

**ADVANCE PROGRAM- 2006/2007 EQUITY ADVISOR REPORT ANALYSIS**

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This report examines the Equity Advisors' activities during the first year following the original NSF ADVANCE grant period at UCI, and seeks to assess whether or not their continuing activities had an impact on the hiring of female faculty members, the advancement of junior faculty members, and gender equity during that year. We begin by reviewing the pattern of female faculty hires over the term of the program.

Table 1 displays the percent female hires in each school for each of the past seven years.

**Table 1. Percent of New Hires at UCI Who Are Women, By School, Academic Year 00/01 through Academic Year 06/07\***

School	00/01	01/02	02/03	03/04	04/05	05/06	06/07
<b>Science and Engineering</b>	<b>19%</b> <b>(6.5/34)</b>	<b>28%</b> <b>(8/29)</b>	<b>40%</b> <b>(12/30)</b>	<b>33%</b> <b>(9/27)</b>	<b>25%</b> <b>(5/20)</b>	<b>29%</b> <b>(6/21)</b>	<b>25%</b> <b>(3/12)</b>
Engineering	9% (1/11.5)	11% (1/9)	0%** (0/4)	50% (2/4)	17% (1/6)	17% (1/6)	0% (0/6)
Biological Sciences	50% (3.5/7)	83% (5/6)	58% (7/12)	50% (2/4)	0% (0/4)	0% (0/4)	100% (1/1)
ICS	23% (1/4.5)	20% (1/5)	44% (4/9)	17% (1/6)	33% (1/3)	50% (2/4)	0% (0/0)
Physical Sciences	9% (1/11)	11% (1/9)	20% (1/5)	31% (4/13)	43% (3/7)	43% (3/7)	36% (2/5)
<b>Other</b>	<b>40%</b> <b>(16/40)</b>	<b>41%</b> <b>(16/39)</b>	<b>43%</b> <b>(12/28)</b>	<b>38%</b> <b>(17/45)</b>	<b>57%</b> <b>(20/35)</b>	<b>56%</b> <b>(23/41)</b>	<b>52%</b> <b>(16/31)</b>
Medicine – Basic	0% (0/0)	0% (0/1)	33% (1/3)	100% (2/2)	0% (0/1)	0% (0/2)	0% (0/1)
Social Ecology	60% (3/5)	50% (2/4)	33% (1/3)	83% (5/6)	67% (2/3)	67% (2/3)	86% (0/2)
Arts	50% (2/4)	50% (2/4)	67% (2/3)	12.5% (1/8)	80% (4/5)	80% (4/5)	40% (2/5)
Business	0% (0/1)	0% (0/1)	100% (2/2)	17% (1/6)	50% (2/4)	50% (2/4)	50% (2/4)
Social Sciences	19% (3/16)	27% (4/15)	14% (1/7)	30% (3/10)	50% (5/10)	45.5% (5/11)	50% (3/6)
Humanities	57% (8/14)	57% (8/14)	50% (5/10)	38% (5/13)	58% (7/12)	54% (7/13)	60% (6/10)
Education						100% (3/3)	100% (3/3)
<b>TOTAL</b>	<b>30%</b> <b>(22.5/74)</b>	<b>35%</b> <b>(24/68)</b>	<b>41%</b> <b>(24/58)</b>	<b>36%</b> <b>(26/72)</b>	<b>45%</b> <b>(25/55)</b>	<b>47%</b> <b>(29/62)</b>	<b>44%</b> <b>(19/43)</b>

\*Data for this table were collected from the ADVANCE website for 2000-2005; 2005-2007 data were collected from the Academic Personnel database. ADVANCE began in the fall quarter of the 2001/02 academic year; data for the 00/01 year reflect hiring prior to the program's inception.

\*\* The Henry Samueli School of Engineering also participated in a half-time appointment of a female faculty member, but since the primary school was the Claire Trevor School of the Arts, it is not reflected in this count.

When considering the Academic Personnel data on female hires, we see that Science and Engineering Schools (Henry Samueli School of Engineering, Biological Sciences, Donald Bren School of Information and Computer Sciences, and Physical Sciences, hereafter S&E) have remained fairly steady in the last three years, with about one fourth female hires. Within the individual schools, the percent female hires has fluctuated considerably. Among S&E schools, the School of Physical Sciences stands out by its accomplishment of a fairly steady unidirectional upward trend from 9% female hires in 2000/2001 to 36% in 2006/2007. The School of Biological Sciences, on the other hand, began with higher percents of female hires then declined during the last two years of the ADVANCE grant. In 2006/2007, it rebounded by hiring a female to fill its only open position. These are the two S&E schools with the highest female assistant professor availability pools. One of the schools with lower availability of female junior candidates hasn't fared as well. The Henry Samueli School of Engineering has consistently hired the lowest percentage female faculty members (only 13% over the seven years of this study), and continued this trend in 2006/2007 with zero female and six male hires. In contrast, the School of Information and Computer Science, which shares with Engineering a low female availability pool, has managed to fairly steadily increase its percent female hires (in 2006/2007 it made no hires). Over the last seven years, ICS has hired 32% female faculty members.

