. In two small departments, Spanish and Portuguese and Health Research and Policy, the percentage of women faculty is 42 percent.

Table VI presents data on tenured women faculty. Of the 70 departments listed in the table, **30 departments (43 percent of all departments) have no tenured women on their faculties.** Most of these departments are in the sciences, and mathematics, but some are in the humanities (drama, music, philosophy, and Slavic) and in the social sciences (communications and economics). In about one-fifth of departments, women comprise between 4 and 15.9 percent of tenured faculty. In another one-fifth, women faculty comprise from 16 percent to about one-third of the tenured faculty. In only 8 departments (11 percent of all departments) do women make up one-third or more of the tenured faculty: industrial engineering, art, classics, English, Spanish and Portuguese, developmental biology, health research and policy, and neurosurgery. Except for industrial engineering and English, these departments are small, some exceedingly small.

The last column in Table IV presents data on the number and percentage of women faculty who are recent hires, defined as the number of faculty hired in each of the five years between 9/1/88 and 9/1/92. Women are 23 percent of recent hires and 13 percent of recent hires with tenure. These averages, however, do not reflect the fact that newly hired women are highly unevenly distributed across fields.

Table VII presents a ranking of departments by the percentage of recent hires who are women. Four departments (7 percent of all departments) had no recent hires of either gender. **In 39 percent of departments, there were faculty recently hired, but none of them were women.** In 27 percent of departments, women made up 10 to 30 percent of recent hires. In about 20 percent of departments, between one-third and one-half of recent hires were women and in another 12 percent of departments women faculty represented more than 50 percent of recent hires.

D. Hiring Plans

One of the policy issues our committee was asked to address is how best to provide incentives to departments to increase the numbers of their women faculty and especially the numbers of their tenured women. In particular, we were asked to look at the use of the Faculty Affirmative Action Fund (FAAF) and the new Faculty Incentive Fund (FIF) as it relates to women.

In order to make recommendations, we obtained data on the use of the Fund from the Provost's office; reviewed the minutes from the Provost's Committee on the Recruitment and Retention of Minority Faculty (1989-91) chaired by Donald Brown and hereafter called the 1989-91 R&R Committee; reviewed the document, "School Plans for Faculty and Graduate Student Recruitment, 1991-1994," published in October 1991; discussed the matter of Affirmative Action policy with faculty in the focus groups and with the two department chairs and the two search committees chairs whom we interviewed; and had lengthy discussions within our own committee.

From the Provost's office we learned that between 1972-73 and 1989-90, the Provost provided budget base support for 38 women and 19 men through the FAAF.[9] The Fund supported 19.76 FTEs for women (an average of 0.52 FTEs per woman) and 12.01 FTEs for men (an average of 0.63 FTEs for men.)

The Fund had been used in at least two ways in the non-formula Schools for members of groups targeted for affirmative action. The targeted groups were (1) all women, and (2) men in the following groups: African-American, Mexican-American, Native-American and Puerto Rican.

First, if a regular search at either the junior or senior level turned up a candidate that the department wished to hire and that candidate was a member of one of the groups targeted for affirmative action, department chairs could ask the Provost for funding for between one-half and one full FTE to hire that candidate. Second, at the senior level only, if a member of the targeted group was seen as a "target of opportunity" by a department, (such that no search was required before making an offer) the department chair could also request funding for between one-half and one full FTE.

This method of proceeding has had two major disadvantages. Because departments decided on a case by case basis whether or not to ask for additional support from the Provost's office to hire a woman, a two-class system was created. Those women for whom additional funds were requested were seen as "second class" and sometimes felt stigmatized. (If they had been **really** good, the argument goes, the department would not have sought an additional half billet or funds for them.)

A second major disadvantage of the current system is that departments are unable to move quickly to make an offer to a woman they wish to hire because they have to make a case and wait for a response from their Dean and then from the Provost, before they know whether the required additional billet and salary support will be forthcoming.

The Minutes of the 1989-91 R&R Committee chronicled other problems with the operation of the FAAF. Many faculty did not understand how the Fund operated, when and how it could be accessed or how using it would affect future hiring opportunities. In addition, the 1989-91 R&R Committee argued that the Fund was an inadequate tool for evaluating the performance of departments and Schools with respect to their success in hiring targeted faculty. Although the Fund presented incentives to departments and Schools to hire women and targeted minority men by providing some rewards if they did so, there was nothing in the operation of the Fund that evaluated their performance with respect to the hiring of targeted faculty groups and nothing that negatively sanctioned them if they were not increasing their proportion of targeted groups.

During the tenure of the 1989-91 R&R Committee, the Dean of the Medical School proposed to the Provost and President a plan for affirmative action for targeted racial/ethnic groups and suggested to them that the plan be made public. Subsequently, the Provost asked the 1989-91 R&R Committee to request the Deans of the other Schools to prepare similar plans for publication.

Since October 1991, when the plans were published, the FAAF is no longer used for targeted minority men. Two changes have been made. First, at the end of each academic year, the Provost monitors

the extent to which Schools are achieving their own published goals. Second, when, at the end of an academic year, a School has achieved a **net** increase in its number of targeted minorities, (number hired minus number leaving) it receives from the Provost's Faculty Incentive Fund (FIF) an addition to its budget equal to the average salary for faculty in that School. In that way, the particular faculty member hired is not stigmatized and the possible notion that targeted minority faculty can be hired more cheaply than regular faculty is dispelled.

As a result of the deliberations of the 1989-91 R&R Committee, the Provost has made another change in the operation of the FAAF that affects women as well as minorities. Up until 1992-93, moneys committed by the FAAF for particular faculty were permanently assigned to those faculty and that portion of their FTE funded initially by the FAAF was to be funded from the FAAF for the remainder of that person's employment at Stanford. However, in the past year, the Provost's Office has taken steps to provide Schools and departments with regularized budget allocations for the salaries of tenured faculty (women as well as targeted minority men) who were originally hired with moneys from the FAAF. To avoid stigmatizing faculty who were initially hired with FAAF funds, the salaries of all tenured faculty will now come from departments' base budgets regardless of the funding source that was used to hire them initially.

On the basis of interviews with faculty and its own deliberations, our Committee has concluded that the procedures for affirmative action for women faculty should be changed. Like the 1989-91 R&R Committee, we think it important that Schools and departments develop goals and timetables with respect to the hiring of underrepresented faculty[10], that these plans be approved by the Provost and that achievement of the goals be rewarded and failure to achieve them without good reason be monitored and followed up by the Provost's office.

We strongly recommend that School's goals and timetables for increasing their representation of women faculty be divided into separate goals for junior faculty and for tenured faculty. The committee is convinced that by and large tenured women in departments change the atmosphere for junior women and make it more likely that junior women will be successful in achieving tenure. Thus, tenured women may be seen as important not only in their own right, but as a long term investment in the department.

By examining likely attrition rates and possible growth of billets in a department and then looking at recent doctorates awarded in the field nationally, at Stanford, and at prestigious research institutions in general, department chairs, Deans and the Provost can come to agreement on reasonable goals and timetables for hiring junior women in each department and School. (See Appendix D on

availability pools.) In this context, we think it important that departments that have been reluctant to hire their own Ph.D.s or postdocs reconsider their policies. In departments where women are underrepresented, women Ph.D.s and postdocs from Stanford should be viewed as suitable hires by the Stanford departments from which they obtained their degrees or training.

At the tenured level, availability pools will be more difficult to construct. Deans and the Provost will need to work with each department to construct a list of women who would be suitable for a senior appointments. These lists should include the names of qualified senior women considered to be "not interested in moving," or "not available," as these designations may be inaccurate or changeable. Together with information about likely retirements and other faculty exits in a department, these lists will form the basis of mutually agreed upon goals and timetables for hiring tenured women. In discussions with the Provost, these targets should be adjusted and agreed upon.

In one important respect, we recommend that the operation of hiring incentives for women should be different than for targeted minorities. At this point in time, targeted minorities are woefully underrepresented in all Schools and departments and the availability pools for targeted minorities are small. Thus, it makes sense and is financially feasible to reward financially, through the Faculty Incentive Fund (FIF), all cases in which a School meets its hiring goals for increasing the net number of targeted minorities. However, since departments and Schools vary greatly in the degree to which women are underrepresented on their faculties, and since in most fields the availability pools for women are large and growing rapidly, it will not be possible to provide additional billets and salary for all net increases in women faculty. The Provost will need to decide department by department and School by School how many net increases of women faculty at the junior and senior levels will be rewarded financially through the FIF.

To avoid stigmatizing women whose Schools receive a financial reward when they are hired, it is important that in advance of the hire of any particular woman there be agreement between the Provost and Deans about how many additional junior and senior billets or partial billets (and concomitant salary support) a school will receive when particular departments increase their net number of junior and senior women according to approved goals and timetables. Thus it will be clear that it is net increases in women faculty, rather than the hiring of a particular woman, that is being supplemented by the Provost's office.[11]

One of the factors that slows down the increase of women on the Stanford faculty in the humanities and social sciences is the narrow definition of scholarly merit that is used by some search committees

in fields where paradigmatic shifts are in process. Sometimes women are working on problems that departments or search committees see as not essential, outside the mainstream, or intellectually unimportant. Excluding women who are working on non-traditional scholarship not only unnecessarily limits the pool of potential women faculty, but also limits the inclusion of new ideas at Stanford. In developing and evaluating the progress of hiring plans, the Provost and Deans need to carefully examine the criteria of scholarly merit that are used by search committees to be sure that women who work outside of the mainstream of disciplines are not systematically excluded from departmental and School consideration for faculty positions.

Recommendation #7

The Provost should require the Dean of each School to prepare a hiring plan, with specific goals and timetables, for hiring tenured and untenured women faculty in the School's various departments. These plans should be based on information concerning likely attrition rates, possible growth of billets and the size of the availability pool of qualified women candidates at the junior and senior levels.

The formulation of the plans will provide a significant opportunity for reviewing the School's search processes and criteria and for systematically assessing the availability pools for different departments and disciplines. In some departments, the women that faculty members see as most qualified for junior faculty positions are women who are recent doctoral recipients from Stanford. Sometimes, these women are not made offers because departments believe that it is taboo to hire one's own Ph.D.s. We recommend that in departments where women are underrepresented on the faculty, women Stanford Ph.D. recipients and postdocs be viewed as suitable hires by the Stanford departments from which they obtained their doctoral degrees or postdoctoral training.

In some instances, the Provost may deem it appropriate to assist a School in increasing its net number of junior and senior women faculty members by providing the School with additional full or partial billets and salary support. The Provost should take care that individual faculty members are not stigmatized through this process.

After the Deans and the Provost have negotiated the hiring plans, they should be made public, as should annual reports of progress under the plans, including information about both attrition and new hires.

If a School fails to fulfill its plans in a timely fashion, and the Provost determines that the reason for the failure cannot be explained by unusual circumstances, the Provost should find appropriate means to remedy the situation and assure that the plans are fulfilled.

Part IV. Salary and Benefits

Salary and benefits are critical aspects of faculty recruitment and retention because they determine faculty members' standards of living and because faculty perceptions of their salary **relative** to others is often a key determinant of their sense of "worth" (to Stanford, to their profession, etc.). Faculty often feel that their salary is unfairly low relative to others. In part, this stems from lack of knowledge about relative salaries. In the case of women full professors, the data we examined indicates that some women are underpaid relative to male colleagues with similar years since Ph.D.

Our Committee examined salary data and also discussed salary in the focus groups and in the interviews with faculty who had left Stanford. We first discuss the numbers we examined and then the results of the interviews.

A. Salary Data

Three members of the Committee met with Provost Lieberman to examine scatterplots (salary, by years since receipt of highest degree) with the salaries of women circled. These scatterplots had been prepared for the Committee by the Provost's staff for full professors in five areas of the university: humanities; social sciences and education; sciences; clinical fields at the Medical School; and non-clinical fields at the Medical School. (Ranks other than full professor and all faculty in Law, Business, Engineering and Earth Sciences were omitted from the analyses because the Provost was concerned that Committee members might be able to identify individuals in such scatterplots.)[12] We had agreed in advance that we would view the data in the Provost's office and not take them away with us.

Because there are so few women full professors, sophisticated statistical analyses were not possible. However, the scatterplots indicated that in some parts of the University women are underrepresented at the high end and overrepresented at the low end of the salary scale, holding constant years since highest degree.

In the past two years, efforts have been made to improve salary equity These are to be applauded. However, salary distributions need continued close monitoring, with particular attention paid to areas in which there are salary inequities.

Provost Lieberman indicated that he found the scatterplots instructive. He suggested that the Committee recommend that as part of the annual salary review process the Provost provide salary scatterplots, with women's salaries aided, to all of the cognizant Deans.

