

One Title, Many Jobs: How to Prepare for the Academic Career That Best Suits Your Interests

Many aspiring cell biologists enter graduate school with the intention of becoming a “college professor.” But the responsibilities of a professor vary significantly from institution to institution. How can you best prepare for a job when the requirements vary so much?

It is largely the balance between research and teaching, as well as requirements for service to the school and community, that defines the differences among academic positions at different institutions. So your first task in preparing for an academic career is to discern what balance of teaching, research, and service will bring personal fulfillment and happiness in your professional life. How important is it to you to manage a large research lab with graduate students and postdocs? Work on the cutting edge of research? Publish your work? Practice grantsmanship? Develop engaging and active coursework? Train undergraduate or graduate students? Do you want to work in a large-scale or small-scale environment? The answers to questions like these will help you to shape your job search.

Once you have decided what sort of balance you are seeking between teaching and research, it is important to consider the types of academic institutions and what is expected of a faculty member at each type. Here I describe the main types of institutions in the U.S. and suggest strategies for searching for a job in each type.

Research University

The research university category is itself broad and includes institutions that grant doctoral degrees and those that grant only master’s degrees. At doctoral institutions, the balance of job responsibilities will tilt heavily toward research. Although he or she will have some

teaching and service responsibilities, the primary goal of a faculty member is to run a lab that will consistently produce publications in peer-reviewed scientific journals. Such a lab will typically be populated with postdocs and graduate and undergraduate students.

Thus the key to success in securing a faculty position at a doctoral institution is to demonstrate potential for research success by publishing peer-reviewed papers and securing external funding. These benchmarks establish a record of research productivity and therefore make you attractive to a potential employer that expects

faculty members to establish successful research labs. Note, though, that teaching experience is also of value at doctoral institutions and cannot be neglected.

At an institution in which the master’s degree is the highest degree offered, a significantly greater emphasis is placed on teaching than at doctoral institutions. Nevertheless, successful research remains paramount for career success. In both types of institution, the search for external funding in the form of grants is critical for the maintenance of a successful lab.

If you will be seeking a position at a master’s-granting institution, it becomes more important to secure teaching experience, preferably beyond the minimum teaching assistant duties of a PhD program. This will be discussed in greater detail in the next section.

Liberal Arts College

A typical liberal arts college will have a small enrollment (as few as several hundred students) of exclusively undergraduates. Here, the most important part of a faculty member’s job is to be an effective teacher in the classroom and the lab. A typical semester will involve teaching two to four classes and lab sections and advising



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several undergraduates on independent research projects. Although research remains a critical part of the job, it is largely conducted with the goal of educating undergraduates in research techniques and preparing them for successful scientific careers. (However, it is important to note that a subset of liberal arts colleges expect higher levels of research productivity and publications.) Research at a liberal arts college, by necessity, will be on a small scale and performed with limited resources. In most cases, it is expected that faculty will seek external funding opportunities, although not to the levels expected at research institutions.

The most critical part of an application for a liberal arts college faculty position is the demonstration of a commitment and capacity for college teaching. The best way to prepare for this is to obtain teaching experience in which you are the primary instructor (i.e., not a teaching assistant), since this gives you experience in the full gamut of teaching responsibilities, including class preparation, classroom management, and assessment. Temporary or adjunct vacancies at local colleges can give graduate students and postdocs the opportunity to obtain just this sort of experience while still working in a research lab. Graduate students may also consider visiting professorships or teaching postdoctoral fellowships as avenues toward demonstrating competence in both teaching and research. The latter is a relatively new type of position found at both research universities and liberal arts colleges. It provides training in both teaching and research in preparation for a liberal arts academic career.

With respect to research, remember that most liberal arts college research programs work with limited budgets and resources and that almost all have only undergraduates available for research work. You may be very

interested in cutting-edge HIV research, but can this work be performed successfully under these conditions? When planning a research program, consider model systems and research projects that are relatively inexpensive, portable, and amenable to undergraduate participation.

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Community College

The community college will have a wide cross-section of undergraduate students in terms of age, background, and long-term personal and career goals. A great emphasis on teaching is found here, and in many cases there are no research expectations. Like those at a liberal arts college, the community college faculty member can expect to teach multiple classes and laboratories per semester.

The suggestions described above for liberal arts colleges with respect to obtaining independent teaching experience apply to community colleges as well. Prior experience, such as one or more years in an adjunct teaching position, is often expected and may be implicitly required to secure this type of position.

It is important to note that these are not hard-and-fast rules for a successful job search. Each faculty position will have its own unique requirements specific to the nature of the particular institution. Nevertheless, preparation for a successful academic career requires a significant level of personal discernment to establish the balance of teaching and research that is most likely to bring you personal satisfaction. This cannot be emphasized enough—it doesn't matter if you get the most prestigious and powerful job in the world if that job does not make you happy. Asking yourself what is important to your professional happiness will allow you to follow the necessary career preparations to make your academic dreams a reality. ■

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