10

HIRING A DIVERSE FACULTY

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ABSTRACT

The percentage of women entering tenure-track science faculty positions continues to rise, yet the number of women faculty with the rank of full professor remains small. Faculty tend to be white and in science, technology, engineering, and mathematics (STEM) departments primarily male, while their students reflect the more diverse society we are becoming. This chapter provides information and suggestions on hiring a more diverse faculty. Steps include educating search committees, providing resources for locating and recruiting diverse faculty, wording job descriptions so as to ensure that they appeal to both male and female candidates, promoting awareness on implicit bias and ways to minimize them, and successfully negotiating the hire.

Recruiting and hiring a diverse faculty doesn't happen by accident, but it can happen if it is an institutional goal. The section below provides information and suggestions about ways to help diversity happen (Figure 10.1). It begins with a search committee committed to diversity and excellence.

10.1. Recruitment Before the Formal Search Begins: Insuring a Diverse Applicant Pool

10.1.1. Educating Search Committee

With the passage of the 1964 Civil Rights Bill, discrimination against hiring women and minorities became illegal, but subtle or implicit biases and unconscious associations continue. Considerable research shows that hiring diverse
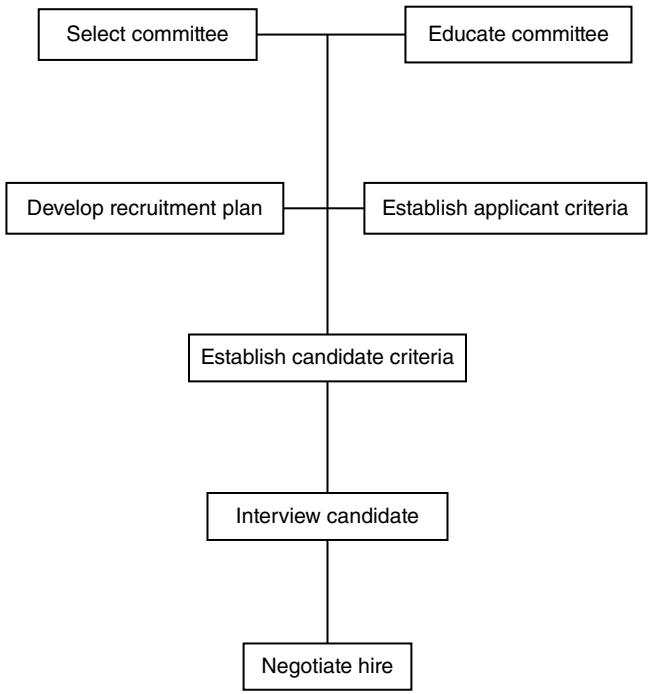
Figure 10.1 Steps to hiring diverse faculty.

faculty is more than a pipeline issue. Search committee members need to be educated about successful approaches for hiring a diverse faculty. It might make sense for the committee as a group to discuss their own approaches to diversity. This discussion could be enhanced by viewing presentations that discuss some of the more subtle aspects of diversity such as Nancy Hopkins's presentation on the "Status of Women in Science and Engineering at MIT" presented as part of MIT's 150th anniversary symposia (http://mit150.mit.edu/symposia/women-of-MIT) or Virginia Valian's interactive tutorials on diversity (http://www.hunter.cuny.edu/gendertutorial/). Professor Hopkins chaired the committee that wrote the 1999 "Report on the Status of Women Faculty in the School of Science at MIT," and her presentation follows the progression of women faculty at MIT. Virginia Valian is the author of *Why So Slow?* Her four tutorials are available as spoken PowerPoint presentations or transcripts, and include an annotated bibliography of resources. These presentations focus on the subtle biases and associations that have prevented and continue to prevent women from being hired in academic positions.

10.1.2. Resources for Locating and Recruiting Diverse Applicants

Key to achieving a diverse applicant pool is to recruit proactively throughout the year and to have broad, open searches rather than focused, narrow searches. Women make up over 35% of geoscience PhD recipients, and although underrepresented minority recipients are not abundant, they do exist and are being produced in increasing numbers (Table 10.1). To insure a diverse applicant pool, search committee members need to actively recruit diverse applicants. One way to do this is to identify research institutions that graduate female and minority PhDs in the search discipline area. If you aren't sure which schools these are, Box 10.1 lists some possible resources.