In other schools (Basic Medicine, Social Ecology, Claire Trevor School of the Arts, Paul Merage School of Business, Social Sciences, and Humanities), there is a clear upward (though not completely unidirectional) trajectory of hiring a higher percent of female faculty members over the period of the NSF ADVANCE grant. In the post-grant year, female hiring fell from 56% to 52%. With the exception of a year here or there, Social Ecology, Arts, and Humanities have maintained high and fairly stable percents of female faculty hires over this period. Business has experienced movement towards gender parity during the last three years. Social Science experienced some variation, with a clear upward trajectory in the last four years. Medicine has too few hires per year to discern patterns.

During 2006/2007, 43% of all new hires were female, compared to 47% in 2005/2006. This continues to be an improvement over 2000/2001, when only 30% of new hires were female. As is expected, we see considerable fluctuations given the small numbers of hires per year. When considering individual schools, we encounter an even more significant issue with low numbers.

The numbers of female hires reported by Academic Personnel differ from those calculated from the Equity Advisors' reports for several reasons. First, the Equity Advisors were asked to report on searches that were conducted by their schools this academic year. This strategy focuses on collecting information about Equity Advisor's direct experiences during the past year. In contrast, the Academic Personnel data count only faculty members who began service as of July of that year. The latter may include faculty members that accepted jobs in previous years but had delayed starting dates. In addition, there are several reasons to expect some data will be missing from the Equity Advisors' reports. Information may be missing because Equity Advisors failed to complete responses to particular questions, or because they didn't have the information as of the time they completed the report (due to the timing of the hire (it may not have been completed)) or because they were not involved (as may be the case if a hire spanned over two years, if it was made in a prior year and was not effective until the following year or due to transitions between Equity Advisors).

The remainder of this report considers only data supplied by the Equity Advisors in their reports. We present below the aggregate numbers for the searches in which they participated and reported in 2006/2007.

**Table 1a. Equity Advisor Reported 2006/2007 Female Hires by School.**

<b>School</b>	<b>06/07</b>
<b>Science and Engineering</b>	<b>23%</b> <b>(6/26)</b>
Engineering	0% (0/4)
Biological Sciences	40% (2/5)
ICS	0% (0/6)
Physical Sciences	36% (4/11)
<b>Other</b>	<b>48%</b> <b>(22/46)</b>
Medicine – Basic	0% (0/2)
Social Ecology	86% (6/7)
Arts	75% (3/4)
Business	50% (1/2)
Social Sciences	40% (6/15)
Humanities	37.5% (6/16)
Education	-
<b>TOTAL</b>	<b>39%</b> <b>(28/72)</b>

## Equity Advisor Practices

Next we examine the extent to which each of the ADVANCE program practices have been implemented across the schools on campus. How many schools have implemented the ADVANCE practices, and how many have continued to incorporate these practices each year? As we observed in prior reports, many of the Equity Advisor practices have been fully implemented. Once they become accepted practice in each school, we can expect that they contribute to the overall improvement in gender hiring parity. (See Table 2.)

**Table 2. Equity Advisor Reports on various factors by year.**

	2001/2002		2002/2003		2003/2004		2004/2005		2005/2006		2006/2007	
	All	S&E	All	S&E	All	S&E	All	S&E	All	S&E	All	S&E
Number of searches	27	14	52.5	21.5	73	33	66	26	81	24	126	24
Percent EA's signed "Plan and Advertisement" form	*	*	58	50	80	100	83	100	96	96	96	100
Percent full search committees that EA met with at any time	30	50	47	71	90	100	68	50	71	80	92	92
Percent of full search comm or comm chairs who received pamphlets or best practices	10	0	67	70	80	75	71	59	84	83	92	92
Percent searches EA Received applicant pool lists	10	25	0	0	10	25	--	--	75	88	86	81
Percent search activity statements EA Reviewed	0	0	0	0	20	50	20	100	96	96	92	97
Number of career Partner requests	2	2	13	4	2	1	6	1	2	1	11	5
Number of career partners requests granted	1	1	12	4	2	1	3	0	1	0	8	3