Recommendation #8

Scatterplots of salary by gender, by years since highest degree, by rank, by field, should be prepared annually and reviewed by the Provost and the cognizant Deans. Deans should be asked to either justify or rectify particularly low salaries, or salaries not commensurate with the achievements of faculty, especially for women faculty. Deans should also be strongly encouraged to increase low salaries of women with outstanding records.

Salary inequities should be remedied as soon as they are noted. The Provost's office should make funds available to the Deans to remedy salary inequities.

B. Issues Involving Salaries and Benefits that Emerged in the Focus Groups and Post-Exit Interviews

In the course of the Committee's interviews, three major salary and benefits issues emerged. First, both women and men faculty reported feeling that to get equitable merit raises, it was necessary to "play the offer game." Men as well as women were averse to playing this game, although women felt particularly disadvantaged by it.

Second, women and men faculty told us that they felt that because they had so little information about salaries and the salary setting process it was very difficult for them to determine whether they were being fairly paid. As a result, they felt that the current salary appeals process needed to be amended to include a means of obtaining relevant salary information.

Finally, several women and men faculty told us that they find it difficult to live at a reasonable level in the Bay Area on the salaries they were receiving. These difficulties were felt most keenly with respect to bonuses, research and summer funds, and housing.

1. The Salary Setting Process and the Power of Outside Offers

Most faculty believe that in order to receive a salary increase it is necessary to obtain an outside offer. Many of the faculty we spoke with, especially those with a spouse or partner who also had a career in the Bay Area, did not wish to "play that game." Women, in particular, had difficulties playing the offer game. Those who were married often had husbands who earned more than they did, making it "hard to move the entire family for my job." Moreover, relatively few married women had husbands who would change their own jobs in order to give precedence to their wives' careers. And some women were married to men who had moved once for their wife's career and now were in jobs that precluded moving at all.

Although some department chairs and Deans told the Committee that they do not respond to outside offers, it is clear that many others do. In the course of our interviews, committee members learned from several faculty who played the offer game that it can pay off handsomely.

At a recent Faculty Senate meeting, President Casper suggested that rather than encourage faculty to play the offer game that Deans and department chairs use "preventive medicine," making salaries equitable before faculty are induced to look outside of Stanford. We endorse this suggestion.

Recommendation #9

There is a widely held perception in some Schools and departments that a primary way for a faculty member to get a higher salary based on merit is to develop an outside offer. To the extent that there is a practice of fielding outside offers, this practice has a disproportionately adverse effect on women. The Provost and Deans should discourage such practices. Outside offers should not be required to obtain merit increases in salary at Stanford.

2. Salary Appeals Process

Several women told us that they felt the current system of appeals for perceived salary inequities was inadequate. Because salary information is so secretive at Stanford, it is very difficult for a woman to know whether she is in fact underpaid relative to her male colleagues at a similar stage and level of accomplishment. Looking at the curves published in *The Campus Report* often does not provide sufficient information.

The current appeals mechanism requires going to the Provost - over the head of the Dean – without any certainty whether one has a case.

Recommendation #10

Any faculty member concerned about the inequity of her or his salary should have the opportunity to meet with a university staff member, designated with this responsibility by the Provost. While maintaining confidentiality concerning the salaries of other faculty, the university staff member should assist faculty members to learn how her or his salary compares with the salaries of comparable other faculty.

3. Summer Support, Other Internally Funded Research Support and Bonuses in Clinical Medicine Departments

Several faculty members with whom we spoke thought that they were treated unfairly with respect to summer support and other internally funded research support. In some cases, faculty simply felt they were not informed about the existence of research funds on campus. In clinical departments at the Medical School, we found that bonuses were a source of contention for women and for men. Some junior faculty felt frustrated because they had not been given sufficient information about how to go about obtaining research funds and funds for summer salary.

At the Medical School, there is enormous variation in bonus setting criteria among clinical departments, with control of bonuses vested to a very large extent in the department chair. Several women thought that in many departments there was gender discrimination in the setting of bonuses. We did not do a sufficient number of interviews at the Medical School to say a great deal about this subject, but we flag it as a matter for further investigation that must be carried out on a department by department basis.

In addition to Recommendation 2C, which deals with the provision of information to all faculty about the availability of various types of funds, we also make the following recommendation.

Recommendation #11

The Provost should ask Deans to appoint a committee to investigate possible gender inequities in non-salary compensation, such as salary bonuses, summer support, and other internally funded research support

4. Housing

When asked "What is your primary concern at Stanford?" large numbers of faculty responded with some aspect of housing. Many pointed out that while Stanford salaries might be adequate in other locales, they were inadequate to enter the housing market in the Bay Area. Others thought the programs designed to assist with housing were inadequate to resolve the problems they had. Still others related demeaning experiences with the programs and with university and housing office personnel. The drubbing came equally from women and men.

Housing is a serious problem at Stanford. As faculty live further and further away from campus because of housing costs, the community becomes fragmented and faculty become estranged. Our housing programs and treatment of faculty concerning those programs need to be improved.

Recommendation #12

The housing program should be reevaluated and improved to serve its fundamental objective of recruiting and retaining faculty members.

Part V. Combining Academic Careers with Family Life

There are four major problems that Stanford faculty find in combining academic careers and family life: time pressures, inability to find jobs in the Bay Area for spouses or partners, difficulties with Stanford's Maternity Leave Policy, and difficulties in finding good child care. In addition, some faculty are troubled by repeated requests to join in university activities during hours (evenings and weekends) when child care is not easily available and may not be desired if the child has been cared for by non-parents all day.

A. Time Pressures

Faculty at Stanford, as at other high prestige research universities, find their positions extremely demanding. The time pressures we feel from teaching, research, advising, university service, public service, and consulting, as well as the pressures for excellence and renown that we ourselves generate, add up to what others might consider several full-time jobs. These time pressures impact women disproportionately because many of them carry more than 50 percent of the housework and child care responsibilities at home.

In the past, male faculty members most often combined work activities with family life by marrying a woman who saw helping his career as part of her job. Faculty wives generally took care of cooking, cleaning, errand-running, raising children, and entertaining. They also often typed manuscripts, served as a research assistant or editor and generally provided psychological, administrative and secretarial "support."

Today, few young faculty have that kind of person in their life. Virtually no women have such help-mates. Nor do men who are single or divorced or married to women who have their own jobs and careers. Most young faculty need to forge new paths for combining work and family. And many are finding it exceedingly difficult.

The time pressures that all faculty at major research institutions face are exacerbated for junior faculty who have only a few years in which to prove themselves. And faculty raising young children at the same time they are trying to get tenure are under tremendous pressure. If they are women, the pressures are often "off-scale."

As one junior woman put it:

"For a woman, raising a family and trying to get tenure is a clash of absolutes."

Yet, often women who wish to bear children must do so in the pre-tenure years, before their "biological clocks" run down.

Women faculty who are raising young children as a single parent face a truly daunting task. Women who are married generally have husbands who are also trying to develop their own careers. Few couples share household and childrearing tasks equally. In most cases, it is the mother who does the lion's share of managing the household. Our culture still sees mothers as the primary rearers of children.

Recommendation #13

To permit faculty members to deal with the time pressures at Stanford will require more flexibility and creative solutions to problems than we have had heretofore.

The Provost should investigate ways that those with special circumstances, for example, raising a young child, can obtain additional flexibility in their employment situation, for example, through a lengthening of the tenure process or a temporary part-time appointment or a reduction in teaching duties with a concomitant reduction in pay.

B. Coordinating Dual Careers

Some of the most complex stories that committee members have heard in the last several months have been from faculty members who have tried to coordinate their careers with those of their spouse or partner. Those who have been unsuccessful have been among the most anguished faculty that we have heard from. Those who have been successful, have been jubilant. In our sample of faculty who have left Stanford, almost one-third said that their spouse's employment situation was a primary factor in their deciding to leave.

These problems are particularly severe for women. Often they are married to men who earn more than they do or who still believe that in our society wives' careers should not take precedence over those of their husbands. Some resolve this problem with highly stressful commuter marriages. The wife comes to Stanford, but the husband remains in the Midwest or on the East coast. In other cases husbands or partners give up good jobs to move to Stanford and cannot find new positions here, placing great stress on the marriage or relationship.

Another problem for dual career couples is that when the non-academic spouse of a faculty member is finally settled in the local area, it may be impossible for the academic member of the couple to further his or her career by either playing the offer game or actually moving to another institution. This can be a particularly serious problem if the academic is denied tenure and has to leave Stanford.

Recommendation #14

Academics increasingly are in two-career marriages or partner ships. Stanford needs to evaluate and acknowledge the problems of interdependent careers, In particular, the Provost's office should develop a mechanism to facilitate joint consideration of academic couples or partners by Stanford Schools and departments, and across School and department lines. In addition, the Provost's office should set up a mechanism and a fund to provide job placement advice and assistance for the spouses and partners of faculty.

C. The Maternity Leave Policy

In 1988, Provost James Rosse developed a university "maternity" policy for faculty women who give birth and for any faculty member, male or female, who becomes a parent of an infant, whether by birth or adoption. One of the stated purposes of the document is "to make it clear that child-bearing should not be incompatible with an academic career."

In the course of our interviews, we have found that the maternity policy is the source of much confusion among faculty members and administrators. This is in part because the Faculty Handbook had not been up-dated since 1984, and therefore did not have any information about the maternity policy. In addition, there is confusion because the written policy does not deal with many of the questions that have arisen in the course of faculty members' experience with the policy.

Questions and complaints about the maternity policy are complex. Given the recent passage of the Family Leave Act, many faculty wonder how the university policy will be modified to conform with that act. But in addition to those issues, the university policy itself raises questions. It needs thorough review and clarification.

A woman who gives birth is entitled to a maternity leave with full pay for up to 13 weeks and to an additional one quarter with no teaching duties, also at full pay. This means that a department may have to replace a woman's courses for up to 6 months. There is no university-wide policy about who is responsible for deciding whether those courses are going to be canceled or offered with someone else teaching them. The policy needs to clarify that it is the department chair's responsibility (and not the responsibility of the woman taking the leave) to find and hire any replacement instructor who may be required. The policy also needs to clarify the sources of funds that department chairs are meant to draw on to replace the teaching services (or in the case of Medical School, the clinical services) of the

faculty member who is taking a leave.[13] Moreover, department chairs need clarification about whether they may supplement the salaries of regular faculty colleagues who may wish to earn extra salary by taking over the teaching or clinical duties of the faculty member who is taking a leave.

According to the current maternity policy, any faculty member who gives birth while holding a tenure-accruing appointment may request from the Provost a one-year extension of the date on which tenure would automatically be conferred due to length of service. Such extensions are permitted only twice, that is for two births. The policy also states that although these requests are automatically approved by the Provost, that approval does not automatically extend the individual's appointment, which must be approved in the normal departmental review process, including a department vote.

Several issues about the tenure dock policy in connection with having a young child were raised in our focus groups. First, some faculty thought it was unfair that the policy does not apply to women who have adopted children rather than given birth to them. Second, one woman said she was very resentful that the policy is restricted to two births. She felt that Stanford should not attempt to "dictate" how many children a faculty woman should have. There needs to be further discussion about whether faculty think that restricting the tenure clock policy to only births and to only two births is appropriate.

The third issue relates to the question of postponement of third or fourth year reviews. One woman told us that she felt she was severely disadvantaged in having to come up for a three-year review when she had given birth during the second year of her appointment. She felt that her third-year review was "dismal" and that she now has to work doubly hard before the tenure review to reverse the bad impression she has already made. The question of the timing of the third or fourth year review for faculty who have stopped their tenure clock needs reexamination.

A fourth issue concerns the fairness of tenure evaluations for women who have postponed the tenure dock. One woman told us that her department chair urged her not to take a child care leave because if she postponed the tenure dock her colleagues would simply judge her on seven years worth of work instead of six. In the Committee's view, women whose tenure clocks have been stopped for child care leaves should not be judged at the tenure review as though their clock had not been stopped.

Recommendation #15

When faculty take advantage of the Maternity and Infant Leave Policy they should not be penalized for having done so, either in the promotion process or in other ways. For example, letters to outside evaluators should indicate that the tenure clock was stopped and appropriate changes should be made in the relevant cohort comparison requests.

Recommendation #16 - Part 1

The Faculty-Staff Benefits Committee should be charged to reexamine the Maternity Leave policy, especially in light of the new Family Leave Act.

D. Child Care

In the past twenty years the child care situation at Stanford has improved greatly. But many faculty feel it needs further improvement. There appear to be four types of complaints.

First, much of the child care available on campus apparently requires that parents spend several hours a week at the child care facility helping out in the classrooms. Many Stanford faculty and their spouses do not wish to volunteer in their children's classrooms either because they are too busy or because they do not wish to spend time with groups of young children (although they enjoy spending time with their own child). These parents would like to see more child care facilities on campus that do not require "co-oping."

