Athena Forum Guide - Signposting Career Paths for Post Doctoral Researchers

As a Post Doctoral Researcher in a UK university you are the future of UK science, but are you in control of your future in science?

Introduction

Early career staff in university science, technology, engineering, mathematics and medicine (STEMM) departments need objective advice on research and academic career paths. There is a wealth of strategy and policy papers on early career staff and their progression; but a dearth of accessible, useful and practical advice for individuals starting their careers. This Athena Forum Guide aims to fill the gap, and is a response to the frequently heard comments -

> from post-doc researchers ..... *individual staff are friendly, helpful, and willing to give advice, but you have to ask them, and you need to know the questions to ask*
>
> and, from their senior colleagues .... *things would have been different had I known ten years ago what I know now/have learnt the hard way*

Planning your Career

Your career is your responsibility; don't wait for others to put you forward, or to tell you what to do. There are some questions you need to answer for yourself, before you start asking others. The more information you have, the more likely you are to ask the right people the right questions, at the right time. Even then, you won't necessarily get answers that are right for you.

Throughout your career you should regularly ask yourself the following fundamental questions. However, week one/month one of a new appointment is not the time to ask your PI /research group head -

Are you on the right career path?

Are you ready for the next step?

However, it is the time for asking yourself questions, the answers to which should help you get the best out of the new job (be it dream job or the best that was available), and help with the answers to -

How's your life/work balance?

Why do you enjoy what you do?

What are your strengths?

What motivates you?

Settling into your new role

Hopefully, your induction to the department and your research group will cover the basics -

Health and safety, lab rules, lone working, office and lab space, computing and technical facilities, and support

Flexible working, holidays, sickness absence, family crises, pay/pension scheme, expenses/travel, financial authority levels

Coffee/lunch breaks, places to meet people, access to common rooms

Your contract, joiners pack and department web site should fill the gaps, and confirm what workplace colleagues tell you/forget/don't know -

Does your department have a post-doc committee, who is your representative, what does the committee do, are post-docs represented on other department committees?

Who's in charge of approving/funding conference attendances/choosing who will go?

What are the arrangements for appraisal, promotion, and pay progression?

Are mentors available, could you mentor a PhD student, is there a post-doc network, are there post-doc research seminars, are post-docs encouraged to attend department research seminars?

What are the expectations on post-docs to teach, run labs, supervise or support undergraduate and graduate students, in terms of workload and any payment?

Is there guidance on for example, the order of author names on papers?

What are post-docs' entitlement to training, what training is available to/specifically arranged for post-docs?

Your 'Insurance policy'

You don't intend to run into difficulties with your PI, but it's useful to know what to do if the relationship with your PI breaks down, you feel unfairly treated/their demands are unreasonable/you aren't getting credit for your contribution; so check out what you should do if -

You/your colleagues are subject to bullying, harassment, discrimination;

The level/type of your support/supervision just isn't right, for your skill/experience level and/or the demands/complexities of your work;

You can't access to the facilities you need for your work;

Also, it's worth looking around to see if you/your group are treated the same as others in the department, so that, if you hit a problem, you ought to be able to judge whether it's an individual, group or department wide issue.

Improving your CV

You have covered the basics/the insurance check, been on the induction course and it's time to focus on getting the best out of the new job, and the opportunities it offers. Your group may be breaking through in an exciting area; the credit you get for your contribution might just lead to a stellar career, but less than inspiring research projects can also provide opportunities to -

Develop management experience – remember you can learn a lot about management, people and communication skills by observation. You can learn from being well managed and by being badly managed (and when you get your own research group you will be aware of the pitfalls and good practice).

Raise your visibility internally and externally - get involved in activities outside your own laboratory/group, so that you are known to senior staff in the department, and outside. Use conferences and meetings to renew contacts, make new ones, to find out what's happening, and what job opportunities are around, to 'sell yourself' and identify possible future collaborators, to talk, listen and pick up answers to questions.

Network, develop and maintain professional contacts – keep in touch with former colleagues your PhD supervisor, PIs you have worked with, people you have met at conferences and on training courses. They may be useful referees, providers of impartial advice on your career, and new job possibilities and may be potential future collaborators. Work hard to develop a new network of contacts, internal and external in every job.

