

Tips for Young Scientists on the Junior Faculty/Independent Investigator Job Search

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Landing a job as an assistant professor or independent investigator in neuroscience in an academic institution or research institute depends on the accomplishments young scientists make during years of training as graduate students and postdoctoral fellows. This training prepares scientists for an array of exciting job opportunities, one of which is as a faculty member or independent investigator. My goal in this NeuroView is to provide tips about the job search for young scientists who have decided to enter the junior faculty/independent investigator job market. Rather than serving as a "protocol for getting a job," these tips are aimed at providing information that will make each candidate better prepared for her or his job search.

Introduction

There has never been a more exciting, yet more challenging, time to begin a career as an independent investigator and faculty member studying neuroscience in an academic setting, whether that be a research university or college, academic medical school, or research institute. Exciting because the tools for making breakthrough discoveries are unparalleled: from new imaging modalities to new technologies in genetic sequencing and manipulation, the ability to unravel brain circuits and to link those circuits to behavior feels tantalizingly close. Challenging not only because the current competition for faculty positions and for research funding is fiercer than ever, but also because there is so much uncertainty about the future of federal support for basic biomedical research. Obtaining a faculty position, and thriving in that position, requires a combination of scientific brilliance and accomplishment, determination, resilience, and luck, as well as a savvy understanding of how to take optimal advantage of any opportunity. In this NeuroView, I will try to distill some of the unwritten rules and tips that I have learned and wished I had known when I embarked on my academic career and job search.

The Independent Investigator/ Faculty Job Search Should I Apply for an Independent Investigator/Faculty Position?

When I was a postdoctoral fellow in the 1990s, most of my fellow postdocs were set on pursuing careers as independent investigators or faculty members in academia. This is no longer true. On the negative side, I see many postdoctoral fellows who are discouraged by the prospects of a career in academic research. especially given the current funding climate. On the positive side, I see postdoctoral fellows who realize that they can pursue an array of exciting career opportunities, from working in biotechnology to jobs in patent law, education, science writing, and science policy. These can be incredibly satisfying and impactful careers and, moreover, may be key to ensuring that biomedical research continues to thrive in our nation. Whether or not to pursue a career as an independent investigator/faculty member in an academic setting is a decision each individual postdoc should make for her- or himself, and I am pleased to see a change in attitude about the value of non-academic careers among my academic colleagues. At the same time, I hope that young scientists are passionate about biomedical research and discovery science in academia. This career choice is especially

fitting for those who want the freedom to pursue the questions they are most interested in and who wish to dedicate themselves to the advancement of knowledge. Despite its difficulties, I can't imagine a more rewarding way to spend my professional life than exploring the biology of the brain and teaching young scientists in a university setting.

When to Apply?

The best way to answer the question "when to apply" is to consider what search committees look for in a successful candidate and then decide whether you meet these criteria. For me, I look at four major areas: the candidate's (1) graduate and postdoctoral research, (2) future research plans, (3) communication skills and potential as a teacher and colleague, and (4) proven ability in obtaining extramural funding. Though all of these areas are important, a candidate's scientific contributions are the most important, and the progress of the candidate's postdoctoral research is especially critical. To successfully apply for a position, a candidate's research needs to be far enough along so that one has a compelling and whole story, sufficient for at least one strong first-author publication (with the minimum number of papers depending on the field). How long this takes depends upon the area, methods, and questions asked. Some projects will simply take



many more years to complete than other projects. Thus, from the beginning of your postdoctoral research, the choices you make in what you pursue will have a major impact on when you can begin your job search. You will need to balance your passion for an area or particular project with a realistic appraisal of how long the project will take to complete. Nevertheless, science is more of a calling than simply a job, and it is your passion for the work that will sustain you throughout your postdoc and beyond. Thus, my advice would be to temper the anxiety about choosing a postdoctoral project that is likely to allow one to apply for a faculty position after only a few years with an allegiance to doing the kind of science you are deeply passionate about.