Second, some parents find difficulty in getting their children into the available facilities. Third, some faculty find the centers unaffordable. Finally, since most facilities in the local area do not provide for sick child care, faculty, especially women faculty who provide the major care for their children, find that when their child is sick they are in a extremely difficult situation.

Recommendation #16 - Part 2

The Faculty-Staff Benefits Committee should examine the availability and affordability of campus child care.

Part VI. Recommendations

The Committee on the Recruitment and Retention of Women Faculty has a series of 16 recommendations divided into four categories:

A. create a culture of faculty support,

B. increase the number and percentage of women faculty,

C. promote salary equity and use benefits to enhance recruit ment and retention, and

D. assist faculty to combine work and family.

A. Create a Culture of Faculty Support

A paramount recommendation of this committee is that Stanford develop and maintain a culture of mutual respect, care, trust and support among faculty members. Thoughtless, inconsiderate, or even hostile, interactions are at the heart of many of the problems for Stanford faculty, and such interactions negatively affect Stanford's recruitment and retention of women faculty.

While it is impossible to legislate a change in culture, there are several actions that can be taken by the Provost, Deans, department chairs, and individual faculty that will begin to create a change in culture. Several departments and Schools at Stanford have already taken steps to create a culture of faculty support that will benefit both women and men faculty. These departments and Schools can serve as models for others.

1. **The Provost should hold department chairs and Deans responsible for initiating and maintaining a climate of trust and support in their department or School. This will require on-going training of department chairs and Deans. The Provost's office should prepare a Handbook for Deans and department chairs, which should be available on line and be revised on an on-going basis. In addition, the Provost's office should provide an annual orientation seminar for new Deans and department chairs.**

2. **A culture of support requires that faculty receive information on a timely basis. It is the responsibility of Deans and department chairs to communicate clearly and regularly with all faculty members in their School or department, and in particular with newly hired and junior faculty.**

   A. Department chairs or Deans should explain the process of salary-setting (and bonuses for clinical faculty in the Medical School) in that department or School to every newly hired faculty member.

   B. Department chairs or Deans should explain to every faculty member the process by which his or her annual raise has been determined.

   C. Department chairs or Deans should provide information to every faculty member about availability of funds for summer salary, research seed money and travel money for conferences. Such information should be published regularly and application procedures made clear.

   D. Department chairs or Deans should recognize that reviews are stressful for faculty and should provide timely feedback and positive support to faculty during reviews. They should ensure that faculty at all stages of the tenure and promotion review process are given full information about the review process and its progress.

3. **The Provost must ensure that Deans and department chairs develop formal and informal systems for providing intellectual and emotional support to faculty, especially junior faculty, on a regular basis. Junior faculty should be treated as colleagues, not as people who have to prove themselves in order to be colleagues.**

   Some of the mentoring systems that are set up may cross School and departmental lines; for example, the Provost might discuss ways to set up mentoring systems for junior faculty women with the Women's Faculty Caucus.

4. **A culture of support will require that advising and committee obligations be distributed in an equitable fashion.**

   A. Department chairs or Deans should monitor faculty advising loads and committee responsibilities to ensure that women do not shoulder a disproportionate share of these duties.

   B. Junior faculty should have a lighter service load than other faculty.

C. **The informal advising that women faculty are disproportionately asked to give, both to other women and to some men, should be taken into account when assigning other duties and allocating rewards.**

5. **Sexual harassment has no place in a university. Deans and department chairs should institute on-going programs in their Schools and departments designed to educate and sensitize faculty members about sexual harassment.**

B. Increase the Number and Percentage of Women faculty

It is important that Stanford increase the number and percentage of women faculty in all departments, particularly in those in which they are historically underrepresented. At a university like Stanford, where women constitute almost half of the student body, more women faculty are needed. Increases in the proportion of tenured women are particularly needed.

In some of the humanities and social sciences, some women scholars have been at the forefront of developing new areas of inquiry. Because of their experiences as women, they have helped to develop new insights into their disciplines. Thus, in some fields hiring more women faculty is a way to move Schools and departments toward exciting new intellectual areas.

6. **Stanford lags behind comparable institutions in the percentage of women on its faculty. To assist in tracking progress on the number and percentage of women faculty, the Provost's Office should annually report to the Faculty Senate the number and percentage of faculty women, by department and School, by rank, tenure status and faculty line, and on the percentage changes in these numbers over the past five years. The Provost should ensure that his or her office maintains the relevant data for such a report.**

7. **The Provost should require the Dean of each School to prepare a hiring plan, with specific goals and timetables, for hiring tenured and untenured women faculty in the School's various departments. These plans should be based on information concerning likely attrition rates, possible growth of billets and the size of the availability pool of qualified women candidates at the junior and senior levels.**

The formulation of the plans will provide a significant opportunity for reviewing the School's search processes and criteria and for systematically assessing the availability pools for different departments and disciplines. In some departments, the women that faculty members see as most qualified for junior faculty positions are women who are recent doctoral recipients from Stanford. Sometimes, these women are not made offers because departments believe that it is taboo to hire one's own Ph.D.s. We recommend that in departments where women are underrepresented on the faculty, women Stanford Ph.D. recipients and postdocs be viewed as suitable hires by the Stanford departments from which they obtained their doctoral degrees or postdoctoral training.

In some instances, the Provost may deem it appropriate to assist a School in increasing its net number of junior and senior women faculty members by providing the School with additional full or partial billets and salary support. The Provost should take care that individual faculty members are not stigmatized through this process.

After the Deans and the Provost have negotiated the hiring plans, they should be made public, as should annual reports of progress under the plans, including information about both attrition and new hires.

If a School fails to fulfill its plans in a timely fashion, and the Provost determines that the reason for the failure cannot be explained by unusual circumstances, the Provost should find appropriate means to remedy the situation and assure that the plans are fulfilled.

C. *Promote Salary Equity and Use Benefits to Enhance Recruitment and Retention*

8. Scatterplots of salary by gender, by years since highest degree, by rank, by field, should be prepared annually and reviewed by the Provost and the cognizant Deans. Deans should be asked to either justify or rectify particularly low salaries, or salaries not commensurate with the achievements of faculty, especially for women faculty. Deans should also be strongly encouraged to increase low salaries of women with outstanding records.

Salary inequities should be remedied as soon as they are noted. The Provost's office should make funds available to the Deans for appropriate increases to remedy salary inequities.

9. **There is a widely held perception in some Schools and departments that a primary way for a faculty member to get a higher salary based on merit is to develop an outside offer. To the extent that there is a practice of fielding outside offers, this practice has a disproportionately adverse effect on women. The Provost and Deans should discourage such practices. Outside offers should not be required to obtain merit increases in salary at Stanford.**

10. **Any faculty member concerned about the inequity of her or his salary should have the opportunity to meet with a univer sity staff member, designated with this responsibility by the Provost. While maintaining confidentiality concerning the salaries of other faculty, the university staff member should assist faculty members to learn how her or his salary compares with the salaries of comparable other faculty.**

11. **The Provost should ask Deans to appoint a committee to investigate possible gender inequities in non-salary compen sation, such as salary bonuses, summer support, and other internally funded research support.**

12. **The housing program should be reevaluated and improved to serve its fundamental objective of recruiting and retaining faculty members.**

D. Assist Faculty to Combine Work and Family

13. **The Provost should investigate ways that those with special circumstances, for example, raising a young child, can obtain additional flexibility in their employment situation, for example, through a lengthening of the tenure process or a temporary part-time appointment or a reduction in teaching duties with a concomitant reduction in pay.**

14. **Academics increasingly are in two-career marriages or partnerships. Stanford needs to evaluate and acknowledge the problems of interdependent careers. In particular, the Provost's office should develop a mechanism to facilitate joint consideration of academic couples or partners by Stanford Schools and departments, and across School and department lines. In addition, the Provost's office should set up a mechanism and a fund to provide job placement advice and assistance for the spouses and partners of faculty.**

15. **When faculty take advantage of the Maternity and Infant Leave Policy they should not be penalized for having done so, either in the promotion process or in other ways. For example, letters to outside evaluators should indicate that the tenure clock was stopped and appropriate changes should be made in the relevant cohort comparison requests.**

16. **The Faculty-Staff Benefits Committee should be charged to reexamine the Maternity Leave policy, especially in light of the new Family Leave Act. The Faculty-Staff Benefits Committee should also examine the availability and affordability of campus child care**.

Part VII. End Notes

1. AAUP data exclude medical school faculty and any faculty who are not employed full time.
2. With regard to full professor, MIT, Cal Tech, Washington State and Oregon State are behind Stanford.
3. This is also true for Cornell and the University of Chicago.
4. Condoleeza Rice, Provost-designate, served as a member of the Committee until May, 1993. Sharon Parker, formerly the Direc tor of the Office of Multicultural Development, served as an ex-officio member until May, 1993.
5. *Focus Groups:* A total of 72 junior and young senior faculty members were asked to be in our 12 focus groups (two each in six broad disciplinary areas.) The areas were Humanities, Clinical Medical Sciences, Business/Education/Law, Engineering/Earth Sciences, Preclinical Medicine/Physical Sciences and Social Sciences. The target focus groups were six women and a second group of six men. The focus group in each area was facilitated by a male-female pair of committee members, using an interview protocol developed by the committee. None of the Committee members facilitated a focus group in their home department or disciplinary area. The focus group protocol is available upon request from the Chair of the Committee. A total of 37 faculty participated in these groups, with an additional 19 filling out questionnaires because scheduling conflicts prohibited them from attending the focus group sessions. Thus, we obtained information from 56 faculty members.

   Post -Exit Interviews: During the last five years, 36 women faculty members have left Stanford for reasons other than retirement. Of this group, every committee member contacted one female and a male faculty member matched by disciplinary area, rank and length of time at Stanford. Of the 24 interviews attempted, 17 (9 women and 8 men) agreed to talk to us. Each interviewee was asked a series of questions about their Stanford experience, from an interview protocol developed by the committee. The inter view protocol is available upon request from the Committee Chairperson.

   For each of these data gathering projects the samples were stratified by disciplines. Within these fields, particular faculty were selected randomly. In some areas, there were so few women faculty, that all of them were included in our samples. All respondents were promised anonymity. In order to avoid revealing identities, we have sometimes changed certain details of the respondent's stories.

6. A sub-committee interviewed the chairs of two recent search committees, one in the Business School, which resulted in the hiring of a man, and one in Civil Engineering, which resulted in the hiring of a woman. Another subcommittee interviewed the chairs of two departments. The first was the economics department, in which women represent 5.7% of the faculty, where there has never been a tenured woman and where only 9.1% of the recent hires were women. The other was the department of biological sciences, in which women are 19.7% of the faculty, 12.8% of the tenured faculty are women, and 37.5% of the recently hired faculty are women.

   Because of time constraints, the committee did not do additional interviews of department chairs and search committee chairs. Our pilots of focus group interviews and post-exit interviews convinced us that we could obtain more relevant information for our work by doing additional focus group interviews and post-exit interviews than by interviewing additional department chairs or chairs of additional search committees.

7. It may be that the stresses related to this also face senior faculty, but our interviews are unable to provide data on this matter.

8. In her 1969 report, *The Education of Women at Stanford University,* Professor Alberta Siegel related that to determine the number of women faculty in 1967-68 it was necessary to go through the Faculty-Staff Directory and count them. Of the 49 women faculty, there were only 8 women holding the title of Professor (fewer than 2 percent of all Professors) and two of the eight became emerita in June 1968. The definition of faculty was as follows: those holding the title of assistant professor, associate professor, or professor, those who had the term visiting or acting in their title and permanent faculty at the overseas campus. Compared to today's definition, the 1967-68 numbers are in flated. Today's counts do not include visiting faculty.

9. It is not dear how many of the women were minority women. The formula schools (Medicine and the GSB) were not included in the calculation because, with one exception, they did not receive budget base support from the Fund. It is not clear whether that one exception was a for a woman or a minority man.

10. Some of the Schools already have goals for women incorporated into the public plans that were published in October 1991. Earth Sciences' goal was to recruit three new women (level unspecified) over the next three years. The Graduate School of Business' goal was to hire 14 to 16 women over the next seven years; of these

at least 3 were to be at the tenured level. The Law School's goal was to hire at least one minority or woman for every non-targeted faculty member hired.

The Schools of Engineering and Humanities and Sciences have no numerical goals for any targeted group. The Schools of Education and Medicine have hiring goals for targeted minorities but not for women.

11. None of this should be construed to mean that departments or Schools are being asked to run searches for women only. The goals and timetables approved and published must be flexible enough so that no search is for women only.

12. Our Committee also obtained a salary scatterplot, by gender, by years since B.S. degree, for faculty at all ranks at the School of Engineering.

13. These questions were exacerbated at the Medical School where not only teaching is at issue but also clinical duties. Because much of the work at the Medical School is highly specialized, it is often not easy to find a replacement clinician outside of the department who is qualified to perform the required services.

