Increasing Women in Neuroscience (IWiN) Toolkit

Candidate Recruitment and Evaluation

Created by the Professional Development Committee of the Society for Neuroscience
The Problem: The Leaky Pipeline

2011 CNDP Survey of Neuroscience Graduate, Postdoctoral, & Undergraduate Programs

- Graduate Students: 52%
- Postdocs: 38%
- Non-Tenure Track Faculty: 40%
- Tenure Track Faculty: 29%
- Full Professors: 23%
Women were 24% of the faculty in 1998 and in 2011 were only 29% of the total. In contrast, women represent approximately 40% of non-tenure-stream faculty members in AY2010-2011, a number that has remained stable during the past five surveys.
Growth of women neuroscientists in tenure-track faculty positions is slow (% total)

<table>
<thead>
<tr>
<th>Year</th>
<th>Graduate Student</th>
<th>Postdoc</th>
<th>Non-Tenure Track</th>
<th>Tenure Track</th>
<th>Assistant Professor</th>
<th>Associate Professor</th>
<th>Full Professor</th>
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*Data from ANDP and SfN Neuroscience Training Survey of Graduate, Postdoctoral, & Undergraduate Programs
The Leaky Pipeline: Across STEM

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<thead>
<tr>
<th>Discipline/Field</th>
<th>PhD</th>
<th>Postdoc</th>
<th>Total Faculty</th>
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<td>Doctoral Univ (5)</td>
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<td>Computer Science (6)</td>
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<td>21*</td>
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<tr>
<td>Engineering (6)</td>
<td>20</td>
<td>-</td>
<td>10*</td>
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(1) = 2011 Neuroscience Training Survey of Graduate, Postdoctoral, & Undergraduate Programs
(2) = Association of Chairs of Departments of Physiology 2007 Survey (The Physiologist 51:87, 2008)
(3) = Chemical and Engineering News 2006 Survey (C&EN 84:58, 2006)
(5) = American Association of University Professors Faculty Equity Indicators 2006
(6) = NSF Survey of Women in Faculty S&E Positions 1958-2006

* Percentages are representative of tenured and tenure track faculty only
“At the most recent rate of increase, it could take as long as four decades before women comprise 50% of the tenure-stream faculty members in neuroscience unless graduate programs become even more committed than they now are to a policy of gender equality in their faculty. A similar statement can be made regarding members of underrepresented U.S. racial and ethnic minorities among faculty in graduate neuroscience programs.”
What is Causing the Leaky Pipeline?

- Why has the representation of women in the professorate remained low at 25% tenure track female faculty and 21% female full professors?
  - Not due to a failure to recruit at the graduate student level.
  - A disproportionate number of women graduates fail to secure tenure track positions.
  - Fewer women are promoted from Asst. Prof to Assoc. and Full Professor.
The Leaky Pipeline: What Can Be Done?

- Understand Implicit Bias
- Employ Open Recruitment and Evaluation Practices (this module)
- Mentoring, Promotion and Tenure Practices
- Address Workplace Climate Issues
Recruiting Strategies to Increase Diversity

- Prime the pump – searching begins before position is available
- Search committee composition
- Job description – “open” searches
- Advertisement and active recruiting
- Promote awareness of the issues
- Interviewing tips
Recruiting Strategies to Increase Diversity

• Cast a wide net
• Open Searches: Define the position in the widest possible terms consistent with the department’s needs.
• Be proactive: Seek out people you think are right for the job, even if they're not actively looking.
Active Recruiting and Open Searches: A University of Michigan Success Story

The difference achieved by one UMich department
Qualitative Feedback on the Use of Open Searches at University of Michigan

"The open searches led to both a larger number of applicants AND a more diverse applicant pool."

"I was not sure if the ‘open search’ is the best way to attract the best candidates to apply for job. I am convinced now it is indeed an excellent strategy to add ‘new blood’ to our department."

"The open searches led to a department-wide discussion of all of the applicants. This has the added benefit of everyone on the faculty knowing the candidate and being invested in their success from their first day on campus."
Evaluation of Candidates and Reviewing Applications
Promote Awareness of Evaluation Bias

• Awareness of evaluation bias is a critical first step
  – Blind Auditions
  – CVs and Resumes
  – Letters of Recommendation
    
    (see module 1, Implicit Bias for more information)

• Spread awareness to entire search committee.
• Understand that evaluation bias can be counteracted.