**Table 2, Continued.**

	2001/2002		2002/2003		2003/2004		2004/2005		2005/2006		2006/2007	
	All	S&E	All	S&E	All	S&E	All	S&E	All	S&E	All	S&E
Percent of women faculty hired	50	25	47	25	48	26	42	23	47	31	39	23
Number of schools With mentoring Programs	2	3	6	1	8	3	9	4	10	4	10	4
Number of schools working on pay equity Issues	5	3	6	2	5	3	9	3	8	3	5	3
Mean number of Dean's Council meetings Equity Advisor attended	9	1	3.4	0	3.2	5	2.6	2.8	5.3	3.5	3.9	4.3
Number of Schools EA met Dean's Council	4	1	3	0	3	1	5	2	9	3	9	4
Number of Schools EA met Dean's Council more than once a year	3	0	3	0	2	1	3	1	9	3	9	4
Mean number individual meetings between EA & Dean	1.0	1.0	2.5	2.5	1.0	2.5	3.8	4.8	4.1	2.5	3.9	5

\* The AP82 form was not developed until 2002-2003. In the 2005-2006 academic year this form was renumbered AP80-A with the development of two new search-related forms, AP80-B and AP80-C.

-- This question was not asked in this year.

An important Equity Advisor activity is to monitor the hiring process. Equity Advisors interact with the search committee chairs in their schools, distribute information on best practices, and interact with search committees. Table 2 shows the percent of searches in all schools and the percent of searches in S&E schools that incorporated each component of the ADVANCE hiring program in each year. In past reports we have documented increasing implementation of each of the “best practices” in all schools and in S&E schools. In fact, four of these practices have been implemented in more than 90% of all searches. These include signing off on the plan and advertisement form (implemented in 96% of searches), Equity Advisor review of the search activity statement (implemented in 92% of searches), distribution of pamphlets or discussion of best practices with committee chair or full committee (implemented in 92% of

searches), and EA meetings with full search committees (implemented 92% of searches). The remaining best practice, Equity Advisor receipt of the applicant pool list, was implemented in 85% of all searches.

The UCI Career Partners Program, which was implemented prior to the ADVANCE Program, may increase the chance of female hires. During ADVANCE, Equity Advisors have been an additional conduit of information to search committees about the Career Partners Program. Also, during ADVANCE the shared funding mechanism was implemented: now the EVC&P's Office puts forth a third of the funds for Career Partner positions, and the primary hire and the secondary hire ("trailing partner") departments each put forth a third of the funds for the new position. The program's use (both requests and grants) has been sporadic throughout the last seven years, with increased requests and grants in 2002/2003 and 2006/2007.

Finally, we measure the frequency of Equity Advisor meetings with the Dean's Council (within each school), the dean, and department chairs in order to capture their integration into the top-level hierarchies of each school. While the frequency of these meetings fluctuated over the earlier years and slightly declined in the last year, they have risen dramatically as the ADVANCE program has moved towards institutionalization (see Table 2). Equity Advisors attended an average of 3.9 meetings with the Dean's Council (4.25 in S&E), and in all but one school, they indicated that they met with the Dean's Council more than once. Campus-wide, Equity Advisors met with deans an average of almost four times, while they met with the dean an average of 5 times in S&E (see Table 2).

Table 3 reports on other detailed Equity Advisor activities in 2006/2007. In spring quarter of 2005, EVC&P Gottfredson made a call for Equity Advisors to attend Dean's Council meetings. When Equity Advisors attended Dean's Council meetings, they stayed for the entire meeting 75% of the time (both S&E and all schools). This is an improvement over last year, when they stayed for the entire meeting in 70% of all schools and in only 50% in S&E. This indicates that they have become more integrated into the schools' leadership. Overall, the Equity Advisors rated deans as slightly more responsive to the ADVANCE Program than they were last year, and they rated dean's behavior as extremely responsive to their efforts. Whereas last year, Equity Advisors rated dean's behavior as fairly responsive, they almost exclusively rated dean's behavior as fully responsive in 2006/2007.

**Table 3. Information about School Characteristics and Equity Advisor Activities  
(Measured at the School Level, All Schools and Science & Engineering Only, 2006-7 Only)**

	<b>All Schools</b>	<b>Science &amp; Engineering Only</b>
	<b>Percent or Mean (and standard deviation)</b>	<b>Percent or Mean (and standard deviation)</b>
<b>Percent of EA's that stayed for the entire meeting when they attended</b>	75%	75%
<b>Mean level of responsiveness of dean (1=very responsive, 10=not at all responsive)</b>	1.3 (0.949)	1.75 (1.5)
<b>Mean assessment of Dean's behavior (0=fully responsive, 3=not at all responsive)</b>	0.2 (0.632)	0 (0)
<b>Percent of EAs dealing with salary residuals</b>	60%	75%
<b>Percent of EAs Involved in any Retention Efforts</b>	44%	50%
<b>Percent of EAs Involved in any Advancement Efforts</b>	90%	75%
<b>Mean number of EA Nominations for Awards</b>	0.89 (1.167)	1.25 (1.5)
<b>Mean number of awards received</b>	0.556 (0.882)	0.5 (1.0)
<b>Mean number of women in administrative positions</b>	0.667 (0.707)	0.50 (0.577)