A successful research career depends upon extramural funding so any evidence for your ability to obtain outside support will be extremely helpful. Despite a common misconception that viable candidates for a faculty position should have an NIH K99 award. I believe that a K99 is only one of many useful grants that a successful candidate may obtain during their postdoctoral training. If you are pursuing a research question that requires more than the 4-year time limit imposed by the NIH. the K99 simply is not a viable source of extramural funding. Hard, but important, scientific questions are worth going after, and these often cannot be accomplished within 4 years. Just as important measures of one's ability to write successful grant proposals includes NRSA or K08 (for physician-scientists) awards, institutional awards or training grant positions, foundation postdoctoral awards, or foundation young investigator awards. Most academic institutions have listings of such funding opportunities; these can be easily accessed by a Google search.

The second area I look for is whether the candidate has a viable new project (or projects) that the candidate plans to pursue during the first 3, 5, and 10 years of one's career. What are the big questions, and what are the specific approaches you plan to take? To answer these questions, you will need to discuss with your postdoctoral mentor what parts of your postdoctoral project your mentor will continue to work on and what parts you are "free" to take to your own lab. In some cases, a mentor will release the

entire project to her or his postdoctoral fellow. In most cases, the postdoctoral fellow will need to identify an approach or question that will differentiate her or his program from that of her or his mentor. It is not realistic to think that one can start an entirely new project, and even if one's mentor does continue to work on the same project, my advice is to think about the ways in which you, as an individual scientist, differ from your mentor and to focus on these differences in designing your own project. For example, when I left Eric Kandel's lab as a postdoctoral fellow, I knew that we were both pursuing the regulation of gene expression during long-term synaptic plasticity, but I recognized that I would likely take a more cell biological approach to this question, and this influenced how I designed my independent program.

Successful science requires communication and relationships with other scientists. Throughout your postdoctoral training you should let yourself and your work be known. For example, sign up for lunch with seminar speakers who are visiting your institution. Once your research project has reached the right stage, take advantage of every opportunity to present your work so that many faculty and scientists get to know you. Attend meetings where you will have the opportunity to present your findings and where you will be able to interact with scientists in your field: smaller meetings. such as Gordon Research Conferences, are especially good for this purpose.

How to Apply: The Application **Process**

Searches generally open in August or September, with applications due between October and December. The first step is to identify open positions. Search ads in journals, including Neuron, Cell, Science, Nature, Nature Neuroscience, and other more specialized journals. Search the Society for Neuroscience job postings at http://neurojobs.sfn.org/jobs. Several commercial search engines list neuroscience faculty positions, which can be found through a Google search. Research institutes, like the Howard Hughes Medical Institute Janelia Farm campus, consider year-round applications for junior group leader positions.

Search committees frequently send letters or emails to colleagues asking them to encourage promising candidates to apply. Ask your postdoctoral mentor or other senior colleagues to bring these opportunities to your attention. If there is a department you are particularly interested in, and where you know faculty members who admire your work, let them know about your interest so that they can notify you directly of any job possibilities.

A variety of considerations determine the selection of job openings to apply to. If teaching is important to you, positions in colleges may be most appealing. These can be faculty positions within large research universities, where you will mentor PhD students, or at 4-year colleges, where your research program will depend on undergraduate students. If proximity to institutions with specialized schools, such as engineering or medicine, are important for your work, this should influence your choice of jobs to apply to. And if you prefer only research, then focusing on positions in research institutes would be wise. Finally, I encourage vou to consider a global job search. While there are concerns about the future of federal funding for science in the United States, other countries are dramatically increasing their investments in science (https://www.amacad.org/content/ Research/researchproject.aspx?d=1276, page 9) and may provide exciting opportunities for young scientists beginning their careers.