    It needs to be made clear that the department chair, and not the faculty member herself, is responsible for finding a replacement and replacement funds.

Part VIII. Tables

Table I:
Number and Proportion of Women Faculty at Stanford University, 1967-68 to 1992-93

	Total Women Faculty		Tenured Women Faculty	
	Number	Proportion	Number	Proportion
1967-68	49 (a)	5.0%	8 (b)	1.6%
1974-75	75	7.0%	27	4.0%
1979-80	95	9.0%	35	4.0%
1984-85	122	11.0%	54	6.0%
1987-88	125	11.0%	64	7.0%
1988-89	130	11.0%	66	8.0%
1989-90	143	12.0%	75	9.0%
1990-91	157	13.0%	83	9.0%
1992-93	214	15.8%	94.5	11.0%

SOURCES

The Education of Women at Stanford University, 1969
Stanford Statistics, 1991
Appendix A-l.

NOTES

(a) Counted from Faculty-Staff Directory, see End Note 1 for definition.
(b) Number of full Professors only.

Table II: Percentage of Faculty Who Are Women: Stanford Compared to Other Institutions— 1992-93

	Percentage of Women Faculty	
School	Of all faculty	Of full professors
Univ. Oregon	28.9%	10.3%
Columbia (a)	28.4%	20.2%
Dartmouth	25.8%	12.3%
Washington State	24.5%	7.3%
Arizona State	24.3%	13.5%
Yale	23.7%	10.2%
Univ. Arizona	23.6%	11.4%
Oregon State	23.2%	8.5%
Univ. Washington	22.8%	12.4%
Brown	22.2%	10.2%
USC	21.4%	10.6%
UCLA	21.4%	12.4%
Harvard	19.1%	10.6%
Univ. Cal. Berkeley	18.6%	11.8%
Univ. Pennsylvania	18.6%	11.1%
Princeton	17.3%	9.5%
Cornell (b)	17.3%	9.0%
Univ. of Chicago	15.8%	10.8%
Stanford	14.2%	8.7%
MIT	11.9%	6.6%
Cal Tech	7.7%	4.7%

SOURCES

ACADEME, March/April 1993, Appendix I, p. 18-65.
Data collected by the AAUP, for source data see Appendix B-l.

NOTES

Comparison institutions include all schools in the Ivy League, the Pac Ten, as well as MIT, Cal Tech and the University of Chicago.

Faculty defined as members of the instructional and research staff employed full time. Excludes clinical or preclinical medicine, administrative officers, graduate students, faculty on leave or replacements of faculty on sabbatical leave.

(a) Columbia University data includes data from Columbia University-Main, Barnard College and Teacher's College.

(b) Cornell data includes data from Endowed and Statutory Colleges.

Table III: Percentage of Faculty Who Are Women: Stanford

		Percentage of Women Faculty	
Year	School	Of all faculty	Of full professors
1976-1977	Columbia Univ. (b)	21.2%	9.2%
	Arizona State	18.5%	5.3%
	Dartmouth	16.6%	0.0%
	Univ Washington	16.1%	6.5%
	Univ Oregon	16.1%	5.8%
	Washington State	15.9%	6.8%
	U Pennsylvania	15.8%	4.0%
	Univ Arizona	14.4%	5.0%
	Oregon State	13.4%	3.3%
	USC	13.1%	6.4%
	Berkeley (a)	11.8%	4.5%
	UCLA (a)	11.8%	4.5%
	Yale	11.3%	1.7%
	Chicago	10.1%	3.4%
	Princeton	10.1%	1.0%
	Stanford	9.5%	2.8%
	Harvard	8.5%	2.9%
	Brown	8.4%	1.2%
	Cornell (c)	7.5%	2.6%
	MIT	6.9%	2.0%
	Cal Tech	0.0%	0.0%
1982-1983	Columbia Univ. (b)	24.0%	11.7%
	Dartmouth	21.1%	3.3%
	Univ Oregon	20.7%	5.1%
	Arizona State	19.9%	7.9%
	Yale	17.3%	3.0%
	Oregon State	16.6%	4.5%
	Washington State	15.9%	4.8%
	Univ Washington	15.6%	8.2%
	USC	15.0%	6.5%
	UCLA	14.9%	8.0%
	U Pennsylvania	14.8%	5.7%
	Univ Arizona	14.6%	4.4%
	Brown	13.1%	3.7%
	Harvard	11.9%	4.5%
	Berkeley	11.3%	5.1%
	Princeton	10.5%	3.0%
	Chicago	10.4%	3.3%
	Cornell (c)	10.0%	4.1%
	Stanford	9.8%	1.7%
	MIT	9.2%	4.1%
	Cal Tech	0.0%	0.0%

		Percentage of Women Faculty	
Year	School	Of all faculty	Of full professors
1987-1988	Univ Oregon	27.8%	7.0%
	Columbia Univ. (b)	26.1%	15.8%
	Dartmouth	21.8%	5.3%
	Washington State	20.9%	5.5%
	Arizona State	20.8%	12.1%
	Oregon State	19.5%	4.8%
	Yale	18.9%	6.2%
	Brown	18.5%	6.9%
	Univ Washington	17.3%	9.7%
	USC	16.9%	9.4%
	UCLA	16.7%	8.9%
	U Pennsylvania	16.3%	8.4%
	Harvard	15.7%	7.7%
	Univ Arizona	15.5%	5.8%
	Berkeley	14.2%	8.5%
	Cornell (c)	13.9%	5.1%
	Chicago	13.3%	6.7%
	Princeton	13.0%	6.0%
	Stanford	10.5%	3.6%
	MIT	9.8%	5.4%
	Cal Tech	4.1%	1.2%
1992-1993	Univ Oregon	28.9%	10.3%
	Columbia (b)	28.4%	20.2%
	Dartmouth	25.8%	12.3%
	Washington State	24.5%	7.3%
	Arizona State	24.3%	13.5%
	Yale	23.7%	10.2%
	Univ Arizona	23.6%	11.4%
	Oregon State	23.2%	8.5%
	Univ Washington	22.8%	12.4%
	Brown	22.2%	10.2%
	USC	21.4%	10.6%
	UCLA	21.4%	12.4%
	Harvard	19.1%	10.6%
	Berkeley	18.6%	11.8%
	U Pennsylvania	18.6%	11.1%
	Princeton	17.3%	9.5%
	Cornell (c)	17.3%	9.0%
	Chicago	15.8%	10.8%
	Stanford	14.2%	8.7%
	MIT	11.9%	6.6%
	Cal Tech	7.7%	4.7%

SOURCES

AAUP BULLETIN, August 1977, p. 174-216
ACADEME, July/August 1982, p. 26-76
ACADEME, March/April 1988, p. 18-65
ACADEME, March/April 1993, p. 32-81
Data collected by the AAUP, for source data see Appendix B-l.

NOTES

Comparison institutions include all schools in the Ivy League, the Pac Ten, as well as MIT, Cal Tech and the University of Chicago.

Faculty defined by the AAUP as members of the instructional and research staff employed full time. Excludes clinical or preclinical medicine, administrative officers, graduate students, faculty on leave or replacements of faculty on sabbatical leave.

(a) Data for combined University of California system given.

(b) Columbia University data includes data for Columbia University-Main, Barnard College and Teacher's College.

(c) Cornell is a summation of Endowed and Statutory Colleges.

Table IV: Number and Proportion of Women Faculty at Stanford University by School and Department, 1992-93

Department	All Faculty (a)		Tenured Faculty		Recently Hired Faculty (b)	
	# Women	% Women	# Women	% Women	# Women	% Women
GS Business	*6*	*7.7%*	*2*	*4.0%*	*4*	*16.6%*
Earth Sciences	*2*	*5.3%*	*2*	*63.0%*	*0*	*0.0%*
Applied Earth Science	0	0.0%		0.0%	0	0.0%
Geology	2	18.1%	2	18.1%	0	0.0%
Geophysics	0	0.0%		0.0%	0	0.0%
Petroleum Engineering (e)	0	0.0%		0.0%	0	0.0%
School of Education	*10*	*24.8%*	*6*	*16.7%*	*6*	*50.0%*
Engineering	*12*	*6.8%*	*6*	*5.1%*	*5*	*12.0%*
Aero/Astro	0	0.0%		0.0%	0	0.0%
Chemical Engineering	1	10.0%	1	14.3%	0	0.0%
Civil Engineering	4	14.8%	2	12.5%	2	33.3%
Computer Science	1	3.5%		0.0%	1	9.1%
Electrical Engineering	2	8.0%		0.0%	2	22.2%
Engineering Econ Sys	0	0.0%		0.0%	0	0.0%
Industrial Engineering	3	31.6%	3	35.3%	0	No Faculty Hired
Materials Sciences	0	0.0%		0.0%	0	0.0%
Mechanical Engineering	1	3.3%		0.0%	0	0.0%
Operations Research (e)	0	0.0%		0.0%	0	No Faculty Hired

Department	All Faculty (a)		Tenured Faculty		Recently Hired Faculty (b)	
	# Women	% Women	# Women	% Women	# Women	% Women
Humanities & Sciences	***90***	***18.4%***	***50.5***	***14.3%***	***28***	***18.8%***
Anthropology	4	28.6%	2	18.2%	1	33.3%
Applied Physics	0	0.0%		0.0%	0	0.0%
Art	4.67	29.8%	4.67	34.2%	0	0.0%
Asian Languages (e)	2	23.1%	1	17.6%	1	50.0%
Biological Sciences	6	19.7%	3	12.8%	3	37.5%
Chemistry	2	9.1%	1	6.7%	0	0.0%
Classics (e)	3.33	35.7%	2.33	36.8%	1	33.3%
Communication	4	33.3%		0.0%	1	50.0%
Comparative Literature (e)	0.83	17.2%	0.83	21.7%	1	27.3%
Drama (e)	2	25.0%		0.0%	1	33.3%
Economics	2	5.7%		0.0%	1	9.1%
English	12.6	33.4%	10.6	33.4%	3	29.4%
Food Research	2	15.4%	1	10.0%	0	0.0%
French and Italian	4	27.6%	3	26.1%	1	37.5%
German (e)	1	15.0%	1	15.0%	0	0.0%
History	6	15.4%	4	11.8%	2	22.2%
Linguistics	3.4	28.2%	3.4	30.7%	0	0.0%
Mathematics	3	9.0%		0.0%	3	11.8%
Music	1	7.1%		0.0%	0	0.0%
Philosophy	3	19.0%		0.0%	3	38.7%
Physics	1	4.1%	1	6.1%	1	16.7%
Political Science	5	18.2%	4	18.6%	1	12.5%
Psychology	6	24.7%	2	10.9%	1	20.0%
Religious Studies	2	20.0%	1	16.7%	1	44.4%
Slavic (e)	0	0.0%		0.0%	0	0.0%
Sociology	4	29.3%	3	28.1%	3	64.4%
Spanish & Portuguese (e)	3.67	42.3%	1.67	35.8%	1	33.3%
Statistics	1	7.7%		0.0%	0	0.0%
Law School	***8***	***17.9%***	***3***	***8.2%***	***4***	***44.4%***

Department	All Faculty (a)		Tenured Faculty		Recently Hired Faculty (b)	
	# Women	% Women	# Women	% Women	# Women	%-Women
Medicine	***86***	***17.5%***	***25***	***10.7%***	***57***	***27.5%***
Anesthesia (c)	7	18.4%	1	10.0%	6	30.0%
Biochemistry	1	9.1%	1	12.5%	0	0.0%
Cardiothoracic Surgery (c) (e)	1	11.1%		0.0%	0	No Faculty Hired
Cell Biology (e)	1	14.3%		0.0%	0	0.0%
Dermatology (c) (e)	1	20.0%		0.0%	0	0.0%
Developmental Biology (e)	2	25.0%	2	33.3%	2	33.3%
Functional Restoration (c)	3	17.6%		0.0%	1	16.7%
Genetics (e)	3	33.3%	2	28.6%	1	14.3%
Gyn & Obstetrics (c)	6	37.5%	2	28.6%	5	62.5%
Health Research & Policy	5	42.3%	2	34.3%	4	57.1%
Medicine-All Areas (c) (d)	20	16.9%	5	9.3%	13	31.0%
Microbiology & Immunology	1	11.1%		0.0%	1	33.3%
Molecular & Cellular Phy (e)	0	0.0%		0.0%	0	0.0%
Neurobiology	0	0.0%		0.0%	0	0.0%
Neurology (c)	2	16.7%		0.0%	0	0.0%
Neurosurgery (c) (e)	1	20.0%	1	33.3%	0	No Faculty Hired
Ophthalmology (c) (e)	2	33.3%		0.0%	2	50.0%
Pathology (c)	6	17.6%	1	5.6%	4	26.7%
Pediatrics (c)	7	16.7%	2	18.2%	5	31.3%
Pharmacology (e)	2	20.0%	1	16.7%	0	0.0%
Psychiatry (c)	4	13.3%	3	13.0%	1	16.7%
Radiation Oncology (c)	2	18.2%	1	16.7%	1	50.0%
Radiology (c)	6	18.6%		0.0%	7	38.9%
Surgery (c)	2	8.0%		0.0%	4	16.7%
Urology (c)	1	10.0%	1	20.0%	0	0.0%
Totals	***214***	***15.7%***	***94.5***	***11.0%***	***105***	***23.1%***

SOURCE

OFFICE OF THE PROVOST, roster as of May 1, 1993, see Appendix Table A-1 for definitions and sources of data.

