So you think you can edit?

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ABSTRACT This article presents one scientist’s perspective on the transition from life at the bench to an editorial career.

BACKGROUND I received my PhD from the Molecular and Cell Biology Department at the University of California, Berkeley. This program emphasizes training well-rounded scientists who think beyond their own fields of study. I found this environment very stimulating; yet in my own graduate career I felt stifled by the limited scope of research required for thesis work. In time, I came to realize that I what I enjoyed most about science was reading and thinking about many different fields; yet I was faced with the prevailing opinion that I should want to pursue an independent research position. Therefore I decided to perform postdoctoral research in a very different field to determine whether it could reinvigorate my interest in being at the bench, focused on one particular field and question. Although exciting at first, after about 6 months I found myself dissatisfied again with the limited scientific focus. At that point, I decided to take a more active part in my career and find a way forward that would capitalize on my strengths and interests. But how does one do that?

TAKING THE PLUNGE Being in a broad and fairly large graduate program with strong connections among the students served me well. I contacted former classmates and reached out to many acquaintances working as consultants, as scientific editors, in industry, and in teaching to decide which career would best fit my interests, abilities, and personality. It was a fruitful approach—one I now encourage all students and scientists to take. After talking to two journal editors and liking the idea that the position allows one to be at the forefront of a breadth of scientific research, I realized that this might be the career for me.

One of the editors invited me to apply for a job and I was fortunate enough to get it.

WHAT IS AN EDITOR? Before going into the pros and cons of the job, I will first define the different types of editors and their roles. Although not an exhaustive list, it represents the editorial careers that I have encountered the most.

At journals like Molecular Biology of the Cell and The Journal of Cell Biology, submitted papers are evaluated by academic editors—scientists running research labs who also act as journal editors to serve their community. Some academic journals, such as The Journal of Cell Biology, also employ “professional editors”—scientists who have earned a PhD and decided to pursue an editorial career. At academic journals, professional and academic editors collaborate to evaluate the suitability of submissions and coordinate the peer review and publication processes. These professional editors serve important advisory and quality control roles by ensuring that the standards of the journal are upheld in a consistent and fair way across diverse fields and by academic editors around the globe. Editorial decisions, however, remain the responsibility of the academic editors.

Other journals are exclusively run by professional scientific editors, a position that I held for a brief period in my editorial career. These professional editors read submitted papers, oversee the peer review process, and make the publication decisions. They usually work within a larger editorial team that collectively decides the scope, standards, and direction of the journal. In both types of journals, the professional and academic editors’ evaluations of submitted work take into account many factors: journal scope, the published literature, the advance provided by the paper, and whether it meets the standards of the journal.

Many journals also publish review articles and other “front matter” such as comments on papers published in that or other journals, opinion articles, and so on. In some cases, the editors (professional or academic) who handle primary research papers also
handle these articles. In other cases, journals have dedicated professional editors to handle them, which is the position I have held for most of my editorial career. All of these editors generate ideas for review articles, identify and invite appropriate authors, and manage the peer review process and the decisions once the review is submitted. Most professional reviews editors also perform some kind of “developmental editing,” that is, help the author improve the clarity and readability of an article and tailor it to the audience of the journal.

Professional editors of all kinds interface with the scientific community at conferences and visits to research institutes and universities, where they promote the goals, scope, and practices of the journal. They also participate in various journal initiatives, whether it be to organize conferences, expand the scope of the journal, improve its presence online, start a new journal, and so on.

WHAT SKILLS DOES THE JOB REQUIRE?

Intellectual adaptability and broad scientific interest
From my description so far, it should be fairly obvious that these skills are crucial for the job. Every day, editors read papers across the scope of their journal. One has to be prepared to think critically about a variety of topics and understand the intricacies of different scientific fields. This can be a challenge initially; at the beginning of my career as a professional editor, I remember being mentally exhausted at the end of every day. You may fancy you are thinking a lot when you are in the lab, but most bench scientists have a lot of down time every day. In addition, it takes some time not to focus in on the minute experimental details and instead appreciate the big picture of the work being evaluated, but that is also a large part of the fun of the job.