Bauer and Baltes, 2002, Sex Roles 9/10, 465.
Evaluation of Identical CVs: Gender

• When evaluating identical application packages, both male and female University psychology professors preferred 2:1 to hire “Brian” over “Karen” as an assistant professor.

• When evaluating a more experienced record (at the point of promotion to tenure), reservations were expressed four times more often when the name was female.


Science faculty’s subtle gender biases favor male students
Corinne A. Moss-Racusina,b, John F. Dovidio, Victoria L. Brescoll, Mark J. Graham,a,d, and Jo Handelsmana,
PNAS (2012)
Evaluation of Identical Resumes: Race

• Applicants with African American-sounding names had to send 15 resumes to get a callback, compared to 10 needed by applicants with white-sounding names.

• White names yielded as many more callbacks as an additional eight years of experience.

Why do race cues produce different evaluations? Ambiguity in Job Credentials: Race

• Identical resumes, but ambiguous fit of credentials to job (rather than ambiguous credentials)
  – A sample of white evaluators recommended
    • Black candidate 45% of the time
    • White candidate 76% of the time
• With awards - criteria can shift to meet the strengths of individual (white male) candidates if due diligence is not paid.

Evaluation of Fellowship Applications: Gender

“...the success rate of female scientists applying for postdoctoral fellowships at the [Swedish Medical Research Council] during the 1990s has been less than half that of male applicants.”

Letters of Recommendation for Successful Medical School Faculty Applicants

Letters for men:
• Longer
• More references to:
  o CV
  o Publications
  o Patients
  o Colleagues

Letters for women:
• Shorter
• More references to personal life
• More “doubt raisers” (hedges, faint praise, and irrelevancies)
  o “It’s amazing how much she’s accomplished.”
  o “It appears her health is stable.”
  o “She is close to my wife.”

Critical Mass Affects the Use of Implicit Bias in Evaluations

• When there are many individuals, we differentiate among them and cannot rely on group-based schemas.

• In both experimental and field settings, increasing the female share of those being rated increased ratings of female applicants and employees.

If We Do Not Actively Intervene, The Cycle Reproduces Itself

Lowered success rate

Accumulation of disadvantage

Performance is underestimated

Evaluation bias

Solo status/Lack of critical mass

Schemas

Inertia
Focus on Multiple Specific Criteria During Evaluation

- Weigh judgments that reflect examination of all materials and direct contact with the candidate.
- Specify evaluations of scholarly productivity, research funding, teaching ability, ability to be a conscientious departmental/university member, fit with the department’s priorities.
- Avoid “global” evaluations

Candidate Evaluation Tool

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 rate the candidate on each of the following:

<table>
<thead>
<tr>
<th>Potential for (Evidence of) scholarly impact</th>
<th>excellent</th>
<th>good</th>
<th>neutral</th>
<th>fair</th>
<th>poor</th>
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<tr>
<td>Potential for (Evidence of) research productivity</td>
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<td>Potential for (Evidence of) research funding</td>
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<td>Potential for (Evidence of) collaboration</td>
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<td>Fit with department’s priorities</td>
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<td>Ability to make positive contribution to department’s climate</td>
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<td>Potential (Demonstrated ability) to attract and supervise graduate students</td>
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<td>Potential (Demonstrated ability) to teach and supervise undergraduates</td>
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<td>Potential (Demonstrated ability) to be a conscientious university community member</td>
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http://www.umich.edu/%7Eadvproj/CandidateEvaluationTool.doc
Reviewing Applications

• Be objective
• Use clear ranking criteria
• Get input from institutional leaders
• Evaluate the interview process
Interviewing Tips

• Bringing in more than one female and/or minority candidate can disproportionately increase the likelihood that a woman and/or minority will be hired.
• Treat female and minority faculty applicants as scholars and educators, not as just female or minority scholars and educators.
• Ensure that all candidates will meet a diverse set of people so that they are more likely to meet someone like them.

Heilman, 1980, Organizational Behavior and Human Performance, 26: 386-95.
Van Ommeren et al., 2005, Psychological Reports, 96: 349-360.
Asking Non-Job-Related Questions Can Be Counter-Productive

In a 2007 study of candidates for positions at a Univ Michigan department, who withdrew from searches or turned down offers, several women mentioned that they had been asked illegal and discriminatory questions about their personal lives.

