So You're a Postdoc. What next?

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The majority of postdocs will leave their current positions within the next three years, either through choice or, most likely, necessity, as they are usually employed on fixed-term, funding-linked contracts. Where do they go, where do they want to go and, most importantly, how can they be supported to succeed?

This article gives some practical tips for postdocs on how to go about finding, and achieving, their 'What Next?'. It also gives practical tips for PIs and for Institutions on how they can support career independence for their researchers. The advice below is based on my work with postdocs and new academics on achieving their own career progression, as well as on my own experiences of moving out of a cycle of postdocing into a career which I find fulfilling and rewarding. I'll start with some context for why career development and developing independence is critical at the postdoctoral stage.

The background

Career aspirations of postdocs in the UK have been tracked over the last ten years through the *Careers in Research Online Survey* (CROS). Consistently, about 75% of respondents aspire to an academic career and around 60% expect to achieve this [1]. However, if you look around your department you will see that there are more postdocs employed than academic positions coming available. The Royal Society estimated in 2010 that 10%–15% of researchers on fixed-term contracts move into permanent academic positions, and that 1.5% will become professors [2].

This can seem disheartening. However, unemployment amongst PhD holders is low and the evidence suggests that those who have moved into positions beyond academia have high levels of job satisfaction, move readily into leadership positions, and only a minority aspire to return to an academic career [3]. Whatever the career destination may be, it is essential that postdocs are aware of the realities of academic careers and their career options as well as the opportunities to develop the skills and evidence necessary to progress in any career.

Research funders recognise this problem and, in 2008, implemented the *Concordat to Support the Career Development of Researchers* [4], an agreement between the funders and employers to improve the support for researchers (postdocs and related roles)

and research careers in UK higher education. In Europe, a *Charter for Researchers and Code of Conduct for the Recruitment of Researchers* [5] addresses similar issues. Institutions implementing these recommendations are able to apply for the HR Excellence in Research Award; currently 98 institutions hold this award in the UK.

During 2017/2018, a review of the Concordat and a community consultation took place, which considered the impact of the Concordat and made recommendations for the future. There has been progress in relation to supporting career development; however, issues persist, particularly in relation to career progression and feeling supported to develop independence. The review recommendations aim to clarify the responsibilities of researchers themselves, their Principal Investigators (Pls), Employers and Funders in supporting the development of their independent careers, regardless of destination.

The key tenet of the 2008 Concordat and of the new recommendations remains the same: researchers and their employers have a role to play in a researcher's career development. Institutions, and Pls, should provide support mechanisms while the researcher must take responsibility for their own career.

A note about Academic vs Non-Academic Careers

We often talk about academic and 'alternative' careers. However, this suggests the two are different and possibly even incompatible: if a postdoc position is an 'academic' track job, surely a postdoc themselves wouldn't be qualified for a career outside academia?

There are some specific differences in the evidence needed when applying for academic roles vs nonacademic roles (I'll touch on this later), but the skills you need to excel, and progress, in any career are the same: communication skills, project management, independent and team-working, time management

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and leadership. As a postdoc, you have these in abundance. The knowledge-base you draw upon may be different beyond academia, but a postdoc position demands that you are a fast and efficient learner so picking up new knowledge shouldn't be a problem.

Advice for postdocs

Start early, plan ahead.

It's very easy to put off thinking about your longterm career goals, particularly if you're on a fixedterm contract. Initially you are focused on getting up to speed in your new position, settling into a new group/institution/city/country, then on producing research outputs. There's never any time to think about 'What Next'. Suddenly the end of your contract is six months away and you only have time to apply for other postdoc positions.

It can be hard to break this cycle and progress to another, 'non-postdoc', role. Finding a position you are confident will be fulfilling and enjoyable will take time and hard work. However, with some planning and commitment you can do it alongside your current role and be ready to make the transition when your contract ends.

The 'What Next' can seem overwhelming and you might even be feeling anxious just reading about it now. You don't have to 'know' at this moment what career you'd like to follow. Set yourself realistic expectations and use the tips in this article to start planning small, achievable steps and goals that will help you progress up your personal career ladder.