10.1.3. Job Description for Recruiting Diverse Applicants

We all have unconscious associations, what are sometimes called implicit biases (see chapter 9). However, if they recognize the existence of these biases, search committee members can implement strategies to reduce their impact. All search committee members should take the Harvard implicit test, https:// implicit.harvard.edu/implicit/demo/featuredtask.html. This can be a revelatory experience: a disclaimer on the site warns participants, "*If you are unprepared to encounter interpretations that you might find objectionable, please do not proceed further.*"

Some words have gender implications, and their use in job advertisements may make a difference in who applies. *Gauchier et al.* [2011] showed that job ads for male-dominated fields contain more words with male stereotypes such as *competitive*, *leader*, and *superior*, and that those for positions dominated by

Table 10.1 Applicant availability. Women and underrepresented minority geoscience doctorate recipients between 2006 and 2010 (from http://www.nsf.gov/statistics/srvydoctorates). % Female includes all females as a *percentage* of total PhD recipients. Ethnic groups include *number* of PhD recipients.

Subject	% Female	Black	Hispanic	Ntv Amer/ Alaska Ntv	Mixed/ Other	Pac Isl/ Ntv Hawaiian	Total White/ Non-Hisp
Atmospheric sci. & meteorology	30	24	n.a.	n.a.	61	n.a.	448
Geological & earth sciences	36	61	141	5	184	n.a.	1677
Ocean/marine sciences	41	8	n.a.	n.a.	62	n.a.	608

n.a. = Not available because the numbers are too low.

Box 10.1   Potential sources of information on recent PhD graduates from underrepresented groups.

The **Committee on Institutional Cooperation (CIC)** is a higher education consortium and includes thirteen primarily Midwestern schools (the Big Ten Conference and the University of Chicago). These institutions grant approximately 15% of U.S. doctoral degrees. Their CIC Doctoral Directory is a searchable listing of doctoral degree recipients from member universities who are members of groups underrepresented in higher education. The directory is designed to increase the visibility of alumni who bring diverse perspectives and experiences to higher education. The directory includes a free online database available to the public. http://www.cic.net/students/doctoral-directory/introduction

   Higher Education Recruitment Consortium (HERC) is a nonprofit consortium of more than 600 colleges, universities, hospitals, research labs, government agencies, and related non- and for-profit organizations. They offer a large database of higher education and related jobs that is international in scope. Consortium member institutions share a commitment to hiring the most diverse and talented faculty, staff, and executives. The consortium also offers a comprehensive approach to enabling dual-career couples to find the right jobs within a commutable distance of one another. http://www.hercjobs.org/

   The **International Association for Geoscience Diversity** promotes access, accommodation, and inclusion for students and geoscientists with disabilities. Currently the association, which is relatively new (2008), does not maintain a directory of geoscientists with disabilities. As it builds a community, however, the association might become a future resource for finding and hiring candidates. http://www.theiagd.org/

   IMDiversity is dedicated to providing career and self-development information to all minorities, specifically African Americans, Asian Americans, Hispanic Americans, Native Americans, and women. It maintains a large database of available jobs, candidate resumes, and information on workplace diversity, although only a small percentage is applicable for faculty jobs. http://www.imdiversity.com

   The **Lewis-Stokes Alliance for Minority Participation (LSAMP)** is an NSF program that supports sustained and comprehensive approaches that facilitate achievement of the long-term goal of increasing the number of students who earn doctorates in STEM fields, particularly those from populations underrepresented in STEM fields. The program goals are accomplished through the formation of alliances. This URL lists awardee schools and their awards, http://www.nsf.gov/awardsearch/advancedSearchResult?QueryText=LSAMP&ActiveAwards=true&#results

Table 9 of this **NSF statistics** Web page lists the top 20 PhD granting institutions for minority doctorates in all STEM fields for U.S. citizens and permanent residents. http://www.nsf.gov/statistics/sed/2011/data_table.cfm

