

CASE STUDIES: Faculty Search results in two departments

Two case studies (Chemistry and Chemical Engineering) are presented. In each case, in one hiring season, pro-active recruitment of women into the applicant pool was carried out in the department. The results for that search are compared with searches in prior hiring seasons conducted without pro-active recruitment of women. Reported below are the results for 6 searches for 9 positions altogether. The reporter was a member of the search committees that conducted pro-active searches in Chemical Engineering and in Chemistry.

CHEMICAL ENGINEERING SUMMARY:

Composition of Ph Ds awarded in Chemical Engineering is **23.7% women** for the period 1996-2005. [Donna Nelson, A National Analysis of Minorities in Science and Engineering Faculties at Research Universities, Oct 31, 2007

http://chem.ou.edu/~djin/diversity/Faculty_Tables_FY07/07Report.pdf]

In the previous search carried out in 2004 (hiring to start Aug. 2005) for 1 position, the applicant pool had only 2 women out of 55 applicants (**3.6% women**). From this applicant pool, 1/8 women ended up in the “hire from” long short list, 1/4 woman interviewed, and 1 male was hired.

After SUCCEED (Supporting UIC’s Commitment to a Community of Excellence, Equity and Diversity) training by WISEST founder Dr. Claudia Morrissey, an aggressively proactive search was carried out in 2006 (to hire starting Aug. 2007) using methods that were developed during this particular search. These strategies have since been documented in the WISEST Search Toolkit. This resulted in an applicant pool of 26/112 women applicants (**23.2% women**). This is nearly identical to the composition of the Ph.D. holders in Chem E. There were 12/17 women in the long short list and the 5 interviewed were all women. The Chemical Engineering department hired one of these women (actually started Aug 2008).

CHEMISTRY SUMMARY:

Composition of Chemistry PhDs granted in the period 1996-2005 is **32.4% women**. [Donna Nelson, 2007] The results of 4 separate search events are summarized.

(1) Chemistry searched in 2004 for one faculty position (for Aug 2005 start date). The applicant pool had 9/59 women applicants (15.25%). Of these, 3/14 women were in the long short list and 2/5 women were interviewed. An offer was made to a male candidate who went elsewhere. No hire was made that year.

(2) In a faculty search for 3 different areas of chemistry involving 3 different search committees in 2005 (for Aug 2006), the applicant pool had 21/149 women (14.1%). There were 11/45 women in the aggregated long short list for 3 positions; 5/14 women were interviewed for 3 different areas of chemistry. Three white males were hired.

(3) The search in 2006 for 1 position (for Aug 2007) had 6/49 women (12.2%) in the applicant pool. Only 1/17 woman (Hispanic) was forwarded to OAE; she was interviewed together with 3 males and a male was hired at the level Assoc. Prof. with tenure.

(4) In 2007, the SUCCEED team made a presentation to the two Chemistry search committees charged with searching for one, possibly 2 (per Dean of LAS) faculty (for Aug 2008 start date). The SUCCEED team showed how well the pro-active search worked in recruiting women into the applicant pool in Chemical Engineering, and distributed copies of the WISEST Search Toolkit which described the successful strategies in detail. The members of the two search committees agreed to give the strategies a try. In one search committee, chaired by a woman, each individual member was given the goal of convincing ten women to apply for the advertised position. Altogether 55/246 women (**22.3% women**) were in the applicant pool for 1, possibly 2, positions. This is still smaller than the % of women in the pool of eligible PhD holders, but the pro-active recruiting paid off because the only women recruited by committee members were those they deemed highly-qualified (i.e., likely to be invited, and likely to succeed, if hired). The combined long short list of the two search committees had 28/48 women. Campus interviews consisted of 13/15 women. In the end, the Chemistry department hired two highly qualified women.

SUMMARY AND CONCLUSIONS:

There are insufficient numbers to make a valid general case from two case studies. Nevertheless, when results are compared for searches involving pro-active recruiting of women into the applicant pool versus no pro-active recruiting in these two case studies, the following interesting trends become apparent:

1. One of the obvious lessons, just from looking at the numbers, is that ***when pro-active recruiting of women is carried out, the department gets a larger number of total applicants, that is, a larger number of males appear in the applicant pool as well*** (that is, 112-123 applicants per position versus 49-59 applicants per position). The aggressive telephone calling, e-mailing, and catching up individuals in conferences create a buzz about the search and the word goes out through the professional network about UIC's advertised positions.
2. In contrast, if it is rumored that the chair of the search committee had already identified a particular candidate as the top candidate before the closing date, then this decreases the number of applicants (down to 49). ***Nobody wants to waste their time when they hear, accurately or not, that "the fix is in"***. The department may indeed get an excellent candidate this way, but how would one really know unless he is compared with worthy peers?
3. Pro-active recruiting of women into the applicant pool results in an applicant pool that is closer to the composition of Ph.D. holders, and ***closer to the critical mass* of women needed for fair evaluations***. [Heilman & Stopeck (1985) *Journal of Applied Psychology*, 70, 379-388; Heilman (1980) *Organizational Behavior and Human Performance*, 26, 386-395]

