How to Build the Foundation for a Successful Career in Academia

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It is the ultimate goal for many who go to medical or graduate school—joining the faculty ranks of an academic institution. For many, this seems an uphill battle, and financial, social, and lifestyle pressures are causing increasing number of graduates to abandon this goal. However, such a goal remains attainable, worthwhile, and desirable and offers a challenging career filled with great rewards. A career in academic medicine is never routine or boring and provides enormous flexibility, yet enough intellectual stimulation and opportunities for growth to sustain interest and excitement for a lifetime.

In this chapter we outline some strategies that can pave the path to success while keeping in mind that each academic physician will have a unique and personal journey. Some factors that predict success are so obvious as to seem formulaic and repetitive, but still deserve discussion. Absolute requirements for the job are (1) possessing motivation and willingness to work hard, (2) being focused on goals in an efficient and organized manner that allows one to set priorities and achieve measurable success in them, (3) being prepared to network in one's field and obtain funding, and (4) having adequate protected time and aligning with the goals of the department and

L.M. Boxer, M.D., Ph.D.(⋈) Department of Medicine, Stanford University, 269 Campus Drive, Stanford, CA, USA e-mail: lboxer@stanford.edu institution. Other skills are more nuanced and not so immediately obvious and relate to the ability to get the first academic job and to grow and mature in the position. These skills include the ability to deal with challenges and take risks and to understand one's strengths and weaknesses and learn from mistakes. Additionally, the ability to find mentors for different aspects of one's career and to be flexible enough to accommodate new opportunities and challenges is key to continued professional development and satisfaction.

Is This the Right Faculty Position?

In searching for a faculty position, a key predictor of future success is alignment of one's goals with those of the department and institution. Determine what an institution values and whether those priorities fit your short- and long-term goals. If your interests are not in line with the institutional vision, do not take a position just because you are enamored by the aura of the institution. Before accepting a faculty position, it is critical to agree with your chief or chair on how your effort will be divided among the three major academic missions of research, clinical care, and teaching. You will most likely spend significantly more time in one of the three missions. Likewise, the faculty position will be structured with a major focus on one of the missions. To accept a position that is not designed to allow you to spend the preponderance of your time on the mission that is of most importance to you and your career development is a recipe for disappointment and failure. In your discussions on the faculty position, be clear about the expectations that the chief or the chair has for what constitutes success. Spend the time to develop a realistic budget for your research needs for at least the first three years, and negotiate with the chief or the chair for this support. You will also need salary support during this time. Ask to see the offer in writing and make certain it is clear. Do not be afraid to ask for the resources and protected time that you need.

Once at the right place, finding colleagues who have similar aspirations will provide the essential intellectual support needed to develop your own scholarship. We do not live in a vacuum and certainly cannot succeed in one. Getting adequate support to develop your scholarship (protected time and resources being two important considerations) are key factors, as are clear expectations of how your time as a new faculty member will be spent (e.g., what proportion will be research, clinical, teaching, administrative). Many early-career faculty fall into the trap of overcommitting to too many service tasks early in their careers. The desire to be a good citizen is laudable, but the necessity to protect one's time during the early years of establishing a research program cannot be overstated.

Establishing Your Identity

Your research mentor has been a great guide for you and helped you develop as a scientist, writer, thinker, manager, and maybe even leader. However, as in all relationships, there is a time when some important and tough conversations must occur.

Your angle: I am going out into the world and need to establish my scientific identity and I want to talk about how I will separate from you—what scientific projects would be yours and what work will be mine?

Your mentor's angle: Great! I am excited for you to begin your own career. But your work has been some of the best in my lab—I am not sure how much of it I can give to you!

In the ideal world, the mentor's and trainee's goals, visions, and plans are completely aligned, but in the real world, where science is tough, funding difficult, and the competitive spirit drives all of us, the issue of separation and differentiation can often be challenging. To avoid misunderstandings, the best approach is to (1) have frank and honest conversations, (2) broach the topic early, (3) set up expectations on both sides, and (4) have regular follow-up. Another consideration is to have a specific time period when you are still working closely with a mentor but you are pursuing an independent project. This can be best accomplished when you have independent funding and will depend on the collaborative and collegial nature of your mentor. Keep in mind that science is difficult to predict. Even if your mentor and you agree to divide work, eventually your mentor's projects may collide with yours. Be prepared for this situation, but do not let fear of it hold you back from tackling the best and most interesting scientific questions. If your mentor has taught you well, you are prepared with the skills to be a friendly colleague, collaborator, and even competitor!