Most job applications require submitting a cover letter, CV or biosketch, research statement, and names of three or four references. Some searches also ask for a teaching and/or diversity statement and for copies of your publications. Your cover letter should be no more than one page and provide a clear and concise introduction of you, outlining your research accomplishments and proposed program, and should explain why you are interested in the position. Your CV or biosketch should be simply formatted, using traditional fonts and font sizes. The research statement is particularly important. It should be written for a broad audience, not for experts in the field. Shorter is always better than longer. Aim for three pages, with the first page or page and a half describing your PhD and postdoc accomplishments and the remainder focused on your future plans. In describing your proposed

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research program, make sure you articulate the big picture, the overarching questions you are interested in, but also provide enough experimental detail to show that you can succeed. Ask your mentor and senior colleagues for examples of research statements that they found particularly good. Write multiple drafts and get plenty of feedback from your colleagues, including colleagues who do not work directly in your field. Search committee members will likely be reading hundreds of research statements (a recent search in the Biological Chemistry department at UCLA received 400 applications) and your statement needs to be clear and compelling to stand out. Use cartoons or images where they are useful. While your first draft may be over three pages, work hard at shortening it by defining the crucial ideas you want to get across. In the research statement, as in all submitted documents, make sure you have no grammatical errors or typos. Reviewers often see these types of errors as a lack of attention to detail that may reflect a sloppiness in science.

The teaching statement is usually no more than one page, describing your teaching experiences, mentoring students, and articulating your teaching philosophy. Tailor this to the position. For example, if you are applying to a research institute that lacks a graduate program, focus on mentoring postdoctoral fellows in your group. If you are applying to a research college, focus on teaching undergraduate students, and so forth. The teaching statement tells the reader what you believe are the most important ideas and approaches in science and biomedical research education.

Many universities, including all the University of California campuses, require a "Diversity Statement." This reflects the growing recognition that biomedical research is strengthened by the inclusion of a diverse workforce that brings a variety of perspectives to address research questions. These statements are usually no more than one page long and should include (1) a description of any activities you have participated in that are aimed at increasing diversity in science and (2) an outline of your vision and plans for promoting diversity in science in your own career. Examples include: working in K-12 settings or mentoring students in

programs for underrepresented minorities to work in a lab.

All statements matter. Effective science depends on one's ability to teach and communicate, and the future of science depends on a diverse workforce. The depth of a candidate's thinking about these issues says something important about the type of colleague that person would make within the department and the type of mentor they would be for trainees in the institution.

Choose references carefully. Your graduate and postdoctoral advisors should both write letters. Ideally, the other letter writers should know you well, especially your postdoctoral work. When you ask someone to serve as your reference, spend time talking with him or her about your goals and interests and share your application materials. Most of the postdoctoral fellows I write letters for apply to 30 to 60 positions, and I find it very helpful when they give me a spreadsheet with a list of the positions, email addresses/ URLs for uploading the letter, and deadlines. I also find it useful to get email reminders from the candidates as deadlines approach.

Interviews

If you have made the initial cut, the head of the search committee or even the department chair will notify you. I recommend that you be as flexible as practical about scheduling a visit since first impressions count. Despite common lore that an interview near the end of the search gives one an edge, I have not found this to be an important variable. Find out early on who will be your point of contact for the visit. Communicate with this person to find out when you will receive your itinerary, who will attend your job talk and your chalk talk, how long these talks will be, etc. And don't forget to express your enthusiasm for the position!

The Skype or Phone Conference Pre-interview

Some searches narrow down candidates for a short list using a Skype or phone interview. Often these are conference calls, with the entire search committee interviewing the candidate. Like all interviews, prepare thoroughly. Learn everything you can about the department and its faculty to demonstrate your interest in the position. Find out how many people will be interviewing you and whether there

are any specific questions you should prepare for. Ask your fellow postdocs and new junior faculty who participated in Skype or phone interviews what kinds of questions they were asked. Then, prepare short 2 to 3 min answers to these questions and/or to questions about your PhD work, your postdoctoral work, and your proposed work. Don't get lost in details; focus on the major findings, insights, approaches, and questions. Remember that the people interviewing you may not have expertise in your area of research. Practice your answers multiple times with a group audience. Be prepared to answer questions about teaching, grant-writing experience, diversity efforts, and even about outside interests. Brevity is important; don't ramble on. A few other pointers: make sure you are in a quiet room with reliable internet or phone reception; have a cheat sheet about the department; write out answers to potential questions and have them available in case you need them; let your enthusiasm for science be felt and try enjoy yourself!

