Center for **Quantum Networks**
National Science Foundation Engineering Research Center

A Guide to Inclusive Hiring for the Teams of CQN

CQN is made up of teams in different institutions and therefore cannot mandate a uniform set of hiring procedures for everyone joining our efforts. But there are general guidelines we can follow to ensure that we are bringing in qualified people of all backgrounds, genders, races, and abilities.

Job Posting and Recruitment
The first step is to decide what key skillsets, experience, work principles, and attributes will lead to success on your team. Once those criteria are established, we want to avoid wording in job postings that unwittingly causes qualified, underrepresented people to disqualify themselves from the running by choosing not to apply.

- If you're using referrals, ask people making the referrals to think of qualified people in their networks who are from underrepresented groups. That intentionality is important, because the research tells us that when people refer others, they often just refer the first people who pop into their heads--and those tend to be people who have stereotypically filled these roles or dominated them in the past. You can accept referrals of people who come immediately to mind, but also encourage people to take the time to think more deeply about who else in their networks meets the relevant criteria for the role.

- Research tells us that women and underrepresented candidates will disqualify themselves from job searches if they don't meet nearly all of the qualifications listed in a job description. Don't include overly steep criteria in job descriptions when you don't need to. And when you can, delineate between "must have" qualifications and "preferred" qualifications that can also be developed on the job.

- Avoid using "fixed trait" language in job descriptions: "We're looking for a brilliant theorist who is an expert in...." Instead, opt for "growth mindset" language, which focuses on one's willingness to learn and develop and tends to better appeal to female and underrepresented candidates generally: "We're looking for someone with experience in…who is willing to grow in the areas of …"

- Post the job with venues and organizations that expand your reach with a diverse set of qualified candidates. Ask people you know who are underrepresented in your field if they have suggestions. Organizations and venues of interest might include

  o American Indian Science & Engineering Society (http://www.aises.org)
  o Anita B.
  o Association for Women in Science (www.awis.org)
  o Diverse Issues in Higher Education (http://diversejobs.net/)
  o HBCU (Historically Black Colleges and Universities) Connect.com Career Center (http://jobs.hbcuconnect.com/)

- Higher Education Recruitment Consortium (http://www.hercjobs.org/greater_chicago_midwest/)
- The Hispanic Outlook in Higher Education (http://www.hispanicoutlook.com/employment-opportunities/)
- Society of Hispanic Professional Engineers
- The Society of Hispanic Professional Engineers (SHPE) (https://careercenter.shpe.org/)
- INSIGHT Into Diversity (http://www.insightintodiversity.com/)
- Minority PostDoc (http://www.MinorityPostdoc.org/view/jobs.html)
- National Society of Black Engineers (http://www.nsbe.org)
- Nemnet (http://www.nemnet.com)
- Society of Women Engineers (www.swe.org)
- African American Women in Physics (https://aawip.com/aawip-members/)
- Amplify Black Voices in Optics (Amplify Black Voices in Optics | Living History | Optica)
- Brown University Presidential Postdoctoral Fellowship (Presidential Postdoctoral Fellowship | Office of Institutional Equity and Diversity (OIED) |Brown University)
- FermiLab Internship Alumni (https://sqmscenter.fnal.gov/people/internship-alumni/).
- Ford Foundation, Ford Fellows Directory
- Leading Edge Fellows (https://www.leadingedgesymposium.org/fellows/)
- Mellon Minority Undergraduate Fellowship Program (http://www.mmuf.org/)
- MIT Rising Stars (https://eecs.berkeley.edu/about/special-events/rising-stars/past-workshops)
- Optica Ambassadors Emerging Leaders Program (https://www.osa.org/foundation/opportunities/ambassadors/)
- Princeton Presidential Postdoctoral Research Fellows (https://dof.princeton.edu/Presidential-Postdoctoral-Fellows)
- Quantum Information Science and Engineering Network (Awarded Projects | QISE-NET)
- Women in Science and Engineering (WISE)

Evaluation of CVs and Resumes/Interviews

Let the relevant criteria you established *before* you read a resume, *before* you meet a candidate, and *before* you get a snap impression, be your guiding star. Then, when reading resumes and interviewing, irrelevant, biased criteria—like what the person looks like, or sounds like, etc.—won't factor into your hiring decisions.

- Often in academic STEM environments, we give undue weight to where people went to school. Don't let preconceived notions about programs and institutions distract you from the most important criteria, which are people's skillsets and experience.

