Faculty Recruitment Education Modules
For Fall 2013 Search Committee Orientation

This resource document is an outcome of the NSF Lehigh ADVANCE and Lehigh University-wide initiative for excellence in faculty recruitment.

Research on faculty recruitment and retention is a thriving, data-driven academic field. This document is a digest of the different ways that many universities are 1) maximizing excellence and diversity in the applicant pool (excellence and diversity are not mutually exclusive), 2) guarding against unconscious bias when evaluating candidates, and 3) building large networks that allow the creative accommodation of extraordinary candidates.

It will not be enough to excel at any one of these individual steps (e.g., Vicker and Royer, 2006). We must excel every step of the way. We hope the information in this document will serve as a resource to inspire new, creative solutions for attracting and retaining the best faculty members to your department.

There are three topics included in this version of the document, with a total of four sections/modules.
  A. Broadening the Search
  B. Evaluating Candidates
  C. Unconscious Bias

INSTRUCTIONS: The following modules are organized according to the organization (topics A-E) listed above. Read the introductory paragraphs and answer the subsequent questions. Then, read the subsequent discussion, which include explanations or deeper examples. References for each section are provided at the end of the document. You are not expected to know the answers to any or all of the questions. Most of the questions are designed to prepare you for the subsequent information and references provided.

Ideas for this document were inspired by, and sometimes taken directly from, a document crafted by Gertrude J. Fraser and Dawn E. Hunt entitled, The Faculty Search Committee Tutorial: Embracing Diversity, Building a Great Institution, published by the University of Virginia, Charlottesville, VA, in 2011. A demonstration version of the tutorial is available online: http://etgapp3.itc.virginia.edu/provost/jsp/why.jsp

A. Broadening The Search
SECTION 1. A Wide Net Catches the Most and the Best Fish

In both small and large universities, small groups of people write job descriptions for their immediate needs, and they typically put the advertisement in journals commonly used in their academic field. The assumption is that this is the best way to get the best candidate because this is the way things are usually done. Is there any data to support this notion? Are there other alternatives?

To the best of your knowledge, which of the following statements are true and **supported by at least some data**?

    a.   The probability that an applicant will accept an offer is higher if that applicant has had a previous connection to the university, and if the applicant has had 2 or more visits to the university before the application process has begun.

    b. Blanket mailings are less successful than targeted in-person networking in yielding a diverse applicant pool.

    c. In addition to an advertisement, search committee members at many universities send out personal notes, make phone calls, and make ambassador visits to a wide range of colleges and universities, including historically black and all female institutions. They make it clear to their colleagues at other universities that referrals will receive immediate and personal attention in the search process, despite a very large pool of applicants.

    d. Recruiting a broad, highly gifted and highly innovative pool of applicants requires a longer timeline than used previously (several years vs. months or a year).

    e. Many universities are routinely employing broad search descriptions in place of those that narrowly describe an already-imagined person of the "right fit."

    f. Excellence and diversity are not mutually exclusive.

    g. Diversity is essential for achieving excellence.

      ○ a-g
      ○ b, c, d, and e
      ○ a, b, c, and d

SECTION 1. Discussion: All of the above (a-g) are true statements supported by a mounting corpus of evidence. Courting and landing the best tenure-track faculty requires:

1) a longer period of time and attention than was previously thought (several years)
2) a broad and open job description
3) personal referrals and ambassadorship
4) cultivation of relationships with senior graduate students and postdoctoral candidates years before the actual searches
5) recognition of excellence among underrepresented groups
6) recognition of the impact of diversity on institutional excellence

Examples:
The University of Minnesota conducted campus-wide research to discover why faculty candidates decline offers. The striking outcome was that 39% of those without any previous relationship to the university declined an offer, while only 17% of those who had a previous relationship declined. The same study showed that for those candidates who had 0-1 visits, the declination rate was 39%, but for those with 2 or more visits, the declination rate was only 24% (Rachac, C. and G. Maruyama. 2007).