On-Campus Interview

Preparing for the on-campus interview requires significant homework. As for the Skype interview, learn everything you can about the department and institution you are visiting. Once you have your interview schedule, try to read at least one paper by each of the individuals you will meet with so that you can have satisfying conversations about their work. Make sure you have prepared short and concise answers to at least this series of questions: tell me about your PhD work; tell me about your postdoctoral work; how did you choose your postdoctoral mentor; how did you choose your postdoctoral research project; what is the first project you want to start in the lab; what will your first R01 be about; what are potential funding sources for your research, other than the NIH; tell me about any teaching experiences you have had; do you like teaching; have you been engaged in any efforts to increase diversity in neuroscience; who do you imagine you would collaborate with in the department; how large of a research group do you envision having; will your postdoctoral advisor continue to work on your project and/or how are you dividing the work with her/ him; do you have any patents; do you



have any interest in entrepreneurship and/or commercialization of your work; what do you like to do outside of the lab. **The Research Job Talk**

Your job talk is a critical element of your interview. If the talk is scheduled for 1 hr, your talk should be no longer than 45 min, speaking slowly and leaving adequate time for questions. Do not go over your allotted time! This means that you need to practice your talk multiple times, including with an audience. The talk should include a thorough introduction, no less than 5 min, as this will frame the entire talk. The introduction allows audience members who are not experts in your field to appreciate the significance of your work. As you describe your project, be as clear and logical as possible. A common structure begins with your specific question and the approach you took, followed by your data depicted in a simple but complete manner, and then an explanation of how the data answer the question you posed. Of course, there is no single right way to present your research. Regardless of how you decide to tell your story, you need a clear narrative with take-home messages that can be remembered after the talk. Your ability to logically walk your audience through your project reflects your teaching ability as well as your ability tackle a scientific problem. Leave the last 5 to 10 min of your talk to describe the next questions vou want to address and how you propose to do so.

All the brilliant speakers I know practice their talks innumerable times. I strongly urge you to give many practice talks to diverse audiences and to modify the talk based on the feedback you receive. Practice in your lab meeting, in any departmental floor meetings or journal clubs, and with family and friends. In preparing your slides, do not include too much text, use fonts of at least 24 points, do not include too much data on any single slide, and do not have too many slides. During your talk, speak to the audience, not to the slide, and make sure your voice is heard (i.e., that your microphone works and that you are speaking into it or that you project if there is not a microphone).

Your answers to questions after the talk is as important as the talk itself. The best way to answer a question well is to have anticipated that question and to have

thought about the answer ahead of time. As you practice, try to imagine every question your data raise and formulate an answer to that question. No doubt, your "practice" audience will pose questions you likely will get during job interviews. I also have developed the following strategy when answering questions after I give a talk. Above all, I listen as carefully as possible. I try not to assume that I know what the question is before the entire question is asked. Anxiety makes it hard to listen, so, if necessary, I take a deep breath to calm myself. If I still don't understand the question, I ask the person to repeat it. If I am still confused. I reframe the question and ask if that is what they meant. If you need a moment to think about the question, it's better to take that moment-or even to say that you need to think about it-than to give an inaccurate answer. In my experience, the more engaged you are with your work, the easier-and more fun it is-to answer questions from the audience.