– One candidate reported that she did not answer truthfully (knew the “right” answer and gave it)
– One candidate reported that she resented the questions
Dual Career Issues Should Not be Discussed by the Search Committee

- Identify someone with whom the candidate can have a confidential conversation in which they could ask questions they don’t want to ask the search committee.
- Ensure all candidates know about dual career support mechanisms available at your institution.
- Support for dual careers enhances both recruitment and retention of men and women.
Top Mistakes in Recruitment

- Committee or faculty make summary judgments about candidates without using specific criteria.
- Committee does not have a diverse pool.
- The committee discussed information about the candidate that is inappropriate.
- Asking counter-productive questions.
- Telling a woman or underrepresented minority candidate that "we want you because we need diversity."
- The candidate does not meet others like themselves during the visit.
Cognitive Errors during Evaluation

• Negative stereotypes: far more evidence is required to be certain an individual has an “unexpected” attribute (competence)
• Positive stereotypes: earn extra points due to presumption of competence
• Raising the bar: happens during evaluation when candidate is member of group thought to be suspect/incompetent
• Elitism
• First impressions (dress, posture, laughter)
Mistakes During Recruitment

• The longing to clone: reproducing self, search committee members, retiring faculty member
• Good fit/Bad fit: Will we feel comfortable and culturally at ease?
• Provincialism: undervaluing something outside own province, circle or clan
Mistakes During Recruitment

Distorting and ignoring evidence:

- Extraneous myths (no qualified women or URMs) and psychoanalyzing candidate (candidate won’t come because too rural/small, salary too low)
- Wishful thinking (rhetoric, not evidence); holding to notion in spite of overwhelming evidence to contrary, allowing it to cloud cognitive processes
- Self-fulfilling prophecy: set up situations that spotlight person in positive or negative way
- Character over context: e.g., lack of awareness of implicit bias in teaching evaluations
- Premature ranking/digging in
- Momentum of the group
Mistakes During Recruitment

- These mistakes contaminate and undermine the credibility and equity of various evaluation reviews; they are magnified by bad practices at the organizational level.
What Else Can Be Done?

• Make a high quality offer
• Employ family friendly work practices
• Equitable teaching, minimal committee work (at the start), a mentoring plan.
Conclusions

• Implicit bias affects evaluation.
• Cast a wide net.
• Open searches enhance recruitment of women and minorities.
• Use explicit evaluation criteria in selection of candidates to interview and in evaluation of candidates after the interview.
• Avoid cognitive errors during interview and evaluations.
Increasing Women in Neuroscience (IWIn) Toolkit: Candidate Recruitment and Evaluation: Discussion Questions

Recruitment

This portion will prompt the viewer to read different recruitment-related scenarios (reviewing applications, spousal hiring, etc.) and select the correct answer from a list of options. The different answer choices — correct and incorrect — will be followed by a brief explanation that may link to additional resources.

**a. Inappropriate questions**

You are at dinner with a faculty candidate. A senior colleague in your field addresses the candidate, “I know that we are not supposed to ask these things, but do you have a spouse or partner who will need a position? Or do you have any children and want to know about the New York City schools? Is there anything that I can do to help?”

Which of the following statements best characterizes this situation?

- □ Questions that are unrelated to the job should be avoided.
- □ Questions about schools are OK, but asking about the spouse might be a problem.
- □ It’s fine to ask these types of questions and let the candidate answer, as long as nothing important is done with the answers.
- □ It’s a good idea to ask questions like this because it helps the candidate more realistically think about the pros and cons of position.

*Feedback: (shown after the learner makes a selection)*

Any question that is not related to the job, such as the ones asked and those listed below, should invariably be avoided — some are illegal.

- * Are you married?
- * How many children do you have living at home?
- * Do you plan to have children? Or, do you plan to have more kids?
- * What work does your spouse/partner do?
- * Have you ever been arrested (an arrest is different than a conviction)?
- * When did you graduate from high school?
- * Where were you born? Are you a U.S. citizen?
- * Is Spanish your first language?
* Do you have any disabilities?
* Will you require days off for religious holidays that University does not observe?