4. By using pre-screening methods in seeking female applicants in the process of looking specifically for females to invite to apply (such as Googling for publications, presentations, and awards, choosing presenters at conferences of professional societies), pro-active recruiting of women into the applicant pool also leads to a **higher quality of women candidates in the pool**. This in turn leads to a **higher probability of more than one token woman ending up in the list from which to hire** (70.6% women rather than 12.5% women in the “hire-from” list in one department, 58-71% women vs. 5.9-24.4% women in the other department).

5. When the normal process for selection of the “best” candidate proceeds **from an applicant pool enhanced by a critical mass of women candidates, the selected “best” candidate can be a woman**.

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CASE STUDIES: Faculty Search results in two STEM departments (Chemistry and Chemical Engineering) 6 searches for 9 positions

DATA

CHEMICAL ENGINEERING SEARCHES

Chem E search for Asst Prof. to start August 2005 hired Randall Meyer

	Applied	to OAE	Invite	Interview	Hire
total	55	8	4	4	0
Women	2	1	1	1*	0
Men	53	7	3	3	1
URM	1F+?#	1F	1F	1F	0
%Women	3.6%	12.5%	25%	25%	0%

Interviewed 1 of the two women who applied. She (Hispanic) was found unprepared for the interview and also not interested in T/TT in Research I university.

ChemE search for Asst Prof to start August 2007: (started Aug 2008) hired Ying Liu, using aggressive **pro-active recruiting**

	Applied	to OAE	Invite	Interview	Hire
total	112	17	7	5	1
Women	26	12	6	5	1
Men	86	5	1	0	0
URM	5	2	1	0	0
%Women	23.2%	70.6%	85.7%	100%	0

Ph Ds awarded is **23.7% women** for period 1996-2005 [Donna Nelson, 2007]

CHEMISTRY SEARCHES:

Chemistry search (chair: Crich) for Asst Prof to start Aug 2005: **offered position to white male, hired no one

	Applied	to OAE	Invite	Interview	Hire
total	59	14	5	5	0
Women	9	3	2	2*	0
Men	50	11	3	3***	0**
URM	2M+?#	2M	1M	1M	0
%Women	15.25%	21.4%	40%	40%	0%

*The interviewed but rejected women ended up in (a) UCalif Davis and in (b) NYU Polytechnic and AFOSR Young Investigator award!

***The interviewed males ended up in (a) U So Fla, (b) UTenn-Knoxville, (c) Nova Southeastern U, FL

Chemistry search (3 different areas, 3 committees) for Asst Prof to start Aug 2006: hired Snee, Driver, Miller

	Applied	to OAE	Invite	Interview	Hire
total	149	45	14	14	3
Women	21	11	5	5*	0
Men	128	34	9	9	3
URM	1 M +?#	1 M	0	0	0
%Women	14.1%	24.4%	35.7%	35.7%	0%

*The interviewed but rejected women ended up in (a) Yale U, (b) U of Geneva, (c) Georgia Tech, (d) U of Iowa, (e) senior remained at Tulane U

search (chair: Gevorgyan) for Asst Prof to start Aug 2007: hired Daesung Lee

	Applied	to OAE	Invite	Interview	Hire
total	49	17	4	4	1
Women	6	1	1	1	0
Men	43	16	3	3	1
URM	1F+?#	1F	1F	1	0
%Women	12.2%	5.9%	25%	25%	0%

Only one woman (Hispanic) was forwarded to OAE.

Search (2 coms for 1-2 positions) for Asst Prof to start Aug 2008 (hired Laura Anderson, Jung Hyun Min) **using pro-active recruiting:**

	Applied	to OAE	Invite	Interview	Hire
total	246	48	15	15	2
Women	55	28	13	13**	2
Men	191	20	2	2***	0
URM	7+?	4	2	2*	0
%Women	22.3%	58.3%	86.7%	86.7%	100%

*** Excellent African American male candidate received first offer; went to Yale U

*Other URM is 25% Native American, but she listed herself as white to OAE.

**The women who were not hired (some indicated no longer interested because they have better offers, others were rejected). Even some of the ones who were rejected became faculty at good schools such as Indiana U, U Alberta, IC Irvine, Wayne St U, Portland St U, Va Commonwealth, Boston U, U Denver.

Chemistry PhD s granted in the period 1996-2005 has **32.4% women**, [Donna Nelson, 2007]

In all tables, race/ethnicity of applicants was recorded only for the "hire-from" list sent to OAE.

Donna Nelson, A National Analysis of Minorities in Science and Engineering Faculties at Research Universities, Oct 31, 2007

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