Nemnet is a national minority recruitment firm committed to helping schools and organizations in the identification and recruitment of minority candidates. It posts academic jobs on its Web site and gathers vitae from students and professionals of color. Although its focus is precollege, many colleges have used its services (e.g., Cornell University, Florida State University). It also conducts workshops to help organizations recruit minority faculty. http://www.nemnet.com

women contain words with female stereotypes, such as *sympathetic*, *support*, and *interpersonal*. Positions held by roughly equal numbers of males and females did not contain gender bias words. While this may not be such an issue in science, women and minorities still fight the sense of belonging and words are part of that. Possibly such subtle differences contribute to the decrease in women in academic geoscience positions relative to their number as PhD recipients (>35% PhD recipients, ~26% assistant professors) (*Holmes and OConnell*, 2007). One strategy for minimizing this sort of bias is to show some people you would like to attract a draft of the advertisement and see if they find it appealing (Table 10.2).

Women may not apply for top positions. Possibly, this is because they are more likely to deal with problems of self-efficacy, and have seen few people similar to them in such positions [*Murphy et al.*, 2007]. This may make it more difficult for them to imagine that they have the credentials necessary for the job. Members of the search committee should attend professional meetings where presentations and posters will be given and make a point to talk to diverse potential candidates and encourage them to apply. If there is a late-stage diverse graduate student or someone beginning a postdoc, encourage her or him to apply even if her or his dissertation isn't completed. If the person is competitive, it might be worth waiting an extra year for a new faculty member who meets both disciplinary and diversity needs.

While most professionals are likely to have a professional partner, women are still more likely than men to have such a partner and possibly in the same discipline, as found by *Schiebinger* [2008]. This study also found that women consider their partner's status and employability important to their career decisions and refuse job offers if their partner cannot find a satisfactory position.

The department must be prepared to address the two-body opportunity early. *Holmes* [2012] describes an innovative approach developed at the University of Nebraska–Lincoln to being prepared to address dual-career needs. If such accommodations exist at your institution, mention this in the job description.

Table 10.2 Tips on defining and writing the position description from the University of Rhode Island.

What	Why/Research Rationale
Develop broad hiring goals to cast a wide hiring net. Write a clear and specific position description about primary job responsibilities, overview of the department/institution, and commitment to diversity in students, teaching, and research—combined with flexibility in qualifications for the position.	To *avoid weeding out applicants* by sounding austere and inflexible. Your goal is to *attract applicants by making a favorable impression*. Simple linguistic conveniences can help: (1) provide detailed, relevant information both about the posted job and the institution, (2) persuade applicants to generate a favorable impression of what the institution has to offer them, (3) try to sell the department/institution to an applicant rather than attempting to screen them out, and (4) endorse diversity at all levels versus displaying tokenism at lower levels while revealing your motivation for doing so.
Write two position descriptions—what is minimally necessary versus what is desirable. Assess if the "desirable" description will unnecessarily limit the applicant pool.	
Use the words "preferred" versus "required" and "should" instead of "must" to broaden the applicant pool without significantly altering the nature of the position.	
Strategize support of your new hire: cluster hiring, collaborative networks, and facilities.	

10.2. Reviewing Applications and Selecting Candidates for the Short List

10.2.1. Confronting Associations and Biases

The most important step you can take at this point in the process is to have objective criteria that have been established before the applications are reviewed. Continue to learn about bias and unconscious associations. As shown by *Moss-Racusin et al.* [2012], women are as likely as men to harbor gender biases. In their study, both male and female faculty, when hiring a laboratory assistant, considered men more qualified and offered them a higher starting salary. Four other examples of studies showing gender bias in academic science are listed below, but the number of such published studies is much larger.

1. *Wenneås and Wold* [1997] found that a woman applying for a postdoctoral fellowship with the Swedish medical Research Council had to be two-and-a-half times more productive than a man to get the same scientific competence scores by referees. Their study also showed that connections to any of the reviewers, by any of the applicants, increased their competence scores.

2. *Steinpreis et al.* [1999] showed bias in hiring by both male and female psychologists when they were sent identical curriculum vitae for a job applicant distinguished only by the gender of the applicant's name. Curiously, when the participants received male and female versions of curriculum vitae of an early tenure candidate, no gender distinction was made.

3. *Trix and Psenka* [2003] found statistically significant differences in reference letters for male and female applicants. Letters for female applicants were shorter, contained more personal information, praise was more measured, and success was more likely to be attributed to luck. They were more likely to be described as students and teachers rather than researchers.

