

# Tips for Pursuing Academic Careers

## Academic Career Pathways



This tool is designed for early career STEM education researchers to offer tips for pursuing careers in academia. The advice largely comes from National Science Foundation-funded awardees who have graciously shared information about their own career pathways, work experiences, and perspectives.

Scholars traverse a variety of paths into academia. Some take a traditional route from being a student in higher education directly to holding a faculty position; others come into positions later in their careers after working as educators at the district or state level, or in the private sector or the nonprofit world of research and development. Still others enter the profession of STEM education after a career in one of the STEM disciplines. All agree that it's hard to know early in your career exactly what you want to do, and it is challenging to plan too specifically in advance. Often it's a matter of being in the right place at the right time and having different experiences to determine what fits with your knowledge base, skill set, and personality. Education is a large and diverse field with many possibilities. For most scholars, it's about defining your goals and, if appropriate, your research agenda, deciding how best to develop yourself professionally, and pursuing different opportunities that align with your goals.

## Postdoctoral Fellowships

After you earn your doctorate, consider a postdoctoral fellowship. A postdoctoral fellowship is not essential, but it is valuable. You can use your time as a postdoc to begin publishing from your dissertation and gain additional research, proposal development, and project management experience, which can position you to be very strong on the job market. If your research agenda is not as well-defined as you would like, or if you want to explore other areas or broaden the scope



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of your research, a postdoc position can be a good opportunity for further exploration and professional growth. Also, the first year at an institution is often challenging, and postdoctoral fellowships can help ease the transition. NSF awardees who completed postdocs reported being better prepared to hit the ground running in their first faculty position than had they gone directly into that position after graduation.

**There are a variety of ways to find postdoc positions.**

Many are advertised through popular e-lists such as [AERA](#), [SIG](#), or [ISLS](#), or e-lists that intersect with a particular area of research.

Other resources include:

- [Postdocjobs](#)
- [Findapostdoc](#)

**There are important things to consider before accepting a postdoc position.** Make sure the position will allow you to maintain a balance between teaching, publishing, and project work. It's important to remain productive on the scholarship side while further developing your own research agenda and setting yourself up for future work.

**It's possible that some institutions will value postdoctoral fellowships more than others.** For example, a fellowship can be especially valuable if you plan to pursue a career at an R1 research university. Be sure your experience as a postdoc is setting you up for the work you want to do at the type of institution you want to be a part of.

## Finding a Faculty Position

### STARTING THE JOB SEARCH

Use the job search as an opportunity to think about who you are as a scholar, your future plans, and what contributions you want to make in your field. You can begin the job search and application process before defending your dissertation. If you haven't already, engage in self-reflection to begin to

identify a long-term research agenda. Ask advisors, mentors, fellow students, and colleagues for advice. Take time to connect the dots on your educational and/or professional path. Figure out how your varied experiences connect with one another. Figuring this out early will help with your professional decision making.

**Check for faculty positions on the websites of the institutions and scholarly associations that interest you, or on other sites such as:**

- [Higher Ed Jobs](#)
- [Academic 360](#)
- [The PhD Project: Academic Jobs Sites](#)
- [Vitae](#)
- [Academic Keys](#)

**If you are truly interested in a position, submit an application even if you don't have all of the required qualifications.** In your cover letter, highlight all of the preferred qualifications you have and indicate that you are willing to grow into the position. You may have experience in your background that makes you an even more desirable candidate than someone who meets all of the required criteria.

### DEVELOPING YOUR APPLICATION

**Know your audience.** Do your homework. Look at course listings. Demonstrate knowledge about the institution, the department, and the program. Know what the institution values. To the extent possible, learn about the people on the search committee and what they care about. Be clear about how your identity and goals fit with the job you're applying for, what you will need to be successful, and where you can be most successful.

**What search committees look for varies by institution.** Some want to see publications in top-tier journals while others prefer publications in journals with high-volume readership. It's assumed that you are a good teacher, but some institutions focus more heavily on teaching experience than others. Experience with funded projects is also a plus. Have a clear understanding of these expectations before you apply. Networking can help you gain this information. You can

also look at the profiles and portfolios of recent hires. What does their work look like? This can provide insight into what is expected at a particular institution. *Note: Be cautious of institutions whose expectations are shifting rapidly. Expectations might be shifting faster than the infrastructure to support them.* Understand what supports are in place to help you meet those expectations, particularly in terms of grant writing and publishing.

**Search committees examine your career trajectory to understand who you are, what you have accomplished to date, and what goals you have set.** Use the application process as an opportunity to tell your story. Committees also want to see evidence that you are well-connected to and engaged with your field of study through publications, conferences, and membership in professional associations. As much as they are thinking about what you can offer the institution, they are also thinking about how well they can support you as a scholar. They are considering whether they have the resources necessary to help you succeed or whether another institution would be better able to support you. In addition, there are considerations related to balancing the experiences, backgrounds, and research interests of their department's faculty.

