Career paths of academic researchers:

ENVIRONMENTAL SCIENCES

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Ecology - Martin

Route into HE
Martin left school with A levels and went straight to University, where he achieved a B.Sc. and a Ph.D. Later, as a management trainee in the National Health Service, he achieved CIPFA (Chartered Public Finance Accountant) qualifications. Martin applied for and got his Ph.D. studentship via the New Scientist and went on to research the study of fish behavioural ecology.

Likes about Contract Research
- Self managed; setting his own agenda, analysing data and figuring out what is going on.

Dislikes about Contract Research
- Lack of security; writing up and tedium of repetitive experiments and fieldwork.

Reasons for moving on
Martin had a young family and needed permanent employment, but he had also lost his passion for his subject. In addition, researching all over the world and being away from home was no longer attractive in relation to other things in life. Martin also took advantage of the CRAC Insight into Management course whilst he was doing his Ph.D. and felt it was a real turning point for him.

 Exploration of Options and Sources
One of Martin's research group colleagues became a tax consultant because he was numerate and computer literate. Martin, on the look out for a new career thought he, too, might be able to use his own similar transferable skills. Martin knew that being an auditor would not be appropriate for him but that there would be aspects of accountancy he would enjoy.

Martin was offered a teaching post at his University, but his wife had a new job in another part of the UK and so he went with her and started his search there. Martin used the press and University careers service. He was looking for graduate management training schemes because he was making a complete change in direction and knew he would be in competition with recent graduates with a more relevant degree. Martin did not want to join an accountancy firm and was looking for a Management Accounting Training Scheme.

Martin sent off lots of applications and got five interviews. He persisted in his search and looked at insurance companies and finally saw an advertisement for the NHS. Public sector working appealed to him. He could get his teeth into that - it was something he could care about.

He researched the service and the job to prepare his application and was offered a place on a two day Assessment Centre. At this, Martin felt his maturity amongst undergraduates stood him in good stead. He coped well with the stress and with group exercises and was able to make a good and true impression of himself and his potential in the service. He was offered the job and a place on the training course.
Messages for contract researchers

- Be aware of losing dedication to your subject and that being a sign that it is time to finish things off and move on.
- Take note of friends who have made or are making similar moves to see whether their approach can offer you any guidance in finding a direction.
- Tailor initial conclusions to suit your preferences and strengths, before setting out to find posts to apply for.
- Prepare well for applications and interviews by reading about the organisation - up to date material so that you are aware of changes taking place. Read about interviewing or see someone who can give you guidance.
Environmental Chemistry - Emma

Background
After completing a first degree in Environmental Chemistry I was offered a research job that included periods of fieldwork overseas and the opportunity to register for a Ph.D. I took an initial 5 year contract, which was subsequently renewed. Following on from this, I had two five month contracts doing non-academic field support work.

In my early twenties I did not mind having a short term contract as I didn't like the idea of being tied down and I had no commitments. However, the research which I was doing was in a very specialised area and I felt that the longer I continued with this, the fewer career options I would have in the future. I was also not that keen to stay in research as there are very few secure jobs available. I actually never really intended to do research in the first place, but was tempted by the interesting subject.

I was keen to work in the environmental sector, but found that I had little success with job applications. I suspect that this is because the field is quite over-subscribed and also because I may have been considered as over-qualified with a Ph.D. (normal entry for this field is at degree or taught M.Sc. level.)

When I became pregnant, I decided to stop trying to get a full time job and I did some short term contracts while developing my contacts for potential work from home. I was contacted by a small consultancy who had some work which I was able to do in my own time. I saw this as a more favourable option while I had a small child as it was very flexible. I bought a good computer and software and set up an office at home.

I continue to work from home, doing work for two different environmental consultancies and also another organisation on a freelance basis. I enjoy the flexibility and challenge of working for myself, but I do not like the instability, as I only ever have work for up to a few weeks at a time. I also miss working with other people.

I intend to work from home for the immediate future as this gives me the flexibility I want. I will see how the work goes, but may consider full-time employment from next year.

Transferable skills
In common with my research role, I use the computer a lot and also have to do literature and web searches. I use report writing skills and many analytical and organisational skills which I picked up while doing research. Some of the work I am currently doing is related to my fieldwork therefore my previous experience is of direct relevance.

However, my work now is more goal based and well-defined. There is also more time pressure as I am working for myself and I need to achieve goals in limited time.