The Research Symposium Job Talk

Many searches have instituted symposia interview days, in which candidates give their job talks one after the other. While one cannot help but be anxious while being directly compared to one's competitors, you can learn from the experience. You likely will hear new and exciting stories from an elite selection of your peers. You may even make new colleagues: think back to the people you met during graduate school or medical school interviews. While you may and should ask questions during the symposium, be cognizant of the fact that the speakers are being interviewed by the faculty and hence it's important that the faculty and their trainees have sufficient opportunity to ask their questions.

The Teaching Job Talk

In some interviews, especially those for college positions, you may be asked to give a teaching job talk. The search committee may give you a topic or ask you to choose a topic. Make sure you find out what the expectations are in advance. Will this be a large introductory course or a small advanced-level seminar? What other material has already been covered in the course? Is there a specific textbook that is used? Are PowerPoint slides expected? As with your research job talk, think about the teaching you

have found most effective-and least effective-and learn from this. This can easily be done because there are so many outstanding lectures now available online. If you like interactive lectures, be sure to incorporate questions into your lecture. If you think it is helpful to describe the experiments that elucidated biological principles, then present those experiments! You can use slides from textbooks or review articles, but be sure to appropriately reference these sources. Finally, make sure your teaching talk is aligned with your written teaching statement and practice your talk with students at your own institution. If there is a teacher that you especially admire, sit down with that person and review your talk, asking for feedback.

The Chalk Talk

Many programs include a chalk talk on either the first or the second visit. Using a chalkboard (or whiteboard), the candidate writes or draws his or her ideas while discussing future projects. Discussing your research without slides is a great skill to learn, and many junior faculty awards, including the McKnight Scholar Award and the Burroughs Wellcome Career Award in Medical Sciences, employ a "chalk talk" format in which the only "prop" is a flip chart with markers. If the search committee does ask you to give a chalk talk, find out what their expectations are. Sometimes they allow the candidate to decide what to discuss. If that is the case, one strategy is to map out the aims for your first planned R01 application, having the aims for a second R01 ready if there is time. Another strategy is to map out your research plans for years 1, 3, and 10, focusing on the questions you will ask and the approaches you will take. Practice your chalk talk just as much as you practice your job talk. Figure out how much you need to write or draw on the board: there is a balance between too much and too little! Try to avoid jargon. And be ready to answer questions throughout. These questions may take you off track. Gracefully address the questions, but if they are taking you in an unproductive direction, it is fine to say you would like to return to the question after you have more fully laid out your plans. If the questions suggest that the audience is not "getting" your point, take a step back and reframe it. The chalk talk reveals

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how well you can think on your feet and, just as importantly, illustrates how well you listen and engage in a scientific conversation while keeping your eye on your goals.

Other Interview Rules of Etiquette

Of course, the focus of the interview should be on the substance of your research and teaching. Nevertheless, I recommend some simple "rules of etiquette" or codes of conduct that you should observe during the interview. First and foremost, you need to be courteous and engaged, demonstrating your interest in and concern for the people you are interviewing with. A brilliant young scientist interviewed in a department at UCLA many years ago, gave an amazing research talk, and then, when asked by the department chair (one of UCLA's most accomplished scientists) whether he wanted to hear about the chair's research program, answered "no." Even his remarkable research potential failed to salvage his chances at UCLA because his behavior raised concerns that he would not make good colleague.

I am often asked what the appropriate attire for the interview is. For a college or basic science department, business casual attire is fine; for clinical departments, suits are expected. Make sure you bring a change of clothing in case you spill something. Pack your interview clothes in a carry on (checked-in baggage gets lost). Wear comfortable shoes as you'll likely do a lot of walking. Bring a laser pointer, breath mints, and a bottle of water. Bring your talk on your laptop and on a flash drive and have a copy on an accessible server. Turn your cell phone off for the day.

The Two-Body Problem

If you have a significant other also on the job market, I recommend waiting until the second interview to discuss, i.e., after you have been identified as a finalist. This helps ensure that you will be evaluated on the merits of your science. If there is sufficient interest in you, opportunities for your significant other usually can be identified. Some universities have special programs for spousal or partner opportunities, and you should look into this before initiating any discussions. Employment laws generally prohibit asking candidates about their family situations, although this may come up naturally during your inter-

views. In this case, you should use your judgment when to disclose that your partner is also on the job market, though, if at all possible, I recommend avoiding this until your second visit.