NOTES

(a) Faculty are defined as described in Appendix A-l.
(b) Recently hired faculty are defined as described in Appendix C-1.
(c) Denotes a Clinical department in the School of Medicine.
(d) Includes the Departments of Medicine, Cardiovascular Medicine, Clinical Pharmacology, Endocrinology/Gerontology/Metabolism, Gastroenterology, General Internal Medicine, Hematology, Infectious Diseases, Immunology & Rheumatology, Nephrology and Oncology.
(e) Denotes department with fewer than 10 faculty.

Table V: Departments Ranked by Proportion of Women Faculty Members — 1992-93

Grouping	School	Department	All Faculty
			% Women
0 - 9.9%	Business	GS Business	7.7%
	Earth Sciences	Applied Earth Science	0.0%
		Geophysics	0.0%
		Petroleum Engineering (e)	0.0%
	Engineering	Aero/Astro	0.0%
		Computer Science	3.5%
		Electrical Engineering	8.0%
		Engineering Econ Sys	0.0%
		Materials Sciences	0.0%
		Mechanical Engineering	3.3%
		Operations Research (e)	0.0%
	Humanities	Music	7.1%
		Slavic (e)	0.0%
	Medicine	Biochemistry	9.1%
		Molecular & Cellular Phy (e)	0.0%
		Neurobiology	0.0%
		Surgery (c)	8.0%
	Sciences	Applied Physics	0.0%
		Chemistry	9.1%
		Mathematics	9.0%
		Physics	4.1%
		Statistics	7.7%
	Soc. Sciences	Economics	5.7%
10 - 19.9%	Earth Sciences	Geology	18.1%
	Engineering	Chemical Engineering	10.0%
		Civil Engineering	14.8%
	Humanities	Comparative Literature (e)	17.2%
		German (e)	15.0%
		History	15.4%
		Philosophy	19.0%
	Law	Law School	17.9%
	Medicine	Anesthesia (c)	18.4%
		Cardiothoracic Surgery (c) (e)	11.1%
		Cell Biology (e)	14.3%
		Functional Restoration (c)	17.6%
		Medicine-All Areas (c) (d)	16.9%
		Microbiology & Immunology	11.1%
		Neurology (c)	16.7%
		Pathology (c)	17.6%
		Pediatrics (c)	16.7%
		Psychiatry (c)	13.3%

Grouping	School	Department	All Faculty
			% Women
		Radiation Oncology (c)	18.2%
		Radiology (c)	18.6%
		Urology (c)	10.0%
	Sciences	Biological Sciences	19.7%
	Soc. Sciences	Food Research	15.4%
		Political Science	18.2%
20 - 39.9%	Education	School of Education	24.8%
	Engineering	Industrial Engineering	31.6%
	Humanities	Art	29.8%
		Asian Languages (e)	23.1%
		Classics (e)	35.7%
		Drama (e)	25.0%
		English	33.4%
		French and Italian	27.6%
		Linguistics	28.2%
		Religious Studies	20.0%
	Medicine	Dermatology (c) (e)	20.0%
		Developmental Biology (e)	25.0%
		Genetics (e)	33.3%
		Gyn & Obstetrics (c)	37.5%
		Neurosurgery (c) (e)	20.0%
		Ophthalmology (c) (e)	33.3%
		Pharmacology (e)	20.0%
	Soc. Sciences	Anthropology	28.6%
		Communication	33.3%
		Psychology	24.7%
		Sociology	29.3%
> 40%	Humanities	Spanish & Portuguese (e)	42.3%
	Medicine	Health Research & Policy	42.3%

SOURCE

OFFICE OF THE PROVOST, see Appendix A-1 for definitions and source data.

NOTES

(c) Denotes a clinical department in the School of Medicine.

(d) Includes the Departments of Medicine, Cardiovascular Medicine, Clinical Pharmacology, Endocrinology/Gerontology/Metabolism, Gastroenterology, General Internal Medicine, Hematology, Infectious Diseases, Immunology & Rheumatology, Nephrology and Oncology.

(e) Denotes department with fewer than 10 faculty.

Table VI: Schools and Departments Ranked by Proportion of Tenured Women Faculty Members— 1992-93

Grouping	School	Department	Tenured Faculty
			% Women
0%	Earth Sciences	Applied Earth Science	0.0%
		Geophysics	0.0%
		Petroleum Engineering (e)	0.0%
	Engineering	Aero/Astro	0.0%
		Computer Science	0.0%
		Electrical Engineering	0.0%
		Engineering Econ Sys	0.0%
		Materials Sciences	0.0%
		Mechanical Engineering	0.0%
		Operations Research (e)	0.0%
	Humanities	Drama (e)	0.0%
		Music	0.0%
		Philosophy	0.0%
		Slavic (e)	0.0%
	Medicine	Cardiothoracic Surgery (c) (e)	0.0%
		Cell Biology (e)	0.0%
		Dermatology (c) (e)	0.0%
		Functional Restoration (c)	0.0%
		Microbiology & Immunology	0.0%
		Molecular & Cellular Phy (e)	0.0%
		Neurobiology	0.0%
		Neurology (c)	0.0%
		Ophthalmology (c) (e)	0.0%
		Radiology (c)	0.0%
		Surgery (c)	0.0%
	Sciences	Applied Physics	0.0%
		Mathematics	0.0%
		Statistics	0.0%
	Soc. Sciences	Communication	0.0%
		Economics	0.0%
1 - 15.9%	Business	GS Business	4.0%
	Engineering	Chemical Engineering	14.3%
		Civil Engineering	12.5%
	Humanities	German (e)	15.0%
		History	11.8%
	Law	Law School	8.2%

Grouping	School	Department	Tenured Faculty
			% Women
	Medicine	Anesthesia (c)	10.0%
		Biochemistry	12.5%
		Medicine-All Areas (c) (d)	9.3%
		Pathology (c)	5.6%
		Psychiatry (c)	13.0%
	Sciences	Biological Sciences	12.8%
		Chemistry	6.7%
		Physics	6.1%
	Soc. Sciences	Food Research	10.0%
		Psychology	10.9%
16 - 33.0%	Earth Sciences	Geology	18.1%
	Education	School of Education	16.7%
	Humanities	Asian Languages (e)	17.6%
		Comparative Literature (e)	21.7%
		French and Italian	26.1%
		Linguistics	30.7%
		Religious Studies	16.7%
	Medicine	Genetics (e)	28.6%
		Gyn & Obstetrics (c)	28.6%
		Pediatrics (c)	18.2%
		Pharmacology (e)	16.7%
		Radiation Oncology (c)	16.7%
		Urology (c)	20.0%
	Soc. Sciences	Anthropology	18.2%
		Political Science	18.6%
		Sociology	28.1%
> 33.3%	Engineering	Industrial Engineering	35.3%
	Humanities	Art	34.2%
		Classics (e)	36.8%
		English	33.4%
		Spanish & Portuguese (e)	35.8%
	Medicine	Developmental Biology (e)	33.3%
		Health Research & Policy	34.3%
		Neurosurgery (c) (e)	33.3%

SOURCE

OFFICE OF THE PROVOST, see Appendix A-1 for definitions and source data. See also Table IV.

NOTES

(c) Denotes a clinical department in the School of Medicine.

(d) Includes the Departments of Medicine, Cardiovascular Medicine, Clinical Pharmacology, Endocrinology/Gerontology/Metabolism, Gastro-enterology. General Internal Medicine, Hematology, Infectious Diseases, Immunology & Rheumatology, Nephrology and Oncology.

(e) Denotes department with fewer than 10 faculty.

Table VII: Schools and Departments Ranked by Proportion of Faculty Hired in the Last Five Years Who Are Women

Grouping	School	Department	Recently Hired Faculty (a)
			% Women
0%	Earth Sciences	Applied Earth Science	0.0%
		Geology	0.0%
		Geophysics	0.0%
		Petroleum Engineering	0.0%
	Engineering	Aero/Astro	0.0%
		Chemical Engineering	0.0%
		Engineering Econ Sys	0.0%
		Materials Sciences	0.0%
		Mechanical Engineering	0.0%
	Humanities	Art	0.0%
		German (e)	0.0%
		Linguistics	0.0%
		Music	0.0%
		Slavic (e)	0.0%
	Medicine	Biochemistry	0.0%
		Cell Biology (e)	0.0%
		Dermatology (c) (e)	0.0%
		Molecular & Cellular Phy (e)	0.0%
		Neurobiology	0.0%
		Neurology (c)	0.0%
		Pharmacology (e)	0.0%
		Urology (c)	0.0%
	Sciences	Applied Physics	0.0%
		Chemistry	0.0%
		Statistics	0.0%
	Soc. Sciences	Food Research	0.0%
9 - 30%	Business	GS Business	16.6%
	Engineering	Computer Science	9.1%
		Electrical Engineering	22.2%
	Humanities	Comparative Literature (e)	27.3%
		English	29.4%
		History	22.2%
	Medicine	Anesthesia (c)	30.0%
		Functional Restoration (c)	16.7%
		Genetics (e)	14.3%
		Medicine-All Areas (c) (d)	31.0%
		Pathology (c)	26.7%
		Psychiatry (c)	16.7%
		Surgery (c)	16.7%

Grouping	School	Department	Recently Hired Faculty (a)
			% Women
	Sciences	Mathematics	11.8%
		Physics	16.7%
	Soc. Sciences	Economics	9.1%
		Political Science	12.5%
		Psychology	20.0%
31 - 49%	Engineering	Civil Engineering	33.3%
	Humanities	Classics (e)	33.3%
		Drama (e)	33.3%
		French and Italian	37.5%
		Philosophy	38.7%
		Religious Studies	44.4%
		Spanish & Portuguese (e)	33.3%
	Law	Law School	44.4%
	Medicine	Developmental Biology (e)	33.3%
		Microbiology & Immunology	33.3%
		Pediatrics (c)	31.3%
		Radiology (c)	38.9%
	Sciences	Biological Sciences	37.5%
	Soc. Sciences	Anthropology	33.3%
>= 50%	Education	School of Education	50.0%
	Humanities	Asian Languages (e)	50.0%
	Medicine	Gyn & Obstetrics (c)	62.5%
		Health Research & Policy	57.1%
		Ophthalmology (c) (e)	50.0%
		Radiation Oncology (c)	50.0%
	Soc. Sciences	Communication	50.0%
		Sociology	64.2%
No Faculty	Engineering	Industrial Engineering	No Faculty Hired
Hired		Operations Research (e)	No Faculty Hired
	Medicine	Cardiothoracic Surgery (c) (e)	No Faculty Hired
		Neurosurgery (c) (e)	No Faculty Hired

SOURCE

OFFICE OF THE PROVOST, see Appendix A-1 for definitions and source data.

NOTES

(a) Recently Hired Faculty include all faculty hired between 9/l/88 and 9/1/92.

(c) Denotes a clinical department in the School of Medicine.

(d) Includes the Departments of Medicine, Cardiovascular Medicine, Clinical Pharmacology, Endocrinology/Gerontology/Metabolism, Gastroenterology, General Internal Medicine, Hematology, Infectious Diseases, Immunology & Rheumatology, Nephrology and Oncology.

(e) Denotes department with fewer than 10 faculty.

Part IX. Appendices

Appendix Table A- 7; Number and Proportion of Stanford Faculty by Gender, Faculty Line and Tenure Status, by School and Department — 1992-93

Table appears on following pages.

SOURCE

OFFICE OF THE PROVOST, Roster as of May 1, 1993

NOTES

Faculty are defined as all members of the academic council. There are 8 Faculty lines, which are displayed here in 5 columns. Tenured and non-tenured tenure track faculty are in the first two columns. In the third column are Professor (Clinical) and Medical Center Line or MCL faculty; this category is used only by the School of Medicine. Three other so-called parenthetical faculty lines, Professor (Teaching), Professor (Research) and Professor (Performance), as well as Senior Fellow are in the final three columns.