- Age bias is rampant in how we read resumes. Don't let dates on a resume or time gaps between schooling and work roles lead to biased assessments. We wittingly or unwittingly read all kinds of things into those gaps, especially in STEM fields: "Did this candidate take too much time off to still be relevant in this space?" "Hmmm, she took a year off after grad school, which probably means she had kids and isn't a serious candidate." If you find yourself making these sorts of judgements when reading resumes, notice and keep it in check. Get back to your list of relevant criteria.
- All sorts of bias abounds when we read resumes. Even a person's name at the top leads us to assume their gender, race, ethnicity—and then we often deduce more about them from there. We make judgements based on people's listed hobbies, affiliations, and addresses. Again, stick to the relevant criteria you already established for the role.
- When we read resumes, we often fall prey to *confirmation bias*--we look for evidence to prove our first impressions of people. We also fall prey to *similarity* bias, which is favoring people like ourselves—people who look like us, have similar backgrounds, went to the same school, etc. To negate the effects of these biases, put each interviewee through the same evaluation process. In interviews, ask each candidate the same questions decided on ahead of time. Even use the same script for every interviewee. For example: "Welcome, let me tell you what's going to happen today. I'll ask you questions about X, give you a skills test on Y, and leave a few minutes at the end for you to ask questions of me…" Whatever the script is, use it for everyone. That uniformity will minimize the bias that invariably creeps in when interviewers ask whatever they feel like asking, which is often affected by their first impression of the candidate.
    - Once you've established your interview questions, make sure all interviewers have those and a few follow up ones ready to go, if needed.
    - Create a rubric that offers interviewers a uniform scale for evaluating good, bad, and better answers to interview questions. That way each and every interviewee is being evaluated by the same criteria.

Interviewing
Stereotype threat is rampant in the interviewing process. Interviewers unwittingly let a candidate's appearance, or accent, or fashion sense, or speech impediment, hairstyle, height, weight, ticks, etc. sway their overall assessment. Meanwhile, candidates worry about confirming a stereotype, even if they don't believe it. Often, they exhaust so much energy trying to disprove it, that they come off as awkward, nervous, or they simply underperform. By the interview stage, a candidate has already been vetted to large degree, so now the goal of the interview is to hone in on their relevant qualifications and to give them an opportunity to put their best foot forward. Interviews should not feel like blind dates; to avoid the effects of stereotype threat, give interviewees an opportunity to know what to expect. Set them up for success by:
- Providing the interviewee with details in advance about who they will meet, the interview agenda, what they will be asked about generally, and even how people dress in your space. Nothing is worse than showing up in formal interview attire, only to find the interviewers in jeans and t-shirts.

- Give the applicant an opportunity to research relevant information about the role, team, and CQN by sharing relevant links to websites, interviewer profiles, etc.
- Make sure the interviewing space isn't inadvertently unwelcoming. Ask the candidate beforehand what you can provide to accommodate their needs-- captioning, wheelchair accessibility, seating in the front of the room, etc.
- Keep wall and desk art culturally neutral. Plants are great, for example, as opposed to movie, gaming, or lewd posters that could scream to a candidate, "You wouldn't belong here!" The goal is not to stifle any look of individual expression in these spaces, but rather not to make them seem so culturally monolithic that a candidate can't imagine themselves working and thriving there. Consider diversifying the names assigned to meeting rooms in your space if they all refer to hegemonic groups.
- Keep the small talk in an interview neutral too: "How was your weekend?" Again, this is not to stifle individual expression, but we also don't want anyone put off by talk of political or cultural topics that make people uncomfortable.
- Show interviewees where they can nurse, pray, take medication, use the gender neutral bathroom, etc. If candidates need those spaces but they don't yet exist, have a frank conversation about it and make note of ways to revamp.
- It is nice for a candidate to meet a diverse group of interviewers, if that is possible. That said, interviewing should not become an undue burden for the *one* woman, for example, or *one* trans person, or disabled person, or *Black* or Native American person on the team. If your team lacks diversity, be honest with candidates about it and assure them of your openness to feedback to help diversify and creating equitable practices for new team members.

Final Assessments and Making Offers of Employment
It would be a shame if you had been adhering to inclusive practices all along the line and then let unconscious bias creep in at the very end of the hiring process, when making final decisions. In final deliberations, we often fall prey to two tendencies: 1. **Group think**, which is when we create consensus and avoid confrontation by adhering to the views of one; and 2. the **Anchoring Effect**, which is our tendency to go along with the first opinion we hear, even it changes our own. Once you've read resumes, looked at candidates' body of work, and conducted interviews, your goal is to gather objective feedback from as many sources as possible, and for those sources to be untainted by anchoring or group think.
- If you can, have candidates meet with multiple people—the more the better. Ironically, group think happens more detrimentally when only two or three people are weighing in on a candidate, as opposed to a dozen, who better diffuse that group consensus.
- Encourage all evaluators on a hiring committee to take notes on a candidate that they can reference later in final deliberations. This will minimize the tendency of evaluators to be swayed by others during those deliberations.

- Encourage evaluators to write notes *only* relating to the relevant criteria first established at the beginning of the hiring process.
- Discourage people from starting deliberations with, "I *felt* like that person…" This often leads to impressionistic feedback about people's personalities, appearance, or style that has no bearing on their qualifications.
- Make people's individual assessments accessible to the rest of the hiring committee *before* final deliberations, but not before every person on the committee has had a chance to meet the candidate and form their own assessment.
- Assign someone in that final deliberation to be the moderator keeping everyone on task. That moderator should
    - Make sure everyone's opinions have been heard
    - Make sure each candidate gets the same attention
    - Call out when people's assessments deviate from the relevant criteria for the role or become personal, impressionistic, or biased
    - Build into the schedule time specifically to hear dissenting opinions. "And now ten minutes for anyone who scored the candidate differently…"