After the First Interview

Most searches interview between four and eight candidates. You can expect to hear back from the chair of the search committee, or the chair of the department, within a week or two after the last candidate visit. If you are not selected as a finalist, you should ask for feedback to help you in future interviews. If you are invited back for a second visit, follow many of the same principles outlined for the first visit, taking the opportunity to learn more about the department, school, and living environment.

Negotiating Your First Independent Investigator/Faculty Position

If you have multiple job offers, how do you choose the right one? Even if you have a single offer, how do you negotiate for a package that will allow you to thrive in your career? In what follows, I outline some important considerations.

Tenure and Salary Concerns

Two core questions are how much of one's salary is guaranteed and does the position offer tenure? Tenure generally means job security until one leaves the university and is granted after a certain period of evaluation. However, the meaning of that job security, and the nature of the evaluation, varies considerably. Ask how much of one's tenured salary consists of "hard money," i.e., guaranteed by the institution, and how much is "soft," or has to be raised through grants or other funding streams. The ratio of hard to soft salary can range from 15% to 100%. In general (but not always), the guaranteed salary at medical schools is lower than the guaranteed salary at colleges, where one is usually guaranteed a 9-month salary for teaching. On the other hand, one's negotiated salary (i.e., takehome salary, including hard and soft money) may be higher at medical schools than at colleges. After you receive an offer letter, make sure you understand how your salary is structured and ask questions about anything that is not clear. I strongly recommend that you wait until after you get an offer letter to ask these questions. The letter will likely answer

many of the questions, and if you ask before getting it, it may give the impression that your primary concern is your salary rather than your ability to thrive in your research program.

You should also have some idea about what your salary should be. This type of information is available through multiple avenues. Public universities publish their salary scales in state databases. The American Academy of Medical Colleges (AAMC) maintains data about mean salaries for medical school faculty in distinct departments, for distinct types of institutions, and in distinct parts of the country. This data can be used as a starting base. You should also ask your postdoctoral mentor and other senior colleagues-as well as any colleagues who have recently started new faculty positions-what a reasonable starting salary should be. Be aware that women commonly ask for and earn less than men (Babcock and Laschever, 2007; Freund et al., 2016); don't let yourself fall into that trap. I myself often have to remind myself of a proverb I learned as a Peace Corps volunteer in the Democratic Republic of Congo: "to ask is not to steal."

You should also learn about how often salary raises are negotiated and what the basis of these raises is. An additional salary-related consideration that should be taken into account concerns the cost of benefits and what those benefits are. Most starting assistant professors are not thinking about retirement, but it's wise to inform yourself about not just health benefits, but also about retirement benefits. Other personal economic and social factors include the cost of living and whether the institution provides any housing support, and, if relevant, information about institutional child care programs or tuition support programs for children of faculty.

If your offered position is tenure track, you should inform yourself about when and how tenure decisions are made. At some institutions, tenure is granted at the associate professor level, while at others it is not given until the professor level. There is usually a time clock for each stage, often 6 to 8 years for the assistant to associate professor level transition, longer to the professor level, with time "off the clock" for child



bearing/adoption or other significant family responsibilities. Find out who makes the final tenure decision (the department, the dean, or a university-side committee on academic promotions?), what percentage of junior faculty are granted tenure, and what the expectations for tenure are. While most academic institutions do not have a formula, there is often an expectation of at least one R01-level federal grant and several corresponding-author peer-reviewed publications. In many institutions, teaching evaluations and institutional service play an especially important role in tenure decisions. In some institutions, there is a midway evaluation of a candidate's progress toward tenure. Understanding when and how tenure decisions are made is not only important for your success, but it also provides information about the culture of an institution.