The recruitment handbook developed by the University of Michigan's ADVANCE program (funded by the National Science Foundation) notes that "[c]ultivating future candidates is an important activity for the search committee to undertake, and may require that the search have a longer time horizon than is typical" (p.10). In fact, recruiting a diverse pool of applicants must be an ongoing process, and should include "growing your own," i.e., recruiting the best graduate students, providing them with the best training and experiences, tracking them after graduation, and recruiting them to back Lehigh. Prior to the advent of the Internet, Skype, and global travel to conferences and collaborations, a commonly-held philosophy favored applicants with experience from several distant and unrelated institutions because it was believed that these applicants would be superior due to their broad exposure to different programs. In today's job market, it is easier to become broadly educated and trained without moving from one geographic area to another. Lehigh's competitors are hiring our best graduates and also *their own* best graduates, particularly if those applicants are from underrepresented groups.

There are more and more anecdotal reports of successful recruiting by close personal contact with target universities. Vicker and Royer, authors of *The Complete Academic Search Manual,* note that, "One of the candidates was referred by two and another by three external colleagues. We knew immediately that they were exceptional candidates. It helps to indicate that their referrals will receive immediate and personal attention in the process. Blanketing mailing lists with position announcements is rarely successful, but targeted networking can often yield fruitful results" (Vicker and Royer, p.23).

The University of Washington and many other research universities are engaged in continual development of ongoing relationships with graduate students with an eye to future faculty candidates (NSF ADVANCE Cornell, NSF ADVANCE University of Michigan, NSF ADVANCE University of Washington). Seminars and workshops are given by ambassadors at historically female or historically black colleges and universities, for example.

The neuroscience programs at Emory and Georgia State Universities have reciprocal, continuous outreach to students at historically black colleges and universities such as Morehouse, Spelman, and Clark Atlanta. For example, undergraduates, graduate students, and faculty from these historically black institutions worked for academic credit in Emory and Georgia State neuroscience laboratories funded by an NSF grant obtained for

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this purpose. The students and faculty from these historically black institutions are trained in summer laboratory courses and attend weekly seminars throughout the year. This allows Emory to identify future candidates and establish substantial, scholarly relationships with those students from the early undergraduate years throughout their post graduate career.

Becoming a magnet for excellent graduates and postdoctoral researchers extends beyond the formal recruiting visits. "Faculty members can be ambassadors for your department and for the University every time they attend a conference or visit another school" (Fraser and Hunt, University of Virginia, The Faculty Search Committee Tutorial: Embracing Diversity, Building a Great Institution). Develop brochures, information packets, slide presentations, and recruiting strategies that can be used by all representatives of your department to use when they present their research at other universities.

Broad, general, rank-open job descriptions are preferred at universities such as The University of Maryland, The University of Michigan, The University of Massachusetts, the University of Virginia, and Case Western Reserve.

Most all universities include statements that would appeal to candidates committed to diversity (e.g., "the college is especially interested in qualified candidates who can contribute, through their research, teaching and/or service, to the diversity and excellence of the academic community.") In other words, the statement in your advertisement should not only state that your institution is an "equal opportunity employer" but project your commitment to achieving excellence through increased diversity (Vicker and Royer, 2006, p. 13; Terry, Effrat and Sorcinelli, 2006).

As top universities increase the representation of women and members of underrepresented groups, we find evidence that diversity and excellence are not mutually exclusive. In addition, evidence is accumulating that excellence is achieved through increased diversity. For example, studies of group function in different professions show that groups composed of mixed gender and representatives of varied racial and ethnic backgrounds achieve their goals with greater enthusiasm, efficiency, motivation, and productivity than same-gender, all white male groups (e.g., Fields and Blum, 1997; Reagans and Zuckerman, 2001; Summers, 2006).