One special consideration is when you take a faculty position at the same institution as your mentor. Although such an arrangement has many advantages (e.g., you are already familiar with the environment, have scientific colleagues around you whom you know, can easily set up your own lab, and it is easier on you and your family not to move across the country), one disadvantage is continued association with your former mentor. In the eyes of your colleagues, will you be a new faculty colleague or simply the great senior postdoc of your mentor? This perception is not absolute and can be overcome, but you will have to make and follow a plan to overcome this perception successfully. Keep in mind that this separation is not just for the sake of your ego—it is for the sake of your career. When the time arrives for decisions on promotion and tenure, you will be judged on how you differentiated from your former mentor and whether you have established a research program that is unique, independent, and additive to the program of your mentor. In other words, what do you bring to the table that your mentor did not?

Setting Priorities and Focusing on Them

Once you have navigated the first few busy (and stressful!) years of life as a new faculty member, your thoughts will soon turn to the next steps reappointment, promotion, and tenure. Have a discussion with your chief or chair on the criteria for reappointment and promotion. Different faculty lines are designed to emphasize each of the three academic missions, and the requirements for promotion will differ among the lines. You have previously made certain to enter the line that is the best fit for your goals and interests. Therefore, the criteria for promotion will likely align with your priorities. Once you have an understanding of the criteria for promotion, ask your mentors for their advice and feedback on what your priorities should be. Know the metrics on which you will be judged so that you can determine your readiness for and success in being promoted. Get as many perspectives as possible—ask, ask, ask. Ask those around you who have recently navigated this hurdle, ask mentors and supervisors what areas you should prioritize, and ask scientific colleagues for their insight and guidance. Among the abundance of advice you receive, common themes will emerge—keep those in mind as you set your goals and priorities.

It is very important to have protected time during your first several years on the faculty. Protected time will allow you to develop your scholarship, clinical practice, and/or teaching. When you are asked to take on a new project or assignment, consider how this work will help you attain your goals. Although some good citizenship activities are desirable and necessary, it is not reasonable to expect an early-career faculty member to engage heavily in these types of activities. With the advice and support of your mentors, determine which activities will be most beneficial for your career development without taking too much time away from your academic mission endeavors. Be focused and merciless about committing to new assignments or projects. Will they help or hinder you in your long-term goals? Taking on new projects that will ultimately help you is not being selfish—it is being smart.

Mentors, Mentors, and More Mentors

The importance of mentors as key predictors of success cannot be overstated. Academic medicine is complex, and listening to the advice of others who know how to negotiate the course will help ensure your success. You cannot have too many mentors, but do not expect them to seek you out. Go and find them. Keep in mind that you will need mentors for many aspects of your academic life—three areas that are the most obvious are research, clinical, and teaching. However, academic physicians also need and benefit from mentors in other areas-maintaining work-life balance, writing well and effectively, public speaking, and so on. It is valuable to have a mentoring team—one mentor does not have to fill all these varied roles. Keep in mind that your need for mentoring will also change over time, and the input and guidance you needed as a new faculty member will be vastly different from the guidance you need as you take on leadership roles. A good place to start in the search for mentors is with your chief or chair and/or your assigned mentor. Several of your mentors will likely be at your institution, but do not limit your mentorship support to colleagues at the same institution. For example, you may need to identify a mentor for your research from investigators in the same research area as yours, and it is quite possible that there will be no one at your home institution in your research field. Your research mentor from your time as a trainee may be able to assist with finding a mentor at another institution. Many institutions offer formal training in teaching skills, which is a valuable resource. It may be possible to identify a mentor to assist with developing your teaching abilities from among the faculty who participate in the training program. As you engage in clinical care, you will likely identify more senior clinical faculty who can serve as mentors and role models.

The best mentors provide honest feedback and advice, pointing to areas for improvement as well as helping you navigate the maze of academic medicine. A mentor who can identify areas for improvement and provide support and advice during the process is very skilled, and you will be fortunate to have such mentors. Stay flexible and be open-minded—many informal mentoring relationships can develop with senior colleagues. Although one does not often consider the need for support and advice on how to become a mentor as one begins a career in academic medicine, mentorship is an important requirement that will develop as you start to work with trainees in research and/or clinical care. One often unrecognized but great benefit to having wonderful mentors is that they can help you develop your mentoring skills. What aspects of a mentor were fantastic: what other habits were less than ideal? Look back at your experience and learn from it. Take the best of what you experienced and contribute to the next generation by being a great mentor. Many faculty members find the process of mentoring and developing early-career colleagues to be one of the most rewarding aspects of a career in academic medicine.