Equity Advisors have been involved in some retention efforts, but many continue to be out of the loop. In one school, the Equity Advisor was told that confidentiality issues prevent participation in retention efforts. The Equity Advisor in that school noted that 3 female Full Professors and 2 female Associate Professors left last year. It would be useful to have discussion about the possible advantages of systematic inclusion of Equity Advisors in retention cases, and if it is decided that they may be helpful, deans should be asked to share the relevant information with them.

On average, Equity Advisors nominated one faculty member per year for an award (1.25 in Science and Engineering schools) and 62% were successful (40% were successful in S&E). Still, Equity Advisors in six of the nine schools did not nominate any faculty members for awards. The success of the nominations that did occur indicates that this activity should be encouraged. Although we had some missing data on this, women continue to be less prevalent in assuming administrative positions, especially in Science and Engineering schools, although there has been an increase in the number of females moving into administrative positions in S&E since last year.

Most Equity Advisors reported meeting with faculty regularly or frequently. One Equity Advisor reported only ad-hoc and infrequent meetings, mainly based on individual needs/requests.

## Equity Advisor Work with Existing Faculty Members

Besides working on hiring, Equity Advisor activities also aimed at improving the relative position of existing female faculty members. For the last three years, all schools have had working mentoring programs underway.

In the early years of the ADVANCE Program, Equity Advisors were asked to develop mentor programs specifically suited to the needs of their schools. As a result, the existing mentor programs differ considerably in both content and form. Some programs are entirely voluntary, some have required participation, and others have both voluntary and required components. While most programs have 2 or 3 mentor/mentored points of contact per year, some have only one, and on the other extreme, one provides for up to 12 meetings per year. Hence, it appears that the amount of effort that goes into each of the mentor programs also varies. When asked about the success of their school's mentor program, most Equity Advisors reported that they were successful. Table 4 gives information on the mentoring program in each school.

**Table 4. Details of Schools' Mentoring Programs**

School	Mentor Program			
	Consistency Across Departments	EA Assessment of Outcome	Number of Junior Faculty Involved	Held Workshops
Engineering	varies	varies; working to improve		yes
Biological Science	tailored	positive	26 at lunch	
ICS	consistent	positive <sup>#</sup>	5; low turnout	
Physical Sciences	consistent	positive	16	
Medicine	consistent	positive	4*	
Social Ecology	consistent	positive	4	yes (2)
Arts	consistent <sup>+</sup>	positive	9	
Business	consistent	positive	12	yes
Social Sciences	consistent	positive	12	yes
Humanities	consistent	positive	18	yes

<sup>#</sup> The Equity Advisor indicated that the 2006/2007 program was not as successful as the 2005/2006 program.

\* The mentoring program run by the equity Advisor is in the basic science departments. There is also an Academic Senate mentoring program in Medicine, which works with faculty in clinical departments. The Equity Advisor is an ex-officio member of that program committee.

<sup>+</sup> In the Arts, the Equity Advisor advises Chairs at a meeting early in the year; chairs assign mentors and guide the process.

Equity Advisors reported many comments from faculty members regarding the mentor programs and workshops. It might be useful for Equity Advisors to collectively review, discuss and compare their programs and suggestions for improvement. Where appropriate, schools might consider including new practices, specifically those that appear to be working in other schools, and dropping existing practices that don't seem to be working.

Several Equity Advisors reported that both junior and senior faculty members requested more mentoring. One Equity Advisor indicated that faculty in his/her school thought that meeting once a year was not necessary.

When questioned about the gender equity in progression through the Assistant, Associate and Full Professor ranks, the vast majority of Equity Advisors reported no problems (or that there were too few cases to be able to make an assessment). At the Assistant Professor rank, only one Equity Advisor reported that there may be a problem. This Equity Advisor indicated that the problem may be rooted in females' lower propensities to request promotion, in the department's lower level of enthusiasm, or in CAP's responses. At the Associate Professor rank, two Equity Advisors indicated an apparent inequity. One indicated that females with children seemed to be stalled, and another indicated that females at this rank did too much service. The Equity Advisor in the latter school organized a successful workshop on moving from Associate Professor to Full Professor. At the Full Professor rank, one Equity Advisor indicated that there seems to be a higher bar at CAP for promoting females faculty members to Professor Step 6. Another Equity Advisor who felt that s/he didn't have adequate information to assess whether or not gender inequity exists in his/her school suggested that it may be true that CAP doesn't appreciate the types of work women and minority faculty make. S/he suggested ongoing education about diversity work at both the department and CAP levels.