For more information, refer to:
http://www.hr.arizona.edu/successful_searches/questions_to_avoid
http://www.eeoc.gov/laws/practices/index.cfm
http://www.eeoc.gov/laws/types/religion.cfm

**b. Search committee**

After reviewing 136 applications for your department’s one open position, your committee now has a short list. There are no female or minority candidates on the short list. You were planning to revisit the applications, but an influential senior faculty member on the committee feels very strongly about one of the candidates on the short list. This white male candidate fits a narrow niche about which the senior faculty member feels very strongly. Although the committee previously recognized the benefits and importance of diversity in the faculty, after a brief discussion, the committee followed the senior member’s recommendation and hired the white male.

**Which of the following statements regarding this scenario is/are true?**

- [ ] It’s generally best to follow a senior member’s recommendation, because their perspective invariably recognizes higher value.
- [ ] The diversity problems generally work themselves out, so this was clearly the best move.
- [ ] Even if the white male is more qualified in some areas, a minority or female candidate should have been hired because diversity is the better long-term value.
- [ ] Criteria / guidelines around how the applications are to be evaluated should be established before any applications are reviewed.

**Feedback:**

Although some of the statements might be debatable, this scenario exposes a potential gap in the committee’s commitment to diversity and perhaps unintended bias. Clear guidelines and targets that are based on big-picture views of real data should be in place to crystalize such a commitment to diversity, represent the consensus, and make it difficult for the committee to deviate away from a critical-path diversity initiative. Prior to reviewing any applications, general discussions about bias and how it affects everyone
can help align the committee. It is essential for individuals on the search committee to reach out to and invite qualified female and underrepresented minorities (URM) candidates to apply for the position early in the search process. This will reduce the chances of scenarios such as the one above occurring. If there are still no women or URM candidates on the short list after these committee efforts, a discussion of why there are no such applicants is appropriate. If the pool is small and limited, the department may want to consider forming a committee to invite promising individuals to visit and present their research before they apply for a position, so that a relationship is established and bridges built to the future. Another alternative would be to initiate a new, “open” search with a broadly defined position.

c. Letters of Recommendation

You notice that one of the candidates in the applicant pool whose work you think is promising has several strong letters in addition to a couple of short, unconvincing letters in her file. Based on your knowledge of her subfield and her own file, you think she is a candidate worth considering.

☐ Reach out directly to the candidate and recommend that she remove the unconvincing letters from her portfolio.
☐ Early in the process, create a compelling and objective case, based on criteria listed on the evaluation form, for why this candidate is worth considering and present it to the committee. Remind the committee that letters of reference for women tend to be shorter and raise more doubts than letters for men.
☐ Identify similar flaws in other applications to help even out the playing field.
☐ Argue that it’s necessary to include at least one woman on the short list to avoid the appearance of bias.

Feedback:

We know that letters of recommendations on behalf of women and URM candidates tend to be shorter, raise more doubts, bring up personal issues and are perceived as less supportive for a candidate than letters on behalf of white male candidates. A discussion of the data that demonstrate this bias should be engaged in prior to review of candidates. Occasionally it is necessary to remind reviewers of this during the review process.

Make sure that criteria are objectively stated prior to candidate review, and consider using an appropriate candidate evaluation form for this purpose. When the criteria are not clearly and objectively stated we are more likely to fall back on schemas that result in selection of majority candidates.
d. CV review

At the first meeting of the search committee you notice that two of the members of the committee have given good evaluations only to candidates from Ivy League institutions who have articles published in *Cell*, *Nature*, *Science*, and other “highly ranked” journals. Because the sum of scores from committee members was used to select the short list of candidates for interview, the process of evaluation has excluded qualified women and diverse candidates from the shortlist. What can you do?

Check any or all of the following that are appropriate or correct:

- Remind the committee that candidates are to be rated based on the sum of the objective criteria that were agreed upon previously, not just one criterion.
- Prior to reviewing applications, the committee should discuss the criteria to be used in judging candidates.
- Nothing — if they are not publishing in those journals they are not very good and probably won’t get funded anyway.
- Give their candidates low scores to get even.

*Feedback:*

Many prominent universities have only recently started graduating women and minorities in some fields. A system of evaluation that excludes individuals from minority serving institutions, or individuals not from certain institutions, introduces biases that discourage diversity.

Remind the committee to rank candidates separately on several different criteria, rather than using a single aggregate ranking. This helps reduce the tendency for impressions of excellence based solely on one or two criteria, such as journal impact factor, rather than evidence-based judgments of multiple, specific criteria and engagement with the candidate’s scholarship.