"Tooting Your Own Horn": Be Your Own Best Advocate

As scientists we are often taught to be modest for example, analyze the data carefully, do not overcall your results, and do not be too broad and generalize beyond what this experiment shows. Although that approach works well in science, it can also hinder you when it is time for you to "sell" yourself. Remember that although your mentor, chief or chair, and other colleagues may do their best to promote you, the person who can best "pitch your product" is you. You need to be your own best advocate. Your job is to do great science, be a good mentor, communicate your data effectively and energetically, and network well with colleagues and collaborators. In addition, you need to keep track of what you have done for the institution (e.g., invited seminars, teaching responsibilities, committees, clinical work, mentoring students) and have that data for your supervisor. Having a systematic way to keep track of what you have contributed to the academic mission of your institution is key. You must toot your own horn—or at least provide the data to your chair so that he or she can toot a horn on your behalf!

I Do Not Look Like Other Faculty Members

The special challenges of being a faculty member as an underrepresented minority or a woman deserve mention. Identifying people whom we look like or to whom we aspire to emulate are important factors in shaping our thoughts about our potential. Seeing women faculty who have successful academic careers, handle work-life balance, and succeed in leadership positions gives the younger generation of women confidence that they too can have this career and be successful at it. For an underrepresented minority faculty member, the importance of finding others who look like him or her or have similar cultural backgrounds is also essential. As with many situations, success breeds success. An institution that has shown the commitment to recruit and retain underrepresented minority and women faculty members will have greater success with recruiting new faculty members in these categories. The awareness of the importance of having a rich, blended faculty at all ranks has been steadily increasing, and most nationally ranked institutions have special programs focused on the recruitment and retention of faculty who are women and underrepresented minorities.

What About My Significant Other?

It is now the norm that recruitment of a faculty member will involve assistance with career opportunities for his or her significant other. It may be a dual recruitment into the same department or different departments at the academic institution or help with locating an appropriate position in the area. This recruitment issue is particularly challenging not only for the couple but also for the institution. Many academic

institutions have a person or an office to assist with issues related to dual-career couples. A significant question for the faculty applicant is when to raise this topic. As a candidate for a position, you should not be asked whether you have a significant other or family. You need to determine the appropriate time to begin this discussion. It may be reasonable to discuss this topic with the chair or the chief at the second visit or at the time you receive a formal offer. You and your significant other should decide in advance what assistance is needed, what kinds of positions would be appropriate for the other member of the couple, and what compromises you are each willing to accept. Dual-career couples face challenges at every stage of their training and career as they move forward in their professional lives. They may undergo a number of moves to different institutions, and these moves are often driven by the career of one member of the couple. How to balance the effect of a move on the career of the other member of the couple is difficult and must be handled with sensitivity on the part of all involved. This is another area in which mentors can be very helpful, especially those mentors who are members of dual-career couples themselves.

When Mistakes Happen

As accomplished as you are for winning the search for the faculty position, you will have areas of weakness or limitations that can be worked on and improved, just as everyone has. It is helpful to ask your mentors and others who know you well in different settings to assist you in evaluating your strengths and areas that require improvement. As you begin to work on your weaknesses, do not neglect your strengths. These are the personal characteristics that got you to where you are now and serve as the foundation of your success—do not neglect them, but enhance them and add to them. These can continue to be built upon, and you want to maintain them as areas that are strong for you. Once you have identified some limitations or weaknesses, work with your mentors on strategies to deal with them or to turn them into strengths. As an example, stubbornness is usually identified as a trait that is limiting, but you can learn to develop this trait into persistence, which is much more useful and can be a positive force.

As an early-career faculty member, you will feel the need to appear confident and knowledgeable. We all hope that each step along the path of an academic career will be filled with successes, but you will undoubtedly make mistakes along the way. You may identify a mistake or someone else may point it out to you. In either case, the best approach is to admit the mistake and work with your mentors to determine what you can learn from it. With this knowledge you can move forward and avoid making a similar mistake. The most worrisome aspect of mistakes is to fail to learn from them and to continue to err in the same way. Understanding your strengths and weaknesses and learning from your mistakes are crucial to continued personal and professional growth. To paraphrase a famous quote: those who cannot learn from failure are condemned to repeat it.