Equity Advisors in 5 of the 9 (55%) reporting schools<sup>1</sup> worked on pay equity issues. This level of activity continues a downward decline over the last two years. Equity Advisors in the other 4 schools (including 2 in S&E) reported no problems with salary residuals. Half of Equity Advisors in S&E (2) reported working on salary residuals. This also represents a decline since last year. Below is a summary of activities in Science and Engineering and in other schools during 2006/2007.

*Science & Engineering.* In one school, the Equity Advisors discussed several cases of apparent inequity with the Dean. There also seems to be an issue with start up funds in this school. The Equity Advisor in another school found that female faculty members have a much larger mean salary residual than males (-\$8,550 for females and -\$1,730 for males). The Equity Advisor discussed this situation with the dean, and there was some action on one senior female faculty member.

*Other Schools.* In one school, the Equity Advisors discussed with the dean cases of faculty members whose salaries were out of line with expected salaries. The inequities are being addressed in the merit and promotion process. In another school, Equity Advisors identified several productive junior faculty members with salaries below the norm. These salaries were increased. They also identified some problems with several senior faculty members. The latter is under investigation. In the third school, the Equity Advisor was approached by a few faculty members concerned about their salaries. The Equity Advisor had a discussion with the dean.

## **Reception of the Equity Advisors**

Overall, Equity Advisors reported that they were well received in their schools, by both faculty and deans. Still, some reported issues that arose over the year. In S&E, one Equity Advisor indicated that there was some resistance to requests for additional information on the AP80B form, particularly with regard to the short list selection. This Equity Advisor suggested including a section on the AP80B form for search committee chairs to include their justification of the short list selections. Another Equity Advisor reported the need to repeatedly request more information from one department.

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<sup>1</sup> The Equity Advisor in Medicine had only been on the job for 2 months as of the time he filled out the annual report. He reported not having worked on salaries in those two months.

In other schools, Equity Advisors reported similar issues. One agreed with the need to include a justification of the short list selections, given the pool. This Equity Advisor pointed out that some faculty felt that the Equity Advisor was interfering with their autonomy. Also, some chairs thought the Equity Advisors held up the hiring process. In this school Equity Advisors responded to the search committees within 24 hours, either granting approval or requesting more information. If the justification was initially requested and included on the form, there would be fewer delays. Another Equity Advisor indicated that tension mounted when s/he didn't sign the AP80B form, but the issue was settled in a meeting with the dean's involvement. Another Equity Advisor reported that in one search where the female availability pool was very low, the process was counterproductive. And finally, one Equity Advisor indicated that in general, s/he was well received, or at worst, tolerated.

Some Equity Advisors felt that they had too little information on the process between the selection of the short list and the hire. In particular, faculty in some disciplines with low female availability may benefit by instruction on proper execution of an interview and deliberations toward an offer. Others wanted to know more about offers, counteroffers, and career partner involvement, where they might have some positive role. Another suggestion was to have a central location for the AP80C forms (potentially the dean's office), so Equity Advisors have access to files at all times. Finally, several Equity Advisors mentioned that it is important to meet in August with search committees that begin their hiring cycles early.

### **Equity Advisor Practices and Hiring Outcomes**

Next, we consider the impact of more specific Equity Advisors activities on the 2006/2007 search cycle, using the *search* as our unit of analysis. Here we examine the completion of each practice in each search, and whether or not it impacted the gender of each hire.

**Table 5. Detailed Search-Level Information on Equity Advisor Activities (All Schools and Science & Engineering Only, 2006/7 Only)**

	All Schools		Science and Engineering Only	
	Percent	Spearman Correlation with Gender of Hire (Significance)	Percent	Spearman Correlation with Gender of Hire (Significance)
<b>EA Gave Feedback on Applicant Pool List</b>	54.5%	0.084 (0.242)	31.6%	-0.142 (0.750)
<b>EA Signed AP80B</b>	91.6%	-0.156 (0.900)	97.2%	NA
<b>EA Asked for more Information on AP80B</b>	21.1%	-0.297 (0.994)	35.0%	-0.096 (0.677)
<b>EA Asked for More Candidates after Reviewing AP80B</b>	5.7%	-0.026 (0.586)	5.1%	-0.115 (0.707)
<b>EA Met Candidate Who Was Hired</b>	16.5%	-0.139 (0.876)	30.3%	-0.015 (0.528)
<b>EA Met With Other Candidates</b>	22.3%	-0.010 (0.534)	34.2%	0.030 (0.441)
<b>Mean Number of EA Meetings with Full Search Committee</b>	---	---	---	---
<b>EA Received AP80C</b>	60.5%	0.215 (0.034)	65.6%	0.207 (0.156)
<b>Gender of First Offer</b>				
<b>Women</b>	36%		21%	
<b>Men</b>	63%		79%	

Note: All variables are measured 0=no and 1=yes except the two variables which measure number of meetings and gender of hire.