4. *Budden et al.* [2008] found a 33% increase in papers authored by women in *Behavioral Ecology* when the reviewers were not aware of the authors' gender.

10.2.2. Ways to Minimize Our Biases and Associations

10.2.2.1. Attention and focus. Published studies about the importance of being able to focus on evaluation come from outside the academy where study subjects are more plentiful. *Martell* [1991] found that gender bias of work performance evaluations of male and female police officers was only removed when the evaluator was able to fully focus on the evaluation task. When the evaluator was distracted, male police officers were given higher performance ratings. Similarly, jurors with less time to process information were more likely to respond to racial stereotypes in assigning guilt and the severity of punishment, whereas no stereotype effect was found when jurors' cognitive load (self-paced) was lowered [*Van Knippenberg et al.*, 1999].

Mechanisms need to be in place to require and reward a high level of commitment from search committees. When the University of Michigan implemented procedures outlined by their ADVANCE committee, Strategies and Tactics for Recruiting to Improve Diversity and Excellence (STRIDE), the percentage of women hired in the three major science colleges (Medicine, Engineering, and Natural Sciences) rose from 13% to 29%.

10.2.2.2. Establish evaluation criteria. As stated above, establishing evaluation criteria early is important. The criteria may vary depending upon the needs of the institution. One good place to start designing evaluation criteria is with an assessment developed by the University of Michigan's STRIDE program, (Figure 10.2).

Applicant selection tool

Applicant's name:

Please indicate which of the following are true for you (check all that apply):

☐ Read applicant's CV
☐ Read applicant's statements (re research, teaching, etc.)
☐ Read applicant's letters of recommendation
☐ Read applicant's scholarship (indicate what): _____

Please rate the applicant on each of the following:	Excellent	Good	Neutral	Fair	Poor	Unable to judge
Evidence of research productivity						
Potential for scholarly impact / tenurability						
Evidence of strong background in [relevant fields]						
Evidence of [particular] perspective on [particular area]						
Evidence of teaching experience and interest (including grad mentorship)						
Potential to teach courses in core curriculum						
Potential to teach the core curriculum on [particular area] (including creation of new courses)						

Other comments?

Figure 10.2 Example of an application evaluation tool for a junior faculty position developed by the University of Michigan ADVANCE STRIDE program. It can be used as a template and modified. Available at http://sitemaker.umich.edu/advance/good-practices.

10.2.2.3. Creativity. Creativity is also important in recruiting and hiring. Possibly, different hiring departments in a college or division could keep each other informed about the status of their diversity efforts and results of their search committees. Ideally, a department with a long-term interest in diversity could begin courting diverse candidates early in their graduate career.

A nonacademic example of creativity in diversity hiring is Etsy, an e-commerce company. In 2011 with only 6% female engineers, the company made it a priority to hire female engineers but succeeded in only hiring 1 woman out of 20 new hires. In summer 2012, they invested in scholarships for a computer-intensive course for 23 women and hired 5. Other women began applying when they heard about the firm's innovative approach, and now several other companies are using the same investment method [*Kamenetz*, 2012].

10.2.2.4. Joint evaluation. Traditionally, academic candidates' campus interviews are conducted individually. Yet according to a recent experimental study [*Bohnet et al.*, 2012], individual evaluations are much more likely to reinforce implicit gender bias than joint evaluations. This would be a radical change in academic hiring, but it might be necessary if the gender and racial mix of the academy is to be changed.

10.3. Interviewing Candidates/Campus Visit

10.3.1. Campus Visit

As anyone who has been through the interview process knows, it can be a harrowing experience. In today's market, it is likely that all of the interviewing candidates are excellent and well qualified for the position. When this is the case, a campus visit becomes primarily an opportunity for the search committee and department, as well as the candidate, to judge about "the fit" of the candidate into the culture and academic goals of the department. This is subtle and crucial.

Fit, however, does not mean "more of the same." When a department is interviewing a diverse candidate it is important that more than one of "that kind" of diversity be included in the interview pool. This provides more opportunity for diverse candidates to be judged on their merit, rather than as the diversity type.

