Options other than a PhD

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For a lot of graduates, particularly in biochemistry, the most obvious route following their degree is to continue in academia and pursue a PhD – a noble, sensible and safe choice. For other people, finding alternatives and looking for work can be exceedingly daunting. Finding a job can be compared to a hero on a quest: the destination is unclear, there are constant setbacks and enemies lie at every turn. This article does not offer any solutions to these problems, and instead simply records some experiences of looking for jobs and tries to offer kindred advice.

If you were to take a look at the careers page of my biochemistry course website, you would find 14 links. Thirteen of them are for PhDs. That is not the fault of the course – many people, both at my university and beyond, do go on to do a PhD, but it does leave you feeling a bit on your own if you want to pursue another option.

There are lots of legitimate reasons not to do a PhD. You might not want four more years of education, for example. You might not want to do something so niche that more people will probably read this article than your thesis. Or maybe you just can’t take any more pipetting.

Whatever your reason, you are now approaching the end of your studies with a sense of existential anxiety about entering the real world and finding yourself your ‘dream job’. Job articles like this one are a useful starting point, but it is difficult to list concisely the available options – simply put, there are too many potential jobs. Success relies on you being diligent and stubborn enough to keep applying, even after the inevitable rejections – something no article can do for you.

Therefore, this article will take a different approach and throw away any pretence of functionality by simply commenting on my experience of the process. There is little I can tell you that you don’t already know and full disclosure, I do not have a job yet, so I’m not qualified to advise anyone. All I can offer is a kindred spirit and an overextended metaphor.

So, I’d like to take you, the reader, on a quest to find a job. This is a quest where you will not rest until you are done. Your adversaries are the deadly ‘firms’ who have the power to block your path by any number of devious means.

The fellowship of skills
The first problem one faces is to work out where the quest destination is, that is, what job do you actually want? With the exception of the lucky few who have a directed career path in mind, the answer to the question ‘what do you want to do?’ generally goes along the lines of ‘I’m not completely sure, maybe something in (insert generic science-related field)’. Instead, it is much easier to say what jobs you do not want, and whilst this can initially be a helpful step, it does not bring you significantly closer to identifying the job you do want.

When applying for jobs, the reader should be aware of the pitfalls of taking a narrow target-based approach. Whilst it can be beneficial to convolute your skills specifically to the job in question, it can result in a painfully long job application process and initially limits you in the numbers of jobs you have time to apply for. Once you realize that all jobs look for effectively the same things, you can easily summarize your skills and switch the direction, an approach I have found far easier and quicker. You know what that means – yes, it’s time for a buzzword list. You have a bioscience degree, can list, among others, the following skills:

- Data analysis – for example, your undergraduate project involving multiple varied analyses including the use of bespoke imaging software to look at frog neural cell sizes. Instantly translatable data analysis skills.
- Communication – lab meetings, seminars, project discussions – you’ve done them all.
- Problem-solving – ‘lab work is hell, God I love it so’ – experiments constantly go wrong and you are likely to have extensive experience solving those drawbacks.
- Teamwork – you have worked on many a group project, normally doing most of the work because people like Lucy are unmotivated and Bernard had a rock dance sport competition to go to.
- Can do attitude – if you can get through cell cycle and metabolism lectures, you can do anything.

A good degree and some work placements do translate into experience, and the list of things our reader is good at is quite extensive. Such skills could legitimately be applied to a wide variety of technical jobs. Suddenly, in these terms, there are hundreds of different possible destinations and the quest becomes limitless – our reader can apply for anything and everything. What a positive start!

A journey in the dark
You are trained. You have lists. You are ready. The applications begin.
You immediately become lost in the infinite tangle that is job searching.

Applying for work is a slog, but I’ve found the more applications I’ve done, the easier they have become (ah yes, there is the patronizing common sense). Navigation becomes simpler, and patterns begin to emerge. Applications vary, often depending on company size, and different application processes suit different people. The best way to find out is to try as many as possible. If you find a job you like the sound of, go for it. What do you have to lose?

If we go back to the tangle, applications to large companies and graduate schemes, your GSKs, J&Js and P&Gs of this world, are like walking along well-paved paths up a steep hill. These acronymed antagonists are perhaps the most fearsome adversaries of our reader. They are easy to find because most careers websites list them, but they take significantly more time and effort to complete. They frequently use psychometric tests, online tasks and video interviews to narrow down the swathes of applicants. Practice is key to help you navigate these hurdles, but it is worth remembering that they are just that: hurdles not blockades. Do not feel downhearted if you don't quite make the cut; clear paths are the most competitively trodden. Keep reapplying, and slowly but surely you will learn exactly what hoops these companies will want you to jump through and how best to get jumping.

Many other application process styles exist, and to give an example from the other end of the scale, we have companies that rely simply on a cover letter and CV. Jobs like this can be hard to find and often require some dedicated digging around to find the best ones. Sources for these companies vary in quality and consistency. The obvious places are a university careers service or job sites, but any source of inspiration is a good one. For example, research for an essay may uncover interesting companies, as will talking to a supervisor. Additionally, smaller companies tend to be more varied. With skill list optimism, you can apply to jobs ranging from meat producers in the Netherlands to paralegal jobs in St Neots – the only constraint is the time to write the application. One of the great benefits of these companies is that the reader can know their adversary by name and enjoy a much more varied exchange, which allows you to exhibit flair and take risks which large corporations may discourage. One drawback is that with mid-size firms, you don’t always know exactly what you are letting yourself in for, but a bit of mystery does keep applications interesting.

After many months of trekking, you may get tired and begin to lose hope, but you have travelled several different paths and become better for it. There are several destinations in sight. Time to keep going.

Homeward bound
It’s a strange process applying for jobs. Inherently, it is not particularly difficult to do, and you can apply for as many as you want. Yet, it is very gruelling.

There are two main reasons for this. The first is rejections. Unlike PhDs or undergraduate courses which have a relatively low application rate to success ratio, the vast majority of jobs you apply to will say no. Over time, it becomes harder and harder not to take these personally, particularly if you get to later stages, but a well-trained reader will know dwelling on this is a fruitless exercise.

The second is an abstract anxiety about the unknown. Previous quests you may have faced typically result in far fewer changes to your everyday life. Success here could quite possibly determine nearly all your future quests and even your greatest future achievements. In these terms, PhDs most closely resemble the current quest, which is perhaps why they can be comforting to some and are such a common route. However, it is worth remembering that academic quests are not going anywhere and can be revisited at any point without any repercussions.

Because of these drawbacks, the single most important skill to remember is perseverance. There are a lot of chances to give up and to turn back, but you won’t. There are different ways to cope with the drawbacks, everyone has their own and all we can do is keep going. Like I said at the start, I’m not qualified to advise anyone, but optimism is key – find all the positives you can in the process and don’t worry about the rest, even when your engineering friends get their third job offer of the week.

So that’s what you will do. You’re holding onto something and you’ll keep going. Then at last one application (and all you need is one) says yes. You feel like you are standing on a rock above it all, free of doubt and worry, resplendent in the sun.

At least that’s what I hope it will be like, I haven’t got there yet either.