Three activities were relatively commonplace:

- more than half (54%) of the Equity Advisors gave feedback on the applicant pool lists (32% in S&E). This represents an improvement from 22% for S&E last year
- 92% signed AP80B forms (97% in S&E). This represents an improvement in all schools (from 75%) and in S&E (from 71%) over last year
- 60% received the AP80C form (65% in S&E) (this represents moderate improvement over last year from 46% in all schools and 52% in S&E)

Other practices were less common:

- 22% of Equity Advisors met with candidates who were not hired (34% in S&E),
- 16% met with candidates who were hired (30% in S&E)
- Equity Advisors asked for more information on 21% of the AP80B forms (35% in S&E),
- Equity Advisors asked for more candidates after reviewing AP80B in 6% of the searches (5% in S&E).

## Number of Positions

In past analyses, we have found that the number of positions a department is granted impacts the gender distribution of resulting hires. This year's analysis repeats the curvilinear relationship between the number of positions and the gender of the hire that we found in past years. Although for any single year this relationship is not statistically significant due to a small N, when pooled it has consistently appeared in the last three analyses. Departments that filled only one position hired 30% females (12.5% in S&E). Departments that were granted two positions hired 50% females, those granted 3 positions hired 47% females, and those granted 4 positions hired 44% (in S&E, no department was granted 2 positions; those departments granted three positions hired 33% females and those granted 4 positions hired 25%). Again, we find that female hires were most likely to occur in departments that received two to three, and to a lesser extent, four positions. The lowest percentage of female hires (17%) resulted from one department's allocation of six FTE, but we don't make too much of this finding, since the characteristics of the particular department involved made a major contribution to this outcome. The maximization of female hires for departments with 2-3 FTE holds for all schools and for S&E.

In order to consider this curvilinear relationship between number of positions and the likelihood of hiring women, we present Table 6 with data pooled from 2004/2005, 2005/2006, and 2006/2007. We find that departments with two, three, and to a lesser extent, four positions tend to hire higher percentages of females (see Table 6). Although we don't have empirical data on the mechanisms involved in this relationship, we may speculate about them. Our results may indicate that departments feel somewhat less pressure to hire a female if they have only one position. On the other end of the spectrum, when departments that have limited female applicant pools receive four to five positions to fill in one year, they may find it difficult to recruit more than one female candidate from that limited pool. In addition, when male-dominated departments have four to five positions, and succeed in hiring one female, they may consider their gender diversity obligation complete, and thereby cease or reduce their efforts to seek out additional female candidates for their other positions.

**Table 6. Gender of Hire and Number of Positions the Department was Granted  
(All Schools and Science & Engineering Only, Pooled 2004/5 - 2006/7)**

		<b>Number of Positions Granted</b>					
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5-6</b>	<b>Total</b>
<b>ALL SCHOOLS</b>							
<b>Gender of Hire</b>	<b>Male</b>	34 (67%)	18 (44%)	21 (52.5%)	12 (57%)	9 (82%)	94 (57%)
	<b>Female</b>	17 (33%)	23 (56%)	19 (47.5%)	9 (43%)	2 (18%)	70 (43%)
<b>SCI. &amp; ENG. ONLY</b>							
<b>Gender of Hire</b>	<b>Male</b>	13 (87%)	4 (67%)	12 (60%)	11 (73%)	--	40 (71%)
	<b>Female</b>	2 (13%)	2 (33%)	8 (40%)	4 (27%)	--	16 (29%)

**All Schools:**

Chi-Square\* = 10.192 (4)

Significance = 0.037

**Science and Engineering Only:**

Chi-Square = 2.818 (3)

Significance = 0.421

\* Chi-squares are calculated with Yates' Continuity Correction. This measure may not be appropriate because expected value for one of the cells is less than 5. But Fisher's exact test yields a similar p-value (0.041 for all schools, and the exact same p-value ( 0.421) for S&E).

These findings suggest a rationale for clustering departmental hires in packets of two to four whenever possible, especially in departments with limited female applicant pools, in order to enhance gender diversity of hires.

Table 7 considers search-level Spearman correlations for our original variables.