## CURRICULUM VITAE (CV)

**Include as much relevant detail as possible on your CV.** A CV is not the same as a resume; there's no need to keep it brief. A five- to seven-page CV is reasonable for someone early in their career. Key information includes:

- ✓ **Education**
- ✓ **Publications**
  - Include manuscript submissions, articles “in review,” and accepted publications. Don't list all publications together in one section; separate them by peer-reviewed journals, top-tier journals, conference papers, practitioner journals, etc. Don't try to hide that you don't have a lot of publications; it's okay, you're early in your career.
- ✓ **Research experience and productivity**
- ✓ **Methodological skill sets**

- ✓ **Proposal writing and/or grant management experience**
  - Search committees will want to see that you can bring money into the institution.
- ✓ **Teaching experience**
  - Provide evidence of strong teaching, even if it's not asked for explicitly. Include courses taught or developed.
- ✓ **Conference presentations and papers**
- ✓ **Administrative experience**
  - Administrative work is relevant for managing projects.
- ✓ **Technical skills**
  - Having certain skill sets such as software experience can set you apart from other applicants.
- ✓ **Languages spoken**
- ✗ **Do not include personal information on your CV, such as marital status, children, or activities in nonprofessional organizations.** Make sure that everything you include is relevant to your professional life.

**Research how best to structure your CV.** Ask yourself, “What do I want the search committee to see first? How do I want to communicate my priorities to them? How do my priorities align with those of the institution?” Think about listing information on your CV so that it aligns with the priorities of the institution. For instance, if an institution prioritizes publications, consider listing your publications first; if it prioritizes teaching, consider listing that experience first.

**Have multiple readers review your CV.** Choose reviewers who are in different positions and at different levels in their career trajectories; their input will offer you diverse perspectives.

## COVER LETTER

**Use your cover letter to directly address the position for which you are applying.** Don't just recycle the same cover letter for every application. Convey your interest in the institution. Let them know why you're interested in them, what you can contribute, and what

you can learn. Speak to all qualifications (minimum and preferred) listed in the job posting. Be specific and targeted; don't use generic language. It's obvious to search committees when applicants have recycled application materials and haven't taken the time to tailor the application to each position.

**Use your cover letter to connect the dots.** If you've worked in a variety of fields, your CV might not easily convey that you're a good fit. Use your cover letter to complete the story, fill in any gaps, and demonstrate how your past experiences build on one another. This will make it easier for committee members to advocate for you.

## PREPARING FOR A CAMPUS VISIT AND IN-PERSON INTERVIEW

**The interview process generally begins with a phone or virtual interview to narrow the applicant pool.** If the search committee invites you for an in-person interview and campus visit, this generally means that you meet the basic qualifications for the position. Now, they are looking for the best fit.

**If accepting a position will require relocation, now is the time to explore the possibility of your spouse or partner working at the same institution.** A good time to introduce the idea of a dual hire to the search committee chair is between the phone interview and the in-person interview. Share your spouse or partner's CV information with the chair so the committee can begin a conversation with other departments to see what opportunities might exist for them. Don't wait until you are offered the job to mention this; it won't be impossible to accommodate your spouse or partner later in the process, but it will be more difficult.

**When you arrive on campus, recognize that you are always being interviewed, not just during the formal interview but also during other meetings, group meals, and informal social time.** In addition to assessing your scholarship, research agenda, and eligibility for promotion and tenure, the search committee is also determining how well you'd fit in with existing faculty and staff. They want to get a well-rounded picture of who you are.

**Be prepared for long days.** The campus visit and interview is a grueling process. In addition to the formal interview, you will be expected to give a job talk, meet with other faculty, tour the campus, and possibly teach all or part of a class. Ask the search committee about these expectations before your visit.

**Come with questions. Not asking questions is a red flag.** Questions will likely arise naturally during the visit, but prepare a few in advance as well. Consider asking several faculty members similar questions about the department or program so that you can gain multiple perspectives.

**If your research involves work in schools, examine the relationships between local schools, nonprofits, community organizations, and the university.** Check out their respective websites for lists of community partners. Ask to visit schools and organizations and talk with university partners as part of your campus visit. Communicate to the search committee the importance of these relationships to your work. This will help both you and the search committee better understand what you need in order to be successful and whether your scholarship is a good fit with the institution.

## JOB TALK

**The job talk is your main research presentation during the interview.** For early career scholars, the substance of your job talk often comes from your dissertation work. The main goal of the job talk is to communicate your research agenda and describe how it builds on the work you've done previously, how it relates to your professional goals, and how it contributes to broader themes in your field.

**Demonstrate how your research agenda connects to the position for which you are applying.** The search committee is interested in learning more about you, your work, and the kinds of theoretical and conceptual frameworks that ground your research.

**Think of the job talk as a conference presentation.** Job talks vary by institution, so ask the search committee about the format for the job talk before your campus visit. Use your time wisely. Speak passionately about your research interests. Explain why

you want to study these particular research questions, what impact you think this work will have, and how it fits into broader themes you care about. Be succinct and focused, but not too narrow. Don't focus on just one aspect of your work, but rather, speak to the broader parameters of your work. Give general descriptions of your methodology, the types of studies you want to propose, and the kinds of participants with whom you want to work. Keep the language general and invite follow-up questions.

