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Your future research ideas

If you want to become an independent academic as a faculty member or fellow you need your own research ideas.

Where to start?

- 1. Coming up with independent ideas
- 2. How to get your research ideas down on paper

1) Coming up with independent ideas

If you are aiming for an independent academic career, it's better to start thinking about future research ideas as early as possible e.g. during your PhD or early on in your postdoc contract.

Read around your subject: try journals that are pitched to a less specialised audience and find the questions that interest you. At conferences, seek out talks, especially the general level ones, which are running outside the sessions for your own community. This is a great way to get perspectives from outside your discipline, and to look for that all important space in the field you can call your own.

Find out what others are thinking: talk to your supervisors and experts in the field, talk to potential future 'employers' (senior academics in other institutions), talk to funding bodies when they visit Cambridge to host information sessions What are the trends? What is important? Where are the gaps and what's the value of filling the gaps? Having this knowledge allows you to see opportunities in your research field and in your own data and to be strategic. You may stumble across something really interesting in your research that you were not expecting, and you can then work more on that.

Find something you want to do but make sure it is fundable and competitive: Think about who else is working in this field and why you have a competitive edge over them. A funder wants you to be the first to succeed. You may need to mould you research ideas to fit the strategy of a funding body or an employer but it still needs to be a project you would enjoy doing. The key is not to be too rigid with your plans. Sometimes your project may need to be re-written to fit a strategy but you can do that in a way, so that you still end up doing what you want to do.

Real life example from a former Cambridge postdoc: "I had several conversations with senior people at the Institute in the years leading up to my application for a Principal Investigator position to understand what their strategy was and how I could fit my research in that strategy. I already knew which medical charity would be a likely funder of my research, so I ensured I had regular conversations with their senior people. It is about positioning your research and making yourself known. Yes, you can apply to any job posted online and then work on putting in a really good application but you are far more likely to be successful if you are strategic about it from an early stage."

2) How to get your research ideas down on paper

Don't wait until you have the perfect idea. Have a go and get something down on paper.

You can either answer the **questions below** or create a skeleton / mindmap if that works better for you.

How to start writing:

Your task: Use a max of 1 page to get your ideas down. Some researchers find writing a lay summary of 200 words a good way to start.

fundamental questions you need to answer about your future research:

- 1. What is the problem?
- 2. Why is it important to solve this problem?
- 3. What is the research question and what is novel about it?
- 4. What will you do and how will you mitigate for risk?
- 5. What will you learn from it and how will that have an impact?

Tip for writing your research ideas effectively:

You need to convince more than one person. Will people outside your direct field, e.g. wider discipline department or a funding body be able to understand the purpose and content of the proposed project?

The power of feedback:

Give your 1-page draft or explain your mindmap to different groups of people, for feedback, for example:

- The Careers Service book an appointment on Handshake, upload it and we'll give you feedback
- Peers and more senior academics in your field
- An academic whose work is tangentially related what do they think?
- Friends and family outside science what do they think is interesting and exciting about it? What parts of the work do they find confusing?

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Your concerns:

It takes courage to share your ideas but it's better to get feedback as early as possible to help shape your future work.

If you are worried that others might take your novel ideas, only share with people you trust and make it clear that it's confidential. Or don't add enough detail for them to be able to copy it.

Pay-offs:

You will already have something tangible to work with if you see a job or funding opportunity which requires you to articulate your future ideas.

You will probably gain further ideas writing and articulating your research and getting feedback from others.

If you absolutely hate the process of writing your research ideas, it's important to reflect if you would be happy in a job where this is an important aspect of the role.

Next steps

- Now that you have crystalised your ideas you can start to write a full research statement
 or even a proposal for a specific scheme. See past successful research statements in
 our PhD and postdoc CV book. You can also use it to write a full research proposal.
- As you build your research statement for a lectureship application or the preliminary round for a fellowship with your draft ideas you will need to add why you are the right person to do it? Have you the research track record to carry out this work successfully and make a clear connection to your previous work?
- Watch our <u>videos research statements</u>, including pitching your research ideas for a
 faculty job, excerpts of research statements and how to adapt your research statement
 for each application.
- Start looking for funding opportunities under <u>Funding and Fellowships</u> on the Careers Service website and <u>hear advice from Pls and early career researchers</u> (STEM and AHSS) who have got their own funding.
- Keep up the habit: write down any further ideas as they occur to you or branches of existing projects, it will come in very useful when you start a faculty job.