B. Evaluating Candidates
SECTION 2. Lashing yourself to an unbiased mast

Data have documented that bias is a natural part of the human condition, but also that there are simple precautions to guard against it. The table below is a version of the table often used by search committee chairs to evaluate each prospective candidate for tenure-track positions in Integrative Biology at Lehigh University (unlike most STEM departments, this department has achieved close to 50% women). Take a look at the table and answer the subsequent questions.

Candidates Alphabetically	Productivity/funding	Collaborative Potential	Teaching	Citizenship/Diversity
John Doe Harvard	20 publications since the Ph.D. in high impact journals. High potential for funding	5% (low potential letters indicate he is an "island unto himself"). Few of our faculty have any overlapping scientific interests	(Some experience in fields we do not teach)	50% (letters and personal communication indicate some negative department interactions)
Jane Doe Indiana	16, the last 4 in high impact journals. K Award	85% (letters indicate she has been an inspiring leader of several productive collaborations. Most of the department faculty can think of collaborative projects with this candidate)	(Excellent experience in the courses that must be taught for our undergrad and grad programs)	100% (African-American woman held in very high esteem by all in her previous 3 positions) Seems shy and yet very enthusiastic about her research. "Listens extremely well"
Mary Smith University of Iowa	17.5 in a wide range of high and medium impact journals. Has small grant from industry.	50% (medium potential. Some possible collaborations, but none in the past)	(some experience but not in our area of need)	50% (medium, letters suggest does not pull her weight in service to the department)
Alex Wilson University of Chicago	18 in medium impact journals. Good potential for funding	85% (research program overlaps with almost all Lehigh department members)	(Some experience)	100% has served on diversity committees as a research associate, very well loved by all, interviewed very well. Interested in setting up a summer program to recruit underrepresented groups to research in chemistry

Which of these statements are true?

a. The table above might be useful for some search committee members, but there is no evidence that using such a table prevents bias regarding race and gender.

b. There is a great deal of evidence that the tendency toward gender or racial bias can be circumvented by ranking each candidate according to the criteria included in this table, rather than jumping to an overall summary of each candidate.

c. In addition to using the above table, there is evidence that equitable, fair searches are most likely to occur when search committee members (i) have attended educational workshops on gender and racial bias, (ii) are required to commit to the value of credentials before reviewing any applicants, (iii) rate specific applicants against specific criteria before making summary statements, (iv) take adequate time to review the candidates prior to the first candidate-ranking meeting, and (v) begin search committee meetings by listing positive rather than negative attributes of particular candidates.

d. There is no evidence that attending educational workshops about gender and racial bias have significant effects on equitable search practices.

○ b and c
○ a, b, and d
○ a, c, and d

SECTION 2. Discussion

Option a is false, there is ample evidence that this rating scheme prevents bias. Options b and c are true, and d is false. Data have accumulated that bias is a natural part of the human condition, but also that there are simple precautions to guard against it. To cite an example, in 2009, faculty members at the University of Wisconsin "systematically review[ed] experimental evidence for interventions mitigating gender bias in employment." The authors (Isaac, Lee, and Carnes, 2009) read over one hundred articles and chose 27 articles published between 1973 and 2008. They found that when search committee members were required "to commit to the value of credentials before reviewing any applicants," gender bias was significantly decreased. Some of the published articles are summarized on the University of Virginia tutorial for search committee members: http://etgapp3.itc.virginia.edu/provost/jsp/why.jsp.

Three papers in particular show that *the more hurried and rushed a search committee member, the more snap judgments, cognitive errors (defined in the next section), and stereotypes were used in the decision-making process.* Search committee members were significantly less likely to demonstrate bias against women applicants when they had adequate time to review applicant material and when they did not have cognitive diversions. (Martell 1991; Sczesney and Kuhnen 2004; Tullar and Mullins 1979)

Search committee members (or other hiring staff and administrators) who participated in workshops that covered material on common hiring biases were less likely to make biased hiring decisions. (Hahn and Dipboye 1988; Latham et al. 1975)