Faculty who are in split billets are counted in the totals in proportion to their billets. For example, the split billet for a professor with a .67 FTE appointment in English and a .33 FTE appointment in Comparative Literature is computed into the departmental totals in those fractions. A faculty members with an appointment in a department with a 0 FTE is not counted into that department. Faculty members with a smaller than 1.00 FTE billet, but who are only in one department are counted as a full faculty member in that department

Does not include Hoover, SLAC, HEPL, SSRL, IIS, IIL, Hopkins Marine Station or other similar independent labs. Faculty with split billets in these areas are included as full-time in their academic-line department.

(c) Denotes a clinical department in the School of Medicine.

(d) Includes the Departments of Medicine, Cardiovascular Medicine, Clinical Pharmacology, Endocrinology/Gerontology/Metabolism, Gastroenterology, General Internal Medicine, Hematology, Infectious Diseases, Immunology & Rheumatology, Nephrology and Oncology.

Department	Women						Men						Totals	
	Tenured	Non-Tenured Tenure Line	(Clinic.) MCL	(Perf.) (Teach	(Res.) Sr. Fell	Total	Tenured	Non-Tenured Tenure Line	(Clinic.) MCL	(Perf.) (Teach	(Res.) Sr. Fell	Total	Total	% Women
GS Business	***2***	***4***	***0***	***0***	***0***	***6***	***48.58***	***22***	***0***	***1***	***0***	***71.58***	***77.58***	***7.7%***
Earth Sciences	***2***	***0***	***0***	***0***	***0***	***2***	***29.5***	***3***	***0***	***0***	***3.5***	***36***	***38***	***5.3%***
Applied Earth Science						0	7.85				1	8.85	8.85	0.0%
Geology	2					2	9.05					9.05	11.05	18.1%
Geophysics						0	7.6	2			2.5	12.1	12.1	0.0%
Petroleum Engineering						0	5	1				6	6	0.0%
School of Education	***6***	***4***	***0***	***0***	***0***	***10***	***30.25***	***0***	***0***	***0***	***0***	***30.25***	***40.25***	***24.8%***
Engineering	***6***	***6***	***0***	***0***	***0***	***12***	***111.34***	***27***	***0***	***4***	***23.2***	***165.5***	***177.5***	***6.8%***
Aero/Astro						0	12.5	1.5			2	16	16	0.0%
Chemical Engineering	1					1	6	3				9	10	10.0%
Civil Engineering	2	2				4	14	5		1	3	23	27	14.8%
Computer Science		1				1	14.17	10		1	2.66	27.83	28.83	3.5%
Electrical Engineering		2				2	12	3.5			7.5	23	25	8.0%
Engineering Econ Sys						0	8				3	11	11	0.0%
Industrial Engineering	3					3	5.5			1		6.5	9.5	31.6%
Materials Sciences						0	7.67	1			2	10.67	10.67	0.0%
Mechanical Engineering		1				1	24.5	3		1	1	29.5	30.5	3.3%
Operations Research						0	7				2	9	9	0.0%

Department	Women						Men						Totals	
	Tenured	Non-Tenured Tenure Line	(Clinic.) MCL	(Perf.) (Teach)	(Res.) Sr. Fell	Total	Tenured	Non-Tenured Tenure Line	(Clinic.) MCL	(Perf.) (Teach)	(Res.) Sr. Fell	Total	Total	% Women
Humanities & Sciences	*50.5*	*34*	*0*	*5*	*0*	*89.5*	*300.84*	*75.75*	*0*	*8*	*13*	*397.59*	*487.09*	*18.4%*
Anthropology	2	2				4	9	1				10	14	28.6%
Applied Physics						0	8.16	2			5	15.16	15.16	0.0%
Art	4.67					4.67	9	2				11	15.67	29.8%
Asian Languages	1	1				2	4.67	2				6.67	8.67	23.1%
Biological Sciences	3	3				6	20.5	2			2	24.5	30.5	19.7%
Chemistry	1	1				2	14	6				20	22	9.1%
Classics	2.33	1				3.33	4	2				6	9.33	35.7%
Communication		1		3		4	6	1		1		8	12	33.3%
Comparative Literature	0.83					0.83	3	1				4	4.83	17.2%
Drama		2				2	3	2		1		6	8	25.0%
Economics		2				2	25.33	8				33.33	35.33	5.7%
English	10.6	2				12.6	21.17	3		1		25.17	37.77	33.4%
Food Research	1	1				2	9	2				11	13	15.4%
French and Italian	3	1				4	8.5	1		1		10.5	14.5	27.6%
German	1					1	5.67					5.67	6.67	15.0%
History	4	2				6	30	3				33	39	15.4%
Linguistics	3.4					3.4	7.67	1				8.67	12.07	28.2%
Mathematics		3				3	19.75	10.5				30.25	33.25	9.0%
Music		1				1	6	2		2	3	13	14	7.1%
Philosophy		3				3	10.08	2.75				12.83	15.83	19.0%
Physics	1					1	15.34	5			3	23.34	24.34	4.1%
Political Science	4	1				5	17.5	4		1		22.5	27.5	18.2%
Psychology	2	3		1		6	16.33	2				18.33	24.33	24.7%
Religious Studies	1	1				2	5	2		1		8	10	20.0%
Slavic						0	3	1				4	4	0.0%
Sociology	3	1				4	7.67	2				9.67	13.67	29.3%
Spanish & Portuguese	1.67	1		1		3.67	3	2				5	8.67	42.3%
Statistics		1				1	8.5	3.5				12	13	7.7%
Law School	*3*	*5*	*0*	*0*	*0*	*8*	*33.67*	*3*	*0*	*0*	*0*	*36.67*	*44.67*	*17.9%*

Department			Women						Men				Totals	
	Tenured	Non-Tenured Tenure Line	(Clinic.) MCL	(Perf.) (Teach)	(Res.) Sr. Fell	Total	Tenured	Non-Tenured Tenure Line	(Clinic.) MCL	(Perf.) (Teach)	(Res.) Sr. Fell	Total	Total	% Women
Medicine	*25*	*30*	*27*	*1*	*3*	*86*	*208.16*	*77*	*105*	*3*	*11.3*	*404.49*	*490.49*	*17.5%*
Anesthesia (c)	1	1	5			7	9	6	16			31	38	18.4%
Biochemistry	1					1	7	3				10	11	9.1%
Cardiothoracic Surgery (c)		1				1	7		1			8	9	11.1%
Cell Biology				1		1	5	1				6	7	14.3%
Dermatology (c)			1			1	3	1				4	5	20.0%
Developmental Biology	2					2	4	2				6	8	25.0%
Functional Restoration (c)		2	1			3	4	3	6		1	14	17	17.6%
Genetics	2				1	3	5				1	6	9	33.3%
Gyn & Obstetrics (c)	2		4			6	5	1	4			10	16	37.5%
Health Research & Policy	2	3				5	3.83	2			1	6.83	11.83	42.3%
Medicine-All Areas * (c)	5	8	7			20	49	19	26		4.33	98.33	118.33	16.9%
Microbiology & Immunology		1				1	6	2				8	9	11.1%
Molecular & Cellular Phy						0	6	3				9	9	0.0%
Neurobiology						0	5					5	5	0.0%
Neurology (c)			1		1	2	5	2	3			10	12	16.7%
Neurosurgery (c)	1					1	2	1	1			4	5	20.0%
Ophthalmology (c)		2				2	2		1		1	4	6	33.3%
Pathology (c)	1	1	3		1	6	17	3	7		1	28	34	17.6%
Pediatrics (c)	2	2	3			7	9	9	16		1	35	42	16.7%
Pharmacology	1	1				2	5	3				8	10	20.0%
Psychiatry (c)	3	1				4	20	1	5			26	30	13.3%
Radiation Oncology (c)	1	1	0			2	5	1	1	1	1	9	11	18.2%
Radiology (c)		5	1			6	14.33	6	6			26.33	32.33	18.6%
Surgery (c)		1	1			2	6	5	10	2	0	23	25	8.0%
Urology (c)	1					1	4	3	2			9	10	10.0%
Total	**94.5**	**83**	**27**	**6**	**3**	**214**	**762.34**	**207.75**	**105**	**16**	**50.99**	**1142.08**	**1355.58**	**15.7%**

Table B-1: Number and Proportion of Faculty by Rank and Gender for Comparable Schools to Stanford, for Four Selected Years

	Men					Women					Total	Percentage of Women Faculty	
School	Prof	Asso	Asst	Inst	Total	Prof	Asso	Asst	Inst	Total	All Fac.	Of all faculty	Full professors
1992-1993													
Arizona State	519	370	197	5	1091	81	140	121	9	351	1442	24.34%	13.50%
Berkeley	770	158	142	0	1070	103	68	73	0	244	1314	18.57%	11.80%
Brown	256	54	78	0	388	29	38	44	0	111	499	22.24%	10.18%
Cal Tech	164	32	32	0	228	8	4	7	0	19	247	7.69%	4.65%
Chicago	420	103	122	27	672	51	26	39	10	126	798	15.79%	10.83%
Columbia	453	146	180	12	791	115	75	102	22	314	1105	28.42%	20.25%
Cornell	716	325	189	7	1237	71	96	84	7	258	1495	17.26%	9.02%
Dartmouth	142	52	76	1	271	20	37	35	2	94	365	25.75%	12.35%
Harvard	591	120	184	15	910	70	48	89	8	215	1125	19.11%	10.59%
MIT	538	155	121	29	843	38	30	38	8	114	957	11.91%	6.60%
Oregon State	193	151	82	24	450	18	44	54	20	136	586	23.21%	8.53%
Princeton	353	47	137	14	551	37	16	54	8	115	666	17.27%	9.49%
Stanford	501	117	110	0	728	48	30	42	0	120	848	14.15%	8.74%
U Pennsylvania	489	182	141	0	812	61	61	63	0	185	997	18.56%	11.09%
UCLA	737	197	216	0	1150	104	87	122	0	313	1463	21.39%	12.37%
Univ Arizona	557	292	199	22	1070	72	96	141	22	331	1401	23.63%	11.45%
Univ Oregon	218	118	88	29	453	25	65	56	38	184	637	28.89%	10.29%
Univ Washington	777	353	185	3	1318	110	125	149	5	389	1707	22.79%	12.40%
USC	421	285	189	12	907	50	86	106	5	247	1154	21.40%	10.62%
Washington State	303	221	182	13	719	24	60	110	39	233	952	24.47%	7.34%
Yale	342	79	121	6	548	39	39	92	0	170	718	23.68%	10.24%
1987-1988													
Arizona State	436	365	213	6	1020	60	81	99	28	268	1288	20.8%	12.1%
Berkeley	856	198	134	0	1188	80	55	61	0	196	1384	14.2%	8.5%
Brown	256	65	69	1	391	19	26	44	0	89	480	18.5%	6.9%
Cal Tech	171	32	32	0	235	2	5	3	0	10	245	4.1%	1.2%

	Men					Women					Total	Percentage of Women Faculty	
School	Prof	Asso	Asst	Inst	Total	Prof	Asso	Asst	Inst	Total	All Fac.	Of all faculty	Full professors
Chicago	421	128	118	30	697	30	34	33	10	107	804	13.3%	6.7%
Columbia Univ. (b)	506	130	215	14	865	95	65	116	30	306	1171	26.1%	15.8%
Cornell (c)	714	325	224	10	1273	38	71	88	8	205	1478	13.9%	5.1%
Dartmouth	161	46	70	7	284	9	24	42	4	79	363	21.8%	5.3%
Harvard	515	117	197	19	848	43	37	73	5	158	1006	15.7%	7.7%
MIT	526	174	140	39	879	30	28	32	5	95	974	9.8%	5.4%
Oregon State	217	175	114	29	535	11	33	58	28	130	665	19.5%	4.8%
Princeton	331	41	144	8	524	21	15	42	0	78	602	13.0%	6.0%
Stanford	503	104	131	0	738	19	26	42	0	87	825	10.5%	3.6%
U Pennsylvania	478	190	160	1	829	44	46	71	0	161	990	16.3%	8.4%
UCLA	779	203	189	0	1171	76	62	97	0	235	1406	16.7%	8.9%
Univ Arizona	606	275	197	9	1087	37	79	73	11	200	1287	15.5%	5.8%
Univ Oregon	227	138	99	30	494	17	50	85	38	190	684	27.8%	7.0%
Univ Washington	763	366	228	4	1361	82	93	105	5	285	1646	17.3%	9.7%
USC	374	346	233	13	966	39	64	85	8	196	1162	16.9%	9.4%
Washington State	258	198	121	6	583	15	49	62	28	154	737	20.9%	5.5%
Yale	365	90	141	8	604	24	36	79	2	141	745	18.9%	6.2%
1982-1983													
Arizona State	396	317	213	6	932	34	64	107	27	232	1164	19.9%	7.9%
Berkeley	800	190	148	3	1141	43	43	59	1	146	1287	11.3%	5.1%
Brown	262	64	64	1	391	10	21	25	3	59	450	13.1%	3.7%
Cal Tech	176	31	40	12	259	0	0	0	0	0	259	0.0%	0.0%
Chicago	405	143	117	38	703	14	32	30	6	82	785	10.4%	3.3%
Columbia Univ. (b)	496	134	213	14	857	66	53	117	34	270	1127	24.0%	11.7%
Cornell (c)	680	327	250	10	1267	29	48	54	10	141	1408	10.0%	4.1%
Dartmouth	146	51	66	7	270	5	11	51	5	72	342	21.1%	3.3%
Harvard	505	135	205	0	845	24	24	66	0	114	959	11.9%	4.5%
MIT	495	208	161	32	896	21	31	28	11	91	987	9.2%	4.1%
Oregon State	255	203	117	37	612	12	31	49	30	122	734	16.6%	4.5%
Princeton	295	49	154	16	514	9	11	37	3	60	574	10.5%	3.0%
Stanford	476	104	120	0	700	8	15	14	35	72	772	9.3%	1.7%