Continue to Take Risks

What brought you to where you are now was the ability to take scientific risks, think in new ways, and ask the big and important scientific questions. Creativity is valued in academic medicine, and success often results from the use of novel approaches. Once you are in a faculty role, it is important not to lose this perspective. Although the initial focus may be in pursuing some safer route, one needs to be creative, willing to try new approaches, and open to new experiences. Having a mixture of high-risk/high-reward projects in addition to those that are likely to succeed is generally the best approach. The safer projects are those that are guaranteed to get papers published and lay the foundation for grants and funding. Advice from an experienced research mentor will be valuable in assessing the balance of research projects in your portfolio. The colleagues that surround us are often catalysts for initiating new projects, and although having plans for your research program is important, it is also important to be ready to take on new opportunities when they present themselves. As we take on each new challenge, we learn from it, grow, improve, and develop.

With your mentors, you will chart a path for success as a new faculty member. Throughout your career, however, you will be presented with opportunities that you did not foresee or necessarily seek. Although these may not be part of your plans for career development, it is essential to remain open to new possibilities. You can assess a new opportunity with the assistance of your mentors and determine whether it is one you choose to pursue. It is important to appraise whether you will thrive in the new role or option, and how it will affect the other areas of your work, including research, clinical care, and teaching. It is beneficial to take on challenges and to learn from them. Clearly, the most important goal of an early-career faculty member is to focus on the three major missions and make the strongest case possible for promotion. Therefore, any new opportunity must be judged in this context.

Work-Life Balance—Do Not Ignore It!

The importance of work-life balance and making time to "recharge" cannot be overstated. Remember, this is a marathon, not a sprint. Everyone needs to have time to recharge, both intellectually and emotionally. People are most creative when they have the mental freedom to think, explore, and ponder. Stifling the creative spirit by not allowing oneself to recharge is a common mistake among young scientists. There cannot be perfect work-life balance in every day, every week, or even every month-months with a grant deadline, for example. A careful selfassessment should be performed on a routine basis so that the balance of work and life is maintained. See what others are doing to maintain some level of harmony and find examples you want-or do not want-to emulate. Then figure out your personal solution. A career in academic medicine, particularly as a new faculty member, comes with substantial pressures and stress. You will need to develop methods to handle stress and maintain a healthy lifestyle. Not all approaches to stress management are healthy. You can learn from your mentors and colleagues how they minimize stress and maintain a healthy

balance between work and other aspects of their life. A career in academic medicine can be very rewarding. You have intellectual freedom and can make a positive impact in a number of areas. As a new faculty member, your entire career lies ahead of you. With hard work and support and advice from senior colleagues, you are off to a great start.

Conclusion

It takes an enormous amount of motivation, hard work, perseverance, and determination to reach the point where one is offered a faculty position. However, the hard work is not done, and the next steps (e.g., getting your scholarly program established and productive) are often just as challenging. Apply the same strategies and approaches that got you this far: be efficient; commit to the time it will take to build your career; make plans, including a timeline for obtaining research grants and writing papers; and network with others in your field by going to meetings and interacting with the leaders in your area of scholarship. Your mentors will provide support and advice, but you must be committed to building your career and spending the time that is required for this. When you are at work, maintain your focus on the tasks at hand. Learn to be as efficient as possible, seeking guidance and training with efficiency if necessary. Determine what is important for your career success. Make a timeline for the submission of grants supported by strong preliminary data and for the preparation of manuscripts. Be certain to attend important meetings in your field of scholarship, and make an effort to meet the leaders in the field. Your research mentor can help facilitate these meetings and your invitations to meetings to present your research. Promotion requires visibility in your area of scholarship, and investigators in the field will be asked to critique your scholarship and assess your likelihood for continued success. Maintain time for yourself and your family—and keep your creative spirits flowing. Most important, take time to reflect on why you love the job of academic medicine and enjoy the process!

Words to the Wise

- You cannot have too many mentors.
- Be certain to obtain sufficient protected time to develop scholarship.
- Set priorities and focus on them.
- Make certain your goals fit with those of the department and the institution.
- Success requires motivation and hard work.
- Understand your strengths and weakness and learn from your mistakes.
- Do not be afraid to take risks.
- Do not neglect other aspects of your life; work-life balance is the key to long-term success.

Ask Your Mentor or Colleagues

- Give me honest feedback—how do you think I am doing?
- What are the next steps for my career development?
- What was the biggest mistake you made in your first position?
- What was your best decision in your first position?
- What is the best advice you can give me at this point in my career?
- How do you maintain a balance between work and the rest of your life and how do you deal with stress?