The advice in this article is as appropriate for academic careers as it is for non-academic careers all careers need planning and time to be successful.

Do your research.

Find out more about your options. It's important to be open-minded and try not to make assumptions. Do you really know what is involved in being an academic? Do you really know what someone in industry does day-to-day? Do you know what other options there are?

At first this is about finding out information, not committing to a career. Your research is likely to start out quite broadly and get more focused over time. There are many places to start: researcher and career development teams at your institution will have information on career planning; websites such as Vitae.ac.uk and jobs.ac.uk have excellent information; company/institution websites can give an idea of the sorts of role available; think, and ask, about people who have moved on from your department.

As your focus narrows, start scanning through job adverts to become familiar with the different roles available, the responsibilities that come with them and the skills needed to get them. Find people a couple of years into a position and ask if you could talk to them about their job. You could ask: what do they do day-to-day? how is it different to what they did before? what do they enjoy about it? what don't they enjoy about it? how did they get it? what advice do they have? This will give you invaluable insights that you can't get just by reading.

While you're doing this research, reflect on what is important to you. Which parts of your current job are you passionate about (what are the 'extra' things you add to your role? what topics do you find yourself always talking about?) and will the roles you are considering support this?

Don't do it alone.

Every successful career is supported by a wide and diverse network. This will range from immediate colleagues, friends, and family who can act as a sounding board, to acquaintances whom you could learn from or who could become collaborators. Those you have interviewed about career options may well become an important part of this.

Talking to others about your career plans can seem intimidating, but in reality most people want to help others. Try to be open with those you work with, particularly your Pl. If they don't know what career you're thinking about, they won't know how to help you. It's important to talk about this.

Once you have narrowed down your options consider finding an independent mentor: this can be an incredibly powerful form of career development. Many institutions run formal mentoring schemes or you might ask someone outside of a scheme. It's important that your mentor is not part of your line management so they can give you truly impartial advice.

Build your evidence.

You know you can do the job, but how do you prove that to an employer? Whatever career you choose to follow, you will eventually need to provide evidence you can do the job. Looking at job adverts will help you understand what sort of evidence this is, but in general you will need to show that you can independently do the tasks required for the role.

It impossible to say exactly what the criteria will be, although for non-academic careers these tend to be evidencing skills described earlier such as project management, communication, etc. For academic careers it tends to be more focused around research outputs, academic activities (perhaps teaching, knowledge exchange) and — increasingly — evidence that you can bring in funding.

Whatever your career destination, undertaking activities outside of your day-to-day research will support you. There may be role-specific activities you need to demonstrate for a non-academic role (although this is generally far less so than for academic roles) or something that makes you stand out in the increasingly competitive academic job market.

Be open to (and seize) opportunities.

If there's one piece of advice you take from this article it should be this! You can't guarantee where the ideas, people and opportunities which will build your evidence and shape your career will come from, but they are less likely to happen if you stay in your office only talking with your immediate colleagues.

Attend conferences (and talk to people!); if your university has a Research Staff Association join it; go on courses; organise seminars; supervise students; join a committee; do public outreach. You never know where opportunities will arise: I am writing this article after meeting a member of the *Newsletter* editorial board at a course — neither of us went expecting this to be an outcome of the day but we are both very happy it was!

Advice for Pls

Be supportive of career development.

This might sound obvious but it is something that can easily be overlooked when there are pressures for research outputs, grant deadlines, marking, etc, etc. Are you providing an environment that encourages your postdocs to investigate their options AND to build independence?

A good start is to make time to discuss their career plans in a way that is open to all options from the beginning and at regular (e.g., six monthly) intervals. You could use the advice above to guide these conversations — do they have steps planned out? do they know their options? who have they talked with? what opportunities outside of research are there? You should also allow them time to work on these areas. Be supportive of them investigating options, going on courses and building the evidence for whatever roles they might move to. Try not to use language that makes value judgements about different career choices (e.g. 'alternative careers', 'Plan B') or equate success only with gaining an academic position.