**Table 7. Spearman Correlations between Gender of Hire and Equity Advisor Activities and Other Relevant Variables (All Schools, 2004-2006)**

	<b>Gender of Hire</b>					
	<b>2004/5</b>		<b>2005/6</b>		<b>2006/07</b>	
<b>ALL SCHOOLS</b>	<b>Spearman Correlation</b>	<b>Sig.</b>	<b>Spearman Correlation</b>	<b>Sig.</b>	<b>Spearman Correlation</b>	<b>Sig.</b>
<b>Department received 2 Positions</b>	0.103	0.495	0.045	0.721	0.190*	0.055
<b>EA met search committee</b>	0.139	0.413	0.060	0.693	-0.044	0.640
<b>Delivered pamphlets or discussed best practices</b>	-0.055	0.718	0.225	0.132	0.019	0.438
<b>EA received Adequate Information</b>	0.293	0.087	0.128	0.397	-0.020	0.564
<b>EA reviewed applicant pool</b>	-0.113	0.341	-0.006	0.967	0.084	0.242
<b>Career partner requests</b>	0.207	0.572	-0.122	0.424	0.043	0.360
<b>Number of individual meetings with Dean</b>	-0.074	0.664	0.150	0.320	-0.041	0.627
<b>Number of Dean's Council EA Attended</b>	-0.051	0.728	0.092	0.542	0.059	0.313

Table 7, Continued.

<b>SCI. &amp; ENG. ONLY</b>						
<b>Department received 2 Positions</b>	-0.083	0.787	0.329	0.329	0.167*	0.207
<b>EA met search committee</b>	0.051	0.167	0.288	0.263	0.098	0.329
<b>Delivered pamphlets or discussed best practices</b>	-0.283	0.349	0.207	0.326	0.098	0.329
<b>EA received Adequate Information</b>	----	----	0.119	0.648	0.098	0.329
<b>EA reviewed applicant pool</b>	-0.030	0.921	-0.064	0.808	-0.142	0.751
<b>Career partner requests</b>	----	----	0.024	0.572	0.272	0.089
<b>Number of individual meetings with Dean</b>	---	---	0.187	0.040	0.129	0.294
<b>Number of Dean's Council EA Attended</b>	0.126	0.682	0.256	0.322	0.013	0.474

All Schools: 2004/5 N= 49 2005/6 N=46; Science and Engineering: 2004/5 N=13 2005/6 N = 17

--- No variance in this variable. All Equity Advisors received adequate information, no career partner requests, and no meetings with the Dean.

\* For 2006/2007, this measures 2-4 positions

This year we had more career partner requests (11). There were five career partner requests in Science and Engineering during this academic year: 50% connected with a female primary hire and 50% connected with a male primary hire.<sup>2</sup>

Again, we observe a positive relationship between the number of positions a department was granted and the gender of the hire. Although not significant, when Equity Advisors reviewed the applicant pools, the search was more likely to result in a female hire. And in S&E, career partner requests were positively related with female hires. Overall, when considering 2006/2007 data to examine the relationship between the Equity Advisor's activities and the outcome of the searches, we see that they are mostly not related to the gender of the hire. This is not because these practices are not effective. Our earlier analyses revealed

<sup>2</sup>One of the five partner requests did not result in a hire for the partner making the request.

their impact in the formative years of the ADVANCE program. The current results indicate that while these practices have become fully implemented, they may contribute to the overall higher level of female hiring at UCI, but loose internal variance, and therefore their ability to determine the internal differences we observe.

Our next step is to consider these variables concurrently in a regression model. Because our dependent variable is dichotomous (female hire or not), we use Logistic Regression. Table 8 shows the results.

We include all three variables that showed at least a moderate relationship with gender of the hire (departments that received two-four positions, searches where the Equity Advisor received AP80C forms, and searches with Career Partner requests).

**Table 8. Logistic Regression of Aspects of Search on the Gender of the New Hire (All Schools for 2004-6)**

<b>Variables</b>	<b>B</b>	<b>S.E.</b>	<b>Significance</b>
<b>Department had 2 – 4 Positions</b>	0.947	0.554	0.088 <sup>+</sup>
<b>EA Received AP80C</b>	1.840	1.112	0.098 <sup>+</sup>
<b>Career Partner Request</b>	0.607	0.777	0.435
<b>Constant</b>	-2.794	1.181	0.018*

**N = 72**

**-2 Log likelihood**                    **89.125**  
**Nagelkerke R Square**                **0.127**  
**Chi-square**                                **7.102<sup>+</sup>**  
**Degrees of freedom**                 **3**  
**AIC**                                         **97.125**  
**BIC**                                         **106.232**

Our Logistic Regression model reveals a significant relationship between the gender of the hire and two of our independent variables: Equity Advisor received the AP80C form and the department was granted between 2 and 4 positions. The former is a relatively newer Equity Advisor practice, and its value in increasing female hires is indicated here. This step may introduce an effective measure of accountability to the hiring process. And as in the analyses of the last few years, we find that the number of positions granted to departments continues to impact the gender of the hire in 2006/2007. This indicates that it is useful to encourage departments to pass the AP80C form to Equity Advisors and to examine the feasibility of attempting to cluster departmental hiring in groups of two to four positions.