The Start-Up Package: Space and Financial Resources

Once you have been offered a job, you will likely be asked to submit a list of your start-up requests. This can be divided into four areas: space, equipment, funds for supplies, and funds for personnel. Each of these can and should be determined in a logical manner, like establishing a budget for a grant proposal. Most faculty start-up packages include support for 3 years, although some can go up to 4 or 5 years. Rather than asking for a candidate's start-up wish list, some institutions will simply offer a set start-up package. If this is the case, the exercise of determining what you can accomplish with that budget is critical. In putting together your start-up wish list and budget, it is very helpful to get sample start-up requests from other candidates.

In terms of space, a general principle is that new faculty are provided on the order of 1,000 sq. ft of lab space, but the amount and type of space depends on one's research program. It's important that there be adequate space to conduct one's program and to grow but also important to understand how decisions about space are made. For example, if one's program grows, is it easy to obtain new space? Is there adequate room for specialized activities, e.g., tissue culture or animal behavior? Another important criterion concerns the local environment

of the lab: who will your nearest neighbors be? This is important because it will have an impact not just on you, but also on your lab members and trainees.

For equipment, determine all the equipment you need for your research and obtain the purchase costs for all (don't forget state tax). For large pieces of equipment, e.g., high speed or ultracentrifuges, or confocal or multiphoton microscopes, determine whether you need exclusive access to this equipment or whether you can rely on shared core resources. Find out whether the department or program will cover the cost of service contracts or whether this needs to be budgeted in your start-up as well.

For supplies, a useful approach is to review the experiments you plan to undertake during the first 3 years. Work with your current lab manager or mentor to determine the cost of these reagents and services needed to undertake these experiments (including, for example, costs for sequencing, molecular biologicals, antibodies, animals, etc.). For animal work, you will need to find out what the per diem costs are at the institution you are considering.

In terms of personnel, it's common to request funding for a technician for 3 years and/or for one to three graduate students or postdocs. You will need information about technician and postdoc salaries (with benefits), as well as student tuition and stipends to determine this. Many institutions have training grant positions for graduate students and postdocs, and you may be promised support for your trainees through this type of mechanism.

Three other considerations about startup are worth mentioning. One is that you should find out whether you can "bank" your start-up funds, i.e., whether you can keep them if you do not spend them within the first 3 years. Second, be aware that if your offer includes any type of "underwriting" clause, this may mean that if you do get grant funding, the institutional funding will not be provided. Finally, find out whether the institute has any internal funding mechanisms, e.g., for pilot grants.

Other Considerations

A series of other questions can help you determine whether a position is right for you. Are you excited by your colleagues'

research programs? Do you share common values about science and education? Will you receive effective mentorship from your senior colleagues? Are there other junior faculty that you feel a sense of camaraderie with? Will you be able to attract the type of trainee you want to work with? Is there sufficient administrative support to allow you to focus on your research or teaching? Is the culture of the environment one in which you will be challenged and grow? Will the worklife balance you want be supported? How strong is the leadership of the department, school, and university? The answers to these questions depend on a fit between program and individual. I consider that these are the most important criteria upon which your decision should be made.

Concluding Thoughts

There is no single formula or right path to finding and choosing an academic job. Obtaining a faculty position depends first and foremost on having made substantive scientific contributions and discoveries. The best candidates I have seen in searches are those who are clearly and sincerely passionate about science, whose enthusiasm for their research is evident in every interaction they have. And yet, there are strategies and pointers that can help all individuals be more successful in their job search. While I've provided my perspective on some of these in this NeuroView. I urge applicants to collect additional data by asking others for their thoughts. Think of your job search as you think of your most important experiments: be knowledgeable and prepared, pay attention to the data, and analyze the information you gather to make the best, most-informed decision.

ACKNOWLEDGMENTS

I thank all the trainees I have mentored for all they have taught me and B.A. Barad, J.T Braslow, G.M. Martin, and S.L. Zipursky for their comments on this manuscript.

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