Look for opportunities to acquire some teaching experience, to contribute to writing grants and papers, and to become involved in the wider activities of the department. If you want, or think you might want a lecturer appointment, then these are important aspect of the job, so the experience is useful and provides a way to find out what it's like.

Some experience is good, but too much may eat into your research/your time for developing your interests, within and outside science. It is difficult to achieve a balance between being a good citizen, gaining useful and transferable experience, and being too useful (to be let go) or just plain exploited. Why not ask the person (who asks you to take yet more on) what effect this might have on your career; it's easier than a bald no, and may provide answers to the questions -

Are you on the right career path?

Are you ready for the next step?

Your next move

Start thinking about, and planning, your next step well before your contract ends. Evaluate the contribution that your current post has made to your experiences, your skills set/mind set, and your career ambitions. Are there new circumstances/changes on the horizon that might make a difference to what you need/want from the next job? You may still have a lot to do before you are ready for the next step up the career ladder; if your most recent job hasn't provided as much opportunity to make much progress/to improve your CV as you had hoped. The problem may not be you, it may be the department/research group, or a bit of both.

Now, you are looking for a department with a good track record in supporting its post-docs, in a university with good training and development provision for early career staff. Your evaluation (against the questions you have asked yourself) may well add to what you want to check about your next job (your network of contacts may provide a reality check), as will asking -

What is your next step?

What skills and experience do you need?

How can you gain these?

Informing your decisions-

So, if you have enjoyed your post-doc jobs, the freedom to pursue some ideas of your own, and the teaching you have done, you have been on some useful development courses, you like what you have seen of academic life;,should you be thinking of trying to make a career in academia? Is an academic career right for you? Do you know:-

Enough about the wide range of other careers, where you could use the skills you have developed (e.g. elsewhere in education, in the public and charity sectors, in entrepreneurial, spin-off or start-up companies, in industry, consultancy and service organisation).and can you articulate the transferable skills you have developed?

What you want to have achieved by the time you are say 30/35, 40, 50? Are you being realistic, given the likely number of lecturer vacancies and the age profile of academics in your field, and do you know the percentage/number of post docs in your field who have actually made it into Research Fellowships and Lecturer appointments?

If you can combine an academic career with your family responsibilities, your partner's career, taking into account any constraints you have on your mobility, how demanding it will be, and will it allow you to pursue other interests/things you want out of life?

What, in your field, is the perceived wisdom of the right number of post-doc posts/years to have worked, the value of collaborative papers, overseas experience, changing fields, and has this changed in recent years?

The most promising sources of funding for independent research/fellowships, and how to ensure you don't miss out on any opportunities?

Don't expect to know the answers to all the questions. There are no 'right' answers. However, when you do ask: your boss, head of group, or head of department, they will expect you to have thought seriously, and realistically, about what you have achieved, your options, your potential, and where your ambitions might take you. You can get help with this from -

People in the department just ahead of you who have recently successfully trodden the path you want to take.

Your department research officer or the university research office, who can advise on sources of funding, or your department may have a designated academic, or staff member with overall responsibility for the career progression of early career staff.

Your professional society (and its special interest groups), conferences and courses offer good opportunities to meet people, and to build your network of professional contacts.

Your mentor, individuals whom you regard as mentors, or as role models, (they may come from outside your field) who have something in common with you (personal circumstances, interrupted/unusual career paths). Don't forget the people who know you well, your family and close colleagues.

University staff development unit, Vitae, women and science web pages, women's networks.

If you are getting conflicting advice/opinions, think about the people giving the advice:

Do they have a personal interest in whether you stay or go?

How in touch are they, is their experience out of date?

And, don’t forget, some people find it difficult to tell others things they don’t want to hear and may be worried about coping with an emotional response.

If you know or suspect you aren’t going to like the answer/won’t cope with it too well, then don’t ask the question directly, try an oblique approach - I am not certain I am cut out for/I don’t want what an academic career will involve (citing your rationale), do you think that’s a sensible decision, am I giving up too easily, what are the alternatives/ do you have any contacts that could be useful/ that I might follow up.....?

If the answers are that you are on the right career path and that you are ready for the next step, then, when you apply for a lecturer post, or fellowship, don’t forget to check the reputation of the department and group you would be working in, and that their expectations match yours.

And finally, if you found this guide of use in answering the last question

Where can you go for objective guidance?

Then bookmark this webpage. Some day you may be asked these questions by your early career colleagues.