Two other papers (Cann et al. 1981; Uhlmann and Cohen 2005) show that *using specific criteria, such as fundability, citizenship, productivity, and teaching experience, encourages search committee members to think broadly and to give each candidate more careful and thorough consideration*. For example, Uhlmann and Cohen (2005) found that, "Men who had not committed to hiring criteria prior to disclosure of the applicant's gender gave more favorable evaluations to a male applicant for police chief than to a female applicant. By contrast, men who had committed to criteria prior to disclosure of the applicant's gender gave equivalent evaluations to the male and female applicants. Our research thus demonstrates the efficacy of a method to reduce job discrimination: the establishment of standards of merit prior to the review of candidates." In another study (Cann et al. 1981), the merit ratings of candidates more closely matched hiring decisions when the raters were required to conduct those merit ratings based on specific criteria before making summary judgments about whether or not to hire an applicant. In contrast, when summary hiring decisions were made first, prior to conducting a merit rating based on specific criteria, these searches resulted in a disparity between the summary decision and the merit rating.

C. Unconscious Bias
SECTION 3. Cognitive Errors/Short Cuts

Cognitive Errors or Short Cuts are fallacies in logic, or quick routes to a conclusion, that occur during evaluation in which the facts are overlooked in favor of specific assumptions that are not upheld by evidence. For example, snap judgments in a search committee are cognitive errors in that a conclusion is reached prior to any conscious examination of evidence or prior to listening to other committee members. Provincialism is a cognitive error in which a conclusion is reached based on limited or narrow knowledge or experience (for example, an understanding based only on a small geographic area). These assumptions develop as a result of socialization among peer groups in academia, but are remarkably easy to avoid by thoughtful, thorough examination of the actual data.

To illustrate cognitive errors, a fictional search committee script is provided below. The following scenario takes place in a hypothetical science department in which a search has led to 4 candidates. They have been interviewed, and now the search committee is meeting prior to giving their recommendation to the chair. What cognitive errors can you spot in the fictional dialogue?

Ellen [search committee chair]: I'd like to start by asking each of you to note the positive attributes of the candidates without ranking them or without bringing up anything negative. This way, we can listen and give equal weight to each member of the search committees. I value each of your opinions, and I would like to get them on the table before we have an open, back-and-forth discussion, and then make our final ranking.
John (full professor): John Doe is my first choice, obviously, he did his Ph.D. at Harvard, and his letters are from Frank Frink, the father of lipid bilayer chemistry. Frink wrote a very nice letter, and we would be foolish not to take the advice of Frank Frink.
Laurie (assoc professor): I also note that John Doe has the most publications.
Anita (assoc professor): I agree, Doe is very, very productive.
Tyler (new assistant professor): All of the other candidates are from state schools, most of them in the midwest (where is Bloomington, again?) I think we can stop there and make an offer to John Doe.
Ellen: I'd like to back up and reiterate that we are discussing the positive attributes of each of these top candidates (not just John Doe) first, without ranking the candidates and without bringing up anything negative. I need to hear all of your thoughts, not only on the pedigree, but also on collaborative potential, fundability, teaching experience, and citizenship. Please. Just for the start of our meeting, please note the positive attributes for each of our top candidates. I really appreciate your giving attention to the criteria we all agreed on at the start of this process. Let's move to candidate Jane Doe, and include the productivity, collaborative potential, teaching, and citizenship. Rita?
Anita: Oh, well, Jane (rather than John) Doe is the one from Indiana with the NIH K award for advancement of women. Um, let's see, she has just a few less publications than John Doe…and there were some interesting things in her letters. Does anybody have them? I forgot my print outs.
Tyler: Here, I'll read one from her postdoctoral mentor at University of Chicago: "Jane is not only very ambitious and independent, she attracts other brilliant, creative collaborators and gets them excited and engaged in her ideas. She has struck-up innovative collaborations with electrical engineers, medical doctors, and other chemists, and these projects have led to publications and successful, funded projects that have received a great deal of press." Hmm.
Ellen: I would add that her letters take a lot of trouble to note the way she led collaborations with engineers that resulted in new patents and the seeds of their new Lipid Bilayer Institute. With her expertise, we would be able to write a credible training grant and fund a lot of graduate students. She also has collaborative potential across departments and colleges, even outside of chemistry, computer science, and engineering.