	Men					Women					Total	Percentage of Women Faculty	
School	Prof	Asso	Asst	Inst	Total	Prof	Asso	Asst	Inst	Total	All Fac.	Of all faculty	Full professors
U Pennsylvania	460	207	208	1	876	28	41	81	2	152	1028	14.8%	5.7%
UCLA	675	236	191	0	1102	59	52	82	0	193	1295	14.9%	8.0%
Univ Arizona	611	281	174	9	1075	28	57	80	19	184	1259	14.6%	4.4%
Univ Oregon	259	150	96	32	537	14	36	57	33	140	677	20.7%	5.1%
Univ Washington	729	378	218	5	1330	65	87	90	4	246	1576	15.6%	8.2%
USC	316	291	233	16	856	22	51	68	10	151	1007	15.0%	6.5%
Washington State	275	207	162	0	644	14	34	67	7	122	766	15.9%	4.8%
Yale	356	102	164	14	636	11	30	71	21	133	769	17.3%	3.0%
1976-1977													
Arizona State	373	312	278	26	989	21	48	111	44	224	1213	18.5%	5.3%
Berkeley (a)	2543	1159	1015	6	4723	119	135	370	8	632	5355	11.8%	4.5%
Brown	253	76	65	8	402	3	7	27	0	37	439	8.4%	1.2%
Cal Tech	178	30	31	9	248	0	0	0	0	0	248	0.0%	0.0%
Chicago	371	149	136	20	676	13	15	40	8	76	752	10.1%	3.4%
Columbia Univ. (b)	515	134	200	15	864	52	54	93	34	233	1097	21.2%	9.2%
Cornell (c)	605	335	269	10	1219	16	28	51	4	99	1318	7.5%	2.6%
Dartmouth	133	40	98	10	281	0	4	41	11	56	337	16.6%	0.0%
Harvard	496	78	168	0	742	15	12	42	0	69	811	8.5%	2.9%
MIT	440	173	160	25	798	9	18	32	0	59	857	6.9%	2.0%
Oregon State	235	215	142	22	614	8	31	39	17	95	709	13.4%	3.3%
Princeton	288	61	152	24	525	3	3	43	10	59	584	10.1%	1.0%
Stanford	423	126	140	38	727	12	7	37	20	76	803	9.5%	2.8%
U Pennsylvania	433	220	227	8	888	18	33	86	30	167	1055	15.8%	4.0%
UCLA (a)	2543	1159	1015	6	4723	119	135	370	8	632	5355	11.8%	4.5%
Univ Arizona	510	275	201	17	1003	27	47	68	27	169	1172	14.4%	5.0%
Univ Oregon	275	151	127	25	578	17	21	57	16	111	689	16.1%	5.8%
Univ Washington	617	409	275	11	1312	43	66	117	26	252	1564	16.1%	6.5%
USC	305	255	262	29	851	21	24	67	16	128	979	13.1%	6.4%
Washington State	246	203	181	3	633	18	22	67	13	120	753	15.9%	6.8%
Yale	350	124	183	17	674	6	18	62	0	86	760	11.3%	1.7%

SOURCES

AAUP BULLETIN, August 1977, p. 174-216
ACADEME, July/August 1982, p. 26-76
ACADEME, March/April 1988, p. 18-65
ACADEME, March/April 1993, p. 32-81
Data collected by the AAUP.

NOTES

Faculty defined as members of the instructional and research staff employed full time. Excludes clinical or preclinical medicine, administrative officers, graduate students, faculty on leave or replacements of faculty on sabbatical leave.

1977 is the first year in which data is presented separately by sex.

(a) Data for the combined University of California system is given.

(b) Columbia University includes data from Columbia Main, Barnard College and Teacher's College.

(c) Cornell University includes the Statutory and the Endowed Colleges.

Table C-1: Number of Recently Hired Stanford Faculty by Gender and Faculty Line, Newly Hired 9/1/88 - 9/7/92

Department	Male				Female				Proportion
	Tenured	Tenure Track	Other	TOTAL	Tenured	Tenure Track	Other	TOTAL	% Women
GS Business	*8.33*	*12*	*0*	*20.33*	*0*	*4*	*0*	*4*	*16.4%*
Earth Sciences	*3*	*5*	*3.5*	*11.5*	*0*	*0*	*0*	*0*	*0.0%*
Applied Earth Science		1	1	*2*				*0*	0.0%
Geology	1	0.5	1	*2.5*				*0*	0.0%
Geophysics	1	3.5	1.5	*6*				*0*	0.0%
Petroleum Engineering	1			*1*				*0*	0.0%
School of Education	*5*	*1*	*0*	*6*	*1*	*5*	*0*	*6*	*50.0%*
Engineering	*5.5*	*24*	*6.5*	*36*	*0*	*5*	*0*	*5*	*12.2%*
Aero/Astro		1.5	1	*2.5*				*0*	0.0%
Chemical Engineering		3		*3*				*0*	0.0%
Civil Engineering		3	1	*4*		2		*2*	33.3%
Computer Science	1	7	2	*10*		1		*1*	9.1%
Electrical Engineering	1.5	4.5	0.5	*6.5*		2		*2*	23.5%
Engineering Econ Sys		1	2	*3*				*0*	0.0%
Industrial Engineering				*0*				*0*	No Faculty Hired
Materials Sciences		1		*1*				*0*	0.0%
Mechanical Engineering	3	3		*6*				*0*	0.0%
Operations Research								*0*	No Faculty Hired

Department	Male				Female				Proportion
	Tenured	Tenure Track	Other	TOTAL	Tenured	Tenure Track	Other	TOTAL	% Women
Humanities & Sciences	***31.17***	***80***	***9***	***120.17***	***5***	***22***	***2***	***29***	***19.4%***
Anthropology		2		*2*		1		*1*	33.3%
Applied Physics	0.5	1	1	*2.5*				*0*	0.0%
Art	2	3	1	*6*				*0*	0.0%
Asian Languages		1		*1*		1		*1*	50.0%
Biological Sciences	1	2	2	*5*		3		*3*	37.5%
Chemistry		7		*7*				*0*	0.0%
Classics		2		*2*		1		*1*	33.3%
Communication	1			*1*			1	*1*	50.0%
Comparative Literature	0.33	1		*1.33*	0.5			*0.5*	27.3%
Drama		2		*2*		1		*1*	33.3%
Economics	3	7		*10*		1		*1*	9.1%
English	3	3		*6*	0.5	2		*2.5*	29.4%
Food Research		2		*2*				*0*	0.0%
French and Italian	0.67	1		*1.67*		1		*1*	37.5%
German		1		*1*				*0*	0.0%
History	5	2		*7*		2		*2*	22.2%
Linguistics	1	1		*2*				*0*	0.0%
Mathematics	3	19.5		*22.5*		3		*3*	11.8%
Music	1	2	4	*7*				*0*	0.0%
Philosophy	2	2.75		*4.75*		3		*3*	38.7%
Physics	1	3	1	*5*	1			*1*	16.7%
Political Science	4	3		*7*	1			*1*	12.5%
Psychology	1	3		*4*		1		*1*	20.0%
Religious Studies		1.25		*1.25*		1		*1*	44.4%
Slavic		3		*3*				*0*	0.0%
Sociology	0.67	1		*1.67*	2	1		*3*	64.2%
Spanish & Portuguese		2		*2*			1	*1*	33.3%
Statistics	1	1.5		*2.5*				*0*	0.0%
Law School	***2***	***3***	***0***	***5***	***1***	***3***	***0***	***4***	***44.4%***

Department	Male				Female				Proportion
	Tenured	Tenure Track	Other	TOTAL	Tenured	Tenure Track	Other	TOTAL	% Women
Medicine	***26***	***76***	***48***	***150***	***5***	***28***	***24***	***57***	***27.5%***
Anesthesia		8	6	*14*		1	5	*6*	30.0%
Biochemistry		2		*2*				*0*	0.0%
Cardiothoracic Surgery				*0*				*0*	No Faculty Hired
Cell Biology	2			*2*				*0*	0.0%
Dermatology	3	1		*4*				*0*	0.0%
Developmental Biology	2	2		*4*	2			*2*	33.3%
Functional Restoration		1	4	*5*			1	*1*	16.7%
Genetics	2	3	1	*6*	1			*1*	14.3%
Gyn & Obstetrics	1	1	1	*3*	1		4	*5*	62.5%
Health Research & Policy	1	2		*3*	1	3		*4*	57.1%
Medicine-All Areas	2	17	10	*29*		7	6	*13*	31.0%
Microbiology & Immunology	1	1		*2*		1		*1*	33.3%
Molecular & Cellular Phy	3	3		*6*				*0*	0.0%
Neurobiology		1		*1*				*0*	0.0%
Neurology		4	2	*6*				*0*	0.0%
Neurosurgery				*0*				*0*	No Faculty Hired
Ophthalmology		2		*2*		2		*2*	50.0%
Pathology	2	6	3	*11*		1	3	*4*	26.7%
Pediatrics		4	7	*11*		2	3	*5*	31.3%
Pharmacology		1		*1*				*0*	0.0%
Psychiatry	1	3	1	*5*		1		*1*	16.7%
Radiation Oncology			1	*1*		1		*1*	50.0%
Radiology	4	7		*11*		6	1	*7*	38.9%
Surgery	2	6	12	*20*		3	1	*4*	16.7%
Urology		1		*1*				*0*	0.0%
Total	***81***	***201***	***67***	***349***	***12***	***67***	***26***	***105***	***23.1%***

SOURCE

OFFICE OF THE PROVOST, May 1, 1993.

NOTES

Faculty definitions and categories conform to definitions in Appendix Table A-l.

This tabulation includes all of the faculty hired between 9/1/88 and 9/1/92. For each academic year, a roster of the faculty as of 9/1 who were not on the roster 9/1 of the previous year was printed out. The faculty were tabulated into the appropriate category and department, and totalled for the 5 years ('88, '89, '90, '91, '92).

Faculty with split billets, who are currently employed, are distributed to Departments according to current billet allocation, as described in Appendix Table A. Faculty hired with split billets who have left Stanford, are counted with their primary department, because the split billet information is not available.

Faculty with the designation (Teaching), (Research), (Clinical), (Performance), or MCL are included in the category "Other".

Appendix D: Availability Pools

In preparing goals and timetables for hiring plans, departments and Schools are assisted by examining their availability pools and comparing these pools to their recent hiring of women faculty. Availability pools differ by field. In the humanities, most of the social sciences, and most engineering departments, the availability pool for junior faculty is the women in the field who received Ph.D.s within the last five years or so from the top institutions across the country. In the sciences and medicine, the availability pool is the women in the field who have completed postdoctoral fellowships at the top institutions world-wide.

At the senior level, the availability pools are more difficult to determine. They are the women who have distinguished themselves, internationally, in their fields.

We have not had the resources or the time to collect data on Ph.D. recipients, by field, by gender, for the top universities that award Ph.D.s. However, to illustrate the use of availability pool data for evaluating past performance and creating hiring plans, we present two estimates of availability pools: (1) the percentage of all doctorates in the field awarded to women in the U.S. in 1989; and (2) the percentage of all doctorates in the field awarded to women by Stanford in 1990-91 and 1990-92 combined. (See Appendix Tables Dl - D3.)

For the sciences and some medical fields, the data presented here are for interest only. They do not represent proxies for availability pools. However, the method of analysis is entirely applicable to the sciences when postdoctoral data are substituted for Ph.D. data.

Where fewer than ten doctorates were given by a Stanford department over the two-year period, the Stanford estimate of the availability pool is not presented.

Both the national availability pools and the Stanford availability pools for women faculty have exceedingly wide ranges. The U.S. pool ranges from a low of 3.1 percent in petroleum engineering to a high of 77.3 percent in French and Italian. The Stanford pool ranges from a low of 5.6 percent in applied physics to a high of 75 percent in food research.