**Failed Searches**

Is there a pattern that explains why some searches fail to result in hires? Several of our variables show a significant relationship with the outcome (hire vs. no hire). (See Table 9.)

**Table 9. Correlation of Aspects of the Search and Success of Hire (Whether or Not a Hire Was Made) (All Schools and Science & Engineering Only 2006-2007)**

	ALL SCHOOLS		SCI & ENG ONLY	
	Tau-B	Significance	Tau-B	Significance
Met Chair of Search Committee	0.497	0.000	0.237	0.068
Met Search Committee	0.207	0.012	0.192	0.128
Signed Plan and Advertisement Form	0.150	0.049	----	----
Received Adequate Information	0.038	0.337	0.163	0.161

--- No variation in this variable.

When Equity Advisors met with the search committee chairs and the full committees, and when they signed the Plan and Advertisement forms, FTE were more likely to result in hires. These relationships tend to have similar patterns in S&E, but their level of significance is lower due to the smaller N's. It may be that these relationships are an artifact of the Equity Advisors' involvement, which indicates that a search is progressing.

Equity Advisors' offered the following explanations about why particular searches failed:

- the job description was too narrow
- time line was too late (2)
- dual career issues, specifically, inability of Career Partner Program to help when partner is not well qualified
- cost of living
- non-competitive salaries
- limited resources, especially space
- criteria for short list unclear
- lack of clarity in leadership due to dean search

Only one of the mentioned issues pertains to gender equity: difficulty with the Career Partner Program when the partner is less qualified. Some Equity Advisors mentioned that deans found temporary, non-tenure track positions for such partners. Perhaps the ability to do so depends on the partner's field, but it might be beneficial to ensure that all of the deans are aware of the alternatives to tenure-track positions both on campus and off for partners who are under qualified for UCI tenure-track positions.

### **UC Post-Doc Fellows**

Two Equity Advisors reported positive outcomes with the UC Postdoctoral Fellowship Program. In both schools, participation in the program led to female hires (along with two other declined offers). Three Equity Advisors indicated that this program would not be appropriate for their schools, but the others indicated that they will encourage participation. This is a good program for Equity Advisors to emphasize as beneficial to diverse hiring.

## **Climate Issues**

Equity Advisors reported that the gender equality climate was generally good, but several pointed out specific problems. One such report was an apparent gender inequity in work load in one department. Another Equity Advisor reported that some faculty in the school are concerned about a hostile work environment due to remarks by senior faculty members, conflicts over scholarship, unfair treatment in personnel cases, exclusion from decision making, etc. That Equity Advisor recommended that the concerned faculty member(s) talk with the chairs, dean, Ombudsman, and EEOD for assistance. That Equity Advisor mentioned that untenured faculty members are vulnerable in such situations.

## **Conclusions**

Our analysis of the 2006-2007 Equity Advisors' reports yield several interesting findings. Overall, the proportion of female hires at UCI rose during the middle years of the ADVANCE Program and have leveled off during the final years of the program and in the first post-grant year. Science and Engineering schools experienced a peak in female hires during the middle of the ADVANCE Program, and have had a lower proportion during the most recent years (note, though, the Science and Engineering have also received fewer FTE during these later years). Most Equity Advisor activities have been fully or almost fully implemented by the last year. Equity Advisors have spent the lion's share of their time with new faculty hiring, but they have also worked with existing faculty in mentor programs and with salary equity issues. They have been integrated into the schools' hierarchies. They have had some involvement in faculty retention issues, but as a rule, they haven't been involved in retention cases in any systematic way. Equity Advisor involvement seems more idiosyncratic with respect to these issues: it may be worth exploring how this may be better systematized.

We analyzed data using both the school level and the search level and found that as Equity Advisor activities are fully integrated in all schools and departments, their effectiveness is absorbed by the overall increase in the percent female hires on campus. No individual practice stands out as more or less effective than the others. We suspect this may result from observing little variance in the practices across Equity Advisors, perhaps suggesting an institutionalization of their activities. However, we do find an important effect for the searches where the Equity Advisors received AP80C forms and the number of positions that are granted to departments. We find that two to four positions seem to yield the highest percent of female hires.