Messages
I applied for quite a few jobs last year and was not successful, mainly I think because I appeared overqualified for the jobs and because my research was not directly relevant. I found that using my existing contacts was very useful - they gave me
helpful suggestions and also ultimately helped me to find the work I am now doing. Networking is very important.
Environmental Chemistry - Susi

Route into HE
Susi went straight from school into University for a first degree in Geology, followed by a Ph.D. at another University.

Reasons for entering Contract Research
Susi went on the British Antarctic Survey after her Ph.D. and wanted to become a contract researcher after that. It was never going to be easy because contracts were few and far between in her field. Eventually she found one in New Scientist to apply for, applied and was successful

Nature and Range of Work
It was lab based in environmental chemistry looking for a new technique to identify trace elements of oil in water. There was no career progression associated with it.

Likes about Contract Research
• A nice group.
• Very exciting project with state of the art equipment.
• Being at the cutting edge of research.
• Developmental chemistry.
• Research cruises.
• Flexibility.
• Freedom.
• Variety.

Dislikes about Contract Research
• Travelling a long distance from home.
• A supervisor who did not understand the contract research way of life and was not happy when people sought permanent employment.

Reasons for moving on
Firstly to have a post in her field as a researcher and later to have a permanent post - in both cases as near to her husband, geographically, as possible. Susi had to live away from her husband a lot in order to work and she was striving constantly to change that.

Exploration of Options and Sources
Susi used the many contacts in her network to help her to find appropriate work. In addition she wrote speculative letters, leading to some short term work. Opportunities were scarce and Susi was willing to do any work to earn a living, but she did start to panic when nothing was happening. Susi kept up her network from conferences by visiting people and speaking to them. She also extended her network. In the meantime she scoured Nature and New Scientist for posts to apply for because she felt she did not know how to branch out into other fields.

Eventually there was an advertisement for a post doctoral position. in a northern university. Since it was not in her field, Susi was astonished to be invited for
interview and then to be offered the post. When Susi had to move again, she scoured the same sources for new posts.

**Messages for Contract Researchers**

- Be sure to establish the different foci of jobs being applied for, to ensure there is sufficient emphasis on whatever is important.
- Be aware of key skills to offer to employers, such as working independently, ability to do research, ability to write grant proposals, networking - all of these can be of value to an new employer.
- Do not feel any compunction about leaving a contract if something permanent and appropriate becomes available.
- It is easier to get a job from a job.
- Never underestimate what is being offered to a new employer - apparently mundane capabilities may be of great value.
- Do not discount anything when looking for posts - it is often not the obvious or expected which lead to offers.
- Remember all the opportunities which a post can offer - for example the opportunity to write and publish, network and find out about posts which are not advertised externally.
- Self esteem and self-confidence will grow from being in a post, where at least some outcomes are adding value to the C.V.
- Expect the Principal Investigator's loyalty to be to the project not to research assistants working on it - which can affect the extent of the support or help which may be available.
- Be accurate in assessment of relationship with the Principal Investigator - be aware of signs of fragility which may be relevant at a later date, even although the relationship on a day to day working basis seems generally quite good.
- Not all Principal Investigators will have been post doctoral research assistants in current times and may not appreciate the life of uncertainty.
- Do not give up trying to find the right thing - it will come.
- Spend a lot of time on your C.V. - make it look different - think of those who will be reading it (with many others) - try to be original and think about including a photograph.
- Make sure the most relevant things are first on the C.V. - do the analysis for the organisation - do not leave it to them to work out what is relevant and what is not.
- Look at web pages; see whether you know anyone (who knows anyone) to make informal contact - try to get a feel for the culture and politics of the place.
Environmental Science - Alan

Route into HE
Alan was a farmer for several years between school and entering university as a mature student, where he gained a B.Sc. in Agriculture and Environmental Science and a M.Res. in Engineering and Marine Technology.

Route into Contract Research
Alan enjoyed his work and during his M.Res. he applied for and got his first research contract.

Nature and range of contract research work
Construction of herbicides database to minimise the impact of use in the paddy environment.

Likes about contract research
- Alan enjoyed the flexibility to manage his own timetable and also the University's facilities.

Dislikes about Contract Research
- Alan disliked the lack of security, the lack of career structure and the unpaid overtime working.

Reasons for moving on
Alan is in his thirties and needs security of employment, with a little extra income and prospects for advancement.

Exploration of Options and Sources
Alan used the Web extensively both for job search and to discover as much as he could about organisations before application and interview. He searched newspaper web sites, although he wanted to stay in N.E. England. He also applied on line, in one instance. Alan had looked carefully at his transferable skills and looked for positions which were demanding those skills. He took care to make applications appealing in their appearance and ensuring that they were tailored to prove his suitability for the post for which he was applying.