As with reading applications, search committees should develop a rating system for use with candidate interviews (Figure 10.3). Faculty who are making the decision (voting?) should include information about their preparation for meeting the candidate and the time they spent with a candidate. This can decrease the impact of someone who has a strong opinion but hasn't participated fully in the interview process. When ranking candidates, it might help to open discussion to rank them by different criteria, such as specialty, teaching, scholarship, and pace of productivity.

Candidate evaluation tool

Candidate's name:

Please indicate which of the following are true for you (check all that apply):

- ☐ Read candidate's CV
- ☐ Read candidate's scholarship
- ☐ Read candidate's letters of recommendation
- ☐ Attended candidate's job talk

- ☐ Met with candidate
- ☐ Attended lunch or dinner with candidate
- ☐ Other (please explain):

Please comment on the candidate's scholarship as reflected in the job talk:

Please comment on the candidate's teaching ability as reflected in the job talk:

Please rate the candidate on each of the following:	Excellent	Good	Neutral	Fair	Poor	Unable to judge
Potential for (Evidence of) scholarly impact						
Potential for (Evidence of) research productivity						
Potential for (Evidence of) research funding						
Potential for (Evidence of) collaboration						
Fit with department's priorities						
Ability to make positive contribution to department's climate						
Potential (Demonstrated ability) to attract and supervise graduate students						
Potential (Demonstrated ability) to teach and supervise undergraduates						
Potential (Demonstrated ability) to be a conscientious university community member						

Other comments?

Figure 10.3 Example of a candidate evaluation tool for a junior faculty position developed by the University of Michigan ADVANCE STRIDE program. It can be used as a template and modified. Original available at http://sitemaker.umich.edu/advance/files/CandidateEvalForm.pdf

10.3.2. Interview Questions

Many interview questions which people with good intentions might consider normal information gathering are in fact illegal. No academic institution wants to confront a lawsuit. The University of Michigan offers a list of topics with examples of

Table 10.3 Examples of legal and illegal topics and questions that can be asked during any employee interview.

Topic	Legal Questions	Discriminatory Questions
Family Status	Do you have any responsibilities that conflict with the job attendance or travel requirements? (Must be asked of all applicants)	Are you married? What is your spouse's name? Do you have any children? Are you pregnant? What are your childcare arrangements?
Race	None	What is your race?
Religion	None You may inquire about availability for weekend work.	What is your religion? Which church do you attend? What are your religious holidays?
Residence	What is your address?	Do you own or rent your house/ apartment/condo? Who resides with you?
Sex	None	What is your gender?
Age	If hired, can you offer proof that you are at least 18 years old?	How old are you? What is your birthdate?
Citizenship or Nationality	Can you show proof of your eligibility to work in the U.S.? Are you fluent in any languages other than English? (May ask only as it relates to the job being sought.)	Are you a U.S. citizen? Where were you born?
Disability	Are you able to perform the essential functions of this job with or without reasonable accommodation?	Are you disabled? What is the nature or severity of your disability?

(Source: http://www.hr.umich.edu/empserv/department/empsel/legalchart.html)

legal and illegal ways to ask questions about the candidate, reproduced as Table 10.3. Everyone who will be meeting with the candidate should review this information.

During the interview process for diverse candidates include time for them to meet faculty in other departments who are part of their diversity group. For example, female and minority candidates would probably want to meet other women or minorities to get a sense of the climate and how faculty like them are treated. No one wants to work at an institution where they won't be comfortable or welcomed. Although this might seem inconsistent, the candidate will still want to be evaluated on the basis of their qualifications and this needs to be made clear.

All candidates should learn about family-friendly policies, and search committee members should be aware of institutional policies. These include child care, family leaves for parental care, birth or adoption, and dual-career policies.

10.4. Negotiating the Hire

No department wants an unsuccessful search. Searches are expensive in terms of both time and money. And in today's fiscal climate there is always the possibility that, if hiring is delayed, the faculty position will be rescinded. Make sure that the candidate being interviewed feels welcome and the department is united.

When you make the offer and bring the recruit to campus, make sure he or she is warmly welcomed and that all members of the department are on board about the hire. The chair, or whoever is negotiating the start-up package, should make it clear that the recruit's interests and needs are a top priority. And if the recruit arrives with a partner, make sure the partner is also welcome and shown respect.

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