John: Well, I might also point out that John Doe does not qualify for a K award. How will Jane Doe fare if she doesn't get that kind of preferential treatment?

Ellen: Tyler, do you want to note any more positive attributes for Jane Doe before we move onto the other candidates?

Tyler: Well, look, I see that Jane Doe has expertise in teaching the exact courses that must be taught by the person in this position. She is almost as productive as John Doe, everyone liked her in the department, she would come with funding, she would already be able to teach the courses we need her to teach, she would be very likely to establish collaborations with at least two people in our department, and that would facilitate their research programs as well. They might get funded through collaborative grant proposals. She seems very likely to hit the ground running.

Ellen: Thanks, everyone, now let's talk about Mary Smith. I'd like each of you to talk about her positive attributes. . .

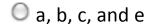*Which of these common cognitive errors did you detect?*

snap judgment: making a decision without substantive thought and/or one that is not based on evidence

elitism: assuming that the best candidates always come from schools/social classes/regions that have traditionally been considered "the best," without careful attention to CVs, recommendations, needs of the department, etc.
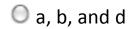
positive & negative stereotypes: presumption of innate competence/incompetence, ability/lack of ability to fit in, etc., based on race, gender, and other personal characteristics

raising or lowering the bar: setting higher/lower standards for some candidates based on negative/positive stereotypes

provincialism: limiting a definition of excellence to those schools/individuals/geographic areas one knows

  a. snap judgment
  b. elitism
  c. positive or negative stereotype
  d. raising or lowering the bar
  e. provincialism

  ○ a, b, c, and e
  ○ a, b, and d
  ○ a, c, and d

SECTION 3. Discussion: All of the cognitive errors A, B, C and E are present.

Options a, b, c and e are found in this example. John is obviously making three cognitive errors when he is ready to rank John Doe the highest based on his academic pedigree (Harvard Ph.D.) and association with the father of his field. Ranking before listening to colleagues is a classic _snap judgment_. Ranking based solely on an ivy league school and a famous mentor is _elitism_. Later, John uses a _negative stereotype_ by implying that Jane Doe is not capable of success without getting what he sees as the "preferential treatment" of an NIH K award for advancement of women. Tyler commits the cognitive error of _provincialism_ (making a decision based on his limited knowledge of institutions in his eastern geographic area). He doesn't even realize that the University of Indiana in Bloomington is an excellent university. This is hypothetical, but can you remember hearing similar cognitive errors in search committee meetings? How should a search committee chair deal with cognitive errors? Should they be pointed out when they happen?

There are obviously good reasons for being impressed with a Harvard degree, or with applicants who have been trained by excellent mentors. However, fair and equitable treatment of applicants requires more careful and thorough consideration of a wide range of qualities. ***When we make snap judgments based only on these assumptions about Harvard or about the applicant's famous mentor, it is akin to drawing a scientific conclusion based on only a small fraction of the available data.***

Ellen's leadership on the committee is not only an attempt to ensure equity and fairness with regard to race, gender, and ethnicity; it also encourages and allows all search committee members to probe more deeply into each applicant to reveal the applicants' talents and potential contributions to the department. It also provokes and uncovers faculty aspirations for the future of the department.

C. Unconscious Bias
SECTION 4. Self-assessment

Sections 3 and 4 provided strategies for a creative, thorough, fair, open-minded search, including:
1) establish criteria for ranking candidates prior to reading the files,
2) include the opinions of all search committee members at each meeting,
3) discuss all the positive attributes of finalists prior to discussing negatives and prior to ranking, and
4) remain aware of cognitive errors such as negative stereotypes, snap judgments, elitism, and provincialism.