The post Alan finally got was advertised in the local press and included psychometric testing as part of the selection process. Alan was successful and began training as a HM Customs and Excise Inspector.

Messages for contract researchers
- Alan recommends being open to any position which seems to need your transferable skills. There is no need to apply if anything is not acceptable or to accept the post after interview if something unacceptable emerges during the interview.
- He would also recommend searching widely and in all sectors of business and industry and the public sector. Try not to have any preconceived ideas about what would be best, rather work with your list of transferable skills and preferences/constraints.
- Finally, stay positive when you do not succeed and try equally hard the next time, until you succeed.
The Competences displayed by Contract Research Staff who make a successful transition from one career to another

1. COMMUNICATION

1.1 Making an impact
· writes to provide evidence of suitability
· writes concisely and unambiguously, with a variety of layouts to help the reader
· presents self effectively in interviews and presentations with the intention of demonstrating strengths for the post
· asks questions to ensure the post and organisation are appropriate for the candidate
· articulates constraints (such as geographical limitations) effectively

1.2 Networking effectively
· networks with people who can influence
· uses a wide range of sources of information, both print and electronic
· builds relationships with named people in careers services or recruitment agencies
· asks questions of careers/recruitment staff to ensure that they understand what is sought and what will be suitable
· scans the environment by asking questions, visiting appropriate web sites and listening to people who might have an idea about the future

1.3. Persuading
· uses well reasoned arguments in applications, interviews and presentations
· is thoroughly prepared for application and interview - having researched the organisation and its environment and being fully self aware
· provides a range of examples of achievements which used relevant key skills

2. COGNITIVE

2.1 Positive/analytical thinking and use of judgement
· positive thinker, when things go wrong, looking forward and putting effort into next attempt
· sees potential in things which are not immediately obviously suitable
· uses judgement to assess the suitability of a post in relation to key skills, preferences and potential
· analytical thinker in identifying own strengths, key skills from experience in the present and previous positions and relating them to requirements of new posts
· makes timely decisions to take action (or not)

2.2 Lateral/creative/conceptual thinking
· lateral thinker, in looking far outside the expected posts in seeking a change - systematically assembles and presents relevant data about self and links it to qualities required for posts
· makes connections between unrelated fields of work and the application of key skills
· innovative in seeking posts and presenting oneself as a candidate
· uses initiative to make self known to people who can help

2.3 Political/Collaborative thinking
· strategic thinker, planning the 'campaign' for finding a new career
understands the political implications of situations and events by being sensitive to the environment in which an organisation is operating and to interview questions or answers to candidate’s questions
• collaborates with colleagues, friends and advisers who can give advice or feedback to help the process of changing career

3. SELF DEVELOPMENT

• undertakes voluntary work/work shadowing to get experience to help in decision making
• uses mentors to support transition
• gets additional qualifications to help transition
• has an ongoing personal development plan which is regularly updated

4. SELF MANAGEMENT

4.1 Positive/enthusiastic
• realistic about how long things will take and expectations
• has energy
• is enthusiastic - talks with passion/sees a positive side to everything/does things does with good spirit even when they are not preferred tasks
• responsible - works to standards expected/meets deadlines/has pride in work and self

4.2 Persistence/stamina
• persistent in making applications despite disappointments
• stamina to keep making consistently high quality applications and attend and make an impression at interviews whilst still maintaining standards in current duties and responsibilities

4.3 Flexible/open-minded
• flexible, in listening to feedback which requires action not previously thought of and in applying for posts which had not appeared appropriate formerly
• open minded in applying for a range of posts which require key skills but will need a lot of new learning as well
• inquisitive about what the world outside academia has to offer
• does not dismiss anything

4.4 Self confident and self controlled
• talks objectively about strengths, needs for development and achievements - with evidence
• self aware - has a list of everything to offer an employer, backed by evidence for previous performance (at work or elsewhere)
• objective - looking at things as they are - without bias from past experience
• adaptable, being willing to try new things which are necessary to progress in the direction required to fit a career plan
• assertive
• self controlled when facing anger, disappointment, frustration and able to vent these emotions quickly and then move forward positively
• has a clear vision for self
• insightful - knows how to build a positive reputation
5. DRIVE TO ACHIEVE

· immerses self in finding knowledge about new career field
· proactive in seeking new opportunities
· uses external resources to help achieve goals
· pays attention to detail