There is a tension between the needs of the PI (research outputs, conference presentations) and the needs of the postdoc (skills development, researching options, building independence). It is important to acknowledge this to yourself and your postdoc to build a plan that supports both. From my own experience, I was more dedicated to my research whilst preparing to move to a non-academic role because my PI was supportive and gave me space to develop my independence.

Provide realistic advice.

Be honest with your postdocs about the probabilities of moving to an academic role and the evidence they will need to obtain such a position. The majority aspire to this career, but only the minority will achieve it. Ever increasing numbers of PhD students, and postdocs, mean these positions are becoming ever more competitive and candidates are increasingly being asked for activities beyond just producing research outputs.

More widely, you don't need to be an expert in every career, but you should know who in your institution can give broader advice (researcher development and careers services are good places to start) as well as being familiar with online resources, again, such as Vitae.ac.uk and jobs.ac.uk. Put your own feelings aside — if your postdoc is thinking about a non-academic career it isn't a reflection on you or your career choices, it's about them and their career choices.

Be open and honest about your job. If they are considering an academic career, tell them what you do day-to-day, what are the good things and the bad. Let them read your grant applications, give them opportunities to help you write them and to review papers, and provide time for them to build up independent research. If they are looking beyond academic careers, allow them time to develop activities related to this.

Develop yourself.

If you're not confident about giving this kind of advice or how you might support your staff, take some time to find out how. Most institutions will have courses on people management which should provide you with tools for supporting your staff. You could also talk to your colleagues and ask how they do it.

Advice for Departments

Don't let your postdocs get hidden.

Postdocs are sometimes grouped together with research students and/or new academic staff. However, postdocs have different needs from either of these groups, which can easily be overlooked. There are times when these groupings are appropriate, but step back and ask whether you are supporting all your postdocs or whether they need something separate or additional.

Do you have ways postdocs can represent themselves in your department/faculty/institution? They will be able to help you see areas where they need support which permanent staff might overlook and identifying these is a valuable career development experience in itself. You could have representatives on committees and/or organise regular (e.g., annual) forums or focus groups.

Provide opportunities for career development.

Be explicit in your support of career development for postdocs. Encourage your Pls to support their postdocs' career development and provide postdocs with time for development opportunities outside of their day-to-day research activities. Consider implementing a policy around how much time this should be.

Whatever career path they follow, your postdocs will need to be able to demonstrate their independence. Are there ways you can involve them in the running of the department? Are there responsibilities they can take on? Are there projects they can get involved with?

One of the most effective approaches to providing career development opportunities is to create (and fi-

nancially support) a Research Staff Association (RSA). These are groups/committees of postdocs that provide representation and a voice for themselves as well as potentially organising events. It is a fantastic opportunity for postdocs to develop leadership skills and independence outside of their immediate research area and to build a wider network, whilst also contributing to the department.

RSAs take many forms and can reside within a single department or across a whole institution (or even a country). If numbers are small in a department, is there a related area you could join up with or could you organise something less formal such as a regular coffee morning which will bring the postdocs together? As soon as they start meeting, ideas will flow!

FURTHER READING

[1] R. Mellors-Bourne, J. Metcalfe, Five Steps Forward, tinyurl.com/ycrr88xh, 2017.

[2] The Scientific Century: Securing Our Future Prosperity, Royal Society Policy document 02/10, tinyurl.com/y8h5rlf6, 2010.

[3] K. Haynes, J. Metcalfe, M. Yilmaz, What Do Researchers Do Next?, tinyurl.com/y8264f8o, 2016.
[4] The Concordat to Support Career Development of Researchers: An Agreement between the Funders and Employers of Researchers in the UK, tinyurl.com/y7bnjcl6, 2008.

[5] The European Charter for Researchers and The Code of Conduct for the Recruitment of Researchers, European Commission, tinyurl.com/ycorlsul, 2005.



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