These strategies were inspired by data from an exploding research field concerned with decisions made by the unconscious mind.

The unconscious mind is a fertile field of scientific research. Clever experiments and life-changing philosophies arise from research on the way human beings make unconscious assumptions and decisions. This research is a vibrant and innovative subfield of neurobiology, medicine, education, psychology, sociology, economics, linguistics, women's studies, and organizational behavior.

Which of the following statements about unconscious bias are true?

a. I am aware that I use unconscious bias in making some decisions.
b. Unconscious bias plays no role whatsoever in my decisions about hiring or promotion.
c. There is more than one study that shows that seemingly objective decisions are influenced by unconscious thoughts, even in the most well-meaning individuals.
d. Unconscious bias about gender is found not only in men, but also in women making decisions about hiring.
e. Unconscious bias against women is limited to STEM fields of academia

○ a, b, c, and d
○ a-e
○ c and d

SECTION 4. Discussion

One cannot answer "true" to a and b with any degree of accuracy. The thing about unconscious bias is that it is *unconscious*, so, by definition, you are not aware that you harbor unconscious bias. Likewise, most of us are not aware that we snore in our sleep. If presented with evidence, a video, an audiotape, or a reliable witness account of ourselves sawing logs, we have some reason to believe that we snore in our sleep. Similarly, unless you have been caught in the act of using stereotypes, you might not know that you do this unconsciously, once in a very long while or several times a day.

Statement c is true. For example, Banaji, Bazerman and Chugh (2003) reported in the *Harvard Business Review* that "[m]ost people believe that they are ethical, unbiased decision makers, but the truth can be somewhat different. Psychological research routinely demonstrates that people hold counterintentional, unconscious biases. The prevalence of these biases suggests that even the most well-intentioned person unwittingly allows unconscious thoughts and feelings to influence apparently objective decisions. These flawed judgments are ethically problematic and undermine managers' fundamental role—to recruit and retain superior talent, improve the performance of individuals and teams, and collaborate effectively with partners."

Statement d is true. It is important to note that several studies have shown that both men and women search committee members harbor the same biases against women. An article recently published in the Proceedings of the National Academy of Sciences provides perhaps one of the most convincing data sets documenting unconscious bias in both male and female faculty members asked to evaluate job candidates (Moss-Racusin et al., 2012).

Trix and Psenka (2003) demonstrated this unconscious bias for the health sciences. Steinpreis et al. (1999) demonstrated that in the academic field of psychology, "both men and women were more likely to vote to hire a male job applicant than a female job applicant with an identical record. Similarly, both sexes reported that the male job applicant had done adequate teaching, research, and service experience compared to the female job applicant with an identical record." Biernat and Fuegen (2001) review an extensive literature on many and varied professions and experimental situations in which females rate other females as inherently less competent than males, even though the comparisons were between applicants with the exact same credentials. Broder (1993) did an analysis of the reviews of grant proposals to the National Science Foundation in economics and found that female reviewers gave significantly lower scores than male reviewers to female-authored proposals. In some cases, a simple bias against women can be masked by the more complicated bias that results from shifting standards of judgment. An example of shifting the standard of judgment is when a search committee member reaches the conclusion that a female applicant is "good, for a woman" (Biernat and Fuegen, 2001). In summary, studies that ask subjects to rate candidates of equal merit reveal both simple and complex tendencies for both men and women to harbor bias against women.

Statement e is most certainly false. As you can see by many of the above examples, unconscious bias is prevalent in many fields of academia and in many different professions, not just science, math, and technology.

The good news is that the strategies described in sections 3 and 4 are effective ways to guard against unconscious bias. Thus, it is important to evaluate faculty candidates according to a pre-agreed upon set of criteria and to attend workshops that educate faculty about the nature of unconscious bias (e.g., Hahn and Dipboye, 1988; Latham et al., 1975; Sheridan et al., 2010).

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C. Unconscious Bias: Section 3 & 4- Cognitive Errors/Shortcuts & Self Assessment

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