For about 30 percent of departments the percentage of doctorates given by Stanford to women is about the same as the percentage given in their fields nation-wide. In about 18 percent of departments the percentage of doctorates awarded to women is lower than the percentage given to women in the same field nation-wide, while in about half of departments the percentage of doctorates awarded to women is higher than the percentage awarded to women in that field nation-wide.

Several of the departments in Earth Sciences and Engineering award more than double the percentage of doctorates to women than are awarded nation-wide.

Table D-1 presents, for each department or School, the ratio of the percentage of women faculty hired in the last five years to the percentage of doctorates awarded in that field nation-wide in 1989. This ratio, the recent hire/ national availability pool ratio (RH/NAP), provides a first approximation of how a department is performing with respect to the availability pool. It should be noted that some departments with high percentages of women faculty in the department may nonetheless exhibit allow recent hire ratio. For example, English, in which 35 percent of all faculty and 37 percent of tenured faculty are women, has a recent hire ratio of only 52 percent, based on a national availability pool.

Using the Stanford availability estimates (as a proxy for the availability of doctoral recipients from top universities), Table D-2 presents the ratios (HR/SAP) calculated by dividing the percentage of women recently hired by the percentage of women awarded doctoral degrees by the department in 1990-91 and 1991-92. Again, departments were divided into five groups.

Caution needs to be exercised in interpreting these ratios, especially the ratio based on the Stanford availability pool. First, the availability pools are only estimates of the actual number of women doctorates that are available to departments. For example, in many fields not all doctorates are interested in academic employment. Second, the Stanford estimate is more useful as a proxy for the availability of women doctorates from prestigious institutions if in fact departments in the same field in institutions similar to Stanford awards about the same percentage of women doctorates as Stanford does. Otherwise, the Stanford estimate is less useful. Third, even though we dropped from consideration all those departments where the number of doctorates awarded in the two year period 1990-92 was less than ten, many of the estimates that remained in our data base are still based on quite low numbers. Fourth, the availability pool based on recent doctorates awarded is not useful for evaluating the degree of success that departments have had in hiring women at the senior level. Note that our data on recent hires does not distinguish between junior and senior level hires. In using these ratios for purposes of evaluation and planning, such a distinction would be important.

Table D-1: Proportion of Women Receiving Doctorates by Field: National Data (1989) and Stanford Doctorates Awarded (1990-91 and 1991-92 Combined)

Department	1989 US Doctorates		Stanford 1990-92 Pooled Doctorates Awarded		Ratio
	Total Degrees	Proportion to Women	Total Degrees	Proportion to Women	Stanford/US
GS Business	*1150*	*26.60%*	*20*	*35.00%*	*1.32*
Earth Sciences	*b*	*b*	*56*	*23.21%*	*a*
Applied Earth Science	b	b	13	15.38%	a
Geology	271	19.92%	18	38.89%	1.95
Geophysics	90 (d)	7.77%	11	27.27%	3.51
Petroleum Engineering	67 (d)	4.47%	14	7.14%	1.60
School of Education	*6783*	*57.33%*	*87*	*67.82%*	*1.18*
Engineering	*4533 (e)*	*8.84%*	*409*	*12.96%*	*1.47*
Aero/Astro	158	4.54%	35	8.57%	1.89
Chemical Engineering	599	13.18%	17	35.29%	2.68
Civil Engineering	503	9.54%	33	21.21%	2.22
Computer Science	538	15.05%	38	15.79%	1.05
Electrical Engineering	1002	6.58%	131	6.11%	0.93
Engineering Econ Sys	b	b	15	6.67%	a
Industrial Engineering	203	12.80%	10	20.00%	1.56
Materials Sciences	245	15.10%	34	29.41%	1.95
Mechanical Engineering	634	3.78%	83	7.23%	1.91
Operations Research		b	13	30.77%	a

Department	1989 US Doctorates		Stanford 1990-92 Pooled Doctorates Awarded		Ratio
	Total Degrees	Proportion to Women	Total Degrees	Proportion to Women	Stanford/US
Humanities & Sciences	*b*	*b*	*456*	*32.02%*	*a*
Anthropology	318	47.79%	12	41.67%	0.87
Applied Physics	b	b	36	5.56%	a
Art	162	69.13%	8	c	a
Asian Languages	22 (d)	45.45%	3	c	a
Biological Sciences	529	34.02%	32	46.88%	1.38
Chemistry	2034	25.36%	74	22.97%	0.91
Classics	51	37.25%	0	c	a
Communication	248	44.75%	7	c	a
Comparative Literature	92	48.91%	4	c	a
Drama	61	36.06%	3	c	a
Economics	834	19.06%	42	30.95%	1.62
English	730	56.43%	16	62.50%	1.11
Food Research	b	b	12	75.00%	a
French and Italian	97	77.31%	10	70.00%	0.91
German	68	58.82%	10	60.00%	1.02
History	480	35.41%	22	27.27%	0.77
Linguistics		56.96%	13	38.46%	0.68
Mathematics	882	19.38%	16	25.00%	1.29
Music		32.49%	20	20.00%	0.62
Philosophy	255	25.09%	11	27.27%	1.09
Physics	1111	9.18%	35	8.57%	0.93
Political Science	451	25.72%	15	33.33%	1.30
Psychology	3263	56.20%	23	43.48%	0.77
Religious Studies	204	28.92%	2	c	a
Slavic	31 (d)	51.60%	3	c	a
Sociology	450	50.88%	12	41.67%	0.82
Spanish & Portuguese	103	60.19%	4	c	a
Statistics		26.47%	11	18.18%	0.69

Department	1989 US Doctorates		Stanford 1990-92 Pooled Doctorates Awarded		Ratio
	Total Degrees	Proportion to Women	Total Degrees	Proportion to Women	Stanford/US
Law School	*76*	*39.47%*	*356*	*42.42%*	*1.07*
Medicine	*b*	*b*	*235*	*35.32%*	*a*
Anesthesia	b	b	13	30.77%	a
Biochemistry	555	36.21%			a
Cardiothoracic Surgery	b	b			a
Cell Biology	208	35.57%	5	c	a
Dermatology	b	b			a
Developmental Biology	b	b	0	c	a
Functional Restoration	b	b			a
Genetics	b	b	3	c	a
Gyn & Obstetrics	b	b			a
Health Research & Policy	b	b			a
Medicine-All Areas	140	39.28%	188	32.98%	a
Microbiology & Immunology	351	37.03%	9	c	a
Molecular & Cellular Phy	b	b	0	c	a
Neurobiology	82	34.14%	11	45.45%	1.33
Neurology	b	b			a
Neurosurgery	b	b			a
Ophthalmology	b	b			a
Pathology	b	b			a
Pediatrics	b	b			a
Pharmacology	169	44.37%	5	c	a
Psychiatry	b	b			a
Radiation Oncology	b	b			a
Radiology	b	b			a
Surgery	b	b			a
Urology	b	b			a

SOURCES

NATIONAL CENTER FOR EDUCATION STATISTICS, US Dept of Education, National data from 1988-89 academic year.

OFFICE OF THE REGISTRAR, Stanford University, *Doctoral Degrees Granted 1990-91* and *1991-92* combined.

NOTES

a. Not calculable. One of the data categories is unavailable.

b. No comparable category of national data available.

c. Fewer than 10 doctorates awarded in 2 years. This number is too small to compute a meaningful percentage.

d. If fewer than 50 doctorates were awarded in a field in 1989, the 1988 and 1989 data were combined.

e. All Engineering specialties combined, whether they are represented at Stanford or not.

Table D-2: Departments Ranked by Ratio of Recently Hired Faculty Women at Stanford (1987-1992) to Proportion of Women Receiving Doctorate in Field (1989)

Grouping	School	Department (b)	Ratios: RH/NAP
			Recently Hired/US Doc
No Women Hired	Earth Sciences	Geology	.00
		Geophysics	.00
		Petroleum Engineering (e)	.00
	Engineering	Aero/Astro	.00
		Chemical Engineering	.00
		Materials Sciences	.00
		Mechanical Engineering	.00
	Humanities	Art	.00
		Linguistics	.00
		Music	.00
		Slavic (e)	.00
	Medicine	Biochemistry	.00
		Cell Biology (e)	.00
		Neurobiology	.00
		Pharmacology (e)	.00
	Sciences	Chemistry	.00
		Statistics	.00
Fewer Women Hired	Business	GS Business	.61
Relative to National Pool	Engineering	Computer Science	.60
(.36 to .79)	Humanities	Comparative Literature (e)	.56
		English	.52
		French and Italian	.48
		History	.63
		Spanish & Portuguese (e)	.55
	Medicine	Medicine-All Areas (c) (d)	.79
	Sciences	Mathematics	.61
	Soc. Sciences	Anthropology	.70
		Economics	.48
		Political Science	.49
		Psychology	.36

Grouping	School	Department (b)	Ratios: RH/NAP
			Recently Hired/US Doc
Approximately Same % of	Education	School of Education	.87
Women Hired Relative	Humanities	Asian Languages (e)	1.10
to National Pool		Classics (e)	.89
(.80 to 1.26)		Drama (e)	.92
	Law	Law School	1.26
	Medicine	Microbiology & Immunology	.90
	Sciences	Biological Sciences	1.10
	Soc. Sciences	Communication	1.12
		Sociology	1.26
More Women Hired	Humanities	Philosophy	1.54
Relative to National Pool		Religious Studies	1.54
(1.5 to 2.0)	Sciences	Physics	1.82
Considerably More Women	Engineering	Civil Engineering	3.49
Hired Relative to National Pool		Electrical Engineering	3.38

SOURCES

OFFICE OF THE PROVOST, Rosters from May 1, 1993
NATIONAL CENTER FOR EDUCATIONAL STATISTICS, US DEFT OF EDUCATION,
1988-89 Degrees Granted

NOTES

(a) Faculty and Recently Hired Faculty are defined as described in Appendix A-l & C-l.
(b) Departments for which this ratio is incalculable are not included.
(c) Denotes a clinical department in the School of Medicine.
(d) Includes the Departments of Medicine, Cardiovascular Medicine, Clinical Pharmacology, Endocrinology/Gerontology/Metabolism, Gastroenterology, General Internal Medicine, Hernatology, Infectious Diseases, Immunology & Rheumatology, Nephrology and Oncology.
(e) Denotes department with fewer than 10 faculty.

Table D-3: Departments Ranked by Ratio of Recently Hired Faculty Women at Stanford (1987-1992) to Proportion of Women Receiving Doctorate in Same Department at Stanford (1990-92)

Grouping	School	Department (b)	Ratio
			Recently Hired/SU Doc
No Women Hired	Earth Sciences	Applied Earth Science	.00
		Geology	.00
		Geophysics	.00
		Petroleum Engineering (e)	.00
	Engineering	Aero/Astro	.00
		Chemical Engineering	.00
		Engineering Econ Sys	.00
		Materials Sciences	.00
		Mechanical Engineering	.00
	Humanities	Linguistics	.00
		Music	.00
	Medicine	Neurobiology	.00
	Sciences	Applied Physics	.00
		Chemistry	.00
		Statistics	.00
	Soc. Sciences	Food Research	.00
Fewer Women Hired	Business	GS Business	.47
Relative to Stanford Pool	Education	School of Education	.74
(.25 to .75)	Engineering	Computer Science	.58
	Humanities	English	.47
		French and Italian	.54
	Sciences	Mathematics	.47
	Soc. Sciences	Economics	.29
		Political Science	.38
		Psychology	.46

Grouping	School	Department (b)	Ratio
			Recently Hired/SU Doc
Approx Same % Women Hired	Humanities	History	.81
Relative to Stanford Pool	Law	Law	1.05
(.8 to 1.2)	Medicine	Anesthesia (c)	.98
		Medicine-All Areas (c) (d)	.94
	Sciences	Biological Sciences	.80
	Soc. Sciences	Anthropology	.80
More Women Hired	Engineering	Civil Engineering	1.57
Relative to Stanford Pool	Humanities	Philosophy	1.42
(1.3 to 1.90)	Soc. Sciences	Sociology	1.54
Considerably More Women Hired	Engineering	Electrical Engineering	3.64
Relative to Stanford Pool	Sciences	Physics	1.94

SOURCES

OFFICE OF THE PROVOST
OFFICE OF THE REGISTRAR, *Doctoral Degrees Granted at Stanford University, 1990-91 & 1991-92*

NOTES

(a) Faculty and Recently Hired Faculty are defined as described in Appendix A-1 & C-1.
(b) Departments for which this ratio is uncalculable are not included.
(c) Denotes a clinical department in the School of Medicine.
(d) Includes the Departments of Medicine, Cardiovascular Medicine, Clinical Pharmacology, Endocrinology/Gerontology/Metabolism, Gastroenterology, General Internal Medicine, Hematology, Infectious Diseases, Immunology & Rheumatology, Nephrology and Oncology.
(e) Denotes department with fewer than 10 faculty.