Multitasking and good organizational skills (or a good memory!)
Editors are faced with multiple submissions on different topics on any given day and also a whole portfolio of manuscripts at various stages of the review process. At a journal run by professional editors, one must deal with new submissions, make decisions based on reviewers’ comments, which are rarely straightforward, and evaluate the strength of revised submissions. Authors also challenge your decisions, and you have to evaluate whether their arguments hold any merit.

In addition, there are always other projects and initiatives that require your participation. Juggling all of this successfully can be a challenge if one lacks sufficient organizational skills, although other abilities, like a good memory, can help fill the breach.

Decisiveness and efficiency
Editors are faced with making critical publication decisions every day. Although it is a skill that you can develop as you get more comfortable with the job, some people really struggle with it, which can be a problem, particularly when authors disagree with your decisions and manuscripts are piling up on your desk. Given the variety of tasks an editor faces every day, being thoughtful and efficient in one’s decision making is a big part of managing the job.

Communication skills and diplomacy
The role of a professional editor generally does not involve a lot of writing, which is a common misconception. However, one does need good communication skills to write clear and instructive decision letters. In addition, editors may write research summaries of papers for publication or the occasional editorial.

In addition to written communication skills, editors interface with the scientific community in various settings, including interactions with world experts and the occasional Nobel Prize winner. Figuring out how you fit into the scientific community in your new role can be challenging. It is important to remember that you represent more than yourself at these events; you are the face of your journal and have to conduct yourself with dignity and maturity even in the face of criticism. The job also requires sensitivity. In many cases, the work submitted to the journal is the result of years of the authors’ hard work and recognizing this allows you to better interact with and understand the community.

JOYS AND CHALLENGES OF EDITORIAL LIFE
I love science and learning about new science. The breadth of science that an editor is exposed to is exhilarating and constantly renews my love of biology. Editors also experience many of the joys of discovery without the pressure of doing the discovering or procur ing the funding. It is really wonderful to have a job in which one can embrace the big picture and see connections between different fields—something I encounter frequently as a reviews editor. As with any career in which you step off the beaten path, the next steps are not always clear and often do involve further reinvention. However, the skills you develop and the breadth of knowledge you gain are versatile enough to be applied to many other opportunities.

Editors travel and attend conferences to hear about new work and interact with many different scientists. (If you are lucky, sometimes the conferences are in very nice locations too!) So, as part of the job, editors meet and talk to lots of smart, creative scientists. This can be extremely exciting and intellectually fulfilling, but it also can sometimes be hard. The attitude bench scientists have toward professional editors is not always open and collegial despite the fact that most editors are diligent and conscientious scientists who are striving to run their journal better, serve their community, and move science forward. This is not to say that every decision that an editor makes is the “right” one, but authors can often be unfairly dismissive of professional editors who they assume lack the necessary perspective or qualification to judge their work.
An inherent part of the job, which I enjoy, is collaborating with other people. This is a big change from the lab, where, even if you work with other people, there is a great deal of pressure for "ownership" or "authorship." As a reviews editor, I particularly enjoy working with authors to communicate their ideas better. Yet it should be noted that being an editor is a behind-the-scenes job; you don’t get a lot of community credit or positive outside reinforcement for your work.

Editorial work suits people who like to have defined goals, time frames, and projects. I personally found the long-term and shifting nature of research goals to be frustrating and am better suited to this kind of a career. However, it should be said that, particularly for editors handling primary research manuscripts, it is hard to control your workload due to the varying number of papers submitted to the journal every day. In addition, as time is of the essence, there can be an intense amount of pressure. This is not a 9 to 5 job. Being a reviews editor in particular is a deadline-oriented job, which I’ve found works well for the perpetual procrastinator (who, me?). However, this deadline structure comes at a price, as the journal stops for no one (nor for illness or travel for work or holidays). Overall, as with any career, there are pro and cons, but for me, the stimulating intellectual nature of the job still trumps the challenges.

ONCE A SCIENTIST, ALWAYS A SCIENTIST

My scientific training still informs my work every day, and I can truly say that I have no regrets about applying that training to an editorial career. The training in scientific inquiry one receives in the process of obtaining a PhD can serve you well in a number of careers; who does not want an employee who has the skills to think critically and clearly about any question? We should be encouraging the placement of scientists in all walks of life both because we are qualified to do a lot more than experimental work and because we can educate nonscientists about the beauty and joy of science. In the end, I am very lucky to have found a scientific career that best combines my strengths and abilities with my love of science.

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