## WAITING TO HEAR FROM THE COMMITTEE

**Know that hiring is a slow and bureaucratic process.** Stay in contact with the search committee, and try not to get discouraged. If after the campus visit and in-person interview the institution does not offer you a position, try not to take it personally. It's not a reflection of your qualifications; you just weren't the best fit for that position at that institution at that time. Someplace else is a better fit for you.

# Considering a Job Offer

**If the university offers you a position, negotiate for the things that matter to you.** Be serious about your interests; you're the only one who's representing them.

**Know ahead of time whether the salary they are offering is appropriate for your level of experience.** Salary information for public universities is usually available online. It might not always be easy to find, but it is publicly available. Do research to see what others at your level are earning. Ask for what you need and what you think you deserve, but understand that when it comes to salary, not everything is within the search committee's control.

**Negotiate for non-salary benefits.** Salary is important, but it's not the only factor. Determine beforehand what you need to be successful. Will you need graduate students or other research assistance? start-up money or discretionary funds? equipment? professional organization dues? travel funds? Your arguments are stronger if you present these requests in the context of

the work you want to do in the first few years. Make a case for needing those things for you to be productive. Don't forget to compare other benefits such as healthcare or retirement/pension plans among different institutions. If you have to relocate, ask whether the institution is able to cover the associated costs.

**Be strategic in your negotiations.** Think about what you need in the short and long terms. When might you benefit most from having a graduate teaching or research assistant? Does it make sense to have one in the first year when you're just getting settled or will you have a more productive relationship in year two or three? When might you need a reduced course load to do your research? Make sure you're meeting your immediate needs and setting yourself up for future work.

**Think about how important work-life balance is to you when choosing an institution.** During your campus visit, ask about your colleagues' work-life balance. Pick up on subtle cues. Do faculty members openly discuss their families or personal lives? Do they have photos of their kids in their offices? What messages are they sending you? Know that balance is easier to achieve at some institutions than others.

**Consider the broader community beyond the institution.** Does the location offer what you need to be personally as well as professionally fulfilled?

# After You're Hired

**Work to build relationships with people outside of your department.** Gaining perspectives from other disciplines can help strengthen your research. For instance, STEM education researchers can benefit from establishing partnerships with content area experts.

## TENURE

**Make a conscious decision to choose the tenure track.** Understand what it entails and make sure it aligns with your goals. Know that with or without tenure, you'll land on your feet. There are always other options - in industry, at nonprofits, or at other institutions with different foci.

**Ask about tenure expectations upfront.** They hired you because they thought you could be successful, so make sure you understand the tenure promotion process. Talk about tenure requirements because they can change. Ask people, especially newer faculty, how the process worked for them. Some of them might even be willing to share their tenure materials with you to help demystify the process.

**Continue ongoing conversations about tenure with those in your department and beyond.** If you remain engaged with the process, you will know in advance how likely it is that you'll get tenure. If it looks unlikely or questionable, you'll have time to plan. But you have to know whether you're on track; feedback from formal and informal mentors can help with this. If you're not on track for tenure, it's likely you're not at the right place to be able to do your work successfully.

**Consider creating a document or electronic file to record everything you do that can count towards tenure.** This is especially useful for things that are difficult to document on your CV.

## WORK-LIFE BALANCE

**Achieving balance between your professional and personal lives involves continuous attention, negotiation, and creativity.** It's more of an orientation, a way of thinking about what you value, how you like to work, how to keep things in balance, and how to bring them back together when they are out of balance. Figure out your processes. Find ways to remain organized; it will save you time in the long run. For example, update your CV on a regular basis or keep track of references using a system that works for you.

## CHANGING JOBS

**Knowing you're in the right position for you is about finding the work you want to do while achieving a work-life balance.** You can learn something valuable at each institution you work for and make connections with colleagues that you'll continue to work with and learn from throughout your career. Moving around to different institutions can give you a sense of how

different universities operate, expose you to new people and new ideas, and offer insights into how ideas play out in different contexts. But, there are plenty of opportunities for growth within the same institution as well. Every few years you can reinvent yourself by working with new colleagues, beginning new projects, taking classes, developing new research interests, and teaching new courses.

**Know that institutions take notice if a potential hire has moved around a lot.** Search committees are looking for long-term investments in faculty, so they may wonder how long you'll stay with them and whether you're too risky an investment. Make sure you can explain your decisions, and be upfront about the changes that led to those decisions.

**Remember that you're part of a larger research community.** When considering future opportunities, think about how you can contribute to those broader networks. Your scholarship is the same no matter where you are; figure out what you need in order to make the impact you want to have.

**If you decide to leave academia for another opportunity but think you might want to return someday, make sure you continue publishing and presenting at conferences.** It's important to keep your name and work present in the field.

# Additional Resources

- [Academic Job Search—The Hiring Process from the Other Side](#)
- [Finding a Job in Academia](#)
- [From PhD to Professor: Advice for Landing Your First Academic Position](#)
- [Life After Rejection](#)
- [Maximize Your Chances of Landing a Faculty Job](#)